

SCHOOLS - ADMINISTRATION BUILDINGS



EXCELLENT CLASS C



GOOD CLASS C

OCCUPANCY DESCRIPTION: These buildings are designed for the administrative office functions for a school plant or board. The interior finish may have plaster or drywall and, depending on the quality, utilize paneling and special wall covering. The better facilities will have good meeting rooms and private offices.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers, signs and office furnishings or equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	\$273.41	Stone, best brick, metal and glass, highly ornamental	Plaster, best paneling, vinyl wall coverings, vinyl, terrazzo, carpet	Luminous ceilings, many outlets, cabling, private restrooms	Hot and chilled water (zoned)
	Good	217.84	Face brick, stone, concrete or metal panels, solar glass	Drywall or plaster, good veneers, acoustic tile, vinyl tile, carpet	Good fluorescent, high-intensity lighting, cabling, good restrooms	Hot and chilled water (zoned)
	Average	161.56	Brick, concrete or metal panels, formed concrete	Average partitions, acoustic tile, vinyl composition, some paneled offices	Average fluorescent lighting, signal system, average restrooms	Warm and cool air (zoned)
	Low cost	129.38	Precast concrete, block, little trim, minimum cost fenestration	Drywall, acoustic ceilings, vinyl composition tile, very plain	Minimum office lighting, cabling, security and plumbing	Warm and cool air (zoned)
A-B	Finished office basement	126.42	Plaster interior	Average office finish, acoustic tile, vinyl composition	Adequate office lighting and plumbing	Warm and cool air (zoned)
C	Excellent	238.90	Steel frame, face brick, metal panels, tile, highly ornamental	Plaster, carpet and terrazzo, suspended ceilings, paneled boardrooms	Best office lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	169.75	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, some paneled offices, vinyl composition, carpet	Good lighting and outlets, good tiled restrooms and signal system	Warm and cool air (zoned)
	Average	128.76	Steel frame or bearing walls, brick, block or concrete, some trim	Plaster or drywall, good partitions, acoustic tile, carpet and vinyl	Adequate lighting and outlets, plumbing and signal systems	Heat pump system
	Low cost	91.96	Masonry bearing walls, light rafters, little trim	Paint, drywall partitions, acoustic tile, vinyl composition	Minimum office lighting, cabling, security and plumbing	Package A.C.
D	Excellent	233.01	Studs or steel columns, bar or web joists, brick or stone veneer, EIFS	Plaster, carpet and terrazzo, suspended ceilings, paneled boardrooms	Best office lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	164.00	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, some paneled offices, vinyl composition, carpet	Good lighting and outlets, good tiled restrooms and signal system	Warm and cool air (zoned)
	Average	123.53	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, good partitions, acoustic tile, carpet and vinyl	Adequate lighting and outlets, plumbing and signal systems	Heat pump system
	Low cost	87.39	Light stucco or siding on wood or steel studs, little trim	Paint, drywall partitions, acoustic tile, vinyl composition	Minimum office lighting, cabling, security and plumbing	Package A.C.
D POLE	Average	115.47	Pole frame, insulated metal panels, some ornamentation	Plaster or drywall, good partitions, acoustic tile, carpet and vinyl	Adequate lighting and outlets, plumbing and signal systems	Heat pump system
	Low cost	81.72	Pole frame, finished interior, insulation, little trim	Paint, drywall partitions, acoustic tile, vinyl composition	Minimum office lighting, cabling, security and plumbing	Package A.C.
S	Good	157.94	Good sandwich panels and fenestration, some brick or stone	Plaster or drywall, some paneled offices, vinyl composition, carpet	Good lighting and outlets, good tiled restrooms and signal system	Warm and cool air (zoned)
	Average	119.51	Pre-engineered, sandwich panels, some ornamentation	Plaster or drywall, good partitions, acoustic tile, carpet and vinyl	Adequate lighting and outlets, plumbing and signal systems	Heat pump system
	Low cost	84.75	Pre-engineered, finished interior, insulation, little trim	Paint, drywall partitions, acoustic tile, vinyl composition	Minimum office lighting, cabling, security and plumbing	Package A.C.
CDS	Finished office basement	85.08	Plaster or drywall interior	Average office finish, acoustic tile, vinyl composition	Typical office lighting and plumbing	Forced air

For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$5.95 per square foot.

SCHOOLS - ADMINISTRATION BUILDINGS

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BELL TOWERS: Large major masonry campaniles or bell towers cost \$43.50 to \$71.00 per cubic foot of the tower structure.</p> <p>Small towers cost \$10.80 to \$19.05 per cubic foot of the tower structure.</p>	<p>SPRINKLERS: Apply to area covered by sprinklers.</p> <table border="1"> <thead> <tr> <th>Sq. Ft.</th> <th>LOW</th> <th>AVG.</th> <th>GOOD</th> <th>EXCL.</th> </tr> </thead> <tbody> <tr><td>1,000</td><td>\$4.60</td><td>\$5.97</td><td>\$7.74</td><td>\$10.05</td></tr> <tr><td>2,500</td><td>4.00</td><td>5.13</td><td>6.58</td><td>8.43</td></tr> <tr><td>5,000</td><td>3.60</td><td>4.57</td><td>5.81</td><td>7.39</td></tr> <tr><td>10,000</td><td>3.24</td><td>4.08</td><td>5.14</td><td>6.47</td></tr> <tr><td>15,000</td><td>3.04</td><td>3.82</td><td>4.78</td><td>5.99</td></tr> <tr><td>20,000</td><td>2.91</td><td>3.64</td><td>4.54</td><td>5.67</td></tr> <tr><td>50,000</td><td>2.53</td><td>3.13</td><td>3.86</td><td>4.76</td></tr> <tr><td>80,000</td><td>2.36</td><td>2.89</td><td>3.55</td><td>4.35</td></tr> <tr><td>100,000</td><td>2.28</td><td>2.79</td><td>3.41</td><td>4.17</td></tr> </tbody> </table> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p> <table border="1"> <thead> <tr> <th></th> <th>LOW</th> <th>AVG.</th> <th>GOOD</th> <th>EXCL.</th> </tr> </thead> <tbody> <tr><td>Concrete</td><td>\$22.50</td><td>\$29.25</td><td>\$38.00</td><td>\$49.50</td></tr> <tr><td>Steel</td><td>20.90</td><td>28.25</td><td>38.00</td><td>51.00</td></tr> <tr><td>Wood</td><td>19.35</td><td>25.75</td><td>34.50</td><td>46.00</td></tr> <tr><td>Add for ornate finishes, balustrades</td><td>19.45</td><td>24.10</td><td>29.75</td><td>36.75</td></tr> <tr><td>Add for roofs or awnings</td><td>10.50</td><td>13.95</td><td>18.45</td><td>24.60</td></tr> </tbody> </table>	Sq. Ft.	LOW	AVG.	GOOD	EXCL.	1,000	\$4.60	\$5.97	\$7.74	\$10.05	2,500	4.00	5.13	6.58	8.43	5,000	3.60	4.57	5.81	7.39	10,000	3.24	4.08	5.14	6.47	15,000	3.04	3.82	4.78	5.99	20,000	2.91	3.64	4.54	5.67	50,000	2.53	3.13	3.86	4.76	80,000	2.36	2.89	3.55	4.35	100,000	2.28	2.79	3.41	4.17		LOW	AVG.	GOOD	EXCL.	Concrete	\$22.50	\$29.25	\$38.00	\$49.50	Steel	20.90	28.25	38.00	51.00	Wood	19.35	25.75	34.50	46.00	Add for ornate finishes, balustrades	19.45	24.10	29.75	36.75	Add for roofs or awnings	10.50	13.95	18.45	24.60
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2	HEATING AND COOLING					
	<p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>					
	Sq. Ft.		Sq. Ft.		Sq. Ft.	
	Costs		Costs		Costs	
HEATING ONLY		HEATING & COOLING		COOLING ONLY		
Electric cable or baseboard	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40	
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05	
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38	
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig. \$2,050 to \$2,600 per ton capacity		
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity		
radiant	4.71					
Steam (including boiler)	18.00					
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY		
Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31	

3	HEIGHT REFINEMENTS			
	<p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055
	9	.981	14	1.073
	10	1.000 (base)	15	1.092
	11	1.018	16	1.110
	12	1.037		

4	Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER													Average Floor Area Sq. Ft./Story	
		125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	----	10,000
	12,000	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	----	12,000
	16,000	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	----	16,000
	20,000	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	----	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - HIGH SCHOOL (ALTERNATIVE)

OCCUPANCY DESCRIPTION: This occupancy includes the entire school facility, which includes a mixture of classrooms, multipurpose space, administrative offices, etc. The school plant may consist of one building or several separate building and encompasses grades nine or ten through twelve and are generally much smaller in scope than the normal high school with limited support, assembly or athletic facilities.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Swimming pools, movable furnishing or equipment, exterior ground improvements (i.e., athletic fields), open shelters and site work.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$186.59	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, carpet hardwood or vinyl composition	Adequate lighting and plumbing	Heat pump system
C	Excellent	224.79	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, carpet, vinyl, ceramic tile, wood	Best classroom lighting and cabling systems, best plumbing	Warm and cool air (zoned)
	Good	181.84	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition, hardwood or tile	High-level lighting, audio-visual wiring, good plumbing	Heat pump system
	Average	140.66	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, carpet, VCT	Adequate school lighting and plumbing	Package A.C.
D	Excellent	217.99	Steel or Glulam frame and joists, brick veneer, glass, best EIFS	Plaster or drywall, acoustic tile, carpet, vinyl, ceramic tile, wood	Best classroom lighting and cabling systems, best plumbing	Warm and cool air (zoned)
	Good	175.56	Wood frame or pipe columns, good stucco, EIFS or siding with trim	Plaster or drywall, acoustic tile, vinyl composition, hardwood or tile	Good fluorescent fixtures, good plumbing, extra features	Heat pump system
	Average	135.01	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, vinyl composition, carpet	Adequate school lighting and plumbing	Package A.C.
D POLE	Average	128.35	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl composition, carpet	Adequate school lighting and plumbing	Package A.C.
S	Good	174.48	Pre-engineered, sandwich panels, some ornamentation	Drywall, acoustic tile, carpet, vinyl composition, hardwood or tile	Good fluorescent fixtures, good plumbing, extra features	Heat pump system
	Average	132.99	Pre-engineered, finished interior, insulation, little trim	Drywall, acoustic tile, vinyl composition, carpet	Adequate school lighting and plumbing	Package A.C.

SCHOOLS - HIGH SCHOOL (ALTERNATIVE)

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push-button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>	<p>SPRINKLERS: Apply to area covered by sprinklers.</p>				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	1,000	\$4.60	\$5.97	\$7.74	\$10.05
	2,500	4.00	5.13	6.58	8.43
	5,000	3.60	4.57	5.81	7.39
	10,000	3.24	4.08	5.14	6.47
	15,000	3.04	3.82	4.78	5.99
	20,000	2.91	3.64	4.54	5.67
	50,000	2.53	3.13	3.86	4.76
	80,000	2.36	2.89	3.55	4.35
	100,000	2.28	2.79	3.41	4.17
		LOW	AVG.	GOOD	EXCL.
Concrete		\$22.50	\$29.25	\$38.00	\$49.50
Steel		20.90	28.25	38.00	51.00
Wood		19.35	25.75	34.50	46.00
Add for ornate finishes, balustrades		19.45	24.10	29.75	36.75
Add for roofs or awnings . . .		10.50	13.95	18.45	24.60

2

HEATING AND COOLING

These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard ..	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refriger. . \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00				
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3

HEIGHT REFINEMENTS

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	---	---	---	---	---	---	---	---	---	1,000
1,500	1.043	1.079	1.116	1.153	1.227	---	---	---	---	---	---	---	---	---	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	---	---	---	---	---	---	---	---	2,000
3,000	---	.968	.985	1.006	1.043	1.079	1.153	---	---	---	---	---	---	---	3,000
4,000	---	---	.957	.968	.995	1.024	1.079	1.134	---	---	---	---	---	---	4,000
5,000	---	---	---	.949	.968	.991	1.036	1.079	1.123	---	---	---	---	---	5,000
6,000	---	---	---	.934	.952	.968	1.006	1.043	1.079	---	---	---	---	---	6,000
8,000	---	---	---	---	.929	.942	.968	.996	1.024	1.079	1.134	---	---	---	8,000
10,000	---	---	---	---	---	.927	.949	.968	.991	1.036	1.079	1.123	---	---	10,000
12,000	---	---	---	---	---	.915	.934	.959	.968	1.006	1.043	1.079	1.153	---	12,000
16,000	---	---	---	---	---	---	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	---	---	---	---	---	---	---	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - ARTS & CRAFTS BUILDINGS



GOOD CLASS C

OCCUPANCY DESCRIPTION: These buildings are designed primarily as work and rehearsal centers with large, open areas and large window and door openings. The best qualities include well appointed performance or concert halls for dramatic arts and music. Portions of these buildings are designated for display and storage.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers movable equipment and furnishings.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	\$338.23	Fine masonry, special architecture and trim	Acoustical design, performance and practice halls, good studios	High quality lighting and sound, good plumbing	Hot and chilled water (zoned)
	Good	260.73	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl, good music, dramatic arts	Good lighting, plumbing and sound, extra features	Hot and chilled water (zoned)
	Average	203.29	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, vinyl, hardwood, rehearsal rooms, studios	Adequate lighting and plumbing, some extra features	Hot and chilled water (zoned)
	Low cost	146.74	Brick, precast concrete, good block, some trim	Plaster or drywall, acoustic tile, VCT, crafts, limited rehearsal facility	Minimum lighting and plumbing	Warm and cool air (zoned)
A-B	Good Balcony	83.52	Not included	Stepped balcony with some ornate finishes, hardwood, carpet	Good lighting	In building cost
	Average Balcony	66.11	Not included	Stepped balcony with drywall soffit, some acoustic finishes, carpet	Adequate lighting	In building cost
	Finished Basement	97.95	Concrete masonry, partly finished interior	Masonry partitions, utility, repair, storage and dressing rooms	Adequate lighting and plumbing	Hot water
C	Excellent	265.30	Steel frame, face brick, metal panels, tile, highly ornamental	Acoustical design, performance and practice halls, good studios	High-quality lighting and sound, good plumbing	Hot and chilled water (zoned)
	Good	206.14	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, hardwood or vinyl, small halls	Good fluorescent fixtures, good plumbing, some extra features	Hot and chilled water (zoned)
	Average	148.34	Steel frame, brick, block, concrete, some ornamentation	Plaster or drywall, acoustic tile, vinyl comp., hardwood, rehearsal stages	Adequate lighting and plumbing	Warm and cool air
	Low cost	114.95	Brick, block, tilt up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile, craft studios	Minimum lighting and plumbing	Heat pump system
D	Good	200.14	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, hardwood or vinyl, small halls	Good fluorescent fixtures and plumbing, some extra features	Hot and chilled water (zoned)
	Average	142.74	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl comp., hardwood, rehearsal stages	Adequate lighting and plumbing	Warm and cool air (zoned)
	Low cost	109.95	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood floors, craft studios	Minimum lighting and plumbing	Heat pump system
D POLE	Average	132.96	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl comp. or hardwood, studios, rehearsal stages	Adequate lighting and plumbing	Warm and cool air (zoned)
	Low cost	101.99	Pole frame, metal panels, finished inside, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile, craft studios	Minimum lighting and plumbing	Heat pump system
S	Average	139.26	Pre-engineered, sandwich panels, some trim	Drywall, acoustic tile, vinyl comp. or hardwood, studios, rehearsal stages	Adequate lighting and plumbing	Warm and cool air (zoned)
	Low cost	106.87	Pre-engineered, finished interior, insulation	Painted walls, acoustic tile or drywall ceilings, asphalt tile, craft studios	Minimum lighting and plumbing	Heat pump system
CDS	Good Balcony	69.54	Not included	Stepped balcony with some ornate finishes, hardwood, carpet	Good lighting	In building cost
	Average Balcony	52.79	Not included	Stepped balcony with drywall soffit, some acoustic finishes, carpet	Adequate lighting	In building cost
	Finished Basement	70.68	Painted interior	Utility, workshops, storage and dressing rooms	Adequate lighting and plumbing	Forced air

For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$5.95 per square foot.

SCHOOLS - ARTS & CRAFTS BUILDINGS

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p>	<p>SPRINKLERS: Apply to area covered by sprinklers.</p> <table border="1"> <thead> <tr> <th>Sq. Ft.</th> <th>LOW</th> <th>AVG.</th> <th>GOOD</th> <th>EXCL.</th> </tr> </thead> <tbody> <tr><td>1,000</td><td>\$4.60</td><td>\$5.97</td><td>\$7.74</td><td>\$10.05</td></tr> <tr><td>2,500</td><td>4.00</td><td>5.13</td><td>6.58</td><td>8.43</td></tr> <tr><td>5,000</td><td>3.60</td><td>4.57</td><td>5.81</td><td>7.39</td></tr> <tr><td>10,000</td><td>3.24</td><td>4.08</td><td>5.14</td><td>6.47</td></tr> <tr><td>15,000</td><td>3.04</td><td>3.82</td><td>4.78</td><td>5.99</td></tr> <tr><td>20,000</td><td>2.91</td><td>3.64</td><td>4.54</td><td>5.67</td></tr> <tr><td>50,000</td><td>2.53</td><td>3.13</td><td>3.86</td><td>4.76</td></tr> <tr><td>80,000</td><td>2.36</td><td>2.89</td><td>3.55</td><td>4.35</td></tr> <tr><td>100,000</td><td>2.28</td><td>2.79</td><td>3.41</td><td>4.17</td></tr> </tbody> </table>	Sq. Ft.	LOW	AVG.	GOOD	EXCL.	1,000	\$4.60	\$5.97	\$7.74	\$10.05	2,500	4.00	5.13	6.58	8.43	5,000	3.60	4.57	5.81	7.39	10,000	3.24	4.08	5.14	6.47	15,000	3.04	3.82	4.78	5.99	20,000	2.91	3.64	4.54	5.67	50,000	2.53	3.13	3.86	4.76	80,000	2.36	2.89	3.55	4.35	100,000	2.28	2.79	3.41	4.17
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2	HEATING AND COOLING			
	<p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>			
	Sq. Ft.		Sq. Ft.	Sq. Ft.
	Costs	Costs	Costs	Costs
	HEATING ONLY	HEATING & COOLING	COOLING ONLY	
	Electric cable or baseboard	Package A.C. (short ductwork)	Central refrigeration (zoned)	\$14.40
	Electric wall heaters	Warm and cool air (zoned)	package (short ductwork)	10.05
	Forced air furnace	Hot/chilled water (zoned)	Central evaporative	5.38
	Hot water, baseboard/convector	Heat pump system	Pkg. refriger. \$2,050 to \$2,600 per ton capacity	
	Space heaters, with fan		Evap. coolers \$300 to \$500 per MCFM capacity	
	radiant			
	Steam (including boiler)			
	without boiler	Small indiv. heat pumps cost \$1,760 to \$2,500 per ton of rated capacity.	VENTILATION ONLY	
	Wall or floor furnace		Vent. (blowers/ducts)	\$3.31

3	HEIGHT REFINEMENTS			
	<p>MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055
	9	.981	14	1.073
	10	1.000 (base)	15	1.092
	11	1.018	16	1.110
	12	1.037		

4	Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER													Average Floor Area Sq. Ft./Story	
		125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
	12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
	16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
	20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - BOOKSTORE

OCCUPANCY DESCRIPTION: These buildings are designed for retail student sales and display. They have limited sales, lounge area, storage and office commensurate with the quality.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Furnishings, signs, trade fixtures and equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$126.35	Brick, precast concrete, block, some trim	Plaster or drywall, acoustic tile, carpet or vinyl composition	Adequate lighting and plumbing	Heat pump system
	Low cost	95.57	Precast concrete, block, very plain	Plaster or drywall, acoustic tile, vinyl composition, some carpet	Adequate lighting, minimum plumbing	Package A.C.
C	Good	128.75	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, vinyl composition or carpet	Good fluorescent fixtures, adequate plumbing	Heat pump system
	Average	96.62	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition, some carpet	Adequate lighting and plumbing	Package A.C.
	Low cost	75.99	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum lighting and plumbing	Forced air
D	Good	124.26	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, adequate plumbing	Heat pump system
	Average	92.14	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition, some carpet	Adequate lighting and plumbing	Package A.C.
	Low cost	71.76	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile or drywall ceilings, asphalt tile	Minimum lighting and plumbing	Forced air
D POLE	Low cost	65.29	Pole frame, good metal panels, finished inside, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum lighting and plumbing	Forced air
S	Low cost	68.06	Pre-engineered, finished interior, insulation, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum lighting and plumbing	Forced air

SCHOOLS - BOOKSTORE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push-button control, four-passenger cab, and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p>	SPRINKLERS: Apply to area covered by sprinklers.				
	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	1,000	\$4.60	\$5.97	\$7.74	\$10.05
	2,500	4.00	5.13	6.58	8.43
	5,000	3.60	4.57	5.81	7.39
	10,000	3.24	4.08	5.14	6.47
	15,000	3.04	3.82	4.78	5.99
	20,000	2.91	3.64	4.54	5.67
	50,000	2.53	3.13	3.86	4.76
	80,000	2.36	2.89	3.55	4.35
	100,000	2.28	2.79	3.41	4.17
	BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.				
		LOW	AVG.	GOOD	EXCL.
	Concrete	\$22.50	\$29.25	\$38.00	\$49.50
	Steel	20.90	28.25	38.00	51.00
	Wood	19.35	25.75	34.50	46.00
	Add for ornate finishes, balustrades	19.45	24.10	29.75	36.75
	Add for roofs or awnings	10.50	13.95	18.45	24.60

2

HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard . .	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convector	20.00	Heat pump system	23.85	Pkg. refriger. . \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00				
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500			
Wall or floor furnace	3.73	per ton of rated capacity.		VENTILATION ONLY	
				Vent. (blowers/ducts)	\$3.31

3

HEIGHT REFINEMENTS			
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - CLASSROOMS

OCCUPANCY DESCRIPTION: These buildings are subdivided into teaching units and designed primarily for academic work. Typically, the better qualities include more windows and better interior and exterior refinements.

NOT INCLUDED IN COSTS: Elevators, sprinklers, movable equipment and furnishings.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built in bookshelves, cabinets and blackboards.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	259.50	Stone, best brick, metal and glass, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	213.34	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Average	162.85	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or carpet	Adequate lighting and plumbing, some extra features	Warm and cool air (zoned)
	Low cost	124.84	Brick, precast concrete, block, very plain	Low cost finishes, acoustic tile, hardwood or vinyl composition	Minimum school lighting and plumbing, few extras	Package A.C.
C	Excellent	211.11	Steel frame, face brick, metal panels, tile, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	161.72	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, hardwood or carpet	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	124.36	Steel frame or bearing walls, brick, block or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Package A.C.
	Low cost	99.95	Brick, block, tilt up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Forced air
	Cheap	69.15	Cheap block, tilt up, light roof	Low cost finishes, no partitions, asphalt tile	Minimum code	Wall furnace
D	Excellent	205.17	Steel or wood frame, brick or stone veneer, metal and glass, ornamental	Plaster, enamel, glazed or vinyl finishes, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	155.85	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, hardwood or carpet	Good fluorescent fixtures and plumbing, extra features	Warm and cool air (zoned)
	Average	118.79	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Package A.C.
	Low cost	94.81	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood floors	Minimum school lighting and plumbing	Forced air
	Cheap	64.63	Low cost stucco or siding	Low cost finishes, no partitions, asphalt tile	Minimum code	Wall furnace
D POLE	Good	148.83	Pole frame, good insulated panels, some brick or stone trim	Drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures and plumbing, extra features	Warm and cool air (zoned)
	Average	112.43	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl composition	Adequate lighting and plumbing	Package A.C.
	Low cost	89.14	Pole frame, good metal panels, finished inside, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Forced air
	Cheap	59.79	Pole frame, metal siding	Low cost finishes, no partitions, acoustic tile, asphalt tile	Minimum code	Wall furnace
S	Good	154.15	Pre-engineered, good sandwich panels, some brick or stone trim	Drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures and plumbing, extra features	Warm and cool air (zoned)
	Average	116.51	Pre-engineered, sandwich panels, some trim	Drywall, acoustic tile, vinyl composition	Adequate lighting and plumbing	Package A.C.
	Low cost	92.27	Pre-engineered, finished interior, insulation	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Forced air
	Cheap	62.05	Light steel frame, siding	Low cost finishes, no partitions, acoustic tile, asphalt tile	Minimum code	Wall furnace

SCHOOLS - CLASSROOMS

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.					SPRINKLERS: Apply to area covered by sprinklers.				
						Sq. Ft.	LOW	AVG.	GOOD	EXCL.
						1,000	\$4.60	\$5.97	\$7.74	\$10.05
						2,500	4.00	5.13	6.58	8.43
						5,000	3.60	4.57	5.81	7.39
						10,000	3.24	4.08	5.14	6.47
						15,000	3.04	3.82	4.78	5.99
						20,000	2.91	3.64	4.54	5.67
						50,000	2.53	3.13	3.86	4.76
						80,000	2.36	2.89	3.55	4.35
						100,000	2.28	2.79	3.41	4.17
	Vertical wheelchair lifts cost \$12,700 to \$24,700.									
	BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.									
		LOW	AVG.	GOOD	EXCL.					
	Concrete	\$22.50	\$29.25	\$38.00	\$49.50					
	Steel	20.90	28.25	38.00	51.00					
	Wood	19.35	25.75	34.50	46.00					
	Add for ornate finishes, balustrades	19.45	24.10	29.75	36.75					
	Add for roofs or awnings	10.50	13.95	18.45	24.60					

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.	Costs	Sq. Ft.	Costs	Sq. Ft.	
	HEATING ONLY		HEATING & COOLING		COOLING ONLY	
	Electric cable or baseboard	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
	Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
	Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
	Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refriger. \$2,050 to \$2,600 per ton capacity	
	Space heaters, with fan	4.08			Evap. coolers \$300 to \$500 per MCFM capacity	
	radiant	4.71				
	Steam (including boiler)	18.00			VENTILATION ONLY	
	without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500 per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31
	Wall or floor furnace	3.73				

3	HEIGHT REFINEMENTS			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055
	9	.981	14	1.073
	10	1.000 (base)	15	1.092
	11	1.018	16	1.110
	12	1.037		

4	Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER													Average Floor Area Sq. Ft./Story	
		125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
	12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
	16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
	20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - CLASSROOMS - LABORATORY

OCCUPANCY DESCRIPTION: These laboratory classroom buildings include areas for lectures, demonstrations, audiovisual presentations, laboratory work and study. Typically, there is also an area designated for storage of materials and equipment. The laboratories have both AC and DC variable voltage and plumbing in the work areas.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers and lab equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$239.35	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, good workstations, lecture, support rooms	Good fluorescent fixtures, good lab plumbing, extra features	Hot and chilled water (zoned)
	Average	178.03	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, work-stations, good demonstration areas	Adequate lighting and plumbing, some extras	Warm and cool air (zoned)
C	Excellent	223.58	Steel frame, face brick or block, tile, ornamental	Plaster or drywall, acoustic tile, good workstations, lecture, support rooms	Good lighting and plumbing, piped gases, air and pure water	Warm and cool air (zoned)
	Good	177.58	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, good workstations, lecture area	Good fluorescent fixtures, good lab plumbing, extra features	Warm and cool air (zoned)
	Average	132.97	Steel frame or bearing walls, brick, block or concrete, some trim	Plaster or drywall, acoustic tile, VCT, adequate work, demonstration areas	Adequate lighting and plumbing	Package A.C.
D	Excellent	218.06	Steel or wood frame, brick or stone veneer, metal and glass	Plaster or drywall, acoustic tile, good workstations, lecture, support rooms	Good lighting and plumbing, piped gases, air and pure water	Warm and cool air (zoned)
	Good	171.84	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, good workstations, lecture area	Good fluorescent fixtures, good lab plumbing, extra features	Warm and cool air (zoned)
	Average	127.43	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, VCT, adequate work, demonstration areas	Adequate lighting and plumbing	Package A.C.
D POLE	Average	120.94	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl comp., adequate work, demonstration areas	Adequate lighting and plumbing	Package A.C.
S	Good	170.21	Pre-engineered, good sandwich panels, some brick or stone	Drywall, acoustic tile, good workstations, lecture area	Good fluorescent fixtures, good lab plumbing, extra features	Warm and cool air (zoned)
	Average	125.13	Pre-engineered, sandwich panels, some trim	Drywall, acoustic tile, vinyl comp., adequate work, demonstration areas	Adequate lighting and plumbing	Package A.C.

SCHOOLS - CLASSROOMS - LABORATORY

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push-button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>					<p>SPRINKLERS: Apply to area covered by sprinklers.</p>					
						Sq. Ft.	LOW	AVG.	GOOD	EXCL.
						1,000	\$4.60	\$5.97	\$7.74	\$10.05
						2,500	4.00	5.13	6.58	8.43
						5,000	3.60	4.57	5.81	7.39
						10,000	3.24	4.08	5.14	6.47
						15,000	3.04	3.82	4.78	5.99
						20,000	2.91	3.64	4.54	5.67
						50,000	2.53	3.13	3.86	4.76
						80,000	2.36	2.89	3.55	4.35
						100,000	2.28	2.79	3.41	4.17
		LOW	AVG.	GOOD	EXCL.					
Concrete		\$22.50	\$29.25	\$38.00	\$49.50					
Steel		20.90	28.25	38.00	51.00					
Wood		19.35	25.75	34.50	46.00					
Add for ornate finishes, balustrades		19.45	24.10	29.75	36.75					
Add for roofs or awnings		10.50	13.95	18.45	24.60					

2

<p>HEATING AND COOLING</p> <p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>					
	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig. \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00			VENTILATION ONLY	
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500 per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31
Wall or floor furnace	3.73				

3

<p>HEIGHT REFINEMENTS</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - CLASSROOM - LECTURE

OCCUPANCY DESCRIPTION: These lecture classroom buildings are designed for a large number of students and appear to be very similar to a small auditorium. Offices and some small classrooms can also be found. Projection areas are usually a common design feature in large classrooms.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. All fixed seats, built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers movable equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$178.87	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood, stepped floor, fixed seats	Adequate lighting and plumbing, good audio-visual wiring	Warm and cool air (zoned)
	Good	188.96	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, hardwood or carpet, stepped floor	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
C	Average	135.87	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood, fixed seats	Adequate lighting and plumbing, audio-visual wiring	Package A.C.
	Good	166.96	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, hardwood or carpet, stepped floor	Good fluorescent fixtures and plumbing, extra features	Warm and cool air (zoned)
D	Average	124.18	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood, fixed seats	Adequate lighting and plumbing, audio-visual wiring	Package A.C.
	Good	121.93	Pre-engineered, sandwich panels, some trim	Drywall, acoustic tile, vinyl composition, fixed seats	Adequate lighting and plumbing, audio-visual wiring	Package A.C.

SCHOOLS - CLASSROOMS - LECTURE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p>					<p>SPRINKLERS: Apply to area covered by sprinklers.</p>				
					Sq. Ft.	LOW	AVG.	GOOD	EXCL.
					1,000	\$4.60	\$5.97	\$7.74	\$10.05
					2,500	4.00	5.13	6.58	8.43
					5,000	3.60	4.57	5.81	7.39
					10,000	3.24	4.08	5.14	6.47
					15,000	3.04	3.82	4.78	5.99
					20,000	2.91	3.64	4.54	5.67
					50,000	2.53	3.13	3.86	4.76
					80,000	2.36	2.89	3.55	4.35
					100,000	2.28	2.79	3.41	4.17
<p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>									
		LOW	AVG.	GOOD	EXCL.				
Concrete		\$22.50	\$29.25	\$38.00	\$49.50				
Steel		20.90	28.25	38.00	51.00				
Wood		19.35	25.75	34.50	46.00				
Add for ornate finishes, balustrades		19.45	24.10	29.75	36.75				
Add for roofs or awnings		10.50	13.95	18.45	24.60				

2

<p>HEATING AND COOLING</p> <p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>					
	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig.. \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00				
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3

<p>HEIGHT REFINEMENTS</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - CLASSROOMS - SPECIAL EDUCATION

OCCUPANCY DESCRIPTION: These buildings are subdivided into teaching units and designed primarily for academic work for students with special needs including the exceptional child, as well as the physically challenged child. Typically, the better qualities include more windows, and better interior and exterior refinements. Floor finishes vary between carpet, hardwood and resilient floor coverings. Higher cost classrooms have carpet or hardwood. Acoustical tile ceiling finishes are found throughout all of the quality ranges. Lighting is commonly fluorescent fixtures.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built in bookshelves, cabinets and blackboards and plumbing associated with special needs.

NOT INCLUDED IN COSTS: Elevators, sprinklers, movable equipment and furnishings.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$236.16	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl, best cabinets	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Average	175.40	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or carpet, good built-ins	Adequate lighting and plumbing, some extra features	Warm and cool air (zoned)
C	Excellent	233.88	Steel frame, face brick, metal panels, tile	Plaster, glazed finishes, enamel, carpet & vinyl, best cabinets, closets	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	175.08	Steel columns, web or bar joists, ornamental block or face brick	Plaster/drywall, acoustic tile, vinyl comp./carpet, good cabinets, storage	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	131.32	Steel frame or bearing walls, brick, block or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood, some extras	Adequate lighting and plumbing	Package A.C.
D	Excellent	228.39	Steel or wood frame, brick or stone veneer, metal and glass	Plaster, enamel, vinyl finishes, carpet and vinyl, best cabinets, closets	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	169.35	Steel or Glulam frame and joists, brick veneer, glass, best EIFS	Plaster/drywall, acoustic tile, vinyl comp./carpet, good cabinets, storage	Good fluorescent fixtures and plumbing, extra features	Warm and cool air (zoned)
	Average	125.76	Wood frame or pipe columns, good stucco, EIFS or siding with trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood, some extras	Adequate lighting and plumbing	Package A.C.
D POLE	Good	162.30	Pole frame, good insulated panels, some brick or stone trim	Drywall, acoustic tile, carpet, vinyl composition, good cabinets, storage	Good fluorescent fixtures and plumbing, extra features	Warm and cool air (zoned)
	Average	119.34	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl composition, some extras	Adequate lighting and plumbing	Package A.C.
S	Good	167.71	Pre-engineered, good sandwich panels, some brick or stone trim	Drywall, acoustic tile, carpet, vinyl composition, good cabinets, storage	Good fluorescent fixtures and plumbing, extra features	Warm and cool air (zoned)
	Average	123.48	Pre-engineered, sandwich panels, some trim	Drywall, acoustic tile, vinyl composition, some extras	Adequate lighting and plumbing	Package A.C.

SCHOOLS - CLASSROOMS - SPECIAL EDUCATION

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.					SPRINKLERS: Apply to area covered by sprinklers.					
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.					
		1,000	\$4.60	\$5.97	\$7.74	\$10.05					
		2,500	4.00	5.13	6.58	8.43					
		5,000	3.60	4.57	5.81	7.39					
		10,000	3.24	4.08	5.14	6.47					
		15,000	3.04	3.82	4.78	5.99					
		20,000	2.91	3.64	4.54	5.67					
		50,000	2.53	3.13	3.86	4.76					
		80,000	2.36	2.89	3.55	4.35					
		100,000	2.28	2.79	3.41	4.17					
	Vertical wheelchair lifts cost \$12,700 to \$24,700.										
	BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.										
		LOW	AVG.	GOOD	EXCL.						
	Concrete	\$22.50	\$29.25	\$38.00	\$49.50						
	Steel	20.90	28.25	38.00	51.00						
	Wood	19.35	25.75	34.50	46.00						
	Add for ornate finishes, balustrades	19.45	24.10	29.75	36.75						
	Add for roofs or awnings	10.50	13.95	18.45	24.60						

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
		Sq. Ft.		Sq. Ft.		Sq. Ft.
	HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
	Electric cable or baseboard	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
	Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
	Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
	Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refriger. \$2,050 to \$2,600 per ton capacity	
	Space heaters, with fan	4.08			Evap. coolers \$300 to \$500 per MCFM capacity	
	radiant	4.71				
	Steam (including boiler)	18.00				
	without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500 per ton of rated capacity.		VENTILATION ONLY	
	Wall or floor furnace	3.73			Vent. (blowers/ducts)	\$3.31

3	HEIGHT REFINEMENTS			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055
	9	.981	14	1.073
	10	1.000 (base)	15	1.092
	11	1.018	16	1.110
	12	1.037		

4	AVERAGE PERIMETER															
	Average Floor Area Sq. Ft./Story	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	Average Floor Area Sq. Ft./Story
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
	12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
	16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
	20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - COLLEGE



GOOD/EXCELLENT CLASS C

OCCUPANCY DESCRIPTION: This occupancy includes the complete school facility with a mixture of classrooms, multipurpose buildings, administrative offices, etc. The schools may consist of one building or several separate buildings. This occupancy applies to colleges with all departments in one building.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Swimming pools, movable furnishings or equipment, exterior ground improvements (i.e., athletic fields), open shelters and site work.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A	Excellent	\$352.51	Stone, best brick, metal and glass, high ornamentation	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	278.79	Face brick, stone, concrete or metal panels, solar glass, ornamental	Plaster or drywall, acoustic tile, carpet and vinyl	High level lighting, audio visual wiring, good plumbing	Hot and chilled water (zoned)
	Average	222.41	Brick, concrete or metal panels, formed concrete, good trim	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Adequate lighting and plumbing	Hot and chilled water (zoned)
	Low cost	165.28	Brick, precast concrete, block, some trim	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Minimum school lighting and plumbing	Warm and cool air (zoned)
B	Excellent	331.36	Stone, best brick, metal and glass, high ornamentation	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	263.65	Face brick, stone, concrete or metal panels, solar glass, ornamental	Plaster or drywall, acoustic tile, carpet and vinyl	High level lighting, audio visual wiring, good plumbing	Hot and chilled water (zoned)
	Average	211.62	Brick, concrete or metal panels, formed concrete, good trim	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Adequate lighting and plumbing	Hot and chilled water (zoned)
	Low cost	157.64	Brick, precast concrete, block, some trim	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Minimum school lighting and plumbing	Warm and cool air (zoned)
C	Excellent	269.72	Steel frame, face brick, metal panels, tile, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	214.51	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Average	158.38	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Warm and cool air (zoned)
	Low cost	125.31	Brick, block, tilt up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Heat pump system
D	Excellent	263.45	Steel or wood frame, brick or stone veneer, metal and glass, ornamental	Plaster, enamel, glazed or vinyl finishes, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	194.44	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	151.65	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	112.33	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood floor	Minimum school lighting and plumbing	Package A.C.
D POLE	Average	143.89	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	105.81	Pole frame, finished interior, insulation, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.
S	Good	191.14	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	148.40	Pre-engineered, sandwich panels, some ornamentation	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	109.30	Pre-engineered, finished interior, insulation, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.

SCHOOLS - COLLEGE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	<p>ELEVATORS: A small passenger elevator with simple call system and push-button control, four-passenger cab, and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BELL TOWERS: Large major masonry campaniles or bell towers cost \$43.50 to \$71.00 per cubic foot of the tower structure.</p> <p>Small towers cost \$10.80 to \$19.05 per cubic foot of the tower structure.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>	SPRINKLERS: Apply to area covered by sprinklers.																																																
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2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.		Sq. Ft.		Sq. Ft.	
	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs	
	Electric cable or baseboard ..	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40	
	Electric wall heaters	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05	
	Forced air furnace	Hot/chilled water (zoned)	39.00	Central evaporative	5.38	
	Hot water, baseboard/convactor	Heat pump system	23.85	Pkg. refriger. . \$2,050 to \$2,600 per ton capacity		
	Space heaters, with fan			Evap. coolers . \$300 to \$500 per MCFM capacity		
	radiant					
	Steam (including boiler)					
	without boiler	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY		
	Wall or floor furnace	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31	

3	HEIGHT REFINEMENTS			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055
	9	.981	14	1.073
	10	1.000 (base)	15	1.092
	11	1.018	16	1.110
	12	1.037		

4	Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER													Average Floor Area Sq. Ft./Story	
		125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	----	10,000
	12,000	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	----	12,000
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NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - COLLEGE CLASSROOMS

OCCUPANCY DESCRIPTION: These buildings are subdivided into teaching units and designed primarily for academic work. Typically the better qualities include more windows and better interior and exterior refinements.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers movable equipment and furnishings.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A	Excellent	\$305.45	Stone, best brick, metal and glass, high ornamentation	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	246.70	Face brick, stone, concrete or metal panels, solar glass, ornamental	Plaster or drywall, acoustic tile, carpet and vinyl	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Average	200.90	Brick, concrete or metal panels, formed concrete, good trim	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Adequate lighting and plumbing	Hot and chilled water (zoned)
	Low cost	151.20	Brick, precast concrete, block, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Minimum school lighting and plumbing	Warm and cool air (zoned)
B	Excellent	284.48	Stone, best brick, metal and glass, high ornamentation	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	232.37	Face brick, stone, concrete or metal panels, solar glass, ornamental	Plaster or drywall, acoustic tile, carpet and vinyl	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Average	191.33	Brick, concrete or metal panels, formed concrete, good trim	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Adequate lighting and plumbing	Hot and chilled water (zoned)
	Low cost	144.99	Brick, precast concrete, block, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Minimum school lighting and plumbing	Warm and cool air (zoned)
C	Excellent	236.16	Steel frame, face brick, metal panels, tile, highly ornamental	Plaster, glazed finishes, enamel, carpet, vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	193.64	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Average	146.17	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Warm and cool air (zoned)
	Low cost	110.88	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or dry-wall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.
D	Excellent	230.59	Steel or wood frame, brick or stone veneer, metal and glass, ornamental	Plaster, enamel, glazed or vinyl finishes, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	174.05	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	139.70	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	105.97	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood floors	Minimum school lighting and plumbing	Package A.C.
D POLE	Average	132.54	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	99.93	Pole frame, finished interior, insulation, little trim	Painted walls, acoustic tile or dry-wall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.
S	Good	171.66	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures and plumbing, extra features	Warm and cool air (zoned)
	Average	137.07	Pre-engineered, sandwich panels, some ornamentation	Drywall, acoustic tile, vinyl composition	Adequate lighting and plumbing	Heat pump system
	Low cost	103.34	Pre-engineered, finished interior, insulation, little trim	Painted walls, acoustic tile or dry-wall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.

SCHOOLS - COLLEGE CLASSROOMS

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push-button control, four-passenger cab, and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BELL TOWERS: Large major masonry campaniles or bell towers cost \$43.50 to \$71.00 per cubic foot of the tower structure.</p> <p>Small towers cost \$10.80 to \$19.05 per cubic foot of the tower structure.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>	<p>SPRINKLERS: Apply to area covered by sprinklers.</p> <table border="1"> <thead> <tr> <th>Sq. Ft.</th> <th>LOW</th> <th>AVG.</th> <th>GOOD</th> <th>EXCL.</th> </tr> </thead> <tbody> <tr><td>1,000</td><td>\$4.60</td><td>\$5.97</td><td>\$7.74</td><td>\$10.05</td></tr> <tr><td>2,500</td><td>4.00</td><td>5.13</td><td>6.58</td><td>8.43</td></tr> <tr><td>5,000</td><td>3.60</td><td>4.57</td><td>5.81</td><td>7.39</td></tr> <tr><td>10,000</td><td>3.24</td><td>4.08</td><td>5.14</td><td>6.47</td></tr> <tr><td>15,000</td><td>3.04</td><td>3.82</td><td>4.78</td><td>5.99</td></tr> <tr><td>20,000</td><td>2.91</td><td>3.64</td><td>4.54</td><td>5.67</td></tr> <tr><td>50,000</td><td>2.53</td><td>3.13</td><td>3.86</td><td>4.76</td></tr> <tr><td>80,000</td><td>2.36</td><td>2.89</td><td>3.55</td><td>4.35</td></tr> <tr><td>100,000</td><td>2.28</td><td>2.79</td><td>3.41</td><td>4.17</td></tr> </tbody> </table>					Sq. Ft.	LOW	AVG.	GOOD	EXCL.	1,000	\$4.60	\$5.97	\$7.74	\$10.05	2,500	4.00	5.13	6.58	8.43	5,000	3.60	4.57	5.81	7.39	10,000	3.24	4.08	5.14	6.47	15,000	3.04	3.82	4.78	5.99	20,000	2.91	3.64	4.54	5.67	50,000	2.53	3.13	3.86	4.76	80,000	2.36	2.89	3.55	4.35	100,000	2.28	2.79	3.41	4.17
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Add for ornate finishes, balustrades	19.45	24.10	29.75	36.75																																																			
Add for roofs or awnings	10.50	13.95	18.45	24.60																																																			

2

<p>HEATING AND COOLING</p> <p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>																																													
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3

<p>HEIGHT REFINEMENTS</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - COMMONS

OCCUPANCY DESCRIPTION: A “commons” has a variety of uses. Although each “commons” varies depending on the number of students and the space available, there are some similar elements found in these occupancies: Administrative areas, food areas, study/quiet areas and hobby/game areas.

INCLUDED IN COSTS: Architects’ fees and contractors’ overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers kitchen or recreational equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	\$310.69	Stone, best brick, metal and glass, good ornamentation	Plaster, glazed finishes, pavers, carpet, varied recreation	Best lighting, plumbing, food services and audio	Hot and chilled water (zoned)
	Good	253.65	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, carpet and vinyl, varied activity center	Good fluorescent fixtures, good plumbing and kitchens	Hot and chilled water (zoned)
	Average	208.58	Brick, precast concrete, block, some trim	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Adequate lighting, plumbing and kitchen	Hot and chilled water (zoned)
A-B	Finished Basement	138.54	Reinforced concrete, plaster interior	Recreation, food service finishes, some utility and storage	Adequate lighting and plumbing	Warm and coolair (zoned)
C	Excellent	277.48	Steel frame, stone, brick, metal and glass, good ornamentation	Plaster, glazed finishes, pavers, carpet, varied recreation	Best lighting, plumbing, food services and audio	Hot and chilled water (zoned)
	Good	221.20	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, carpet and vinyl, good activity center	Good fluorescent fixtures, good plumbing and kitchens	Hot and chilled water (zoned)
	Average	164.07	Steel frame or bearing walls, brick, block or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting, plumbing and kitchen and snack bars	Warm and cool air (zoned)
	Low cost	130.10	Brick, block, tilt up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile, small game rooms	Minimum lighting and plumbing, few extras	Heat pump system
D	Good	215.02	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, carpet and vinyl, good activity center	Good fluorescent fixtures, good plumbing and kitchens	Hot and chilled water (zoned)
	Average	158.54	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting, plumbing and kitchen and snack bars	Warm and cool air (zoned)
	Low cost	125.26	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood floors	Minimum lighting and plumbing, few extras	Heat pump system
D POLE	Low cost	119.59	Pole frame, good metal panels, finished inside, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile, small game rooms	Minimum lighting and plumbing, few extras	Heat pump system
S	Low cost	123.08	Pre-engineered, finished interior, insulation, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile, small game rooms	Minimum lighting and plumbing, few extras	Heat pump system
CDS	Finished Basement	97.42	Reinforced concrete, plaster or drywall interior	Recreation, food service finishes, some utility and storage	Adequate lighting and plumbing	Forced air

For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$5.95 per square foot.

SCHOOLS - COMMONS

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BELL TOWERS: Large major masonry campaniles or bell towers cost \$43.50 to \$71.00 per cubic foot of the tower structure.</p> <p>Small towers cost \$10.80 to \$19.05 per cubic foot of the tower structure.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>	<p>SPRINKLERS: Apply to area covered by sprinklers.</p> <table border="1"> <thead> <tr> <th>Sq. Ft.</th> <th>LOW</th> <th>AVG.</th> <th>GOOD</th> <th>EXCL.</th> </tr> </thead> <tbody> <tr><td>1,000</td><td>\$4.60</td><td>\$5.97</td><td>\$7.74</td><td>\$10.05</td></tr> <tr><td>2,500</td><td>4.00</td><td>5.13</td><td>6.58</td><td>8.43</td></tr> <tr><td>5,000</td><td>3.60</td><td>4.57</td><td>5.81</td><td>7.39</td></tr> <tr><td>10,000</td><td>3.24</td><td>4.08</td><td>5.14</td><td>6.47</td></tr> <tr><td>15,000</td><td>3.04</td><td>3.82</td><td>4.78</td><td>5.99</td></tr> <tr><td>20,000</td><td>2.91</td><td>3.64</td><td>4.54</td><td>5.67</td></tr> <tr><td>50,000</td><td>2.53</td><td>3.13</td><td>3.86</td><td>4.76</td></tr> <tr><td>80,000</td><td>2.36</td><td>2.89</td><td>3.55</td><td>4.35</td></tr> <tr><td>100,000</td><td>2.28</td><td>2.79</td><td>3.41</td><td>4.17</td></tr> </tbody> </table>					Sq. Ft.	LOW	AVG.	GOOD	EXCL.	1,000	\$4.60	\$5.97	\$7.74	\$10.05	2,500	4.00	5.13	6.58	8.43	5,000	3.60	4.57	5.81	7.39	10,000	3.24	4.08	5.14	6.47	15,000	3.04	3.82	4.78	5.99	20,000	2.91	3.64	4.54	5.67	50,000	2.53	3.13	3.86	4.76	80,000	2.36	2.89	3.55	4.35	100,000	2.28	2.79	3.41	4.17
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HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard ..	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig. . \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00				
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3

HEIGHT REFINEMENTS

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - ELEMENTARY SCHOOLS



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: This occupancy includes the entire school facility serving kindergarten through fifth or sixth grade. There is a mixture of classrooms, multipurpose buildings, administrative offices, etc. The schools may consist of one building or several separate buildings.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Swimming pools, movable furnishings or equipment, exterior ground improvements (i.e., athletic fields), open shelters and site work.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	\$282.91	Stone, best brick, metal and glass, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled Swater (zoned)
	Good	222.01	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl	High level lighting, audio-visual wiring, good plumbing	Warm air cool air (zoned)
	Average	184.13	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Adequate lighting and plumbing	Warm and cool air (zoned)
A-B	Finished classroom	130.57	Reinforced concrete, plaster interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Warm and cool air (zoned)
	Basement	62.33	Unfinished interior	Concrete with hardener, lines and stops	Exposed lighting, drains	Ventilation
	Unfinished Basement	53.98	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None
C	Excellent	239.84	Steel frame, face brick, metal panels, tile	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	185.02	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	143.22	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Package A.C.
	Low cost	115.23	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Forced Air
D	Excellent	232.97	Steel or wood frame, brick or stone veneer, metal and glass, ornamental	Plaster, enamel, glazed or vinyl finishes, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	178.55	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	137.29	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Package A.C.
	Low cost	109.88	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood floors	Minimum school lighting and plumbing	Forced Air
D POLE	Average	130.32	Pole frame, good metal panels, finished inside, some trim	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Package A.C.
	Low cost	103.71	Pole frame, metal siding, finished interior, insulated, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Forced Air.
S	Good	177.38	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	135.22	Pre-engineered, sandwich panels, some ornamentation	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Package A.C.
	Low cost	107.35	Pre-engineered, finished interior, insulation, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Forced Air
CDS	Finished classroom	89.16	Reinforced concrete, plaster or drywall interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Forced air
	Basement	41.73	Unfinished interior	Finished ceiling, concrete floor with hardener	Exposed lighting, adequate drains	Ventilation
	Unfinished Basement	33.67	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None

For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$5.95 per square foot.

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SCHOOLS - ELEMENTARY SCHOOLS

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.					SPRINKLERS: Apply to area covered by sprinklers.				
					Sq. Ft.	LOW	AVG.	GOOD	EXCL.
					1,000	\$4.60	\$5.97	\$7.74	\$10.05
					2,500	4.00	5.13	6.58	8.43
					5,000	3.60	4.57	5.81	7.39
					10,000	3.24	4.08	5.14	6.47
					15,000	3.04	3.82	4.78	5.99
					20,000	2.91	3.64	4.54	5.67
					50,000	2.53	3.13	3.86	4.76
					80,000	2.36	2.89	3.55	4.35
					100,000	2.28	2.79	3.41	4.17
Vertical wheelchair lifts cost \$12,700 to \$24,700.									
BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.									
		LOW	AVG.	GOOD	EXCL.				
Concrete.....		\$22.50	\$29.25	\$38.00	\$49.50				
Steel.....		20.90	28.25	38.00	51.00				
Wood.....		19.35	25.75	34.50	46.00				
Add for ornate finishes, balustrades.....		19.45	24.10	29.75	36.75				
Add for roofs or awnings.....		10.50	13.95	18.45	24.60				

2

HEATING AND COOLING

These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard ..	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convector	20.00	Heat pump system	23.85	Pkg. refrig. . \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00				
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3

HEIGHT REFINEMENTS

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - FINE ARTS BUILDING



GOOD CLASS B

OCCUPANCY DESCRIPTION: These fine arts buildings are designed primarily as rehearsal and work centers with large, open areas and large window and door openings. Floor finishes vary depending on the specific use of a given area. For example, vinyl composition tile is commonly found in the general band or fine art area while hardened concrete flooring can be found in some craft areas.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers, furnishings or movable equipment.

Portions of these buildings are designated for display and storage. Extensive electrical outlets, lighting and plumbing are typically found.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$247.58	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl, good music, dramatic arts	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Average	180.95	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, vinyl, hardwood, craft, rehearsal studios	Adequate lighting and plumbing	Warm and cool air (zoned)
C	Excellent	248.35	Steel frame, face brick or block, tile, ornamental	Plaster or drywall, acoustic tile, carpet and vinyl, good music, dramatic arts	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Good	182.32	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, hardwood or vinyl, small studios	Good fluorescent fixtures, good plumbing	Warm and cool air (zoned)
	Average	141.96	Steel frame, brick, block, concrete, some ornamentation	Plaster or drywall, acoustic tile, vinyl comp., hardwood, rehearsal stage	Adequate lighting and plumbing	Heat pump system
	Low cost	104.61	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile, craft centers	Minimum school lighting and plumbing	Package A.C.
D	Good	176.16	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, hardwood or vinyl, small studios	Good fluorescent fixtures, good plumbing	Warm and cool air (zoned)
	Average	135.94	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl comp., hardwood, rehearsal stage	Adequate lighting and plumbing	Heat pump system
	Low cost	99.04	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood, craft centers	Minimum school lighting and plumbing	Package A.C.
D POLE	Average	129.58	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl comp. or hardwood, rehearsal stage	Adequate lighting and plumbing	Heat pump system
	Low cost	93.52	Pole frame, metal panels, finished inside, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile, craft centers	Minimum school lighting and plumbing	Package A.C.
S	Good	175.38	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, acoustic tile, hardwood or vinyl, small studios	Good fluorescent fixtures, good plumbing	Warm and cool air (zoned)
	Average	134.54	Pre-engineered, sandwich panels, some trim	Drywall, acoustic tile, vinyl comp. or hardwood, rehearsal stage	Adequate lighting and plumbing	Heat pump system
	Low cost	97.40	Pre-engineered, finished interior, insulation	Painted walls, acoustic tile or drywall ceilings, asphalt tile, craft centers	Minimum school lighting and plumbing	Package A.C.

SCHOOLS - FINE ARTS BUILDING

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push-button control, four-passenger cab, and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>	<p>SPRINKLERS: Apply to area covered by sprinklers.</p>																																																																																				
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<p>HEIGHT REFINEMENTS</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
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3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
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NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - GYMNASIUM

OCCUPANCY DESCRIPTION: These buildings are usually designed with the basketball court as the focal point. There is usually an entry area or lobby, and there may be a storefront and large openings in the entry area. The building itself is subdivided and includes locker/shower room facilities, some small administrative offices and miscellaneous rooms for storage and/or meetings. They can also serve as a number of teaching stations utilizing the spectator seating in the basketball court area.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Elevators, sprinklers, lockers, equipment and seating.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$210.76	Heavy frame, best masonry walls, solar glass, good entrance and lobby	Basketball floor, high-cost finishes, many extra facilities	Good lighting and outlets, good plumbing, extra features	Heat pump system
	Average	157.28	Steel columns and girders, face brick, glass, best ornamental block	Plaster or drywall, basketball floor, vinyl, good detail	Good lighting and outlets, tiled showers and restrooms	Heat pump system
A-B	Finished classroom mezzanine	84.84	Not included	Classroom and office, typical school finishes	Adequate school lighting and plumbing	In bldg. cost
	Good open mezzanine	46.31	Not included	Finished running track, plaster or drywall soffit	Average lighting, no plumbing	In bldg. cost
	Average open mezzanine	34.02	Not included	Finished floors and soffit, add for spectator seating	Average lighting, no plumbing	In bldg. cost
C	Excellent	209.67	Heavy frame, best masonry walls, good entrance and lobby	Basketball floor, high-cost finishes, many extra facilities	Good lighting and outlets, good plumbing, extra features	Heat pump system
	Good	156.92	Steel columns and girders, face brick, best ornamental block	Plaster or drywall, basketball floor, vinyl, good detail	Good lighting and outlets, tiled showers and restrooms	Heat pump system
	Average	111.05	Steel or Glulam, trusses or girders, brick, block or tilt-up	Basketball floor, showers, vinyl composition, some interior finish	Adequate lighting and plumbing, shower rooms	Package A.C.
	Low cost	72.25	Light frame, block or tilt-up, very plain	Concrete floor, some vinyl composition, minimal finish	Minimum gym lighting, plumbing and shower facilities	Space heaters
D	Excellent	202.31	Heavy frame, masonry veneer walls, good entrance and lobby	Basketball floor, high-cost finishes, many extra facilities	Good lighting and outlets, good plumbing, extra features	Heat pump system
	Good	150.28	Steel or Glulam frame, trusses and girders, brick veneer, best stucco	Plaster or drywall, basketball floor, vinyl, good detail	Good lighting and outlets, tiled showers and restrooms	Heat pump system
	Average	105.34	Heavy frame, trusses or girders, good stucco or siding, little trim	Plaster or drywall, basketball floor, asphalt tile, few partitions	Adequate lighting and plumbing, shower rooms	Package A.C.
	Low cost	67.47	Light frame, stucco or siding, very plain	Concrete floor, some vinyl composition, minimal finish	Minimum gym lighting, plumbing and shower facilities	Space heaters
D POLE	Average	97.79	Pole frame, good metal panels, finished inside, little trim	Basketball floor, showers, vinyl composition, some interior finish	Adequate lighting and plumbing, shower rooms	Package A.C.
	Low cost	62.43	Pole frame, metal siding, finished interior, insulated	Concrete floor, vinyl composition, minimal finish	Minimum gym lighting, plumbing and shower facilities	Space heaters
	Cheap	52.75	Pole frame, metal siding, partly finished interior, some insulation	Concrete floor, some vinyl composition, minimal finish	Minimum gym lighting and plumbing	Space heaters
S	Good	149.33	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, basketball floor, vinyl, good detail	Good lighting and outlets, tiled showers and restrooms	Heat pump system
	Average	103.43	Pre-engineered, finished interior, insulation, little trim	Basketball floor, showers, vinyl composition, some interior finish	Adequate lighting and plumbing, shower rooms	Package A.C.
	Low cost	65.26	Pre-engineered, finished interior, insulated	Concrete floor, vinyl composition, minimal finish	Minimum gym lighting, plumbing and shower facilities	Space heaters
	Cheap	54.77	Pre-engineered, partly finished interior, some insulation	Concrete floor, some vinyl composition, minimal finish	Minimum gym lighting and plumbing	Space heaters
CDS	Finished classroom mezzanine	64.53	Not included	Finished running track, plaster or drywall soffit	Average lighting, no plumbing	In bldg. cost
	Good open mezzanine	36.98	Not included	Finished floors and soffit, add for spectator seating	Average lighting, no plumbing	In bldg. cost
	Average open mezzanine	25.03	Not included	Classroom and office, typical school finishes	Adequate school lighting and plumbing	In bldg. cost

For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$5.95 per square foot.

SCHOOLS - GYMNASIUM

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

ELEVATORS: A small passenger elevator with simple call system and push-button control, four-passenger cab, and two or three stops, costs \$56,250 to \$77,250.					SPRINKLERS: Apply to area covered by sprinklers.				
					Sq. Ft.	LOW	AVG.	GOOD	EXCL.
					1,000	\$4.60	\$5.97	\$7.74	\$10.05
					2,500	4.00	5.13	6.58	8.43
					5,000	3.60	4.57	5.81	7.39
					10,000	3.24	4.08	5.14	6.47
					15,000	3.04	3.82	4.78	5.99
					20,000	2.91	3.64	4.54	5.67
					50,000	2.53	3.13	3.86	4.76
					80,000	2.36	2.89	3.55	4.35
					100,000	2.28	2.79	3.41	4.17
Vertical wheelchair lifts cost \$12,700 to \$24,700.									
BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.									
		LOW	AVG.	GOOD	EXCL.				
Concrete	.....	\$22.50	\$29.25	\$38.00	\$49.50				
Steel	.....	20.90	28.25	38.00	51.00				
Wood	.....	19.35	25.75	34.50	46.00				
Add for ornate finishes, balustrades	.....	19.45	24.10	29.75	36.75				
Add for roofs or awnings	.....	10.50	13.95	18.45	24.60				

2

HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	.. \$12.05	Package A.C. (short ductwork)	.... \$15.85	Central refrigeration (zoned)	.... \$14.40
Electric wall heaters	..... 3.61	Warm and cool air (zoned)	..... 25.00	package (short ductwork)	.... 10.05
Forced air furnace	..... 13.75	Hot/chilled water (zoned)	..... 39.00	Central evaporative	..... 5.38
Hot water, baseboard/convactor	20.00	Heat pump system	..... 23.85	Pkg. refrig.. \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	..... 4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	..... 4.71				
Steam (including boiler)	..... 18.00			VENTILATION ONLY	
without boiler	..... 16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		Vent. (blowers/ducts)	..... \$3.31
Wall or floor furnace	..... 3.73	per ton of rated capacity.			

3

HEIGHT REFINEMENTS					
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.					
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055	20	1.183
9	.981	14	1.073	22	1.220
10	1.000 (base)	15	1.092	24	1.257
11	1.018	16	1.110	30	1.367
12	1.037	18	1.147	36	1.476

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - HIGH SCHOOL



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: This occupancy includes the entire school facility, which includes a mixture of classrooms, multipurpose building, administrative offices, etc. The school may consist of one building or several separate buildings, and encompasses grades nine or ten through twelve.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Swimming pools, movable furnishing or equipment, exterior ground improvements (i.e., athletic fields), open shelters and site work.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A	Excellent	\$290.26	Stone, best brick, metal and glass, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	*Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	239.90	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl	*High level lighting, audio-visual wiring, good plumbing	Hot and chilled water (zoned)
	Average	185.84	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or vinyl composition	*Adequate lighting and plumbing	Warm and cool air (zoned)
B	Excellent	273.70	Stone, best brick, metal and glass, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	*Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	227.61	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl	*High level lighting, audio-visual wiring, good plumbing	Hot and chilled water (zoned)
	Average	176.79	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or vinyl composition	*Adequate lighting and plumbing	Warm and cool air (zoned)
C	Excellent	224.76	Steel frame, face brick, metal panels, tile, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	175.33	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	145.40	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	114.22	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.
D	Excellent	219.23	Steel or wood frame, brick or stone veneer, metal and glass, ornamental	Plaster, enamel, glazed or vinyl finishes, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	169.65	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	139.83	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	108.94	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood floors	Minimum school lighting and plumbing	Package A.C.
D POLE	Average	132.80	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	102.98	Pole frame, finished interior, insulation, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.
S	Good	167.69	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	137.56	Pre-engineered, sandwich panels, some ornamentation	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	106.55	Pre-engineered, finished interior, insulation, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.

SCHOOLS - HIGH SCHOOL

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab, and two or three stops, costs \$56,250 to \$77,250.		SPRINKLERS: Apply to area covered by sprinklers.				
			Sq. Ft.	LOW	AVG.	GOOD	EXCL.
			1,000	\$4.60	\$5.97	\$7.74	\$10.05
			2,500	4.00	5.13	6.58	8.43
			5,000	3.60	4.57	5.81	7.39
			10,000	3.24	4.08	5.14	6.47
			15,000	3.04	3.82	4.78	5.99
			20,000	2.91	3.64	4.54	5.67
			50,000	2.53	3.13	3.86	4.76
			80,000	2.36	2.89	3.55	4.35
			100,000	2.28	2.79	3.41	4.17
	Vertical wheelchair lifts cost \$12,700 to \$24,700.						
	ELEVATORS: Buildings whose base costs include elevators are marked with an asterisk (*). If the building under consideration has no elevators, deduct the following from the base costs so marked. For detailed costs see Section UIP 8.						
	Classes A/B	Sq. Ft. Costs	BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.				
	Excellent	\$3.46		LOW	AVG.	GOOD	EXCL.
	Good	2.08	Concrete	\$22.50	\$29.25	\$38.00	\$49.50
	Average	1.33	Steel	20.90	28.25	38.00	51.00
			Wood	19.35	25.75	34.50	46.00
			Add for ornate finishes, balustrades	19.45	24.10	29.75	36.75
			Add for roofs or awnings	10.50	13.95	18.45	24.60

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.	Costs	Sq. Ft.	Costs	Sq. Ft.	Costs
	HEATING ONLY		HEATING & COOLING		COOLING ONLY	
	Electric cable or baseboard . .	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
	Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
	Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
	Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig. . \$2,050 to \$2,600 per ton capacity	
	Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
	radiant	4.71				
	Steam (including boiler)	18.00			VENTILATION ONLY	
	without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500 per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31
	Wall or floor furnace	3.73				

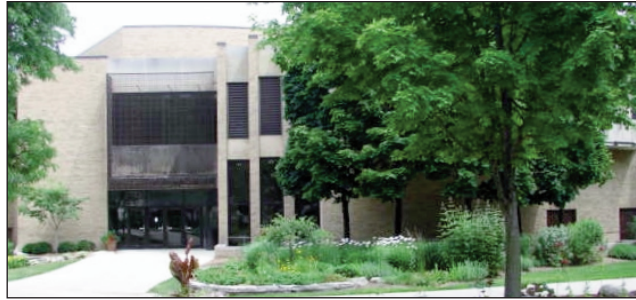
3	HEIGHT REFINEMENTS			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055
	9	.981	14	1.073
	10	1.000 (base)	15	1.092
	11	1.018	16	1.110
	12	1.037		

4	AVERAGE PERIMETER															
	Average Floor Area Sq.Ft./Story	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	Average Floor Area Sq. Ft./Story
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
	12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
	16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
	20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - LECTURE HALL BUILDING



GOOD CLASS B

OCCUPANCY DESCRIPTION: These buildings are used as classrooms for a large number of students and appear to be very similar to a small auditorium. Offices and some small classrooms can also be found. Projection areas are usually a common design feature in large classrooms.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers movable equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	\$320.77	Steel frame, face brick, metal panels, tile, highly ornamental	Plaster or drywall, acoustic tile, carpet, studios, main hall or auditorium	Best lighting, audio-visual wiring, good plumbing	Hot and chilled water (zoned)
	Good	257.42	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl, main hall, fixed seating	Good lighting, audio-visual wiring, good plumbing	Hot and chilled water (zoned)
	Average	208.30	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, VCT, hardwood, small studios or hall	Adequate lighting and plumbing, good audio-visual wiring	Hot and chilled water (zoned)
A-B	Balcony	73.44	Not included	Stepped balcony with plaster soffit, fixed seating	Adequate lighting	In building cost
C	Excellent	263.42	Steel frame, face brick, metal panels, tile, ornamental	Plaster or drywall, acoustic tile, carpet, studios, main hall or auditorium	Best lighting, audio-visual wiring, good plumbing	Hot and chilled water (zoned)
	Good	209.19	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, carpet, hardwood, main hall, fixed seating	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Average	153.95	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition, small studios, fixed seats	Adequate lighting and plumbing, audio-visual wiring	Warm and cool air (zoned)
D	Good	199.16	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, carpet, hardwood, main hall, fixed seats	Good fluorescent fixtures, good plumbing, extra features	Hot and chilled water (zoned)
	Average	146.65	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition, small studios, fixed seats	Adequate lighting and plumbing, audio-visual wiring	Warm and cool air (zoned)
S	Average	143.18	Pre-engineered, sandwich panels, some trim	Drywall, acoustic tile, vinyl composition, small studios or hall, fixed seats	Adequate lighting and plumbing, audio-visual wiring	Warm and cool air (zoned)
CDS	Balcony	60.67	Not included	Stepped balcony with drywall soffit, fixed seating	Adequate lighting	In building cost

SCHOOLS - LECTURE HALL BUILDING

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>	SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		1,000	\$4.60	\$5.97	\$7.74	\$10.05
		2,500	4.00	5.13	6.58	8.43
		5,000	3.60	4.57	5.81	7.39
		10,000	3.24	4.08	5.14	6.47
		15,000	3.04	3.82	4.78	5.99
		20,000	2.91	3.64	4.54	5.67
		50,000	2.53	3.13	3.86	4.76
		80,000	2.36	2.89	3.55	4.35
		100,000	2.28	2.79	3.41	4.17
		LOW	AVG.	GOOD	EXCL.	
	Concrete.....	\$22.50	\$29.25	\$38.00	\$49.50	
	Steel.....	20.90	28.25	38.00	51.00	
	Wood.....	19.35	25.75	34.50	46.00	
	Add for ornate finishes, balustrades.....	19.45	24.10	29.75	36.75	
	Add for roofs or awnings..	10.50	13.95	18.45	24.60	

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
	Electric cable or baseboard ..	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
	Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
	Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
	Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refig.. \$2,050 to \$2,600 per ton capacity	
	Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
	radiant	4.71				
	Steam (including boiler)	18.00				
	without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
	Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3	HEIGHT REFINEMENTS					
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.					
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055	20	1.183
	9	.981	14	1.073	22	1.220
	10	1.000 (base)	15	1.092	24	1.257
	11	1.018	16	1.110	30	1.367
	12	1.037	18	1.147	36	1.476

4	Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
		125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
	12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
	16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
	20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - MANUAL ARTS (SHOP) BUILDING

OCCUPANCY DESCRIPTION: These are buildings with large rooms used primarily for specialized education and vocational training. They are built of masonry, wood frame or pre-engineered steel. The walls are painted with some drywall and acoustic tile ceilings. Good lighting and many outlets can be found.

The buildings, when divided, have some classroom/lecture stations and work areas. Cost includes all necessary components. The overall division of the building separates the various training specialties that may include woodworking, graphic arts, electrical, metal, machine and automotive.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers, finishings and movable equipment power wiring or equipment that may be found.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$146.92	Brick, precast concrete, block, some trim	Plaster or drywall, acoustic tile, good slab, hardwood or vinyl composition	Good lighting and outlets, good plumbing	Package A.C.
	Low cost	112.07	Precast concrete, block, very plain	Painted walls, acoustic tile or exposed ceilings, some asphalt tile	Adequate lighting, many outlets, adequate plumbing	Forced air
C	Good	148.84	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, vinyl composition, carpet, good slab	Good fluorescent fixtures and outlets, good plumbing	Package A.C.
	Average	113.00	Steel frame or bearing walls, brick block, concrete panels, some trim	Painted walls, acoustic tile or dry-wall ceilings, some asphalt tile	Good lighting, many outlets, adequate plumbing	Forced air
	Low cost	78.22	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Space heaters
D	Good	142.44	Steel or Glulam frame and joists, brick veneer, best stucco	Plaster or drywall, acoustic tile, vinyl composition, carpet, good slab	Good fluorescent fixtures and outlets, good plumbing	Package A.C.
	Average	107.36	Wood frame or pipe columns, good stucco or siding with some trim	Plaster, acoustic tile or drywall ceiling, some asphalt tile	Good lighting, many outlets, adequate plumbing	Forced air
	Low cost	73.36	Wood frame, stucco or siding, very plain, industrial sash	Drywall, acoustic tile, some floor finish, sealed slab	Adequate lighting and outlets, minimum plumbing	Space heaters
D POLE	Average	92.27	Pole frame, metal siding, some interior finish and insulation	Painted walls, acoustic tile or dry-wall ceiling, some asphalt tile	Good lighting, many outlets, adequate plumbing	Forced air
	Low cost	61.73	Pole frame, metal siding, primarily exposed	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Space heaters
S	Average	96.07	Pre-engineered, partly finished interior, some insulation	Painted walls, acoustic tile or dry-wall ceiling, some asphalt tile	Good lighting, many outlets, adequate plumbing	Forced air
	Low cost	64.50	Pre-engineered, light frame, primarily exposed	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Space heaters

SCHOOLS - MANUAL ARTS (SHOP) BUILDING

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>					<p>SPRINKLERS: Apply to area covered by sprinklers.</p>					
					Sq. Ft.	LOW	AVG.	GOOD	EXCL.	
					1,000	\$4.60	\$5.97	\$7.74	\$10.05	
					2,500	4.00	5.13	6.58	8.43	
					5,000	3.60	4.57	5.81	7.39	
					10,000	3.24	4.08	5.14	6.47	
					15,000	3.04	3.82	4.78	5.99	
					20,000	2.91	3.64	4.54	5.67	
					50,000	2.53	3.13	3.86	4.76	
					80,000	2.36	2.89	3.55	4.35	
					100,000	2.28	2.79	3.41	4.17	
		LOW	AVG.	GOOD	EXCL.					
Concrete		\$22.50	\$29.25	\$38.00	\$49.50					
Steel		20.90	28.25	38.00	51.00					
Wood		19.35	25.75	34.50	46.00					
Add for ornate finishes, balustrades		19.45	24.10	29.75	36.75					
Add for roofs or awnings		10.50	13.95	18.45	24.60					

2

<p>HEATING AND COOLING</p> <p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>					
	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned) package (short ductwork)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	Central evaporative	5.38
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Pkg. refriger. \$2,050 to \$2,600 per ton capacity	
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Evap. coolers \$300 to \$500 per MCFM capacity	
Space heaters, with fan radiant	4.08 4.71				
Steam (including boiler) without boiler	18.00 16.35	Small indiv. heat pumps cost \$1,760 to \$2,500 per ton of rated capacity.		VENTILATION ONLY	
Wall or floor furnace	3.73			Vent. (blowers/ducts)	\$3.31

3

<p>HEIGHT REFINEMENTS</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - MIDDLE (JUNIOR HIGH) SCHOOL



GOOD CLASS C

OCCUPANCY DESCRIPTION: This occupancy includes the entire school facility covering sixth or seventh grade through eighth or ninth grade. There is a mixture of classrooms, multipurpose buildings, administrative offices, etc. The school may consist of one building or several separate buildings.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Swimming pools, movable furnishings or equipment, exterior ground improvements (i.e., athletic fields), open shelters and site work.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A	Excellent	\$271.31	Stone, best brick, metal and glass, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	227.31	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl	High level lighting, audio-visual wiring, good plumbing	Hot and chilled water (zoned)
	Average	177.64	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Adequate lighting and plumbing	Warm and cool air (zoned)
B	Excellent	255.90	Stone, best brick, metal and glass, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	215.83	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl	High level lighting, audio-visual wiring, good plumbing	Hot and chilled water (zoned)
	Average	169.16	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Adequate lighting and plumbing	Warm and cool air (zoned)
C	Excellent	213.27	Steel frame, face brick, metal panels, tile, highly ornamental	Plaster, glazed finishes, enamel, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	168.23	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	141.46	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	112.51	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.
D	Excellent	206.51	Steel or wood frame, brick or stone veneer, metal and glass, ornamental	Plaster, enamel, glazed or vinyl finishes, carpet and vinyl	Best classroom lighting and cabling systems, best plumbing	Hot and chilled water (zoned)
	Good	161.89	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	135.61	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	107.18	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood floors	Minimum school lighting and plumbing	Package A.C.
D POLE	Average	129.33	Pole frame, good metal panels, finished inside, little trim	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	101.47	Pole frame, metal siding	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.
S	Good	161.33	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, acoustic tile, carpet, vinyl composition	Good fluorescent fixtures, good plumbing, extra features	Warm and cool air (zoned)
	Average	134.08	Pre-engineered, sandwich panels, some ornamentation	Drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting and plumbing	Heat pump system
	Low cost	105.05	Pre-engineered, finished interior, insulation, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Package A.C.

SCHOOLS - MIDDLE (JUNIOR HIGH) SCHOOL

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>	SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		1,000	\$4.60	\$5.97	\$7.74	\$10.05
		2,500	4.00	5.13	6.58	8.43
		5,000	3.60	4.57	5.81	7.39
		10,000	3.24	4.08	5.14	6.47
		15,000	3.04	3.82	4.78	5.99
		20,000	2.91	3.64	4.54	5.67
		50,000	2.53	3.13	3.86	4.76
		80,000	2.36	2.89	3.55	4.35
		100,000	2.28	2.79	3.41	4.17
			LOW	AVG.	GOOD	EXCL.
	Concrete.....	\$22.50	\$29.25	\$38.00	\$49.50	
	Steel.....	20.90	28.25	38.00	51.00	
	Wood.....	19.35	25.75	34.50	46.00	
	Add for ornate finishes, balustrades.....	19.45	24.10	29.75	36.75	
	Add for roofs or awnings..	10.50	13.95	18.45	24.60	

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.	Costs	Sq. Ft.	Costs	Sq. Ft.	Costs
	HEATING ONLY		HEATING & COOLING		COOLING ONLY	
	Electric cable or baseboard ..	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
	Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
	Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
	Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig. . \$2,050 to \$2,600 per ton capacity	
	Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
	radiant	4.71				
	Steam (including boiler)	18.00				
	without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
	Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3	HEIGHT REFINEMENTS			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055
	9	.981	14	1.073
	10	1.000 (base)	15	1.092
	11	1.018	16	1.110
	12	1.037		

4	Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER													Average Floor Area Sq. Ft./Story	
		125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	----	10,000
	12,000	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	----	12,000
	16,000	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	----	16,000
	20,000	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	----	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - MULTIPURPOSE BUILDING

OCCUPANCY DESCRIPTION: These buildings are designed for large audience and participation groups. They may include combinations of uses within the same building, i.e., gymnasium and auditorium or cafeteria, plus offices and other rooms. They can be designed to accommodate two or more group activities at the same time with the better qualities having a small stage.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Elevators, sprinklers, fixed seating and cafeteria or kitchen equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$226.54	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl, stage, some extras	Good fluorescent fixtures, good plumbing, kitchen	Warm and cool air (zoned)
	Average	174.18	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or vinyl, small stage	Adequate lighting and plumbing, some extras	Heat pump system
C	Excellent	227.24	Steel frame, best masonry walls, highly ornamental	Plaster, acoustic tile, good wood floor, stage, good detail	Good lighting and plumbing, kitchen, tiled surfaces	Warm and cool air (zoned)
	Good	167.13	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, hardwood or vinyl, stage	Good fluorescent fixtures, good plumbing, kitchen	Package A.C.
	Average	126.80	Steel frame, brick, block, concrete, some ornamentation	Plaster or drywall, acoustic tile, vinyl composition, hardwood, small stage	Adequate lighting and plumbing, some extras	Forced air
	Low cost	88.29	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Wall furnace
D	Good	161.86	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, hardwood or vinyl, stage	Good fluorescent fixtures, good plumbing, kitchen	Package A.C.
	Average	121.94	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood, small stage	Adequate lighting and plumbing, some extras	Forced air
	Low cost	83.97	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile linoleum or wood floors	Minimum school lighting and plumbing	Wall furnace
D POLE	Average	115.23	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl composition or hardwood, small stage	Adequate lighting and plumbing, some extras	Forced air
	Low cost	78.19	Pole frame, metal panels, finished inside, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Wall furnace
S	Average	119.35	Pre-engineered, sandwich panels, some trim	Drywall, acoustic tile, vinyl composition or hardwood, small stage	Adequate lighting and plumbing, some extras	Forced air
	Low cost	81.36	Pre-engineered, finished interior, insulation	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Minimum school lighting and plumbing	Wall furnace

SCHOOLS - MULTIPURPOSE BUILDING

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>					<p>SPRINKLERS: Apply to area covered by sprinklers.</p>					
					Sq. Ft.	LOW	AVG.	GOOD	EXCL.	
					1,000	\$4.60	\$5.97	\$7.74	\$10.05	
					2,500	4.00	5.13	6.58	8.43	
					5,000	3.60	4.57	5.81	7.39	
					10,000	3.24	4.08	5.14	6.47	
					15,000	3.04	3.82	4.78	5.99	
					20,000	2.91	3.64	4.54	5.67	
					50,000	2.53	3.13	3.86	4.76	
					80,000	2.36	2.89	3.55	4.35	
					100,000	2.28	2.79	3.41	4.17	
		LOW	AVG.	GOOD	EXCL.					
Concrete	.....	\$22.50	\$29.25	\$38.00	\$49.50					
Steel	.....	20.90	28.25	38.00	51.00					
Wood	.....	19.35	25.75	34.50	46.00					
Add for ornate finishes, balustrades	.....	19.45	24.10	29.75	36.75					
Add for roofs or awnings	.....	10.50	13.95	18.45	24.60					

2

<p>HEATING AND COOLING</p> <p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>					
	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	.. \$12.05	Package A.C. (short ductwork)	.... \$15.85	Central refrigeration (zoned)	.... \$14.40
Electric wall heaters	..... 3.61	Warm and cool air (zoned)	..... 25.00	package (short ductwork)	.... 10.05
Forced air furnace	..... 13.75	Hot/chilled water (zoned)	..... 39.00	Central evaporative	..... 5.38
Hot water, baseboard/convactor	20.00	Heat pump system	..... 23.85	Pkg. refrig.. \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	..... 4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	..... 4.71				
Steam (including boiler)	..... 18.00			VENTILATION ONLY	
without boiler	..... 16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		Vent. (blowers/ducts)	..... \$3.31
Wall or floor furnace	..... 3.73	per ton of rated capacity.			

3

<p>HEIGHT REFINEMENTS</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - PHYSICAL EDUCATION BUILDING

OCCUPANCY DESCRIPTION: This building supplements the use of the gymnasium and includes classrooms that serve as instructional areas for athletic activities. There are also large areas that can be utilized for other uses such as intramural sports, demonstrations, exhibitions and informal recreation.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Elevators, sprinklers, lockers, furnishings or equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$226.80	Good frame, face brick, stone, concrete or metal panels, solar glass	Good exhibition floors, varied sports and teaching facilities	Good lighting and outlets, good plumbing, extra features	Warm and cool air (zoned)
	Average	169.56	Steel columns and girders, face brick, best ornamental block	Intramural and competitive sports venues, good teaching facilities	Good lighting and outlets, showers and restrooms	Heat pump system
C	Excellent	224.25	Heavy frame, best masonry walls, spectator entrance and lobby	Good exhibition floors, varied sports and teaching facilities	Good lighting and outlets, good plumbing, extra features	Warm and cool air (zoned)
	Good	168.79	Steel columns and girders, face brick, best ornamental block	Intramural and competitive sports venues, good teaching facilities	Good lighting and outlets, showers and restrooms	Heat pump system
	Average	121.19	Steel or Glulam, trusses or girders, brick, block or tilt up	Multisport floors, co-recreation/sports/teaching activities, some courts	Adequate lighting and plumbing, locker rooms, good classrooms	Package A.C.
	Low cost	80.71	Light frame, block or tilt up, very plain	Low cost finishes, minimal sports facilities, synthetic flooring	Minimum sports lighting and plumbing, adequate classrooms	Space heaters
D	Excellent	218.23	Heavy frame, masonry veneer walls, spectator entrance and lobby	Good exhibition floors, varied sports and teaching facilities	Good lighting and outlets, good plumbing, extra features	Warm and cool air (zoned)
	Good	162.90	Steel or Glulam frame, trusses and girders, brick veneer, best stucco	Intramural and competitive sports venues, good teaching facilities	Good lighting and outlets, showers and restrooms	Heat pump system
	Average	115.82	Heavy frame, trusses or girders, good stucco or siding, little trim	Multisport floors, co-recreation/sports/teaching activities, some courts	Adequate lighting and plumbing, locker rooms, good classrooms	Package A.C.
	Low cost	76.02	Light frame, stucco or siding, very plain	Low cost finishes, minimal sports facilities, synthetic flooring	Minimum sports lighting and plumbing, adequate classrooms	Space heaters
D POLE	Average	108.18	Pole frame, good metal panels, finished inside, little trim	Multisport floors, co-recreation/sports/teaching activities, some courts	Adequate lighting and plumbing, locker rooms, good classrooms	Package A.C.
	Low cost	70.94	Pole frame, metal siding, finished interior, insulation	Low cost finishes, minimal sports facilities, synthetic flooring	Minimum sports lighting and plumbing, adequate classrooms	Space heaters
S	Good	160.52	Pre-engineered, good sandwich panels, some brick or stone trim	Intramural and competitive sports venues, good teaching facilities	Good lighting and outlets, showers and restrooms	Heat pump system
	Average	113.49	Pre-engineered, finished interior, insulation, little trim	Multisport floors, co-recreation/sports/teaching activities, some courts	Adequate lighting and plumbing, locker rooms and classrooms	Package A.C.
	Low cost	73.91	Pre-engineered, finished interior, some insulation	Low cost finishes, minimal sports facilities, synthetic flooring	Minimum sports lighting and plumbing, adequate classrooms	Space heaters

SCHOOLS - PHYSICAL EDUCATION BUILDING

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>					<p>SPRINKLERS: Apply to area covered by sprinklers.</p>					
	Sq. Ft.	LOW	AVG.	GOOD	EXCL.					
	1,000	\$4.60	\$5.97	\$7.74	\$10.05					
	2,500	4.00	5.13	6.58	8.43					
	5,000	3.60	4.57	5.81	7.39					
	10,000	3.24	4.08	5.14	6.47					
	15,000	3.04	3.82	4.78	5.99					
	20,000	2.91	3.64	4.54	5.67					
	50,000	2.53	3.13	3.86	4.76					
	80,000	2.36	2.89	3.55	4.35					
	100,000	2.28	2.79	3.41	4.17					

	LOW	AVG.	GOOD	EXCL.
Concrete.....	\$22.50	\$29.25	\$38.00	\$49.50
Steel.....	20.90	28.25	38.00	51.00
Wood.....	19.35	25.75	34.50	46.00
Add for ornate finishes, balustrades.....	19.45	24.10	29.75	36.75
Add for roofs or awnings..	10.50	13.95	18.45	24.60

2

HEATING AND COOLING

These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard ..	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig. . \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00			VENTILATION ONLY	
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		Vent. (blowers/ducts)	\$3.31
Wall or floor furnace	3.73	per ton of rated capacity.			

3

HEIGHT REFINEMENTS

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055	20	1.183
9	.981	14	1.073	22	1.220
10	1.000 (base)	15	1.092	24	1.257
11	1.018	16	1.110	30	1.367
12	1.037	18	1.147	36	1.476

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - RELOCATABLE CLASSROOM

OCCUPANCY DESCRIPTION: These relocatable buildings are designed as classroom structures, typically found in school facilities, and are generally smaller and utilitarian in scope.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Exterior ramps, landings or steps.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
D	Excellent	\$141.04	Good siding or stucco panels on good modular frame	Drywall, good wall coverings and boards, good carpet and vinyl	Best classroom lighting and cabling systems, some plumbing	Package A.C.
	Good	111.57	Siding or stucco, some trim, modular structure	Drywall, vinyl wall coverings, acoustic tile, carpet and vinyl	Good fluorescent fixtures and wet sink, few extra features	Indiv. thru-wall heat pumps
	Average	93.21	Standard siding and fenestration, little trim	Drywall, tack board, acoustic tile, carpet and vinyl composition	Adequate lighting and signaling system	Indiv. thru-wall heat pumps
	Low cost	78.18	Low-cost siding on studs, metal roof	Drywall or paneling, acoustic tile, vinyl composition	Minimum classroom lighting and cabling, no plumbing	Indiv. thru-wall heat pumps
	Cheap	57.11	Metal siding on light studs, mobile structure	Low-cost paneling or drywall, vinyl composition, no partitions	Minimum electrical to code, no plumbing	Electric wall heaters

SCHOOLS - RELOCATABLE CLASSROOM

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

Vertical wheelchair lifts cost \$12,700 to \$24,700.	SPRINKLERS: Apply to area covered by sprinklers.				
	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	1,000	\$4.60	\$5.97	\$7.74	\$10.05
	2,500	4.00	5.13	6.58	8.43
	5,000	3.60	4.57	5.81	7.39
	10,000	3.24	4.08	5.14	6.47
	15,000	3.04	3.82	4.78	5.99
	20,000	2.91	3.64	4.54	5.67
	50,000	2.53	3.13	3.86	4.76
	80,000	2.36	2.89	3.55	4.35
	100,000	2.28	2.79	3.41	4.17

2

HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard . . .	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig. . \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00				
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3

HEIGHT REFINEMENTS			
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - RELOCATABLE OFFICE

OCCUPANCY DESCRIPTION: These relocatable buildings are designed as office structures, typically found in school facilities, and are generally smaller and utilitarian in scope. The lower qualities are generally composed of light mobile/modular structures with minimal finishes. The better qualities will have good modular frames with well-finished walls and floors, good acoustical ceilings, good lighting, cabling, and plumbing fixtures.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Exterior ramps, landings or steps.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
D	Excellent	\$131.97	Good siding or stucco panels on good modular frame	Drywall, good vinyl and paneling, good flooring, many private offices	Good lighting, cabling, many outlets and plumbing, some extras	Heat pump system
	Good	107.06	Siding or stucco, some trim, modular structure	Drywall, vinyl wall covering, acoustic tile, carpet and vinyl	Good lighting and outlets, good signal systems and restrooms	Package A.C.
	Average	85.50	Standard siding and fenestration, little trim	Drywall, acoustic tile, carpet and vinyl composition	Adequate lighting and outlets, plumbing and signal system	Indiv. thru-wall heat pumps
	Low cost	73.47	Low-cost siding on studs, metal roof	Drywall partitions, paint, acoustic tile, vinyl composition tile	Minimum office lighting, cabling and plumbing	Indiv. thru-wall heat pumps
	Cheap	61.53	Metal siding on light studs, mobile structure	Low-cost paneling or drywall, vinyl composition, few partitions	Minimum electrical to code, few plumbing fixtures	Indiv. thru-wall heat pumps

SCHOOLS - RELOCATABLE OFFICE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

Vertical wheelchair lifts cost \$12,700 to \$24,700.	SPRINKLERS: Apply to area covered by sprinklers.																																																		
	<table border="1"> <thead> <tr> <th>Sq. Ft.</th> <th>LOW</th> <th>AVG.</th> <th>GOOD</th> <th>EXCL.</th> </tr> </thead> <tbody> <tr><td>1,000</td><td>\$4.60</td><td>\$5.97</td><td>\$7.74</td><td>\$10.05</td></tr> <tr><td>2,500</td><td>4.00</td><td>5.13</td><td>6.58</td><td>8.43</td></tr> <tr><td>5,000</td><td>3.60</td><td>4.57</td><td>5.81</td><td>7.39</td></tr> <tr><td>10,000</td><td>3.24</td><td>4.08</td><td>5.14</td><td>6.47</td></tr> <tr><td>15,000</td><td>3.04</td><td>3.82</td><td>4.78</td><td>5.99</td></tr> <tr><td>20,000</td><td>2.91</td><td>3.64</td><td>4.54</td><td>5.67</td></tr> <tr><td>50,000</td><td>2.53</td><td>3.13</td><td>3.86</td><td>4.76</td></tr> <tr><td>80,000</td><td>2.36</td><td>2.89</td><td>3.55</td><td>4.35</td></tr> <tr><td>100,000</td><td>2.28</td><td>2.79</td><td>3.41</td><td>4.17</td></tr> </tbody> </table>	Sq. Ft.	LOW	AVG.	GOOD	EXCL.	1,000	\$4.60	\$5.97	\$7.74	\$10.05	2,500	4.00	5.13	6.58	8.43	5,000	3.60	4.57	5.81	7.39	10,000	3.24	4.08	5.14	6.47	15,000	3.04	3.82	4.78	5.99	20,000	2.91	3.64	4.54	5.67	50,000	2.53	3.13	3.86	4.76	80,000	2.36	2.89	3.55	4.35	100,000	2.28	2.79	3.41	4.17
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2

HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard . . .	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refriger. . \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00				
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3

HEIGHT REFINEMENTS			
MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - SCIENCE BUILDING

OCCUPANCY DESCRIPTION: Science buildings include areas for lectures, demonstrations, audiovisual presentations, laboratory work and study and some administrative and stage areas. Typically, there is also an area designated for storage of materials and equipment. The laboratories have both AC and DC variable voltage and plumbing in the work areas.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers lab equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	\$355.52	Stone, best brick, metal and glass, highly ornamental	Plaster, glazed finishes, enamel, tile, many workstations, support facilities	Best lab plumbing and lighting, many extras	Complete H.V.A.C.
	Good	278.03	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl, good teaching and research	Good fluorescent fixtures, good lab stations and plumbing	Complete H.V.A.C.
	Average	217.89	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, VCT, carpet, good teaching and support	Adequate lighting and plumbing, some extra features	Complete H.V.A.C.
	Low cost	170.56	Brick, precast concrete, block, little trim	Low cost finishes, acoustic tile, VCT, plain classrooms and offices	Minimum lab lighting and plumbing, few extras	Complete H.V.A.C.
A-B	Finished Basement	147.79	Reinforced concrete, plaster interior	Lab finish, administrative and technical facilities	Adequate lighting and plumbing for laboratory facilities	*Complete H.V.A.C.
C	Excellent	278.87	Steel frame, face brick, metal panels, tile, highly ornamental	Plaster, glazed finishes, enamel, tile, carpet, vinyl, good support facilities	Best lab stations and plumbing, good lighting and outlets	Complete H.V.A.C.
	Good	220.41	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, vinyl or carpet, teaching, good research	Good fluorescent fixtures, lab stations and plumbing	Complete H.V.A.C.
	Average	174.21	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, VCT, adequate teaching, support facilities	Adequate lighting, plumbing and workstations	Complete H.V.A.C.
	Low cost	138.27	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall, VCT, plain classrooms and offices	Minimum lab lighting and plumbing	Complete H.V.A.C.
D	Excellent	272.97	Steel or wood frame, brick or stone veneer, metal and glass, ornamental	Plaster, glazed finishes, enamel, tile, carpet, vinyl, good support facilities	Best lab stations and plumbing, good lighting and outlets	Complete H.V.A.C.
	Good	214.62	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, vinyl or carpet, teaching and research	Good fluorescent fixtures, lab stations and plumbing	Complete H.V.A.C.
	Average	168.74	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Adequate lighting, plumbing and workstations	Complete H.V.A.C.
	Low cost	133.21	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, vinyl comp., plain classrooms and offices	Minimum lab lighting and plumbing	Complete H.V.A.C.
D POLE	Average	161.05	Pole frame, insulated metal panels, some ornamentation	Plaster or drywall, acoustic tile, VCT, adequate teaching, support facilities	Adequate lighting, plumbing and workstations	Complete H.V.A.C.
	Low cost	126.23	Pole frame, good metal panels, finished inside, little trim	Drywall, acoustic tile, vinyl comp., plain classrooms and offices	Minimum lab lighting and plumbing	Complete H.V.A.C.
S	Good	211.93	Pre-engineered, good sandwich panels, some brick or stone	Plaster or drywall, acoustic tile, vinyl or carpet, teaching and research	Good fluorescent fixtures, lab stations and plumbing	Complete H.V.A.C.
	Average	165.56	Pre-engineered, sandwich panels, some trim	Plaster or drywall, acoustic tile, VCT, adequate teaching, support facilities	Adequate lighting, plumbing and workstations	Complete H.V.A.C.
	Low cost	129.88	Pre-engineered, finished interior, insulation	Drywall, acoustic tile, vinyl comp., plain classrooms and offices	Minimum lab lighting and plumbing	Complete H.V.A.C.
CDS	Finished Basement	113.27	Reinforced concrete, plaster or drywall interior	Lab finish, administrative and technical facilities	Adequate lighting and plumbing for laboratory facilities	*Complete H.V.A.C.

For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$5.95 per square foot.

SCHOOLS - SCIENCE BUILDING

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.	SPRINKLERS: Apply to area covered by sprinklers.				
	Vertical wheelchair lifts cost \$12,700 to \$24,700.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		1,000	\$4.60	\$5.97	\$7.74	\$10.05
		2,500	4.00	5.13	6.58	8.43
		5,000	3.60	4.57	5.81	7.39
		10,000	3.24	4.08	5.14	6.47
		15,000	3.04	3.82	4.78	5.99
		20,000	2.91	3.64	4.54	5.67
		50,000	2.53	3.13	3.86	4.76
		80,000	2.36	2.89	3.55	4.35
		100,000	2.28	2.79	3.41	4.17
	BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.					
		LOW	AVG.	GOOD	EXCL.	
	Concrete.....	\$22.50	\$29.25	\$38.00	\$49.50	
	Steel.....	20.90	28.25	38.00	51.00	
	Wood.....	19.35	25.75	34.50	46.00	
	Add for ornate finishes, balustrades.....	19.45	24.10	29.75	36.75	
	Add for roofs or awnings..	10.50	13.95	18.45	24.60	

2	COMPLETE HEATING, COOLING AND AIR CONDITIONING			
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.			
	Sq. Ft.	Sq. Ft.	Sq. Ft.	Sq. Ft.
	Costs	HEATING & COOLING	Costs	Costs
	COMPLETE H.V.A.C	Classes C/D/S		
	Classes A/B			
	Excellent.....	Excellent.....	\$67.00	\$59.00
	Good.....	Good.....	51.00	44.75
	Average.....	Average.....	39.25	34.00
	Low Cost.....	Low Cost.....	30.00	26.25

3	HEIGHT REFINEMENTS			
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055
	9	.981	14	1.073
	10	1.000 (base)	15	1.092
	11	1.018	16	1.110
	12	1.037		

4	AVERAGE PERIMETER															
	Average Floor Area Sq.Ft./Story	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	Average Floor Area Sq. Ft./Story
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
	12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
	16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
	20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - TECHNICAL TRADES BUILDING

OCCUPANCY DESCRIPTION: Technical trades buildings have large rooms used primarily for specialized education and vocational training.

The buildings, when divided, have some classroom/lecture stations and work areas. Cost includes all necessary components. The overall division of the building separates the various training specialties, which may include woodworking, graphic arts, electrical, metal, machine and automotive.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Built-in bookshelves, cabinets and blackboards.

NOT INCLUDED IN COSTS: Elevators, sprinklers movable equipment and furnishings power wiring or equipment that may be found.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$231.47	Face brick, concrete, metal panels, EIFS, glass, ornamental	Plaster or drywall, glazed finishes, carpet, tile and vinyl, some lab space	High-level lighting, good plumbing, some extras	Hot and chilled water (zoned)
	Average	169.89	Brick, precast concrete, good block, some trim	Plaster or drywall, acoustic tile, good slab, hardwood or vinyl composition	Good lighting, many outlets, good plumbing	Warm and cool air (zoned)
	Low cost	132.92	Precast concrete, block, very plain	Painted walls, tile or drywall, some VCT	Adequate electrical and plumbing	Heat pump system
C	Good	168.40	Steel columns, web or joists, ornamental block or face brick	Plaster or drywall, acoustic tile, vinyl composition, carpet, good slab	Good fluorescent fixtures and outlets, good plumbing	Warm and cool air (zoned)
	Average	124.30	Steel frame or bearing walls, brick, block, concrete panels, some trim	Painted walls, acoustic tile or drywall ceilings, some asphalt tile	Good lighting, many outlets, adequate plumbing	Package A.C.
	Low cost	97.94	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Package A.C.
D	Good	163.66	Steel or Glulam frame and joists, brick veneer, best stucco	Plaster or drywall, acoustic tile, vinyl composition, carpet, good slab	Good fluorescent fixtures and outlets, good plumbing	Warm and cool air (zoned)
	Average	119.82	Wood frame or pipe columns, good stucco or siding with some trim	Plaster, acoustic tile or drywall ceiling, some asphalt tile	Good lighting, many outlets, adequate plumbing	Package A.C.
	Low cost	93.89	Light frame, siding, very plain	Drywall, acoustic tile, some flooring	Adequate lighting, little plumbing	Package A.C.
D POLE	Average	113.82	Pole frame, metal siding, some interior finish and insulation	Painted walls, acoustic tile or drywall ceilings, some asphalt tile	Good lighting, many outlets, adequate plumbing	Package A.C.
	Low cost	88.85	Pole frame, metal single wall	Some ceiling and floor finish	Adequate lighting, little plumbing	Package A.C.
S	Average	117.91	Pre-engineered, partly finished interior, some insulation	Painted walls, acoustic tile or drywall ceilings, some asphalt tile	Good lighting, many outlets, adequate plumbing	Package A.C.
	Low cost	91.97	Pre-engineered, metal, primarily exposed	Drywall, acoustic tile, some flooring	Adequate lighting, little plumbing	Package A.C.

SCHOOLS - TECHNICAL TRADES BUILDING

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>	SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		1,000	\$4.60	\$5.97	\$7.74	\$10.05
		2,500	4.00	5.13	6.58	8.43
		5,000	3.60	4.57	5.81	7.39
		10,000	3.24	4.08	5.14	6.47
		15,000	3.04	3.82	4.78	5.99
		20,000	2.91	3.64	4.54	5.67
		50,000	2.53	3.13	3.86	4.76
		80,000	2.36	2.89	3.55	4.35
		100,000	2.28	2.79	3.41	4.17
			LOW	AVG.	GOOD	EXCL.
	Concrete.....	\$22.50	\$29.25	\$38.00	\$49.50	
	Steel.....	20.90	28.25	38.00	51.00	
	Wood.....	19.35	25.75	34.50	46.00	
	Add for ornate finishes, balustrades.....	19.45	24.10	29.75	36.75	
	Add for roofs or awnings..	10.50	13.95	18.45	24.60	

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	HEATING ONLY	Sq. Ft.	HEATING & COOLING	Sq. Ft.	COOLING ONLY	Sq. Ft.
		Costs		Costs		Costs
	Electric cable or baseboard ..	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
	Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
	Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
	Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig. . \$2,050 to \$2,600 per ton capacity	
	Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
	radiant	4.71				
	Steam (including boiler)	18.00				
	without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
	Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3	HEIGHT REFINEMENTS					
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.					
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055	20	1.183
	9	.981	14	1.073	22	1.220
	10	1.000 (base)	15	1.092	24	1.257
	11	1.018	16	1.110	30	1.367
	12	1.037	18	1.147	36	1.476

4	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
		125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	----	10,000
	12,000	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	----	12,000
	16,000	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	----	16,000
	20,000	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	----	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SCHOOLS - VOCATIONAL

OCCUPANCY DESCRIPTION: This occupancy includes the entire school facility with a mixture of classrooms, multipurpose buildings, administrative offices, etc. The schools may consist of one building or several separate buildings. This occupancy's emphasis is on trade and technical skills with a greater proportion of shops and laboratories.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Elevators, sprinklers, lockers, therapy or recreational equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A	Good	\$230.23	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, carpet and vinyl, some sealed concrete	Best fluorescent fixtures and outlets, good plumbing	Hot and chilled water (zoned)
	Average	172.68	Brick, precast concrete, block, some trim	Plaster or drywall, acoustic tile, some hardwood or vinyl composition	Good lighting, many outlets, good plumbing	Warm and cool air (zoned)
B	Good	217.53	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, carpet and vinyl, some sealed concrete	Best fluorescent fixtures and outlets, good plumbing	Hot and chilled water (zoned)
	Average	163.60	Brick, precast concrete, block, some trim	Plaster or drywall, acoustic tile, some hardwood or vinyl composition	Good lighting, many outlets, good plumbing	Warm and cool air (zoned)
A-B	Classroom Basement	130.57	Reinforced concrete, plaster interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Warm and cool air (zoned)
	Parking Basement	62.33	Unfinished interior	Concrete with hardener, lines and stops	Exposed lighting, drains	Ventilation
	Unfinished Basement	53.98	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None
	Classroom Mezzanine	84.84	Not included	Classroom and office, typical school finishes	Adequate school lighting and plumbing	In bldg. cost
	Open Mezzanine	34.02	Not included	Finished floors and soffit, add for spectator seating	Average lighting, no plumbing	In bldg. cost
C	Excellent	222.24	Steel frame, face brick, metal panels, tile, some ornament	Plaster, glazed finishes, enamel, carpet and vinyl, some sealed concrete	Best lighting and wiring, good plumbing	Hot and chilled water (zoned)
	Good	165.53	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, vinyl composition, carpet, good slab	Good fluorescent fixtures and outlets, good plumbing	Warm and cool air (zoned)
	Average	123.53	Steel frame or bearing walls, brick, block or concrete, some trim	Painted walls, acoustic tile or drywall ceilings, some asphalt tile	Good lighting, many outlets, adequate plumbing	Package A.C.
	Low cost	96.33	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Forced air
D	Excellent	216.57	Steel or wood frame, brick or stone veneer, metal and glass, ornamental	Plaster, enamel, glazed or vinyl finishes, some carpet and vinyl	Best lighting and wiring, good plumbing	Hot and chilled water (zoned)
	Good	160.05	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, vinyl composition, carpet, good slab	Good fluorescent fixtures and outlets, good plumbing	Warm and cool air (zoned)
	Average	118.46	Wood frame or pipe columns, good stucco or siding with some trim	Painted walls, acoustic tile or drywall ceilings, some asphalt tile	Good lighting, many outlets, adequate plumbing	Package A.C.
	Low cost	91.78	Wood frame, stucco or siding, very plain	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Forced air
D POLE	Good	151.59	Pole frame, best metal panels, some brick or stone trim	Plaster or drywall, acoustic tile, vinyl composition, carpet, good slab	Good fluorescent fixtures and outlets, good plumbing	Warm and cool air (zoned)
	Average	111.36	Pole frame, good metal panels, finished inside, little trim	Painted walls, acoustic tile or drywall ceiling, some asphalt tile	Good lighting, many outlets, adequate plumbing	Package A.C.
	Low cost	85.88	Pole frame, metal siding, some interior finish, insulation	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Forced air
S	Good	157.53	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, acoustic tile, vinyl composition, carpet, good slab	Good fluorescent fixtures and outlets, good plumbing	Warm and cool air (zoned)
	Average	115.74	Pre-engineered, sandwich panels, some ornamentation	Painted walls, acoustic tile or drywall ceiling, some asphalt tile	Good lighting, many outlets, adequate plumbing	Package A.C.
	Low cost	89.10	Pre-engineered, some finished interior, insulation	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Forced air
CDS †	Classroom Basement	89.16	Reinforced concrete, plaster or drywall interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Forced air
	Parking Basement	41.73	Unfinished interior	Finished ceiling, concrete floor with hardener	Exposed lighting, adequate drains	Ventilation
	Unfinished Basement	33.67	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None
	Classroom Mezzanine	64.53	Not included	Classroom and office, typical school finishes	Adequate school lighting and plumbing	In bldg. cost
	Open Mezzanine	25.03	Not included	Finished floors and soffit, add for spectator seating	Average lighting, no plumbing	In bldg. cost

†For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$5.95 per square foot.

MEZZANINES: Do not use story height or area/perimeter multipliers with mezzanine costs.

SCHOOLS - VOCATIONAL

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	<p>ELEVATORS: A small passenger elevator with simple call system and push button control, four passenger cab and two or three stops, costs \$56,250 to \$77,250.</p> <p>Vertical wheelchair lifts cost \$12,700 to \$24,700.</p> <p>BALCONIES: Balcony cost include the supporting structure decking and rails. Apply costs to the balcony area.</p>	<p>SPRINKLERS: Apply to area covered by sprinklers.</p>																																																																																		
		<table border="1"> <thead> <tr> <th>Sq. Ft.</th> <th>LOW</th> <th>AVG.</th> <th>GOOD</th> <th>EXCL.</th> </tr> </thead> <tbody> <tr><td>1,000</td><td>\$4.60</td><td>\$5.97</td><td>\$7.74</td><td>\$10.05</td></tr> <tr><td>2,500</td><td>4.00</td><td>5.13</td><td>6.58</td><td>8.43</td></tr> <tr><td>5,000</td><td>3.60</td><td>4.57</td><td>5.81</td><td>7.39</td></tr> <tr><td>10,000</td><td>3.24</td><td>4.08</td><td>5.14</td><td>6.47</td></tr> <tr><td>15,000</td><td>3.04</td><td>3.82</td><td>4.78</td><td>5.99</td></tr> <tr><td>20,000</td><td>2.91</td><td>3.64</td><td>4.54</td><td>5.67</td></tr> <tr><td>50,000</td><td>2.53</td><td>3.13</td><td>3.86</td><td>4.76</td></tr> <tr><td>80,000</td><td>2.36</td><td>2.89</td><td>3.55</td><td>4.35</td></tr> <tr><td>100,000</td><td>2.28</td><td>2.79</td><td>3.41</td><td>4.17</td></tr> </tbody> </table>	Sq. Ft.	LOW	AVG.	GOOD	EXCL.	1,000	\$4.60	\$5.97	\$7.74	\$10.05	2,500	4.00	5.13	6.58	8.43	5,000	3.60	4.57	5.81	7.39	10,000	3.24	4.08	5.14	6.47	15,000	3.04	3.82	4.78	5.99	20,000	2.91	3.64	4.54	5.67	50,000	2.53	3.13	3.86	4.76	80,000	2.36	2.89	3.55	4.35	100,000	2.28	2.79	3.41	4.17	<table border="1"> <thead> <tr> <th></th> <th>LOW</th> <th>AVG.</th> <th>GOOD</th> <th>EXCL.</th> </tr> </thead> <tbody> <tr><td>Concrete.....</td><td>\$22.50</td><td>\$29.25</td><td>\$38.00</td><td>\$49.50</td></tr> <tr><td>Steel.....</td><td>20.90</td><td>28.25</td><td>38.00</td><td>51.00</td></tr> <tr><td>Wood.....</td><td>19.35</td><td>25.75</td><td>34.50</td><td>46.00</td></tr> <tr><td>Add for ornate finishes, balustrades.....</td><td>19.45</td><td>24.10</td><td>29.75</td><td>36.75</td></tr> <tr><td>Add for roofs or awnings..</td><td>10.50</td><td>13.95</td><td>18.45</td><td>24.60</td></tr> </tbody> </table>					LOW	AVG.	GOOD	EXCL.	Concrete.....	\$22.50	\$29.25	\$38.00	\$49.50	Steel.....	20.90	28.25	38.00	51.00	Wood.....	19.35	25.75	34.50	46.00	Add for ornate finishes, balustrades.....	19.45	24.10	29.75	36.75	Add for roofs or awnings..	10.50	13.95
Sq. Ft.	LOW	AVG.	GOOD	EXCL.																																																																																
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2	<p>HEATING AND COOLING</p> <p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>					
	<p>HEATING ONLY</p>		<p>HEATING & COOLING</p>		<p>COOLING ONLY</p>	
	Sq. Ft.	Costs	Sq. Ft.	Costs	Sq. Ft.	Costs
	Electric cable or baseboard ..	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
	Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
	Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
	Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refrig.. \$2,050 to \$2,600 per ton capacity	
	Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
	radiant	4.71				
	Steam (including boiler)	18.00				
	without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
	Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3	<p>HEIGHT REFINEMENTS</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.055
	9	.981	14	1.073
	10	1.000 (base)	15	1.092
	11	1.018	16	1.110
	12	1.037		

4	<p>AVERAGE PERIMETER</p>															
	Average Floor Area Sq. Ft./Story	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	Average Floor Area Sq. Ft./Story
	1,000	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	----	1,000
	1,500	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	----	1,500
	2,000	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	----	2,000
	3,000	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	----	3,000
	4,000	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	----	4,000
	5,000	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	----	5,000
	6,000	----	----	----	.934	.952	.968	1.006	1.043	1.079	----	----	----	----	----	6,000
	8,000	----	----	----	----	.929	.942	.968	.996	1.024	1.079	1.134	----	----	----	8,000
	10,000	----	----	----	----	----	.927	.949	.968	.991	1.036	1.079	1.123	----	----	10,000
	12,000	----	----	----	----	----	.915	.934	.959	.968	1.006	1.043	1.079	1.153	----	12,000
	16,000	----	----	----	----	----	----	.915	.929	.942	.968	.996	1.024	1.079	1.134	16,000
	20,000	----	----	----	----	----	----	----	.915	.927	.949	.968	.991	1.036	1.079	20,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHEDS – ARCH-RIB (QUONSET), LIGHT COMMERCIAL



GOOD CLASS S



GOOD CLASS D

OCCUPANCY DESCRIPTION: Light commercial building with semi-circular (culvert) shaped roofs that curve to the ground to form the sides. These buildings have many uses, such as general material, commodity or equipment storage and repair, and are generally lighter than typical warehouse buildings. Interior modification can turn them into any one of several uses. The better qualities will have some built-in shop or workbench cabinetry and adequate lighting and plumbing.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Sprinklers, furnishings or special utilities for industrial equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
D	Good	\$30.48	Good laminated arch, siding, shingles, pedestrian and overhead doors	Small office or shop area, concrete floor, some extras	Good lighting and outlets, water service, few fixtures	Space heaters
	Average	20.93	Arched frame, shingles and siding, windows, overhead door	Unfinished, concrete or asphalt floor, some partitioning, cabinets	Adequate lighting and water outlets	None
	Low cost	15.63	Arch-rib frame, siding, composition shingles	Unfinished, cheap slab/asphalt	Minimum electrical service	None
D POLE	Good	28.81	Good laminated arch, metal siding, pedestrian and overhead doors	Small office or shop area, concrete floor, some extras	Good lighting and outlets, water service, few fixtures	Space heaters
	Average	19.58	Pre-engineered arched frame, metal siding, windows, overhead door	Unfinished, concrete or asphalt floor, some partitioning, cabinets	Adequate lighting and water outlets	None
	Low cost	14.55	Light arch-rib frame, metal siding	Unfinished, cheap slab/asphalt	Minimum electrical service	None
S	Good	30.57	Good self-framing quonset panels, pedestrian and overhead doors	Small office or shop area, concrete floor, some extras	Good lighting and outlets, water service, few fixtures	Space heaters
	Average	21.16	Pre-engineered quonset, metal siding, windows, overhead door	Unfinished, concrete or asphalt floor, some partitioning, cabinets	Adequate lighting and water outlets	None
	Low cost	15.92	Light self-framing quonset panels	Unfinished, cheap slab/asphalt	Minimum electrical service	None

SHEDS – ARCH-RIB (QUONSET), LIGHT COMMERCIAL

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	FLOOR STRUCTURE: Adjust for variations in floors as indicated in base square foot costs.					SPRINKLERS: Apply to area covered by sprinklers.				
		LOW	AVG.	GOOD	EXCL.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
					1,000	\$3.54	\$4.61	\$6.00	\$7.81	
					2,500	3.06	3.95	5.09	6.56	
	Compacted earth	\$.24	\$.28	\$.35	\$.41	5,000	2.74	3.51	4.49	5.75
	Gravel .....	.53	.62	.73	.85	7,500	2.57	3.28	4.18	5.32
	Asphalt, including base	1.99	2.52	3.19	4.03	10,000	2.46	3.12	3.97	5.04
	Concrete slab	3.27	3.97	4.82	5.84	15,000	2.30	2.92	3.69	4.67
	Add for vapor barrier .....	.68	.94	1.32	1.84					

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.		Sq. Ft.		Sq. Ft.	
	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs	
	HEATING ONLY	Package A.C. (short ductwork)	\$9.58	Central refrigeration (zoned)	\$8.17	
	Electric cable or baseboard ..			package (short ductwork)	6.28	
	Electric wall heaters			Evaporative coolers	3.72	
	Forced air furnace					
	Hot water, baseboard/convactor			VENTILATION ONLY		
	Space heaters, with fan			Vent. (blowers/ducts)	\$1.36	
	radiant					
	Steam (including boiler)					
	without boiler					
	Wall or floor furnace					

3	HEIGHT REFINEMENTS			
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.058
	9	.981	14	1.077
	10	1.000 (base)	16	1.115
	11	1.019	18	1.154
	12	1.038	20	1.192

4	Average Floor Area	AVERAGE PERIMETER													Average Floor Area	
	Sq.Ft./Story	75	125	150	200	250	300	350	400	500	600	700	800	900	1000	Sq. Ft./Story
	500	1.178	1.311	1.444	1.577	1.844	2.110	2.377	2.909	----	----	----	----	----	----	500
	750	1.044	1.133	1.222	1.311	1.489	1.667	1.844	2.201	----	----	----	----	----	----	750
	1,000	.980	1.044	1.110	1.178	1.311	1.444	1.577	1.844	----	----	----	----	----	----	1,000
	1,500	.911	.955	1.000	1.044	1.133	1.222	1.311	1.489	----	----	----	----	----	----	1,500
	2,000	.878	.911	.945	.977	1.044	1.110	1.178	1.311	----	----	----	----	----	----	2,000
	2,500	.858	.884	.911	.938	.991	1.044	1.097	1.204	----	----	----	----	----	----	2,500
	3,000	.843	.865	.889	.911	.955	1.000	1.044	1.133	----	----	----	----	----	----	3,000
	4,000	----	----	.860	.878	.911	.945	.977	1.044	1.110	1.178	----	----	----	----	4,000
	5,000	----	----	.844	.857	.884	.911	.938	.991	1.044	1.097	1.150	----	----	----	5,000
	10,000	----	----	----	----	----	.844	.858	.884	.911	.938	.960	.991	1.018	1.044	10,000
	12,000	----	----	----	----	----	.833	.843	.867	.888	.911	.934	.955	.977	1.000	12,000
	14,000	----	----	----	----	----	.825	.835	.854	.873	.892	.911	.931	.949	.967	14,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHEDS – BOAT STORAGE



GOOD CLASS S BUILDING



AVERAGE CLASS S BUILDING

OCCUPANCY DESCRIPTION: The three walled shed buildings are designed for dry boat storage and include costs for the storage racks. Structures are typically designed with an open front and only three exterior walls, of either wood frame or steel construction. Floors are either concrete or asphalt. Security lighting can be found in the better qualities.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Storage racks (four-walled buildings).

NOT INCLUDED IN COSTS: Special foundations, piers or flotation systems. Boat lifts or hoists.

The four-walled buildings may include a small office and shop area as well as electrical wiring and water service at the better qualities.

4-WALL BUILDINGS

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
D	Average	\$29.39	Post frame and trusses, plywood or board siding	Some partitions, shop area, light floor, average racks	Minimum electrical and water service	None
	Low cost	21.94	Post frame, light plywood siding	Unfinished, asphalt floor, minimum racks	Minimum electrical and water outlets	None
D POLE	Average	26.56	Pole frame and truss, enameled siding	Some partitions, shop area, light floor, average racks	Minimum electrical and water service	None
	Low cost	19.81	Pole frame, light metal siding	Unfinished, asphalt floor, minimum racks	Minimum electrical and water outlets	None
S	Good	40.87	Good metal on heavy steel frame	Small office, concrete floor, good racks	Adequate electrical, some plumbing	None
	Average	30.56	Metal siding on steel frame	Some partitions, shop area, light floor, average racks	Minimum electrical and water service	None
	Low cost	22.88	Low-cost siding, light steel frame	Unfinished, asphalt floor, minimum racks	Minimum electrical and water outlets	None
SSLANT WALL	Good	38.97	Good metal on heavy steel frame	Small office, concrete floor, good racks	Adequate electrical, some plumbing	None
	Average	28.98	Metal on slant frame	Some partitions, average racks	Minimum electrical and water service	None
	Low cost	21.57	Low-cost siding, slant frame	Unfinished, minimum racks	Minimum electrical and water outlets	None

3-WALL SHEDS

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
D	Good	\$30.84	Open front, good wood siding on post frame and rack	Unfinished, light concrete or asphalt floor, good racks	Security lighting, no plumbing	None
	Average	20.96	Open front, plywood or board on light frame and rack	Unfinished, asphalt floor, average racks	None	None
	Low cost	14.26	End walls only, low-cost plywood siding and rack framing	Unfinished, asphalt floor or gravel, minimum racks	None	None
D POLE	Good	28.29	Open front, good metal siding on pole frame and rack	Unfinished, light concrete or asphalt floor, good racks	Security lighting, no plumbing	None
	Average	19.00	Open front, metal or board on light pole frame and rack	Unfinished, asphalt floor, average racks	None	None
	Low cost	12.77	End walls only, low-cost siding and rack framing	Unfinished, asphalt floor or gravel, minimum racks	None	None
S	Good	31.94	Open front, good metal siding on steel rack and frame	Unfinished, light concrete or asphalt floor, good racks	Security lighting, no plumbing	None
	Average	21.64	Open front, metal siding on light frame and rack	Unfinished, asphalt floor, average racks	None	None
	Low cost	14.67	End walls only, low-cost siding, rack framing	Unfinished, asphalt floor or gravel, minimum racks	None	None

For buildings with fewer than four walls, use the total length of the walls to enter the Floor Area/Perimeter tables.

SHEDS – BOAT STORAGE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

FLOOR STRUCTURE: Adjust for variations in floors as indicated in base square foot costs.					SPRINKLERS: Apply to area covered by sprinklers.				
	LOW	AVG.	GOOD	EXCL.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
					1,000	\$3.54	\$4.61	\$6.00	\$7.81
					2,500	3.06	3.95	5.09	6.56
Compacted earth	\$.24	\$.28	\$.35	\$.41	5,000	2.74	3.51	4.49	5.75
Gravel .....	.53	.62	.73	.85	7,500	2.57	3.28	4.18	5.32
Asphalt, including base	1.99	2.52	3.19	4.03	10,000	2.46	3.12	3.97	5.04
Concrete slab	3.27	3.97	4.82	5.84	15,000	2.30	2.92	3.69	4.67
Add for vapor barrier .....	.68	.94	1.32	1.84	20,000	2.20	2.78	3.50	4.42
					40,000	1.97	2.47	3.09	3.87
BOAT STORAGE RACKS: Costs of storage racks are included in the boat storage buildings and sheds. Costs of racks only are as follows: Sq. Ft. costs: Good ... \$13.45 – \$15.60; Average ... \$9.64 – \$11.65; Minimum ... \$6.95 – \$8.85									

2

HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
HEATING ONLY	Sq. Ft.	Costs	HEATING & COOLING	Sq. Ft.	Costs
Electric cable or baseboard ...	\$4.31		Package A.C. (short ductwork)	\$9.58	
Electric wall heaters	1.84				COOLING ONLY
Forced air furnace	4.85				Central refrigeration (zoned)
Hot water, baseboard/convactor	8.63				package (short ductwork)
Space heaters, with fan	2.37				Evaporative coolers
radiant	2.79				
Steam (including boiler)	7.68				VENTILATION ONLY
without boiler	6.74				Vent. (blowers/ducts)
Wall or floor furnace	2.19				\$1.36

3

HEIGHT REFINEMENTS			
MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs. STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	14	1.077
9	.981	16	1.115
10	1.000 (base)	18	1.154
11	1.019	20	1.192
12	1.038	22	1.231
13	1.058	24	1.269

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	75	100	125	150	200	250	300	400	500	600	700	800	900	1000	
500	1.178	1.311	1.444	1.577	1.844	2.110	2.377	2.909	----	----	----	----	----	----	500
750	1.044	1.133	1.222	1.311	1.489	1.667	1.844	2.201	----	----	----	----	----	----	750
1,000	.980	1.044	1.110	1.178	1.311	1.444	1.577	1.844	----	----	----	----	----	----	1,000
1,500	.911	.955	1.000	1.044	1.133	1.222	1.311	1.489	----	----	----	----	----	----	1,500
2,000	.878	.911	.945	.977	1.044	1.110	1.178	1.311	----	----	----	----	----	----	2,000
2,500	.858	.884	.911	.938	.991	1.044	1.097	1.204	----	----	----	----	----	----	2,500
3,000	.843	.865	.889	.911	.955	1.000	1.044	1.133	----	----	----	----	----	----	3,000
3,500	----	.854	.872	.892	.931	.967	1.006	1.080	1.157	----	----	----	----	----	3,500
4,000	----	----	.860	.878	.911	.945	.977	1.044	1.110	1.178	----	----	----	----	4,000
5,000	----	----	.844	.857	.884	.911	.938	.991	1.044	1.097	1.150	----	----	----	5,000
10,000	----	----	----	----	----	.844	.858	.884	.911	.938	.960	.991	1.018	1.044	10,000
25,000	----	----	----	----	----	----	.810	.820	.831	.841	.852	.863	.873	.884	25,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHEDS – EQUIPMENT



AVERAGE CLASS S

OCCUPANCY DESCRIPTION: Equipment sheds are designed for the storage and maintenance of equipment. The better qualities will generally have good electrical circuits and/or water service. Those equipment sheds with extensive shop or office areas should be priced from Garages, Service, Repair. For light sheds, see Vol. 1, Agricultural Structures.



AVERAGE CLASS D POLE

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Tool cabinets.

NOT INCLUDED IN COSTS: Sprinklers or equipment.

4-WALL BUILDINGS

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$40.46	Concrete block, low-cost brick, wood rafters, overhead doors	Unfinished, concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	30.65	Concrete block, light roof, windows	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters
D	Good	33.01	Heavy wood frame, siding or stucco, overhead doors	Unfinished, concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	23.54	Open wood frame, exposed siding or stucco, windows	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters
D POLE	Good	28.46	Good pole frame, color siding, overhead doors	Unfinished, concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	20.57	Pre-engineered pole frame, metal siding, windows	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters
S	Good	32.80	Good frame, color siding, overhead doors	Unfinished, concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	23.96	Pre-engineered frame, metal siding, windows	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters
SSLANT WALL	Good	30.52	Good slant frame, color siding, overhead doors	Unfinished, concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	22.34	Pre-engineered pole frame, metal siding, windows	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters
CDS	Avg. stor. mezzanine	18.43	In building cost	Heavy plywood or plant on wood or light steel structure, no partitions	Minimum lighting, no plumbing	Included in building cost
	Low stor. mezzanine	13.77	In building cost	Light storage on plywood, minimum supports, no soffit	Minimum lighting	Included in building cost

NOTE: Do not use story height or area/perimeter with mezzanine costs.

3-WALL SHEDS

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$33.02	Open front, block or low-cost brick, wood rafters	Unfinished concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	25.10	Open front, concrete block, light wood rafters	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters
D	Good	29.89	Open front, light frame and rafters, siding or stucco	Unfinished concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	22.25	Open front, exposed frame, siding or stucco	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters
D POLE	Good	25.43	Open front, good metal and pole frame	Unfinished concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	19.31	Open front, enameled siding on wood pole frame	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters
S	Good	29.33	Open front, good metal and steel frame	Unfinished concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	22.49	Open front, enameled siding on steel frame	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters
SSLANT WALL	Good	27.24	Open front, good metal and steel slant frame	Unfinished, concrete floor, shop area and cabinets	Good lighting and outlets, adequate plumbing	Space heaters
	Average	20.99	Open front, enameled siding on steel slant frame	Unfinished, concrete or asphalt floor, some cabinets, work area	Adequate electrical and water service and outlets	Space heaters

For buildings with fewer than four walls, use the total length of the walls to enter the Floor Area/Perimeter tables.

SHEDS – EQUIPMENT

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

FLOOR STRUCTURE: Adjust for variations in floors as indicated in base square foot costs.					SPRINKLERS: Apply to area covered by sprinklers.				
	LOW	AVG.	GOOD	EXCL.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
					1,000	\$3.54	\$4.61	\$6.00	\$7.81
					2,500	3.06	3.95	5.09	6.56
Compacted earth	\$.24	\$.28	\$.35	\$.41	5,000	2.74	3.51	4.49	5.75
Gravel .....	.53	.62	.73	.85	7,500	2.57	3.28	4.18	5.32
Asphalt, including base	1.99	2.52	3.19	4.03	10,000	2.46	3.12	3.97	5.04
Concrete slab	3.27	3.97	4.82	5.84	15,000	2.30	2.92	3.69	4.67
Add for vapor barrier .....	.68	.94	1.32	1.84					

2

HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
HEATING ONLY	Sq. Ft.	Costs	HEATING & COOLING	Sq. Ft.	Costs
Electric cable or baseboard ..	\$4.31		Package A.C. (short ductwork)	\$9.58	
Electric wall heaters	1.84		Central refrigeration (zoned)		\$8.17
Forced air furnace	4.85		package (short ductwork)		6.28
Hot water, baseboard/convactor	8.63		Evaporative coolers		3.72
Space heaters, with fan	2.37				
radiant	2.79				
Steam (including boiler)	7.68				
without boiler	6.74				
Wall or floor furnace	2.19				
			VENTILATION ONLY		
			Vent. (blowers/ducts)		\$1.36

3

HEIGHT REFINEMENTS			
MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.058
9	.981	14	1.077
10	1.000 (base)	16	1.115
11	1.019	18	1.154
12	1.038	20	1.192

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	75	125	150	200	250	300	350	400	500	600	700	800	900	1000	
500	1.178	1.311	1.444	1.577	1.844	2.110	2.377	2.909	----	----	----	----	----	----	500
750	1.044	1.133	1.222	1.311	1.489	1.667	1.844	2.201	----	----	----	----	----	----	750
1,000	.980	1.044	1.110	1.178	1.311	1.444	1.577	1.844	----	----	----	----	----	----	1,000
1,500	.911	.955	1.000	1.044	1.133	1.222	1.311	1.489	----	----	----	----	----	----	1,500
2,000	.878	.911	.945	.977	1.044	1.110	1.178	1.311	----	----	----	----	----	----	2,000
2,500	.858	.884	.911	.938	.991	1.044	1.097	1.204	----	----	----	----	----	----	2,500
3,000	.843	.865	.889	.911	.955	1.000	1.044	1.133	----	----	----	----	----	----	3,000
4,000	----	----	.860	.878	.911	.945	.977	1.044	1.110	1.178	----	----	----	----	4,000
5,000	----	----	.844	.857	.884	.911	.938	.991	1.044	1.097	1.150	----	----	----	5,000
10,000	----	----	----	----	----	.844	.858	.884	.911	.938	.960	.991	1.018	1.044	10,000
12,000	----	----	----	----	----	.833	.843	.867	.888	.911	.934	.955	.977	1.000	12,000
14,000	----	----	----	----	----	.825	.835	.854	.873	.892	.911	.931	.949	.967	14,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHEDS – LUMBER YARD



GOOD CLASS D BUILDING



LOW COST CLASS S SHED

OCCUPANCY DESCRIPTION:

VERTICAL STORAGE – These buildings are designed for vertical lumber storage and include costs for the storage racks. These structures are typically designed with four exterior walls of either wood frame or steel construction. Floors are either concrete or wood at the better qualities and dirt at the lower qualities. Electrical wiring and open fixtures can be found in the better qualities. Commonly, no plumbing or heating is found.

HORIZONTAL STORAGE – The buildings are designed for horizontal lumber storage and include costs for the storage racks. They are generally designed with an open front and only three exterior

walls. These wood-framed structures have wood, metal or plaster (stucco) exterior wall finishes. Floors are unfinished, with the quantity of the racks varying with the quality of the structure. Commonly, no plumbing or heating is found.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Storage racks.

NOT INCLUDED IN COSTS: Sprinklers, office or restroom facilities, or material-handling equipment.

VERTICAL STORAGE BUILDING (4 WALLS)

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
D	Good	\$32.13	Good wood or stucco on wood frame, four walls	Unfinished, concrete or wood floor, good racks	Conduit, open fixtures, no plumbing	None
	Average	22.61	Wood or stucco on wood frame, four walls	Unfinished, light concrete or wood floor, average racks	Minimum electric, no plumbing	None
	Low cost	15.96	Low-cost board siding, light frame, four walls	Unfinished, asphalt or wood floor, minimum racks	None	None
D POLE	Good	28.38	Good metal panels on steel frame, four walls	Unfinished, concrete or wood floor, good racks	Conduit, open fixtures, no plumbing	None
	Average	19.74	Metal on pole frame, four walls, vertical storage	Unfinished, light concrete or wood floor, average racks	Minimum electric, no plumbing	None
	Low cost	13.77	Metal on pole frame, four walls, vertical storage	Unfinished, asphalt or wood floor, minimum racks	None	None
S	Good	33.14	Good metal panels on steel frame, four walls	Unfinished, concrete or wood floor, good racks	Conduit, open fixtures, no plumbing	None
	Average	23.38	Steel siding on steel frame, four walls	Unfinished, light concrete or wood floor, average racks	Minimum electric, no plumbing	None
	Low cost	16.55	Low-cost steel siding, light frame, four walls	Unfinished, asphalt or wood floor, minimum racks	None	None

HORIZONTAL STORAGE SHED (3 WALLS)

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
D	Good	\$26.94	Open front, some doors, good wood or stucco on wood frame	Unfinished, light concrete or asphalt floor, good racks	Few lights on front	None
	Average	18.34	Open front, good wood or stucco on wood frame	Unfinished, asphalt floor, average racks	None	None
	Low cost	12.52	Open front, low-cost board siding, light exposed frame	Unfinished, asphalt or dirt floor, minimum racks	None	None
D POLE	Good	22.79	Open front, some doors, good steel siding on pole frame	Unfinished, light concrete or asphalt floor, good racks	Few lights on front	None
	Average	15.46	Open front, metal on pole frame	Unfinished, asphalt floor, average racks	None	None
	Low cost	10.50	Open front, metal on pole frame	Unfinished, asphalt or dirt floor, minimum racks	None	None
S	Good	27.76	Open front, some doors, good steel siding on steel frame	Unfinished, light concrete or asphalt floor, good racks	Few lights on front	None
	Average	18.84	Open front, steel siding, steel frame	Unfinished, asphalt floor, average racks	None	None
	Low cost	12.82	Open front, low-cost steel siding, light frame	Unfinished, asphalt or dirt floor, minimum racks	None	None

For buildings with fewer than four walls, use the total length of the walls to enter the Floor Area/Perimeter tables.

SHEDS – LUMBER YARD

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

FLOOR STRUCTURE: Adjust for variations in floors as indicated in base square foot costs.					SPRINKLERS: Apply to area covered by sprinklers.				
					Sq. Ft.	LOW	AVG.	GOOD	EXCL.
					1,000	\$3.54	\$4.61	\$6.00	\$7.81
	LOW	AVG.	GOOD	EXCL.	2,500	3.06	3.95	5.09	6.56
Compacted earth	\$.24	\$.28	\$.35	\$.41	5,000	2.74	3.51	4.49	5.75
Gravel .....	.53	.62	.73	.85	7,500	2.57	3.28	4.18	5.32
Asphalt, including base	1.99	2.52	3.19	4.03	10,000	2.46	3.12	3.97	5.04
Concrete slab	3.27	3.97	4.82	5.84	15,000	2.30	2.92	3.69	4.67
Add for vapor barrier .....	.68	.94	1.32	1.84	20,000	2.20	2.78	3.50	4.42
 LUMBER STORAGE RACKS: Costs of storage racks are included in the boat storage buildings and sheds. Costs of racks only are as follows: Sq. Ft. costs: Good . . . \$2.70 – \$3.74; Average . . . \$1.98 – \$2.59; Minimum . . . \$1.38 – \$1.93									

2

HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.			Sq. Ft.	Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING		COOLING ONLY	Costs
Electric cable or baseboard ..	\$4.31	Package A.C. (short ductwork)	\$9.58	Central refrigeration (zoned)	\$8.17
Electric wall heaters	1.84			package (short ductwork)	6.28
Forced air furnace	4.85			Evaporative coolers	3.72
Hot water, baseboard/convactor	8.63				
Space heaters, with fan	2.37				
radiant	2.79				
Steam (including boiler)	7.68				
without boiler	6.74			VENTILATION ONLY	
Wall or floor furnace	2.19			Vent. (blowers/ducts)	\$1.36

3

HEIGHT REFINEMENTS			
MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	14	1.077
9	.981	16	1.115
10	1.000 (base)	18	1.154
11	1.019	20	1.192
12	1.038	22	1.231
13	1.058	24	1.269

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	75	100	125	150	200	250	300	400	500	600	700	800	900	1000	
500	1.178	1.311	1.444	1.577	1.844	2.110	2.377	2.909	----	----	----	----	----	----	500
750	1.044	1.133	1.222	1.311	1.489	1.667	1.844	2.201	----	----	----	----	----	----	750
1,000	.980	1.044	1.110	1.178	1.311	1.444	1.577	1.844	----	----	----	----	----	----	1,000
1,500	.911	.955	1.000	1.044	1.133	1.222	1.311	1.489	----	----	----	----	----	----	1,500
2,000	.878	.911	.945	.977	1.044	1.110	1.178	1.311	----	----	----	----	----	----	2,000
2,500	.858	.884	.911	.938	.991	1.044	1.097	1.204	----	----	----	----	----	----	2,500
3,000	.843	.865	.889	.911	.955	1.000	1.044	1.133	----	----	----	----	----	----	3,000
3,500	----	.854	.872	.892	.931	.967	1.006	1.080	1.157	----	----	----	----	----	3,500
4,000	----	----	.860	.878	.911	.945	.977	1.044	1.110	1.178	----	----	----	----	4,000
5,000	----	----	.844	.857	.884	.911	.938	.991	1.044	1.097	1.150	----	----	----	5,000
10,000	----	----	----	----	----	.844	.858	.884	.911	.938	.960	.991	1.018	1.044	10,000
25,000	----	----	----	----	----	----	.810	.820	.831	.841	.852	.863	.873	.884	25,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHEDS – MATERIAL STORAGE



4 WALL AVERAGE CLASS S

OCCUPANCY DESCRIPTION: Utility sheds are multipurpose structures that are usually lighter than typical industrial or warehouse buildings and form a large family of low cost utilitarian buildings which may use similar structural shells.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Sprinklers.

SQUARE FOOT COST TABLE MATERIAL STORAGE BUILDING - 4 WALL

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Very Good	\$43.02	Concrete and siding walls, heavy frame, dome or conical roof	Asphalt floor, salt storage	Good lighting, no plumbing	None
	Good	37.68	Brick or block, heavy rafters, barred windows	Sealed walls and heavy slab	Rigid conduit, spark-proof fixtures, no plumbing	None
	Average	28.89	Block, structural clay tile, light roof structure	Unfinished walls, slab or plank floor	Few open fixtures, no plumbing	None
D	Very good	38.28	Siding on heavy posts, arch, dome or conical roof	Heavy concrete piers, asphalt floor, salt storage	Good lighting, no plumbing	None
	Good	31.81	Stucco, wood or metal siding on heavy wood studs	Wainscot, heavy slab or plank floor	Rigid conduit, spark-proof fixtures, no plumbing	None
	Average	21.99	Wood or cheap stucco, wood frame	Unfinished, concrete or plank floor	Few open fixtures, no plumbing	None
D POLE	Average	19.06	Metal panels, sheathing on pole frame	Concrete slab, some wainscot	Few open fixtures, no plumbing	None
S	Very good	39.43	Siding on heavy steel, arch or dome roof	Heavy concrete piers, asphalt floor, salt storage	Good lighting, no plumbing	None
	Good	32.86	Steel panels, sheathing, on heavy steel studs	Heavy slab, sealed walls	Rigid conduit, spark-proof fixtures, no plumbing	None
	Average	22.85	Steel panels, sheathing on steel frame	Sealed concrete slab, some wainscot	Few open fixtures, no plumbing	None
SSLANT WALL	Average	20.91	Steel panels, sheathing on light steel slant frame	Sealed concrete slab, some wainscot	Few open fixtures, no plumbing	None

MATERIAL STORAGE SHED - 3 WALL

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Average	\$19.93	Open one side, block, steel or wood truss, average cover	Unfinished, light concrete or asphalt floor	Few lights on front	None
	Low cost	15.18	Open front, block, light shed cover	Unfinished, asphalt floor	None	None
D	Average	15.38	Open one side, wood or stucco on open wood frame	Unfinished, light concrete or asphalt floor	Few lights on front	None
	Low cost	10.81	Open front, board siding/frame	Unfinished, asphalt floor	None	None
D POLE	Average	12.27	Open one side, good metal on pole frame	Unfinished, light concrete or asphalt floor	Few lights on front	None
	Low cost	8.52	Open front, metal on pole frame	Unfinished, asphalt floor	None	None
S	Average	15.03	Open one side, good metal on steel frame	Unfinished, light concrete or asphalt floor	Few lights on front	None
	Low cost	10.81	Open front, steel frame/siding	Unfinished, asphalt floor	None	None
SSLANT WALL	Average	13.99	Open one side, good metal on steel slant frame	Unfinished, light concrete or asphalt floor	Few lights on front	None
	Low cost	9.99	Open front, steel frame/siding	Unfinished, asphalt floor	None	None

For buildings with fewer than four walls, use the total length of the walls to enter the Floor Area/Perimeter tables.

SHEDS – MATERIAL STORAGE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	FLOOR STRUCTURE: Adjust for variations in floors as indicated in base square foot costs.					SPRINKLERS: Apply to area covered by sprinklers.				
	LOW	AVG.	GOOD	EXCL.		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
						1,000	\$3.54	\$4.61	\$6.00	\$7.81
						2,500	3.06	3.95	5.09	6.56
	\$.24	\$.28	\$.35	\$.41		5,000	2.74	3.51	4.49	5.75
Compacted earth . . . . .	.53	.62	.73	.85		7,500	2.57	3.28	4.18	5.32
Gravel	1.99	2.52	3.19	4.03		10,000	2.46	3.12	3.97	5.04
Asphalt, including base	3.27	3.97	4.82	5.84		15,000	2.30	2.92	3.69	4.67
Concrete slab . . . . .	.68	.94	1.32	1.84						
Add for vapor barrier										

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.		Sq. Ft.		Sq. Ft.	
	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs	
HEATING ONLY		Package A.C. (short ductwork)	\$9.58	Central refrigeration (zoned)	\$8.17	
Electric cable or baseboard	\$4.31			package (short ductwork)	6.28	
Electric wall heaters	1.84			Evaporative coolers	3.72	
Forced air furnace	4.85					
Hot water, baseboard/convactor	8.63					
Space heaters, with fan	2.37					
radiant	2.79					
Steam (including boiler)	7.68					
without boiler	6.74					
Wall or floor furnace	2.19					
				VENTILATION ONLY		
				Vent. (blowers/ducts)	\$1.36	

3	HEIGHT REFINEMENTS			
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.963	13	1.058
	9	.981	14	1.077
	10	1.000 (base)	16	1.115
	11	1.019	18	1.154
	12	1.038	20	1.192

4	AVERAGE PERIMETER														
	Average Floor Area Sq. Ft./Story														
	75	100	125	150	200	250	300	400	500	600	700	800	900	1000	
500	1.178	1.311	1.444	1.577	1.844	2.110	2.377	2.909	----	----	----	----	----	----	500
750	1.044	1.133	1.222	1.311	1.489	1.667	1.844	2.201	----	----	----	----	----	----	750
1,000	.980	1.044	1.110	1.178	1.311	1.444	1.577	1.844	----	----	----	----	----	----	1,000
1,500	.911	.955	1.000	1.044	1.133	1.222	1.311	1.489	----	----	----	----	----	----	1,500
2,000	.878	.911	.945	.977	1.044	1.110	1.178	1.311	----	----	----	----	----	----	2,000
2,500	.858	.884	.911	.938	.991	1.044	1.097	1.204	----	----	----	----	----	----	2,500
3,000	.843	.865	.889	.911	.955	1.000	1.044	1.133	----	----	----	----	----	----	3,000
4,000	----	----	.860	.878	.911	.945	.977	1.044	1.110	1.178	----	----	----	----	4,000
5,000	----	----	.844	.857	.884	.911	.938	.991	1.044	1.097	1.150	----	----	----	5,000
10,000	----	----	----	----	----	.844	.858	.884	.911	.938	.960	.991	1.018	1.044	10,000
12,000	----	----	----	----	----	.833	.843	.867	.888	.911	.934	.955	.977	1.000	12,000
14,000	----	----	----	----	----	.825	.835	.854	.873	.892	.911	.931	.949	.967	14,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

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SHEDS – OFFICE STRUCTURE



AVERAGE CLASS C



GOOD CLASS C

OCCUPANCY DESCRIPTION: These structures are small rural office rooms, typically servicing bulk oil plants, grain elevator facilities, cement plants, etc. The lower qualities are bare office structures with minimum lighting and no plumbing, while the better qualities include finished floors and ceilings and adequate fluorescent lighting and plumbing.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Sprinklers or office equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$79.52	Block, concrete, structural clay tile, light roof structure	Drywall, acoustic tile, low-cost carpet or vinyl composition	Adequate lighting and plumbing	Wall furnace
	Average	58.37	Masonry bearing walls, light rafters, very plain	Low-cost partitions, acoustic tile, vinyl comp. tile, minimal counter and shelving	Minimum fluorescent lighting and plumbing	Electric wall heaters
D	Good	75.10	Stucco or wood siding on wood or steel studs, some trim	Drywall, acoustic tile, low-cost carpet or vinyl composition	Adequate lighting and plumbing	Wall furnace
	Average	54.20	Light stucco or siding on wood studs, very plain	Low-cost partitions, acoustic tile, vinyl comp. tile, minimal counter and shelving	Minimum fluorescent lighting and plumbing	Electric wall heaters
	Low cost	37.68	Wood, metal or cheap stucco on studs, metal or composition roof	Bare office space, low-cost paneling, asphalt tile	Few open fixtures, no plumbing	None
D POLE	Average	51.39	Metal panels, sheathing on pole frame or studs	Low-cost partitions, acoustic tile, VCT, minimal counter and shelving	Minimum fluorescent lighting and plumbing	Electric wall heaters
	Low cost	35.74	Metal panels, sheathing on pole frame	Bare office space, low-cost paneling, asphalt tile	Few open fixtures, no plumbing	None
S	Average	55.49	Steel panels, sheathing, on steel studs or self-framing	Low-cost partitions, acoustic tile, vinyl comp. tile, minimal counter and shelving	Minimum fluorescent lighting and plumbing	Electric wall heaters
	Low cost	38.87	Metal panels, sheathing on steel frame	Bare office space, low-cost paneling, asphalt tile	Few open fixtures, no plumbing	None

SHEDS – OFFICE STRUCTURE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>FLOOR STRUCTURE: Adjust for variations in floors as indicated in base square foot costs.</p>	<p>SPRINKLERS: Apply to area covered by sprinklers.</p>																																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Sq. Ft.</th> <th>LOW</th> <th>AVG.</th> <th>GOOD</th> <th>EXCL.</th> </tr> </thead> <tbody> <tr> <td>1,000</td> <td>\$3.54</td> <td>\$4.61</td> <td>\$6.00</td> <td>\$7.81</td> </tr> <tr> <td>2,500</td> <td>3.06</td> <td>3.95</td> <td>5.09</td> <td>6.56</td> </tr> <tr> <td>5,000</td> <td>2.74</td> <td>3.51</td> <td>4.49</td> <td>5.75</td> </tr> <tr> <td>7,500</td> <td>2.57</td> <td>3.28</td> <td>4.18</td> <td>5.32</td> </tr> <tr> <td>10,000</td> <td>2.46</td> <td>3.12</td> <td>3.97</td> <td>5.04</td> </tr> <tr> <td>15,000</td> <td>2.30</td> <td>2.92</td> <td>3.69</td> <td>4.67</td> </tr> </tbody> </table>	Sq. Ft.	LOW	AVG.	GOOD	EXCL.	1,000	\$3.54	\$4.61	\$6.00	\$7.81	2,500	3.06	3.95	5.09	6.56	5,000	2.74	3.51	4.49	5.75	7,500	2.57	3.28	4.18	5.32	10,000	2.46	3.12	3.97	5.04	15,000	2.30	2.92	3.69	4.67
Sq. Ft.	LOW	AVG.	GOOD	EXCL.																																
1,000	\$3.54	\$4.61	\$6.00	\$7.81																																
2,500	3.06	3.95	5.09	6.56																																
5,000	2.74	3.51	4.49	5.75																																
7,500	2.57	3.28	4.18	5.32																																
10,000	2.46	3.12	3.97	5.04																																
15,000	2.30	2.92	3.69	4.67																																

2

HEATING AND COOLING					
<p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>					
	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard . . .	\$4.31	Package A.C. (short ductwork)	\$9.58	Central refrigeration (zoned)	\$8.17
Electric wall heaters	1.84			package (short ductwork)	6.28
Forced air furnace	4.85			Evaporative coolers	3.72
Hot water, baseboard/convactor	8.63				
Space heaters, with fan	2.37				
radiant	2.79				
Steam (including boiler)	7.68				
without boiler	6.74				
Wall or floor furnace	2.19				
				VENTILATION ONLY	
				Vent. (blowers/ducts)	\$1.36

3

HEIGHT REFINEMENTS			
<p>MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.058
9	.981	14	1.077
10	1.000 (base)	16	1.115
11	1.019	18	1.154
12	1.038	20	1.192

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	75	100	125	150	200	250	300	400	500	600	700	800	900	1000	
500	1.178	1.311	1.444	1.577	1.844	2.110	2.377	2.909	----	----	----	----	----	----	500
750	1.044	1.133	1.222	1.311	1.489	1.667	1.844	2.201	----	----	----	----	----	----	750
1,000	.980	1.044	1.110	1.178	1.311	1.444	1.577	1.844	----	----	----	----	----	----	1,000
1,500	.911	.955	1.000	1.044	1.133	1.222	1.311	1.489	----	----	----	----	----	----	1,500
2,000	.878	.911	.945	.977	1.044	1.110	1.178	1.311	----	----	----	----	----	----	2,000
2,500	.858	.884	.911	.938	.991	1.044	1.097	1.204	----	----	----	----	----	----	2,500
3,000	.843	.865	.889	.911	.955	1.000	1.044	1.133	----	----	----	----	----	----	3,000
4,000	----	----	.860	.878	.911	.945	.977	1.044	1.110	1.178	----	----	----	----	4,000
5,000	----	----	.844	.857	.884	.911	.938	.991	1.044	1.097	1.150	----	----	----	5,000
10,000	----	----	----	----	----	.844	.858	.884	.911	.938	.960	.991	1.018	1.044	10,000
12,000	----	----	----	----	----	.833	.843	.867	.888	.911	.934	.955	.977	1.000	12,000
14,000	----	----	----	----	----	.825	.835	.854	.873	.892	.911	.931	.949	.967	14,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHEDS – UTILITY



AVERAGE CLASS S

OCCUPANCY DESCRIPTION: Utility sheds are multipurpose structures that are usually lighter than typical industrial or warehouse buildings and form a large family of low cost utilitarian buildings which may use similar structural shells.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Sprinklers.

SQUARE FOOT COST TABLE LIGHT COMMERCIAL UTILITY BUILDING

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$35.77	Concrete block, low-cost brick, wood rafters, roll-up doors	Small office, good slab floor, few extras	Good lighting, adequate plumbing	Space heaters
	Average	25.39	Concrete block, light roof, overhead doors	Unfinished, concrete floor, minimum office	Adequate lighting and water outlets, few fixtures	Electric wall heaters
D	Good	28.67	Heavy wood frame, siding or stucco, roll-up doors	Small office, good slab floor, few extras	Good lighting, adequate plumbing	Space heaters
	Average	18.94	Open wood frame, exposed siding or stucco, overhead doors	Unfinished, concrete floor, minimum office	Adequate lighting and water outlets, few fixtures	Electric wall heaters
	Low cost	13.40	Wood frame, board siding	Unfinished, light slab/asphalt	Minimum electric service	None
D POLE	Good	24.49	Good pole frame, color siding, roll-up doors, some trim	Small office, good slab floor, few extras	Good lighting, adequate plumbing	Space heaters
	Average	15.98	Pre-engineered pole frame, metal siding, overhead doors	Unfinished, concrete floor, minimum office	Adequate lighting and water outlets, few fixtures	Electric wall heaters
	Low cost	11.30	Light pole frame, metal siding	Unfinished, light slab/asphalt	Minimum electric service	None
S	Good	28.60	Good frame, color siding, roll-up doors, some trim	Small office, good slab floor, few extras	Good lighting, adequate plumbing	Space heaters
	Average	19.23	Pre-engineered frame, metal siding, overhead doors	Unfinished, concrete floor, minimum office	Adequate lighting and water outlets, few fixtures	Electric wall heaters
	Low cost	13.86	Light steel frame, siding	Unfinished, light slab/asphalt	Minimum electric service	None
SSLANT WALL	Good	26.53	Good slant frame, color siding, roll-up doors, some trim	Small office, good slab floor, few extras	Good lighting, adequate plumbing	Space heaters
	Average	17.78	Pre-engineered frame, metal siding, end doors	Unfinished, concrete floor, minimum office	Adequate lighting and water outlets, few fixtures	Electric wall heaters
	Low cost	12.82	Light steel slant frame, siding	Unfinished, light slab/asphalt	Minimum electric service	None

SHEDS – UTILITY

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

FLOOR STRUCTURE: Adjust for variations in floors as indicated in base square foot costs.					SPRINKLERS: Apply to area covered by sprinklers.				
	LOW	AVG.	GOOD	EXCL.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
					1,000	\$3.54	\$4.61	\$6.00	\$7.81
					2,500	3.06	3.95	5.09	6.56
Compacted earth	\$.24	\$.28	\$.35	\$.41	5,000	2.74	3.51	4.49	5.75
Gravel .....	.53	.62	.73	.85	7,500	2.57	3.28	4.18	5.32
Asphalt, including base	1.99	2.52	3.19	4.03	10,000	2.46	3.12	3.97	5.04
Concrete slab	3.27	3.97	4.82	5.84	15,000	2.30	2.92	3.69	4.67
Add for vapor barrier .....	.68	.94	1.32	1.84					

2

HEATING AND COOLING						
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.						
HEATING ONLY		Sq. Ft.	HEATING & COOLING		Sq. Ft.	
		Costs			Costs	
Electric cable or baseboard ..		\$4.31	Package A.C. (short ductwork)		\$9.58	
Electric wall heaters		1.84			Central refrigeration (zoned)	\$8.17
Forced air furnace		4.85			package (short ductwork)	6.28
Hot water, baseboard/convactor		8.63			Evaporative coolers	3.72
Space heaters, with fan		2.37				
radiant		2.79			VENTILATION ONLY	
Steam (including boiler)		7.68			Vent. (blowers/ducts)	\$1.36
without boiler		6.74				
Wall or floor furnace		2.19				

3

HEIGHT REFINEMENTS				
MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.				
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.				
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier	
8	.963	13	1.058	
9	.981	14	1.077	
10	1.000 (base)	16	1.115	
11	1.019	18	1.154	
12	1.038	20	1.192	

4

Average Floor Area Sq. Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	75	100	125	150	200	250	300	400	500	600	700	800	900	1000	
500	1.178	1.311	1.444	1.577	1.844	2.110	2.377	2.909	----	----	----	----	----	----	500
750	1.044	1.133	1.222	1.311	1.489	1.667	1.844	2.201	----	----	----	----	----	----	750
1,000	.980	1.044	1.110	1.178	1.311	1.444	1.577	1.844	----	----	----	----	----	----	1,000
1,500	.911	.955	1.000	1.044	1.133	1.222	1.311	1.489	----	----	----	----	----	----	1,500
2,000	.878	.911	.945	.977	1.044	1.110	1.178	1.311	----	----	----	----	----	----	2,000
2,500	.858	.884	.911	.938	.991	1.044	1.097	1.204	----	----	----	----	----	----	2,500
3,000	.843	.865	.889	.911	.955	1.000	1.044	1.133	----	----	----	----	----	----	3,000
4,000	----	----	.860	.878	.911	.945	.977	1.044	1.110	1.178	----	----	----	----	4,000
5,000	----	----	.844	.857	.884	.911	.938	.991	1.044	1.097	1.150	----	----	----	5,000
10,000	----	----	----	----	----	.844	.858	.884	.911	.938	.960	.991	1.018	1.044	10,000
12,000	----	----	----	----	----	.833	.843	.867	.888	.911	.934	.955	.977	1.000	12,000
14,000	----	----	----	----	----	.825	.835	.854	.873	.892	.911	.931	.949	.967	14,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHOPPING CENTERS – COMMUNITY



GOOD CLASS C



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: A community shopping center building is typically an intermediate group or cluster of stores (also called a plaza). It is generally a much larger and better designed project than a neighborhood center and typically supports at least one major anchor.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Storefronts, basic plumbing and electrical for a typical mix of tenants including service areas. Some roof, canopy or mansard overhang consistent with the quality.

NOT INCLUDED IN COSTS: Elevators, sprinklers, fixtures, furnishings or equipment, pedestrian mall, balconies or signs, major anchor buildings and public pedestrian mall concourse balconies or walkways.

AVERAGE TENANT COMPOSITION

The shopping center building costs found on this page represent group averages of a typical mix of tenants as listed below.

Retail – All general retail and specialty occupancies	44%
Discount – Discount, including large drug, furniture, hardware, garden, etc.	17%
Food – Market, convenience specialty, delicatessen, baker, florist, etc.	9%
Food Service – Restaurant, lounge, cafeteria, fast food outlets	9%
Commercial – Office, financial, medical, post office, etc.	7%
Personal services – Laundry, barber/beauty, health club, repair	7%
Recreational – Theater, skating, bowling, clubhouse, day care	5%
Miscellaneous – Storage and center service area including nonpublic accessways and restrooms	2%

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Excellent	\$149.27	Stone, face brick, fine ornamentation and displays	Best plaster, ornamental ceilings, paneling, ceramic, hardwood, carpet	Special lighting and outlets, good plumbing	Warm and cool air (zoned)
	Good	123.24	Face brick, best block/ mansard ornamentation, good displays	Plaster and paneling, ornamental finishes, carpet, plain terrazzo	Extensive lighting and outlets, good plumbing	Warm and cool air (zoned)
	Average	98.37	Brick, block, stucco, best tilt-up, bearing or frame, adequate displays	Drywall or plaster, good tile ceilings, vinyl composition and carpet	Good lighting and outlets, standard fixtures	Package A.C.
	Low cost	81.54	Adequate fronts, block, tilt-up panels, big box center	Painted walls and roof deck, some acoustic, VCT, stained concrete	Adequate lighting and outlets, good plumbing	Package A.C.
D	Excellent	140.98	Best masonry veneer, fine ornamentation and displays	Best plaster, ornamental ceilings, paneling, ceramic, hardwood, carpet	Special lighting and outlets, good plumbing	Warm and cool air (zoned)
	Good	116.03	Masonry veneer, staggered set-backs, good fronts, mansard fascia	Plaster and paneling, ornamental finishes, carpet, plain terrazzo	Extensive lighting and outlets, good plumbing	Warm and cool air (zoned)
	Average	92.13	Good stucco or siding, masonry trim, adequate front facade	Drywall or plaster, good tile ceilings, vinyl composition and carpet	Good lighting and outlets, standard fixtures	Package A.C.
S	Average	88.68	Sandwich panels, adequate display fronts, ornamentation	Acoustic tile, vinyl composition, some carpet and interior trim	Good lighting and outlets, standard fixtures	Package A.C.
CDS [†]	Display basement	62.38	Plaster interior	Store finish, acoustic tile, vinyl composition tile	Average store lighting and plumbing	Forced air
	Storage basement	34.19	Painted interior	Painted ceiling and floors, few partitions	Exposed lighting, few outlets, drains	Space heaters
	Parking basement	37.59	Unfinished interior	Finished ceiling, concrete floor with hardener	Exposed lighting, few outlets, drains	Ventilation

[†]For fire-resistant Type I basements, with concrete slab separation under Class C, D or S units, add \$5.95 per square foot.

SHOPPING CENTER – COMMUNITY

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger or freight elevator with simple call system and push button control and two or three stops, costs \$56,250 to \$77,250.	SPRINKLERS: Apply to area covered by sprinklers.				
	For detailed costs, see Section UIP 8.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		1,000	\$4.14	\$5.36	\$6.94	\$8.98
		2,000	3.73	4.32	5.46	7.87
		3,000	3.50	4.47	5.71	7.29
		5,000	3.24	4.11	5.22	6.62
		10,000	2.91	3.67	4.61	5.81
		20,000	2.62	3.27	4.08	5.09
		30,000	2.47	3.06	3.80	4.72
		50,000	2.28	2.81	3.47	4.28
	BALCONIES: Balcony cost include the supporting structure, decking and rails. Apply costs to the balcony area.	LOW	AVG.	GOOD	EXCL.	
	Concrete	\$20.20	\$26.25	\$34.00	\$44.25	
	Steel	18.35	25.25	34.75	48.00	
	Wood	15.80	21.45	29.25	39.75	
	Add for ornate finishes, balustrades	16.85	21.10	26.50	33.00	
	Add for roofs or awnings	10.45	13.85	18.40	24.45	

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
	Electric cable or baseboard ..	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
	Hot water, baseboard/convactor radiant floor/ceiling	11.40	Heat pump system	14.35	Pkg. refriger. . \$1,840 to \$2,350 per ton capacity	
	Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
	radiant	3.60				
	Steam (including boiler)	9.20				
	without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY	
	Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$ 1.77

3	HEIGHT REFINEMENTS			
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.936	14	1.042
	10	.957	15	1.064
	11	.979	16	1.085
	12	1.000 (base)	18	1.127
	13	1.021	20	1.170

4	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER													Average Floor Area Sq.Ft./Story	
		100	150	200	250	300	400	500	600	800	900	1000	1200	1500		2000
	2,000	.969	1.079	1.183	1.283	1.376	----	----	----	----	----	----	----	----	----	2,000
	3,000	.892	.969	1.042	1.115	1.183	1.322	----	----	----	----	----	----	----	----	3,000
	4,000	.854	.912	.969	1.025	1.079	1.183	1.280	----	----	----	----	----	----	----	4,000
	5,000	----	.878	.924	.969	1.011	1.097	1.183	----	----	----	----	----	----	----	5,000
	10,000	----	----	----	----	.878	.925	.969	1.011	1.097	1.140	1.183	----	----	----	10,000
	14,000	----	----	----	----	----	.870	.904	.937	1.000	1.030	1.060	1.121	----	----	14,000
	20,000	----	----	----	----	----	----	.854	.878	.924	.948	.969	1.011	----	----	20,000
	25,000	----	----	----	----	----	----	.831	.850	.887	.906	.925	.959	1.011	----	25,000
	30,000	----	----	----	----	----	----	----	.831	.862	.878	.894	.925	.969	----	30,000
	40,000	----	----	----	----	----	----	----	----	.831	.843	.854	.878	.913	----	40,000
	50,000	----	----	----	----	----	----	----	----	----	----	.831	.850	.877	----	50,000
	100,000	----	----	----	----	----	----	----	----	----	----	----	.792	.807	.831	100,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHOPPING CENTERS – COMMUNITY (ALTERNATE METHOD)

OCCUPANCY DESCRIPTION: Shell This occupancy, together with occupancy Interior Build-out, Community Shopping Center, allows you to individually price the shell and the tenant improvement costs for a community shopping center. This provides an alternative to occupancy Community Shopping Center, which includes both the shell and tenant improvement costs.

A community shopping center shell is typically an intermediate group or cluster of unfinished store spaces (also called a plaza). It is generally a much larger and better-designed project than a neighborhood center. It usually supports at least one major anchor. Typical anchors in a community center include secondary or junior department or retail-discount stores and major restaurant buildings.

Shopping center costs are for the strip or plaza shell buildings only and include only the necessary rough plumbing and electrical connections to provide for the operation of the satellites, including service areas and fixtures. Interior finish consists of bare space with concrete floor, demising walls and storefront entries commensurate with the quality.

Interior Build-out This occupancy, together with occupancy Shell, Community Shopping Center, allows you to individually price the shell and the tenant improvement costs for a community shopping center. This provides an alternative to occupancy Community Shopping Center, which includes both the shell and tenant improvement costs.

The costs represent group averages of a typical mix of tenant finishes only (excluding major anchor occupancies). The floor and ceiling finishes and finished electrical and plumbing are normally commensurate with the quality and type of general occupancies found within a center.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Storefronts and basic plumbing and electrical for a typical mix of tenants including service areas. Some roof, canopy or mansard overhang commensurate with the quality.

NOT INCLUDED IN COSTS: Elevators, sprinklers, fixtures, furnishings or equipment, pedestrian mall, balconies or signs.

SHELL - COMMUNITY SHOPPING CENTER

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Excellent	\$74.63	Stone, face brick, fine ornamentation and display fronts	Bare retail, floor slab, some service-storage area	Rough retail electrical and plumbing, some service fixtures	None
	Good	59.97	Face brick, best block, mansard ornamentation and display fronts	Bare retail, floor slab, some service-storage area	Rough retail electrical and plumbing, some service fixtures	None
	Average	48.20	Brick, block, stucco, best tilt-up, bearing or frame, adequate displays	Bare retail, floor slab, some bare partitioning	Rough retail electrical and plumbing, some service outlets	None
D	Excellent	74.63	Best masonry veneer, fine ornamentation and display fronts	Bare retail, floor slab, some service-storage area	Rough retail electrical and plumbing, some service fixtures	None
	Good	59.97	Masonry veneer, staggered set-backs, good fronts, mansard fascia	Bare retail, floor slab, some service-storage area	Rough retail electrical and plumbing, some service fixtures	None
	Average	48.20	Good stucco or siding, masonry trim, adequate front facade	Bare retail, floor slab, some bare partitioning	Rough retail electrical and plumbing, some service outlets	None
S	Average	39.41	Good metal panels, adequate display fronts, ornamentation	Bare retail, floor slab, some bare partitioning	Rough retail electrical and plumbing, some service outlets	None

COMMUNITY SHOPPING CENTER INTERIOR RETAIL BUILD-OUT (SQUARE FOOT OF RETAIL FINISH)

TYPE	COST/ SQ. FT.	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
Excellent	\$71.53	Best plaster, ornamental ceilings, paneling, carpet, tile or hardwood	Special lighting and outlets, good plumbing	Warm and cool air (zoned)
Good	61.59	Drywall or plaster, some paneling, ornamental finishes, carpet, plain terrazzo	Extensive lighting and outlets, good plumbing	Warm and cool air (zoned)
Average	49.50	Drywall or plaster, some good tile ceilings, vinyl composition and carpet	Adequate lighting and outlets per unit, small restrooms	Package A.C.
Low cost	36.45	Painted walls, drywall or acoustic tile, asphalt or composition tile, few partitions	Minimum lighting, outlets and plumbing per unit	Forced air

SHOPPING CENTERS – COMMUNITY (ALTERNATE METHOD)

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: A small passenger or freight elevator with simple call system and push-button control, and two or three stops, costs \$56,250 to \$77,250.</p> <p>For detailed costs, see Section UIP 8.</p> <p>BALCONIES: Balcony cost include the supporting structure, decking and rails. Apply costs to the balcony area.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">LOW</th> <th style="text-align: center;">AVG.</th> <th style="text-align: center;">GOOD</th> <th style="text-align: center;">EXCL.</th> </tr> </thead> <tbody> <tr> <td>Concrete</td> <td style="text-align: right;">\$20.20</td> <td style="text-align: right;">\$26.25</td> <td style="text-align: right;">\$34.00</td> <td style="text-align: right;">\$44.25</td> </tr> <tr> <td>Steel</td> <td style="text-align: right;">18.35</td> <td style="text-align: right;">25.25</td> <td style="text-align: right;">34.75</td> <td style="text-align: right;">48.00</td> </tr> <tr> <td>Wood</td> <td style="text-align: right;">15.80</td> <td style="text-align: right;">21.45</td> <td style="text-align: right;">29.25</td> <td style="text-align: right;">39.75</td> </tr> <tr> <td>Add for ornate finishes, balustrades</td> <td style="text-align: right;">16.85</td> <td style="text-align: right;">21.10</td> <td style="text-align: right;">26.50</td> <td style="text-align: right;">33.00</td> </tr> <tr> <td>Add for roofs or awnings</td> <td style="text-align: right;">10.45</td> <td style="text-align: right;">13.85</td> <td style="text-align: right;">18.40</td> <td style="text-align: right;">24.45</td> </tr> </tbody> </table>						LOW	AVG.	GOOD	EXCL.	Concrete	\$20.20	\$26.25	\$34.00	\$44.25	Steel	18.35	25.25	34.75	48.00	Wood	15.80	21.45	29.25	39.75	Add for ornate finishes, balustrades	16.85	21.10	26.50	33.00	Add for roofs or awnings	10.45	13.85	18.40	24.45	<p>SPRINKLERS: Apply to area covered by sprinklers.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sq. Ft.</th> <th style="text-align: center;">LOW</th> <th style="text-align: center;">AVG.</th> <th style="text-align: center;">GOOD</th> <th style="text-align: center;">EXCL.</th> </tr> </thead> <tbody> <tr> <td>1,000</td> <td style="text-align: right;">\$4.14</td> <td style="text-align: right;">\$5.36</td> <td style="text-align: right;">\$6.94</td> <td style="text-align: right;">\$8.98</td> </tr> <tr> <td>2,000</td> <td style="text-align: right;">3.73</td> <td style="text-align: right;">4.32</td> <td style="text-align: right;">5.46</td> <td style="text-align: right;">7.87</td> </tr> <tr> <td>3,000</td> <td style="text-align: right;">3.50</td> <td style="text-align: right;">4.47</td> <td style="text-align: right;">5.71</td> <td style="text-align: right;">7.29</td> </tr> <tr> <td>5,000</td> <td style="text-align: right;">3.24</td> <td style="text-align: right;">4.11</td> <td style="text-align: right;">5.22</td> <td style="text-align: right;">6.62</td> </tr> <tr> <td>10,000</td> <td style="text-align: right;">2.91</td> <td style="text-align: right;">3.67</td> <td style="text-align: right;">4.61</td> <td style="text-align: right;">5.81</td> </tr> <tr> <td>20,000</td> <td style="text-align: right;">2.62</td> <td style="text-align: right;">3.27</td> <td style="text-align: right;">4.08</td> <td style="text-align: right;">5.09</td> </tr> <tr> <td>30,000</td> <td style="text-align: right;">2.47</td> <td style="text-align: right;">3.06</td> <td style="text-align: right;">3.80</td> <td style="text-align: right;">4.72</td> </tr> <tr> <td>50,000</td> <td style="text-align: right;">2.28</td> <td style="text-align: right;">2.81</td> <td style="text-align: right;">3.47</td> <td style="text-align: right;">4.28</td> </tr> </tbody> </table>					Sq. Ft.	LOW	AVG.	GOOD	EXCL.	1,000	\$4.14	\$5.36	\$6.94	\$8.98	2,000	3.73	4.32	5.46	7.87	3,000	3.50	4.47	5.71	7.29	5,000	3.24	4.11	5.22	6.62	10,000	2.91	3.67	4.61	5.81	20,000	2.62	3.27	4.08	5.09	30,000	2.47	3.06	3.80	4.72	50,000	2.28	2.81	3.47	4.28
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HEATING AND COOLING					
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HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard ..	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
Hot water, baseboard/convector radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refriger. . \$1,840 to \$2,350 per ton capacity	
Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
radiant	3.60				
Steam (including boiler)	9.20				
without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY	
Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$1.77

3

HEIGHT REFINEMENTS			
<p>MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.936	14	1.042
10	.957	15	1.064
11	.979	16	1.085
12	1.000 (base)	18	1.127
13	1.021	20	1.170

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq.Ft./Story
	100	150	200	250	300	400	500	600	800	900	1000	1200	1500	2000	
2,000	.969	1.079	1.183	1.283	1.376	----	----	----	----	----	----	----	----	----	2,000
3,000	.892	.969	1.042	1.115	1.183	1.322	----	----	----	----	----	----	----	----	3,000
4,000	.854	.912	.969	1.025	1.079	1.183	1.280	----	----	----	----	----	----	----	4,000
5,000	----	.878	.924	.969	1.011	1.097	1.183	----	----	----	----	----	----	----	5,000
10,000	----	----	----	.878	.925	.969	1.011	1.097	1.140	1.183	----	----	----	----	10,000
14,000	----	----	----	.870	.904	.937	1.000	1.030	1.060	1.121	----	----	----	----	14,000
20,000	----	----	----	.854	.878	.924	.948	.969	1.011	----	----	----	----	----	20,000
25,000	----	----	----	.831	.850	.887	.906	.925	.959	1.011	----	----	----	----	25,000
30,000	----	----	----	.831	.862	.878	.894	.925	.969	----	----	----	----	----	30,000
40,000	----	----	----	.831	.843	.854	.878	.913	.969	----	----	----	----	----	40,000
50,000	----	----	----	.831	.850	.877	.881	.913	.969	----	----	----	----	----	50,000
100,000	----	----	----	.792	.807	.831	.831	.831	.831	.831	.831	.831	.831	.831	100,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHOPPING CENTERS – MALL CONCOURSE



EXCELLENT CLASS A-B ENCLOSED MALL

OCCUPANCY DESCRIPTION: The mall costs are for the public pedestrian concourse areas only, exclusive of open well areas, and include stairs and ramps as necessary. This may consist of a single access way or it may include a number of subsidiary approach routes connecting to the main shopping corridor. These malls are limited to three types: open, covered and enclosed.

Open mall costs are for an open air pedestrian concourse, generally referred to as an arcade or courtyard.

Covered mall are covered but open to the air pedestrian concourses. Costs include floor and roof finishes and supports commensurate with the quality of the center buildings. Apply costs to covered areas only.



EXCELLENT CLASS A-B ENCLOSED MALL

Enclosed mall are completely enclosed, climatized pedestrian concourses in which the enclosing walls are part of the shopping center buildings. One, two and three level malls are included in the averages. Costs include floor, ceiling, roof and entryway finishes commensurate with the quality of the anchor buildings.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Typical paving, lighting and permanent focal elements such as built-in seating, planters, center court wells, stages and fountains consistent with the quality of the center buildings. Allowances for escalators and elevators are included where designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, all kiosks, landscaping, skating rinks, and monumental sculpture and other individual works of art.

OPEN MALL

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
CDS	Excellent	\$54.35	Themed pathways, courtyard, varied elevations and finishes	Heavily rock and water scaped, open pavillion, amphitheater	Best luminaires, good streams, waterfalls, ponds and fountains	None
	Very Good	37.12	Best pavers, wood decks, varied patterns and elevations	High-cost seating and planters, good stage of display areas	High-quality luminaires, good reflection ponds, fountains	None
	Good	25.35	Good pavers, decorative concrete	Good planters, some seating and display areas	Good outdoor lighting and fixtures, small fountains	None
	Average	17.32	Patterned concrete, some pavers	Adequate raised planters and benches	Adequate area lighting and fixtures	None
	Low cost	11.83	Concrete, some decorative finish	Some low-cost planters, benches, and tree grates	Minimum lighting and fixtures	None

COVERED MALL

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
CDS	Excellent	\$58.60	Completely roofed, comparable to average enclosed mall	Exposed deck, joists, carpet, vinyl, wood, plain seating and planters	Adequate lighting & plumbing, standard fixtures, few outlets	None
	Good	49.46	Substantial structure, good mansard, finished soffit	Pavers, terrazzo, best ornamenta concrete	High-quality illumination and fixtures	None
	Average	41.75	Metal or wood canopies, decorative supports	Terrazzo, decorative concrete	Good illumination and fixtures	None
	Low cost	35.24	Light trellises or awnings, plain supports	Patterned concrete, some plain terrazzo or pavers	Adequate illumination and fixtures	None

ENCLOSED MALL

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	\$156.69	Fine fronts, metal and glass, usually part of a building	Ornamental ceilings, best pavers, terrazzo, ceramic tiled finishes	*Special lighting fixtures and effects, tiled restrooms	Complete H.V.A.C.
	Good	123.24	Good entries, brick or concrete, usually part of a bldg	Plaster or Tiled ceiling, carpet, terrazzo, some ornamentation	*Good lighting and outlets, public restrooms and fixtures	Complete H.V.A.C.
	Average	97.75	Built-up roof, skylights adequate entries	Exposed deck, joists, carpet, vinyl, pavers, plain seating and food courouts	*Adequate lighting & plumbing, standard fixtures, few outlets.	Complete H.V.A.C.
	Low cost	68.56	Plain entry, exposed roof deck	Vinyl composition, no extras	Minimum lighting and plumbing	Complete H.V.A.C.
CDS	Excellent	135.42	High-cost roof, large arched entries and domed skylights	Best plaster, vaulted ceiling, pavers, terrazzo, tiled seating, food cluster	*Special lighting fixtures, deluxe restrooms & fixtures, fountains	Complete H.V.A.C.
	Good	102.47	Good parapets, skylights and storefront entryways	Plaster or drywall, plain pavers or terrazzo, center court wells	*Good indirect lighting, public restrooms, small fountains	Complete H.V.A.C.
	Average	77.71	Light built-up roof, small skylights and entries	Exposed deck, joists, carpet, vinyl, wood, plain seating and planters	*Adequate lighting & plumbing, standard fixtures, few outlets.	Complete H.V.A.C.
	Low cost	50.72	Plain entry, exposed roof deck	Vinyl composition, no extras	Minimum lighting and plumbing	Complete H.V.A.C.

SHOPPING CENTERS – MALL CONCOURSE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	<p>ELEVATORS: Malls whose base costs include elevators are marked with an asterisk (*). If the mall under consideration has no elevators, deduct the following from the base costs so marked. For detailed costs see Section UIP 8.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Classes A/B</th> <th style="text-align: right;">Sq. Ft. Costs</th> <th style="text-align: left;">Classes C/D/S</th> <th style="text-align: right;">Sq. Ft. Costs</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td style="text-align: right;">\$11.45</td> <td>Excellent</td> <td style="text-align: right;">\$10.70</td> </tr> <tr> <td>Good</td> <td style="text-align: right;">10.80</td> <td>Good</td> <td style="text-align: right;">10.05</td> </tr> <tr> <td>Average</td> <td style="text-align: right;">10.25</td> <td>Average</td> <td style="text-align: right;">9.48</td> </tr> </tbody> </table>	Classes A/B	Sq. Ft. Costs	Classes C/D/S	Sq. Ft. Costs	Excellent	\$11.45	Excellent	\$10.70	Good	10.80	Good	10.05	Average	10.25	Average	9.48	<p>SPRINKLERS: Apply to area covered by sprinklers.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sq. Ft.</th> <th style="text-align: right;">LOW</th> <th style="text-align: right;">AVG.</th> <th style="text-align: right;">GOOD</th> <th style="text-align: right;">EXCL.</th> </tr> </thead> <tbody> <tr><td>2,500</td><td style="text-align: right;">\$3.60</td><td style="text-align: right;">\$4.61</td><td style="text-align: right;">\$5.90</td><td style="text-align: right;">\$7.55</td></tr> <tr><td>5,000</td><td style="text-align: right;">3.24</td><td style="text-align: right;">4.11</td><td style="text-align: right;">5.22</td><td style="text-align: right;">6.62</td></tr> <tr><td>10,000</td><td style="text-align: right;">2.91</td><td style="text-align: right;">3.67</td><td style="text-align: right;">4.61</td><td style="text-align: right;">5.81</td></tr> <tr><td>15,000</td><td style="text-align: right;">2.74</td><td style="text-align: right;">3.43</td><td style="text-align: right;">4.30</td><td style="text-align: right;">5.38</td></tr> <tr><td>20,000</td><td style="text-align: right;">2.62</td><td style="text-align: right;">3.27</td><td style="text-align: right;">4.08</td><td style="text-align: right;">5.09</td></tr> <tr><td>30,000</td><td style="text-align: right;">2.47</td><td style="text-align: right;">3.06</td><td style="text-align: right;">3.80</td><td style="text-align: right;">4.72</td></tr> <tr><td>50,000</td><td style="text-align: right;">2.28</td><td style="text-align: right;">2.81</td><td style="text-align: right;">3.47</td><td style="text-align: right;">4.28</td></tr> <tr><td>75,000</td><td style="text-align: right;">2.14</td><td style="text-align: right;">2.63</td><td style="text-align: right;">3.23</td><td style="text-align: right;">3.97</td></tr> <tr><td>100,000</td><td style="text-align: right;">2.05</td><td style="text-align: right;">2.51</td><td style="text-align: right;">3.07</td><td style="text-align: right;">3.76</td></tr> <tr><td>150,000</td><td style="text-align: right;">1.93</td><td style="text-align: right;">2.35</td><td style="text-align: right;">2.86</td><td style="text-align: right;">3.48</td></tr> <tr><td>200,000</td><td style="text-align: right;">1.85</td><td style="text-align: right;">2.24</td><td style="text-align: right;">2.72</td><td style="text-align: right;">3.29</td></tr> </tbody> </table>	Sq. Ft.	LOW	AVG.	GOOD	EXCL.	2,500	\$3.60	\$4.61	\$5.90	\$7.55	5,000	3.24	4.11	5.22	6.62	10,000	2.91	3.67	4.61	5.81	15,000	2.74	3.43	4.30	5.38	20,000	2.62	3.27	4.08	5.09	30,000	2.47	3.06	3.80	4.72	50,000	2.28	2.81	3.47	4.28	75,000	2.14	2.63	3.23	3.97	100,000	2.05	2.51	3.07	3.76	150,000	1.93	2.35	2.86	3.48	200,000	1.85	2.24	2.72	3.29
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2	<p>MALL CONCOURSE HEATING, COOLING AND AIR CONDITIONING</p> <p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs. COMPLETE H.V.A.C.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Classes A/B</th> <th style="text-align: right;">Sq. Ft. Costs</th> <th style="text-align: left;">Classes C/D/S</th> <th style="text-align: right;">Sq. Ft. Costs</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td style="text-align: right;">\$17.15</td> <td>Excellent</td> <td style="text-align: right;">\$14.35</td> </tr> <tr> <td>Good</td> <td style="text-align: right;">16.00</td> <td>Good</td> <td style="text-align: right;">11.45</td> </tr> <tr> <td>Average</td> <td style="text-align: right;">14.90</td> <td>Average</td> <td style="text-align: right;">8.82</td> </tr> <tr> <td>Low-cost</td> <td style="text-align: right;">13.90</td> <td>Low-cost</td> <td style="text-align: right;">7.14</td> </tr> <tr> <td></td> <td></td> <td>Heat and ventilation only</td> <td style="text-align: right;">4.52</td> </tr> </tbody> </table>	Classes A/B	Sq. Ft. Costs	Classes C/D/S	Sq. Ft. Costs	Excellent	\$17.15	Excellent	\$14.35	Good	16.00	Good	11.45	Average	14.90	Average	8.82	Low-cost	13.90	Low-cost	7.14			Heat and ventilation only	4.52
Classes A/B	Sq. Ft. Costs	Classes C/D/S	Sq. Ft. Costs																						
Excellent	\$17.15	Excellent	\$14.35																						
Good	16.00	Good	11.45																						
Average	14.90	Average	8.82																						
Low-cost	13.90	Low-cost	7.14																						
		Heat and ventilation only	4.52																						

3	<p>HEIGHT REFINEMENTS</p> <p>NOT APPLICABLE</p>
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4	<p>AREA/PERIMETER MULTIPLIERS</p> <p>NOT APPLICABLE</p>
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5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHOPPING CENTERS – MIXED WITH RESIDENTIAL/OFFICE UNITS



GOOD CLASS C



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: These structures are generally two to three story buildings with retail store or neighborhood center use on the first level and one or more residential/office units on the up per levels.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Fireplaces, balconies, porches or built-in appliances.

MIXED WITH RESIDENTIAL UNITS

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$114.02	Face brick, best block, some mansard trim, good display fronts	Above-average retail finishes, good residential units above	Good lighting and outlets, standard fixtures per unit	Package A.C.
	Average	91.77	Brick or block, bearing or light frame, plain storefronts	Average retail mix and finishes, few extras, standard residential above	Adequate lighting, some plumbing per unit	Package A.C.
	Low cost	68.02	Brick or block, bearing walls, very plain fronts, simple design	Low-cost general retail and basic residential above, no extras	Minimum lighting and plumbing per code	Forced air
CMILL	Average	105.82	Mill-type construction, heavy brick walls, trusses, good wood sash	Average retail mix and finishes, few extras, standard residential above	Adequate lighting, some plumbing per unit	Hot water
D	Good	107.24	Best siding, EIFS, masonry veneer, good trim and display fronts	Above-average retail finishes, good residential units above	Good lighting and outlets, standard fixtures per unit	Package A.C.
	Average	85.93	Stucco, siding, plain storefronts, minimum fenestration	Average retail mix and finishes, few extras, standard residential above	Adequate lighting, some plumbing per unit	Package A.C.
	Low cost	63.05	Low-cost wood or stucco, very plain, small fronts, simple design	Low-cost general retail and basic residential above, no extras	Minimum lighting and plumbing per code	Forced air

MIXED WITH OFFICE UNITS

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$113.24	Face brick, best block, some mansard trim, good display fronts	Above-average retail finishes, good office units above	Good lighting and outlets, standard fixtures per unit	Package A.C.
	Average	93.82	Brick or block, bearing or light frame, plain storefronts	Average retail mix and finishes, few extras, standard offices above	Adequate lighting, some plumbing per unit	Package A.C.
	Low cost	71.77	Brick or block, bearing walls, very plain fronts, simple design	Low-cost general retail and basic offices above, no extras	Minimum lighting and plumbing per code	Forced air
CMILL	Average	106.79	Mill-type construction, heavy brick walls, trusses, good wood sash	Average retail mix and finishes, few extras, standard offices above	Adequate lighting, some plumbing per unit	Hot water
D	Good	106.46	Best siding, EIFS, masonry veneer, good trim and display fronts	Above-average retail finishes, good office units above	Good lighting and outlets, standard fixtures per unit	Package A.C.
	Average	87.84	Stucco, siding, plain storefronts, minimum fenestration	Average retail mix and finishes, few extras, standard offices above	Adequate lighting, some plumbing per unit	Package A.C.
	Low cost	66.54	Low-cost wood or stucco, very plain, small fronts, simple design	Low-cost general retail and basic offices above, no extras	Minimum lighting and plumbing per code	Forced air

SHOPPING CENTERS – MIXED WITH RESIDENTIAL/OFFICE UNITS

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger or freight elevator with simple call system and push button control, and two or three stops. cost \$56,250 to \$77,250. For detailed costs, see Section UIP 8.	SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		1,000	\$4.14	\$5.36	\$6.94	\$8.98
		2,000	3.73	4.32	5.46	7.87
		3,000	3.50	4.47	5.71	7.29
		4,000	3.35	4.29	5.46	6.91
		5,000	3.24	4.11	5.22	6.62
		10,000	2.91	3.67	4.61	5.81
		20,000	2.62	3.27	4.08	5.09
		30,000	2.47	3.06	3.80	4.72
50,000	2.28	2.81	3.47	4.28		

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.		Sq. Ft.		Sq. Ft.	
	Costs		Costs		Costs	
	HEATING ONLY		HEATING & COOLING		COOLING ONLY	
	Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
	Hot water, baseboard/convactor radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refriger. . \$1,840 to \$2,350 per ton capacity	
	Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
	radiant	3.60				
	Steam (including boiler)	9.20				
	without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY	
3	Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$1.77

HEIGHT REFINEMENTS			
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.915	13	1.021
10	.957	14	1.042
11	.979	15	1.064
12	1.000 (base)	16	1.085
		18	1.127

4	Average Floor Area	AVERAGE PERIMETER														Average Floor Area
	Sq. Ft./Story	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	Sq. Ft./Story
	1,000	1.183	1.376	1.566	1.753	----	----	----	----	----	----	----	----	----	----	1,000
	2,000	.969	1.079	1.183	1.283	1.376	1.470	----	----	----	----	----	----	----	----	2,000
	3,000	.892	.969	1.042	1.115	1.183	1.256	1.322	----	----	----	----	----	----	----	3,000
	4,000	.854	.912	.969	1.025	1.079	1.131	1.183	1.280	----	----	----	----	----	----	4,000
	5,000	----	.878	.924	.969	1.011	1.054	1.097	1.183	----	----	----	----	----	----	5,000
	10,000	----	----	----	----	.878	.901	.925	.969	1.011	1.054	1.097	1.140	1.183	----	10,000
	14,000	----	----	----	----	----	.870	.904	.937	.969	1.000	1.030	1.060	----	----	14,000
	20,000	----	----	----	----	----	----	.854	.878	.901	.924	.948	.969	----	----	20,000
	25,000	----	----	----	----	----	----	.831	.850	.868	.887	.906	.925	1.011	----	25,000
	30,000	----	----	----	----	----	----	.831	.847	.862	.878	.894	.906	.969	----	30,000
	40,000	----	----	----	----	----	----	.820	.831	.843	.854	.866	.877	.888	.899	40,000
	50,000	----	----	----	----	----	----	.810	.821	.832	.843	.854	.865	.876	.887	50,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHOPPING CENTERS – NEIGHBORHOOD



GOOD CLASS C



GOOD CLASS C

OCCUPANCY DESCRIPTION: A neighborhood shopping center building is typically a row of open stores comprising a single line of storefronts with individual service entrances to the rear. It is generally a small, one-story project which may or may not have a major anchor.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Storefronts, basic plumbing and electrical for a typical mix of tenants. Some roof canopy or mansard overhang consistent with the quality is included.

NOT INCLUDED IN COSTS: Sprinklers, furnishings, equipment, pedestrian mall concourse or signs. Anchor buildings and public walkways are not included in the costs.

AVERAGE TENANT COMPOSITION

The shopping center building costs found on this page represent group averages of a typical mix of tenants as listed below.

Retail – All general retail and specialty occupancies	25%
Discount – Discount, including large drug, furniture, hardware, garden, etc.	15%
Food – Market, convenience specialty, delicatessen, baker, florist, etc.	17%
Food Service – Restaurant, lounge, cafeteria, fast food outlets	13%
Commercial – Office, financial, medical, post office, etc.	11%
Personal services – Laundry, barber/beauty, health club, repair	14%
Recreational – Theater, skating, bowling, clubhouse, day care	3%
Miscellaneous – Storage and center service area including nonpublic accessways and restrooms	2%

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$110.44	Stucco or brick on block, light frame, good roof, mansard and storefronts	Drywall, some paneling, good vinyl comp. tile and acoustic tile, carpet	Good lighting and outlets per unit, small restrooms	Package A.C.
	Average	92.60	Good block, tilt-up, bearing or light frame, plain fronts, some trim	Drywall, acoustic tile, vinyl comp. tile, some carpet and masonry partitions	Adequate lighting and outlets per unit, small restrooms	Package A.C.
	Low cost	71.63	Low-cost fronts, block, tilt-up panels, bearing walls	Painted walls, drywall or acoustic tile, asphalt tile, few partitions	Minimum lighting, outlets and plumbing per unit	Forced air
CMILL	Average	104.30	Mill-type construction, heavy brick walls, trusses, good wood sash	Plaster, vinyl comp. tile, wood, some carpet, wainscot and trim	Adequate lighting and outlets per unit, small restrooms	Hot water
D	Good	103.90	Stucco or brick veneer, light frame, good roof, mansard and storefronts	Drywall, some paneling, good VCT and acoustic tile, carpet	Good lighting and outlets per unit, small restrooms	Package A.C.
	Average	86.72	Pipe columns, web or bar joists, stucco or siding, plain fronts	Drywall, acoustic tile, vinyl composition, some carpet and trim	Adequate lighting and outlets per unit, small restrooms	Package A.C.
	Low cost	66.41	Low-cost wood or stucco, very plain, small fronts	Low-cost acoustic tile, asphalt tile, few partitions	Minimum lighting, outlets and plumbing per unit	Forced air
D POLE	Low cost	61.73	Pole frame, metal siding, finished interior, small fronts	Drywall, low-cost tile, few partitions	Minimum lighting, outlets and plumbing per unit	Forced air
S	Average	83.32	Good metal panels, some trim, plain fronts	Acoustic tile, vinyl composition, some carpet and interior trim	Adequate lighting and outlets per unit, small restrooms	Package A.C.
	Low cost	63.72	Metal siding, finished interior, small fronts	Drywall, low-cost tile, few partitions	Minimum lighting, outlets and plumbing per unit	Forced air
CDS †	Display basement	62.38	Plaster interior	Store finish, acoustic tile, vinyl composition tile	Average store lighting and plumbing	Forced air
	Storage basement	34.19	Painted interior	Painted ceiling and floors, few partitions	Exposed lighting, few outlets, drains	Space heaters

†For fire-resistant Type I basements, with concrete slab separation under Class C, D or S units, add \$5.95 per square foot.

SHOPPING CENTERS – NEIGHBORHOOD

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger or freight elevator with simple call system and push button control, and two or three stops. cost \$56,250 to \$77,250. For detailed costs, see Section UIP 8.	SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		1,000	\$4.14	\$5.36	\$6.94	\$8.98
		2,000	3.73	4.32	5.46	7.87
		3,000	3.50	4.47	5.71	7.29
		4,000	3.35	4.29	5.46	6.91
		5,000	3.24	4.11	5.22	6.62
		10,000	2.91	3.67	4.61	5.81
		20,000	2.62	3.27	4.08	5.09
		30,000	2.47	3.06	3.80	4.72
	50,000	2.28	2.81	3.47	4.28	

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
		Sq. Ft.		Sq. Ft.		Sq. Ft.
	HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
	Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
	Hot water, baseboard/convactor radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refriger. . \$1,840 to \$2,350 per ton capacity	
	Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
	radiant	3.60				
	Steam (including boiler)	9.20				
	without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY	
	Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$1.77

3	HEIGHT REFINEMENTS			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.915	13	1.021
	10	.957	14	1.042
	11	.979	15	1.064
	12	1.000 (base)	16	1.085
			18	1.127

4	Average Floor Area	AVERAGE PERIMETER														Average Floor Area
	Sq. Ft./Story	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	Sq. Ft./Story
	1,000	1.183	1.376	1.566	1.753	---	---	---	---	---	---	---	---	---	---	1,000
	2,000	.969	1.079	1.183	1.283	1.376	1.470	---	---	---	---	---	---	---	---	2,000
	3,000	.892	.969	1.042	1.115	1.183	1.256	1.322	---	---	---	---	---	---	---	3,000
	4,000	.854	.912	.969	1.025	1.079	1.131	1.183	1.280	---	---	---	---	---	---	4,000
	5,000	---	.878	.924	.969	1.011	1.054	1.097	1.183	---	---	---	---	---	---	5,000
	10,000	---	---	---	---	.878	.901	.925	.969	1.011	1.054	1.097	1.140	1.183	---	10,000
	14,000	---	---	---	---	---	---	.870	.904	.937	.969	1.000	1.030	1.060	---	14,000
	20,000	---	---	---	---	---	---	---	.854	.878	.901	.924	.948	.969	---	20,000
	25,000	---	---	---	---	---	---	---	.831	.850	.868	.887	.906	.925	1.011	25,000
	30,000	---	---	---	---	---	---	---	---	.831	.847	.862	.878	.894	.969	30,000
	40,000	---	---	---	---	---	---	---	---	---	.820	.831	.843	.854	.913	40,000
	50,000	---	---	---	---	---	---	---	---	---	---	---	---	.831	.877	50,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

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SHOPPING CENTERS – NEIGHBORHOOD (ALTERNATE METHOD)

OCCUPANCY DESCRIPTION: Shell This occupancy, together with occupancy Interior Build-out, Neighborhood Shopping Center, allows you to individually price the shell and the tenant improvement costs for a neighborhood shopping center. This provides an alternative to occupancy Neighborhood Shopping Center, which includes both the shell and tenant improvement costs.

A neighborhood shopping center shell is typically a row of open unfinished store spaces comprising a single line of storefronts with individual service entrances in the rear. It is generally a small, one-story project that may or may not support a major anchor. Typical anchors in a neighborhood center include major markets, large drug stores (discount stores) and banks.

The costs for this occupancy are for the strip shell buildings only and include only the necessary rough plumbing and electrical connections to provide for the operation of the satellites, including service areas. Interior finish consists of bare space with concrete floor, demising walls and storefront entries consistent with the quality.

Add interior retail space build-out (tenant improvement) costs using, Interior Space, Neighborhood Shopping Center.

Interior Build-out

This occupancy, together with occupancy Shell, Neighborhood Shopping Center, allows you to individually price the shell and the tenant improvement costs for a neighborhood shopping center. This provides an alternative to occupancy Neighborhood Shopping Center, which includes both the shell and tenant improvement costs.

The costs represent group averages of a typical mix of tenant build-out costs only (excluding major anchor occupancies). The floor and ceiling finishes and finished electrical and plumbing are normally consistent with the quality and type of general occupancies found within a center.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Storefronts, basic plumbing and electrical for a typical mix of tenants. Some roof canopy or mansard overhang commensurate with the quality is included.

NOT INCLUDED IN COSTS: Sprinklers, furnishings, equipment, pedestrian mall concourse or signs.

SHELL - NEIGHBORHOOD SHOPPING CENTER

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$52.85	Stucco or brick on block, light frame, good roof, mansard and storefronts	Bare retail space, floor slab, some bare partitioning	Rough retail electrical and plumbing, some service outlets	None
	Average	43.11	Good block, tilt-up, bearing or light frame, plain fronts, some trim	Bare retail space, floor slab, some bare partitioning	Rough retail electrical and plumbing, some service outlets	None
	Low cost	35.17	Low-cost fronts, brick, block, tilt-up panels, bearing walls, small fronts	Bare retail space, floor slab, no service areas	Rough retail electrical and plumbing, few service outlets	None
	Cheap	25.97	Light block or tilt-up, built-up cover, minimal openings, no storefronts	Bare space, dirt floor, no interior demising walls	Rough retail electrical and plumbing, few service outlets	None
D	Average	38.30	Pipe columns, web or bar joists, stucco or siding, plain fronts	Bare retail space, floor slab, some bare partitioning	Rough retail electrical and plumbing, some service outlets	None
	Low cost	30.81	Low-cost wood or stucco, very plain, small fronts	Bare retail space, floor slab, no service areas	Rough retail electrical and plumbing, few service outlets	None
	Cheap	21.89	Low-cost siding, no storefronts	Bare space, dirt floor, see above	Rough-ins only, see above	None
D POLE	Low cost	26.14	Pole frame, light metal siding, finished, small plain fronts	Bare retail space, floor slab, no service areas	Rough retail electrical and plumbing, few service outlets	None
	Cheap	17.34	Pole frame, light metal utility siding, minimal openings, no storefronts	Bare retail space, dirt floor, no interior demising walls	Rough retail electrical and plumbing, few service outlets	None
S	Average	34.69	Sandwich panels, some trim, plain fronts	Bare retail space, floor slab, some bare partitioning	Rough retail electrical and plumbing, some service outlets	None
	Low cost	27.98	Light pre-eng. frame, metal siding, finished, small plain fronts	Bare retail space, floor slab, no service areas	Rough retail electrical and plumbing, few service outlets	None
	Cheap	18.81	Light pre-eng. bldg., no storefronts	Bare space, dirt floor, see above	Rough-ins only, see above	None

INTERIOR BUILD-OUT NEIGHBORHOOD SHOPPING CENTER (SQUARE FOOT OF RETAIL FINISH)

TYPE	COST/ SQ. FT.	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
Excellent	\$71.53	Best plaster, ornamental ceilings, paneling, carpet, tile or hardwood	Special lighting and outlets, good plumbing	Warm and cool air (zoned)
Good	61.59	Drywall or plaster, some paneling, ornamental finishes, carpet, plain terrazzo	Extensive lighting and outlets, good plumbing	Warm and cool air (zoned)
Average	49.50	Drywall or plaster, some good tile ceilings, vinyl composition and carpet	Adequate lighting and outlets per unit, small restrooms	Package A.C.
Low cost	36.45	Painted walls, drywall or acoustic tile, asphalt or composition tile, few partitions	Minimum lighting, outlets and plumbing per unit	Forced air

SHOPPING CENTER – NEIGHBORHOOD (ALTERNATE METHOD)

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	<p>ELEVATORS: A small passenger or freight elevator with simple call system and push button control, and two or three stops. cost \$56,250 to \$77,250. For detailed costs, see Section UIP 8.</p>	<p>SPRINKLERS: Apply to area covered by sprinklers.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sq. Ft.</th> <th style="text-align: right;">LOW</th> <th style="text-align: right;">AVG.</th> <th style="text-align: right;">GOOD</th> <th style="text-align: right;">EXCL.</th> </tr> </thead> <tbody> <tr><td>1,000</td><td style="text-align: right;">\$4.14</td><td style="text-align: right;">\$5.36</td><td style="text-align: right;">\$6.94</td><td style="text-align: right;">\$8.98</td></tr> <tr><td>2,000</td><td style="text-align: right;">3.73</td><td style="text-align: right;">4.32</td><td style="text-align: right;">5.46</td><td style="text-align: right;">7.87</td></tr> <tr><td>3,000</td><td style="text-align: right;">3.50</td><td style="text-align: right;">4.47</td><td style="text-align: right;">5.71</td><td style="text-align: right;">7.29</td></tr> <tr><td>4,000</td><td style="text-align: right;">3.35</td><td style="text-align: right;">4.29</td><td style="text-align: right;">5.46</td><td style="text-align: right;">6.91</td></tr> <tr><td>5,000</td><td style="text-align: right;">3.24</td><td style="text-align: right;">4.11</td><td style="text-align: right;">5.22</td><td style="text-align: right;">6.62</td></tr> <tr><td>10,000</td><td style="text-align: right;">2.91</td><td style="text-align: right;">3.67</td><td style="text-align: right;">4.61</td><td style="text-align: right;">5.81</td></tr> <tr><td>20,000</td><td style="text-align: right;">2.62</td><td style="text-align: right;">3.27</td><td style="text-align: right;">4.08</td><td style="text-align: right;">5.09</td></tr> <tr><td>30,000</td><td style="text-align: right;">2.47</td><td style="text-align: right;">3.06</td><td style="text-align: right;">3.80</td><td style="text-align: right;">4.72</td></tr> <tr><td>50,000</td><td style="text-align: right;">2.28</td><td style="text-align: right;">2.81</td><td style="text-align: right;">3.47</td><td style="text-align: right;">4.28</td></tr> </tbody> </table>	Sq. Ft.	LOW	AVG.	GOOD	EXCL.	1,000	\$4.14	\$5.36	\$6.94	\$8.98	2,000	3.73	4.32	5.46	7.87	3,000	3.50	4.47	5.71	7.29	4,000	3.35	4.29	5.46	6.91	5,000	3.24	4.11	5.22	6.62	10,000	2.91	3.67	4.61	5.81	20,000	2.62	3.27	4.08	5.09	30,000	2.47	3.06	3.80	4.72	50,000	2.28	2.81	3.47	4.28
Sq. Ft.	LOW	AVG.	GOOD	EXCL.																																																
1,000	\$4.14	\$5.36	\$6.94	\$8.98																																																
2,000	3.73	4.32	5.46	7.87																																																
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30,000	2.47	3.06	3.80	4.72																																																
50,000	2.28	2.81	3.47	4.28																																																

2	HEATING AND COOLING				
<p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>					
HEATING ONLY		Sq. Ft. Costs	HEATING & COOLING		
			Sq. Ft. Costs	COOLING ONLY	
				Sq. Ft. Costs	
Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
Hot water, baseboard/convactor radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refrig. . \$1,840 to \$2,350 per ton capacity	
Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
radiant	3.60				
Steam (including boiler)	9.20				
without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY	
Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$1.77

3	HEIGHT REFINEMENTS			
<p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>				
Average Wall Height	Square Foot Multiplier		Average Wall Height	Square Foot Multiplier
8	.915		13	1.021
10	.957		14	1.042
11	.979		15	1.064
12	1.000 (base)		16	1.085
			18	1.127

4	Average Floor Area	AVERAGE PERIMETER														Average Floor Area
	Sq. Ft./Story	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	Sq. Ft./Story
	1,000	1.183	1.376	1.566	1.753	---	---	---	---	---	---	---	---	---	---	1,000
	2,000	.969	1.079	1.183	1.283	1.376	1.470	---	---	---	---	---	---	---	---	2,000
	3,000	.892	.969	1.042	1.115	1.183	1.256	1.322	---	---	---	---	---	---	---	3,000
	4,000	.854	.912	.969	1.025	1.079	1.131	1.183	1.280	---	---	---	---	---	---	4,000
	5,000	---	.878	.924	.969	1.011	1.054	1.097	1.183	---	---	---	---	---	---	5,000
	10,000	---	---	---	---	.878	.901	.925	.969	1.011	1.054	1.097	1.140	1.183	---	10,000
	14,000	---	---	---	---	---	---	.870	.904	.937	.969	1.000	1.030	1.060	---	14,000
	20,000	---	---	---	---	---	---	---	.854	.878	.901	.924	.948	.969	---	20,000
	25,000	---	---	---	---	---	---	---	.831	.850	.868	.887	.906	.925	1.011	25,000
	30,000	---	---	---	---	---	---	---	---	.831	.847	.862	.878	.894	.969	30,000
	40,000	---	---	---	---	---	---	---	---	---	.820	.831	.843	.854	.913	40,000
	50,000	---	---	---	---	---	---	---	---	---	---	---	---	.831	.877	50,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHOPPING CENTERS – REGIONAL



GOOD CLASS C



GOOD CLASS C

OCCUPANCY DESCRIPTION: A regional shopping center building complex contains a large number of satellite stores in strips, with one or more major department store buildings as anchors.

NOT INCLUDED IN COSTS: Sprinklers, furnishings, special display shelving or equipment or pedestrian mall concourse or signs. The major anchor buildings and pedestrian mall concourse walkways are not included in the cost.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Service elevators, storefronts, basic plumbing and electrical for a typical mix of tenants including all service areas. Elevators are included where designated with an asterisk (*).

AVERAGE TENANT COMPOSITION

The shopping center building costs found on this page represent group averages of a typical mix of tenants as listed below.

Retail – All general retail and specialty occupancies	47%
Discount – Discount, including large drug, furniture, hardware, garden, etc.	19%
Food – Market, convenience specialty, delicatessen, baker, florist, etc.	8%
Food Service – Restaurant, lounge, cafeteria, fast food outlets	8%
Commercial – Office, financial, medical, post office, etc.	4%
Personal services – Laundry, barber/beauty, health club, repair	3%
Recreational – Theater, skating, bowling, clubhouse, day care	4%
Miscellaneous – Storage and center service area including nonpublic accessways and restrooms	7%

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	\$200.25	Stone, face brick, best metal and glass, display front	Best plaster and drywall, ornamental ceilings, paneling, carpet, hardwood	*Special lighting, many good outlets, plumbing and restrooms	Hot and chilled water (zoned)
	Good	163.36	Brick, concrete, or metal and glass, good displays	Good partitions, acoustic ceilings, terrazzo, carpet, vinyl tile	*Good lighting and outlets, adequate employees' restrooms	Warm and cool air (zoned)
	Storage basement	57.81	Painted interior walls	Painted floor and ceilings, adequate partitioning, service tunnel	Exposed lighting, few outlets, drains, restrooms	Space heaters
C	Excellent	172.43	Face brick, stone, staggered setbacks, fine display fronts	Plaster/drywall, ornamental ceilings, paneling, ceramic, carpet, hardwood	*Special lighting and outlets, good plumbing and restrooms	Hot and chilled water (zoned)
	Good	136.83	Steel frame, brick, best block, stucco, good displays	Good partitions, acoustic ceilings, terrazzo, carpet, vinyl tile	*Good lighting and outlets, adequate employees' restrooms	Warm and cool air (zoned)
	Average	110.78	Steel columns, web or bar joists, brick, block, tilt-up adequate fronts	Acoustic ceilings, vinyl composition, some carpet and masonry partitions	*Adequate lighting and plumbing, minimum service facilities	Package A.C.
D	Excellent	161.92	Brick veneer EIFS, staggered setbacks, fine display fronts	Plaster/drywall, ornamental ceilings, paneling, ceramic, carpet, hardwood	*Special lighting and outlets, good plumbing and restrooms	Hot and chilled water (zoned)
	Good	127.87	Steel or glulam frame, best stucco or siding, good display fronts	Good partitions, acoustic ceilings, terrazzo, carpet, vinyl tile	*Good lighting and outlets, adequate employees' restrooms	Warm and cool air (zoned)
	Average	103.16	Wood frame or steel columns, masonry trim, adequate fronts	Plaster or drywall, acoustic tile, vinyl composition, some carpet and trim	*Adequate lighting and plumbing, minimum service facilities	Package A.C.
S	Average	100.77	Sandwich panels, metal and glass, good ornamentation, displays	Good acoustic tile, vinyl composition, some carpet and masonry partitions	*Adequate lighting and plumbing, minimum service facilities	Package A.C.
CDS [†]	Storage basement	37.40	Painted interior walls	Painted ceiling and floors, adequate partitions, service tunnel	Exposed lighting, few outlets, drains, restrooms	Space heaters

[†]For fire-resistant Type I basements, with concrete slab separation under Class C, D or S units, add \$5.95 per square foot. For basement stores, use 80% of comparable above ground center cost.

SHOPPING CENTERS – REGIONAL

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

ELEVATORS: Buildings whose base costs include elevators are marked with an asterisk (*). If the building under consideration has no elevators, deduct the following from the base costs so marked. For detailed costs For detailed costs, see Section UIP 8.				SPRINKLERS: Apply to area covered by sprinklers.				
Classes A/B	Sq. Ft. Costs	Class C/D	Sq. Ft. Costs	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
Excellent	\$1.58	Excellent	\$1.34	5,000	\$3.24	\$4.11	\$5.22	\$6.62
Good	1.35	Good	1.17	10,000	2.91	3.67	4.61	5.81
		Average	1.04	20,000	2.62	3.27	4.08	5.09
				30,000	2.47	3.06	3.80	4.72
				50,000	2.28	2.81	3.47	4.28
				75,000	2.14	2.63	3.23	3.97
				100,000	2.05	2.51	3.07	3.76
				300,000	1.74	2.09	2.53	3.05
				500,000	1.61	1.93	2.31	2.77
ELEVATOR STOPS: For basements stops, add \$6,350 to \$9,650 per stop.				BALCONIES: Balcony cost include the supporting structure, decking and rails. Apply costs to the balcony area.				
					LOW	AVG.	GOOD	EXCL.
				Concrete	\$20.20	\$26.25	\$34.00	\$44.25
				Steel	18.35	25.25	34.75	48.00
				Wood	15.80	21.45	29.25	39.75
				Add for ornate finishes, balustrades	16.85	21.10	26.50	33.00
				Add for roofs or awnings	10.45	13.85	18.40	24.45

2

HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard ..	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
Hot water, baseboard/convactor radiant floor/ceiling	11.40	Heat pump system	14.35	Pkg. refrig. . \$1,840 to \$2,350 per ton capacity	
Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
radiant	3.60				
Steam (including boiler)	9.20			VENTILATION ONLY	
without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		Vent. (blowers/ducts)	\$1.77
Wall or floor furnace	2.59				

3

HEIGHT REFINEMENTS			
MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
12	1.000 (base)	16	1.085
13	1.021	18	1.127
14	1.042	20	1.170
15	1.064	22	1.213
		24	1.255

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq.Ft./Story
	400	450	500	550	600	800	1000	1200	1500	2000	2600	3000	5000	7000	
10,000	.925	.948	.969	.990	1.011	1.097	1.183	-----	-----	-----	-----	-----	-----	-----	10,000
14,000	.870	.886	.904	.921	.937	1.000	1.060	1.121	-----	-----	-----	-----	-----	-----	14,000
20,000	-----	.843	.854	.866	.878	.924	.969	1.011	-----	-----	-----	-----	-----	-----	20,000
25,000	-----	-----	.831	.841	.850	.887	.925	.959	1.011	-----	-----	-----	-----	-----	25,000
30,000	-----	-----	-----	-----	.831	.862	.894	.925	.969	-----	-----	-----	-----	-----	30,000
50,000	-----	-----	-----	-----	-----	-----	.831	.850	.877	-----	-----	-----	-----	-----	50,000
70,000	-----	-----	-----	-----	-----	-----	-----	.817	.838	.872	-----	-----	-----	-----	70,000
100,000	-----	-----	-----	-----	-----	-----	-----	.792	.807	.831	.859	-----	-----	-----	100,000
150,000	-----	-----	-----	-----	-----	-----	-----	-----	.781	.799	.819	.831	-----	-----	150,000
300,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	.760	.771	.780	.815	-----	300,000
400,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.759	.765	.795	.820	400,000
500,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.780	.802	500,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHOPPING CENTERS – REGIONAL (ALTERNATE METHOD)

OCCUPANCY DESCRIPTION: Shell This occupancy, together with occupancy Interior Build-out, Regional Shopping Center, allows you to individually price the shell and the tenant improvement costs for a regional shopping center. This provides an alternative to occupancy Regional Shopping Center, which includes both the shell and tenant improvement costs.

A regional shopping center shell contains a large number of unfinished satellite store spaces in strips with one or more major department store buildings as anchors.

Shopping center costs are for the strip shell buildings only and include only the necessary rough plumbing and electrical connections to provide for the operation of the satellites, including service areas, but excluding storefronts and the public pedestrian concourse.

You can add interior retail space build-out (tenant improvement) costs using occupancy, Interior Space, Regional Shopping Center.

Interior Build-out

This occupancy, together with occupancy Shell, Regional Shopping Center, allows you to individually price the shell and the tenant improvement costs for a regional shopping center. This provides an alternative to occupancy Regional Shopping Center, which includes both the shell and tenant improvement costs.

The costs represent group averages of a typical mix of tenant finishes only (excluding major anchor occupancies). The storefronts, floor and ceiling finishes and finished electrical and plumbing are normally commensurate with the quality and type of general occupancies found within a center.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Service elevators, storefronts, basic plumbing and electrical for a typical mix of tenants including all service areas. Elevators are included where designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, furnishings, special display shelving or equipment or pedestrian mall concourse or signs.

SHELL - REGIONAL SHOPPING CENTER

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Excellent	\$80.03	Exterior stone, face brick, best metal and glass, no displays	Bare retail, typical center office finish, service corridors, delivery court	*Rough electrical and plumbing, service area finish, elevators	None
	Good	73.36	Exterior brick, concrete or metal and glass, no fronts	Bare retail, typical center office finish, service corridors, delivery court	*Rough electrical and plumbing, service area finish, elevators	None
C	Excellent	55.04	Exterior face brick, stone, no retail storefronts	Bare retail, typical center office finish, service corridors, delivery court	*Rough electrical and plumbing, service area finish, elevators	None
	Good	48.66	Steel frame, exterior brick, best block, stucco finish, no fronts	Bare retail, typical center office finish, service corridors, delivery court	*Rough electrical and plumbing, service area finish, elevators	None
	Average	43.04	Steel columns, web or bar joists, brick, block, tilt-up, no fronts	Bare retail space, plain center, service-delivery space finish	*Rough electrical and plumbing, service area finish, elevators	None
D	Good	41.72	Steel or Glulam frame, best stucco, EIFS or siding, no fronts	Bare retail, typical center office finish, service corridors, delivery court	*Rough electrical and plumbing, service area finish, elevators	None
	Average	36.94	Wood frame or steel columns, stucco or siding, masonry trim	Bare retail space, plain center, service-delivery space finish	*Rough electrical and plumbing, service area finish, elevators	None
S	Average	34.25	Sandwich panels, metal and glass, good trim, no fronts	Bare retail space, plain center, service-delivery space finish	*Rough electrical and plumbing, service area finish, elevators	None

INTERIOR BUILD-OUT REGIONAL SHOPPING CENTER

(SQUARE FOOT OF RETAIL FINISH)

TYPE	COST/ SQ. FT.	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
Excellent	\$120.52	Special lighting, many good outlets, plumbing and restrooms	Special lighting, many good outlets, plumbing and restrooms	Hot and chilled water (zoned)
Good	90.36	Good lighting and outlets, adequate employees' restrooms	Good lighting and outlets, adequate employees' restrooms	Warm and cool air (zoned)
Average	69.66	Adequate lighting and plumbing, minimum service facilities	Adequate lighting and plumbing, minimum service facilities	Package A.C.

SHOPPING CENTERS – REGIONAL (ALTERNATE METHOD)

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: Buildings whose base costs include elevators are marked with an asterisk (*). If the building under consideration has no elevators, deduct the following from the base costs so marked. For detailed costs For detailed costs, see Section UIP 8.				SPRINKLERS: Apply to area covered by sprinklers.				
					Sq. Ft.	LOW	AVG.	GOOD	EXCL.
					5,000	\$3.24	\$4.11	\$5.22	\$6.62
					10,000	2.91	3.67	4.61	5.81
					20,000	2.62	3.27	4.08	5.09
					30,000	2.47	3.06	3.80	4.72
					50,000	2.28	2.81	3.47	4.28
					75,000	2.14	2.63	3.23	3.97
					100,000	2.05	2.51	3.07	3.76
					300,000	1.74	2.09	2.53	3.05
					500,000	1.61	1.93	2.31	2.77
	Classes A/B	Sq. Ft. Costs	Class C/D	Sq. Ft. Costs					
	Excellent	\$1.58	Excellent	\$1.34					
	Good	1.35	Good	1.17					
			Average	1.04					
BALCONIES: Balcony cost include the supporting structure, decking and rails. Apply costs to the balcony area.									
					LOW	AVG.	GOOD	EXCL.	
	Concrete				\$20.20	\$26.25	\$34.00	\$44.25	
	Steel				18.35	25.25	34.75	48.00	
	Wood				15.80	21.45	29.25	39.75	
	Add for ornate finishes, balustrades				16.85	21.10	26.50	33.00	
	Add for roofs or awnings				10.45	13.85	18.40	24.45	

2	HEATING AND COOLING								
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.								
					Sq. Ft. Costs		Sq. Ft. Costs		Sq. Ft. Costs
	HEATING ONLY		HEATING & COOLING			COOLING ONLY			
	Electric cable or baseboard ..	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45			
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97			
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31			
	Hot water, baseboard/convactor radiant floor/ceiling	11.40	Heat pump system	14.35	Pkg. refrig. . \$1,840 to \$2,350 per ton capacity				
	Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity				
	radiant	3.60							
	Steam (including boiler)	9.20							
	without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275		VENTILATION ONLY				
	Wall or floor furnace	2.59	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.77			

3	HEIGHT REFINEMENTS			
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs. STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	12	1.000 (base)	16	1.085
	13	1.021	18	1.127
	14	1.042	20	1.170
	15	1.064	22	1.213
			24	1.255

4	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq.Ft./Story
		400	450	500	550	600	800	1000	1200	1500	2000	2600	3000	5000	7000	
	10,000	.925	.948	.969	.990	1.011	1.097	1.183	-----	-----	-----	-----	-----	-----	10,000	
	14,000	.870	.886	.904	.921	.937	1.000	1.060	1.121	-----	-----	-----	-----	-----	14,000	
	20,000	-----	.843	.854	.866	.878	.924	.969	1.011	-----	-----	-----	-----	-----	20,000	
	25,000	-----	-----	.831	.841	.850	.887	.925	.959	1.011	-----	-----	-----	-----	25,000	
	30,000	-----	-----	-----	-----	.831	.862	.894	.925	.969	-----	-----	-----	-----	30,000	
	50,000	-----	-----	-----	-----	-----	-----	.831	.850	.877	-----	-----	-----	-----	50,000	
	70,000	-----	-----	-----	-----	-----	-----	.817	.838	.872	-----	-----	-----	-----	70,000	
	100,000	-----	-----	-----	-----	-----	-----	.792	.807	.831	.859	-----	-----	-----	100,000	
	150,000	-----	-----	-----	-----	-----	-----	-----	.781	.799	.819	.831	-----	-----	150,000	
	300,000	-----	-----	-----	-----	-----	-----	-----	-----	.760	.771	.780	.815	-----	300,000	
	400,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	.759	.765	.795	.820	400,000	
	500,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.780	.802	500,000		

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHOPPING CENTERS – REGIONAL DISCOUNT



GOOD CLASS C



GOOD CLASS C

OCCUPANCY DESCRIPTION: A regional discount or off-price shopping center contains a large number of satellite stores in strips. There may or may not be one or more major anchor department store buildings. These centers generally have a greater mix of large or big-box retail outlets, with minimum finishes compared to the standard regional center. Shopping center costs are for the strip buildings only and include all necessary plumbing and electrical connections to provide for the operation of the satellites, including service areas. The costs represent group average of a typical mix of tenants (excluding major anchor occupancies). The following are normally consistent with the quality and type of anchors they support: the mix of general occupancies found within a center and their display or decorative storefronts.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Service elevators, storefronts, basic plumbing and electrical for a typical mix of tenants including all service areas. Elevators are included where designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, furnishings, special display shelving or equipment or pedestrian mall concourse or signs.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$121.70	Brick veneer, EIFS, light open frame, staggered setbacks, some ornament.	Drywall, some acoustic, ornamental ceilings, VCT, carpet, decorative conc.	Good lighting and fixtures, adequate service facilities	Warm and cool air (zoned)
	Average	100.41	Steel studs, stucco, EIFS, some exposed roof deck, adequate fronts	Painted walls, some ceiling ornament, some carpet, VCT, stained concrete	Adequate lighting and plumbing, restrooms and service facilities	Package A.C.
C	Excellent	114.94	Face block, brick, staggered setbacks, some ornamentation	Drywall, some acoustic, ornamental ceilings, VCT, carpet, decorative conc.	Good lighting and fixtures, adequate service facilities	Warm and cool air (zoned)
	Good	94.44	Steel frame, best tilt-up block, EIFS, stucco, some exposed deck	Drywall, some acoustic, standard carpet, VCT, concrete	Adequate lighting and plumbing, restrooms and service facilities	Package A.C.
	Average	80.67	Tilt-up, block, web or bar joists, exposed deck, adequate fronts	Painted interior, some ceiling and finished floors, stained concrete	Adequate lighting, minimum service facilities and plumbing	Package A.C.
D	Good	87.76	Steel or Glulam frame, stucco or brick veneer, some exp. roof deck	Drywall, some acoustic, standard carpet, VCT, concrete	Adequate lighting and plumbing, restrooms and service facilities	Package A.C.
	Average	74.69	Stucco or siding, open frame, exposed deck, adequate fronts	Painted interior, some ceiling and finished floors, stained concrete	Adequate lighting, minimum service facilities, plumbing	Package A.C.
S	Average	72.51	Steel panels, exposed frame, adequate fronts	Painted interior, some finished ceiling and floors, stained concrete	Adequate lighting, minimum service facilities, plumbing	Package A.C.

SHOPPING CENTERS – REGIONAL DISCOUNT

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger or freight elevator with simple call system and push button control, and two or three stops costs \$56,250 to \$77,250					SPRINKLERS: Apply to area covered by sprinklers.					
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.					
	For detailed costs, see Section UIP 8.	5,000	\$3.24	\$4.11	\$5.22	\$6.62					
		10,000	2.91	3.67	4.61	5.81					
		20,000	2.62	3.27	4.08	5.09					
		30,000	2.47	3.06	3.80	4.72					
		50,000	2.28	2.81	3.47	4.28					
		75,000	2.14	2.63	3.23	3.97					
		100,000	2.05	2.51	3.07	3.76					
		300,000	1.74	2.09	2.53	3.05					
		500,000	1.61	1.93	2.31	2.77					
	BALCONIES: Balcony cost include the supporting structure, decking and rails. Apply costs to the balcony area.....										
		LOW	AVG.	GOOD	EXCL.						
	Concrete	\$20.20	\$26.25	\$34.00	\$44.25						
	Steel	18.35	25.25	34.75	48.00						
	Wood	15.80	21.45	29.25	39.75						
	Add for ornate finishes, balustrades	16.85	21.10	26.50	33.00						
	Add for roofs or awnings	10.45	13.85	18.40	24.45						

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	HEATING ONLY	Sq. Ft.	Costs	HEATING & COOLING	Sq. Ft.	Costs
	Electric cable or baseboard ..		\$ 5.67	Package A.C. (short ductwork)		\$12.55
	Electric wall heaters		2.30	Warm and cool air (zoned)		16.50
	Forced air furnace		6.18	Hot/chilled water (zoned)		25.00
	Hot water, baseboard/convactor radiant floor/ceiling		11.40	Heat pump system		14.35
	Space heaters, with fan		3.01			
	radiant		3.60			
	Steam (including boiler)		9.20			
	without boiler		7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		
	Wall or floor furnace		2.59			
				COOLING ONLY	Sq. Ft.	Costs
				Central refrigeration (zoned)		\$10.45
				package (short ductwork)		6.97
				Central evaporative		4.31
				Pkg. refrig. . \$1,840 to \$2,350 per ton capacity		
				Evap. coolers . \$250 to \$420 per MCFM capacity		
				VENTILATION ONLY		
				Vent. (blowers/ducts)		\$1.77

3	HEIGHT REFINEMENTS			
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	12	1.000 (base)	16	1.085
	13	1.021	18	1.127
	14	1.042	20	1.170
	15	1.064	22	1.213
			24	1.255

4	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER													Average Floor Area Sq.Ft./Story	
		400	450	500	550	600	800	1000	1200	1500	2000	2600	3000	5000	7000	
	10,000	.925	.948	.969	.990	1.011	1.097	1.183	----	----	----	----	----	----	----	10,000
	14,000	.870	.886	.904	.921	.937	1.000	1.060	1.121	----	----	----	----	----	----	14,000
	20,000	----	.843	.854	.866	.878	.924	.969	1.011	----	----	----	----	----	----	20,000
	25,000	----	----	.831	.841	.850	.887	.925	.959	1.011	----	----	----	----	----	25,000
	30,000	----	----	----	----	.831	.862	.894	.925	.969	----	----	----	----	----	30,000
	50,000	----	----	----	----	----	----	.831	.850	.877	----	----	----	----	----	50,000
	70,000	----	----	----	----	----	----	----	.817	.838	.872	----	----	----	----	70,000
	100,000	----	----	----	----	----	----	----	.792	.807	.831	.859	----	----	----	100,000
	150,000	----	----	----	----	----	----	----	----	.781	.799	.819	.831	----	----	150,000
	300,000	----	----	----	----	----	----	----	----	----	.760	.771	.780	.815	----	300,000
	400,000	----	----	----	----	----	----	----	----	----	----	.759	.765	.795	.820	400,000
	500,000	----	----	----	----	----	----	----	----	----	----	----	----	.780	.802	500,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SHOWER ROOM BUILDINGS



AVERAGE/GOOD CLASS C

OCCUPANCY DESCRIPTION: These buildings are used to provide shower and dressing facilities. Interior walls are paint-enameled dry-wall or plaster and the floors are concrete. There is adequate lighting and plumbing. Better qualities include saunas and/or steam rooms and finished offices consistent with the quality.

INCLUDED IN COSTS: Built-in lockers, Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Elevators, sprinklers, therapy or recreational equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$173.69	Brick, concrete or metal panels, formed concrete	Finished interior, good tile or glazed surfaces, some extra facilities	Good lighting and plumbing, some extras	Wall furnace
	Excellent	235.09	Stone, rustic trim or block	Good finish or under 1,000 sq. ft.	High-cost fixtures	Forced air
C	Good	173.69	Decorative block and trim, heavy structure	Finished interior, good tile or glazed surfaces, extra facilities	Good lighting and plumbing, extra outlets and fixtures, sauna	Wall furnace
	Average	134.47	Steel frame or bearing walls, brick, block, concrete panels, some trim	Enameled walls, some wainscot, plaster ceiling, good concrete floor	Adequate lighting and plumbing, showers, lockers	Space heaters
	Low cost	104.20	Block, light roof, very plain	Low-cost finishes, few partitions, sealed concrete	Minimum lighting and plumbing, showers, dressing stalls	Space heaters
	Cheap	73.18	Low-cost block, top ventilation	Light slab, unfin. interior, camp facility	Minimum lights, fixtures and drains	None
D	Good	167.00	Steel or Glulam frame and joists, brick veneer, best stucco	Finished interior, good tile or glazed surfaces, extra facilities	Good lighting and plumbing, extra outlets and fixtures, sauna	Wall furnace
	Average	128.05	Wood frame or pipe columns, good stucco or siding, little trim	Plaster, enameled walls, some wainscot, good concrete floors	Adequate lighting and plumbing, showers, lockers	Space heaters
	Low cost	98.29	Low-cost stucco or siding	Low-cost finishes, few partitions, sealed concrete	Minimum lighting and plumbing, showers, dressing stalls	Space heaters
	Cheap	66.00	Box frame, plywood, boards, top ventilation	Light slab, unfinished interior, camp facility	Minimum lights and fixtures, few drains	None
D POLE	Average	115.98	Pole frame, good metal panels, finished inside, little trim	Enameled walls, some wainscot, plaster ceiling, good concrete floor	Adequate lighting and plumbing, showers, lockers	Space heaters
	Low cost	91.52	Pole frame, metal siding, finished interior	Low-cost finishes, few partitions, sealed concrete	Minimum lighting and plumbing, showers, dressing stalls	Space heaters
S	Average	120.32	Pre-engineered, finished interior, insulation, little trim	Enameled walls, some wainscot, plaster ceiling, good concrete floor	Adequate lighting and plumbing, showers, lockers	Space heaters
	Low cost	94.51	Pre-engineered, metal siding, finished interior	Low-cost finishes, few partitions, sealed concrete	Minimum lighting and plumbing, showers, dressing stalls	Space heaters

SHOWER ROOM BUILDING

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

SPRINKLERS: Apply to area covered by sprinklers.

Sq. Ft.	LOW	AVG.	GOOD	EXCL.
1,000	\$4.60	\$5.97	\$7.74	\$10.05
2,500	4.00	5.13	6.58	8.43
5,000	3.60	4.57	5.81	7.39
10,000	3.24	4.08	5.14	6.47
15,000	3.04	3.82	4.78	5.99
20,000	2.91	3.64	4.54	5.67

2

HEATING AND COOLING

These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard . . .	\$12.05	Package A.C. (short ductwork)	\$15.85	Central refrigeration (zoned)	\$14.40
Electric wall heaters	3.61	Warm and cool air (zoned)	25.00	package (short ductwork)	10.05
Forced air furnace	13.75	Hot/chilled water (zoned)	39.00	Central evaporative	5.38
Hot water, baseboard/convactor	20.00	Heat pump system	23.85	Pkg. refriger. . \$2,050 to \$2,600 per ton capacity	
Space heaters, with fan	4.08			Evap. coolers . \$300 to \$500 per MCFM capacity	
radiant	4.71				
Steam (including boiler)	18.00				
without boiler	16.35	Small indiv. heat pumps cost \$1,760 to \$2,500		VENTILATION ONLY	
Wall or floor furnace	3.73	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.31

3

HEIGHT REFINEMENTS

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.963	13	1.055
9	.981	14	1.073
10	1.000 (base)	15	1.092
11	1.018	16	1.110
12	1.037		

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	100	125	150	175	200	250	300	400	500	600	700	800	1000	1200	
500	1.298	1.407	1.516	1.625	1.734	----	----	----	----	----	----	----	----	----	500
1,000	1.079	1.134	1.189	1.244	1.298	1.407	----	----	----	----	----	----	----	----	1,000
1,500	1.006	1.043	1.079	1.116	1.153	1.227	----	----	----	----	----	----	----	----	1,500
2,000	----	.996	1.024	1.052	1.079	1.134	1.189	----	----	----	----	----	----	----	2,000
3,000	----	----	.968	.985	1.006	1.043	1.079	1.153	----	----	----	----	----	----	3,000
4,000	----	----	----	.957	.968	.995	1.024	1.079	1.134	----	----	----	----	----	4,000
5,000	----	----	----	----	.949	.968	.991	1.036	1.079	1.123	----	----	----	----	5,000
6,000	----	----	----	----	.934	.952	.968	1.006	1.043	1.079	1.116	----	----	----	6,000
7,000	----	----	----	----	----	.939	.955	.984	1.015	1.048	1.079	1.110	----	----	7,000
8,000	----	----	----	----	----	.929	.942	.968	.996	1.024	1.052	1.079	1.134	----	8,000
10,000	----	----	----	----	----	----	.927	.949	.968	.991	1.013	1.036	1.079	1.123	10,000
12,000	----	----	----	----	----	----	.915	.934	.959	.968	.985	1.006	1.043	1.079	12,000

NOTE: For larger buildings, enter the table by taking half the area and half the perimeter. For very small structures, reverse the process (i.e., for a 10' x 10' or 100-square-foot building, multiply both the area and the perimeter by a factor of 5 to enter the table where the wall-to-floor ratio remains the same at 4:1 with a 10' height).

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SKATING RINKS - ICE



AVERAGE CLASS S



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: Large, open structures which include areas for ice skating, lobby, restrooms and equipment storage. Ice skating rinks include the basic floor structure. For ice skating, the cost must be adjusted to account for the ice surface.

Lounge, snack bar, locker or shower room facilities are consistent with the quality as indicated.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Suitable office and gathering and/or lounge areas.

NOT INCLUDED IN COSTS: Elevators, sprinklers, snack bar equipment, seating, lockers or ice making equipment or surface.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$204.31	Special architecture, good materials, good entrance and lobby	Top sports rink, spectator seating, many extra facilities and rooms	Best sports lighting, plumbing, many extra support facilities	Hot and chilled water (zoned)
	Average	146.66	Heavy frame, metal or concrete panels, good architecture	Good rink and viewers' seating, multiple locker rooms, food service	Good sports lighting, restrooms and shower rooms	Warm and cool air (zoned)
A-B	Finished basement	132.48	Reinforced concrete, plaster interior	Exercise and dressing room finishes, some utility and storage	Adequate lighting and plumbing, showers and restrooms	Package A.C.
	Good mezzanine	44.74	Not included	Open, finished running track, plaster or drywall soffit	Average lighting, no plumbing	In building cost
	Average mezzanine	32.87	Not included	Open, finished floors and soffit, add for spectator seating	Average lighting, no plumbing	In building cost
C	Excellent	195.18	Best masonry, good curtain walls, good entrance and lobby	Top sports rink, spectator seating, many extra facilities and rooms	Best sports lighting, plumbing, many extra support facilities	Warm and cool air (zoned)
	Good	134.96	Brick or concrete, good entrance	Acoustic treatment, good viewers' seating, snack bar and locker rooms	Good lighting and restrooms, some entertainment-type lighting	Package A.C.
	Average	100.01	Block or brick, little trim	Gypsum board, acoustic tile, few extras	Adequate lighting and plumbing	Package A.C.
	Low-cost	75.79	Block or tilt-up	No dressing rooms or showers, adequate subfloor insulation	Minimum lighting and plumbing	Package A.C.
D	Excellent	192.29	Best masonry veneer, EIFS, good entrance and lobby	Top sports rink, spectator seating, many extra facilities and rooms	Best sports lighting, plumbing, many extra support facilities	Warm and cool air (zoned)
	Good	131.39	Brick veneer, good siding or stucco, trim, good entrance	Acoustic treatment, good viewers' seating, snack bar and locker rooms	Good lighting and restrooms, some entertainment-lighting	Package A.C.
	Average	96.46	Stucco or siding, some trim	Some gypsum board and acoustic tile, few extras	Adequate lighting and plumbing	Package A.C.
	Low-cost	72.57	Stucco or siding, very plain	No dressing rooms or showers, adequate subfloor insulation	Minimum lighting and plumbing	Package A.C.
D POLE	Low-cost	67.77	Pole frame, metal, finished inside	No dressing rooms or showers, adequate subfloor insulation	Minimum lighting and plumbing	Package A.C.
S	Excellent	189.67	Heavy frame, metal sandwich panels, good architecture	Top sports rink, spectator seating, many extra facilities and rooms	Best sports lighting, plumbing, many extra support facilities	Warm and cool air (zoned)
	Good	127.97	Insulated metal sandwich panels, steel frame, good entrance	Acoustic treatment, good viewers' seating, snack bar and locker rooms	Good lighting and restrooms, some entertainment-lighting	Package A.C.
	Average	93.01	Good metal panels and roof, some interior finish, trim	Some gypsum board and acoustic tile, few extras	Adequate lighting and plumbing	Package A.C.
	Low-cost	69.47	Single wall, finished interior	No dressing rooms or showers, adequate subfloor insulation	Minimum lighting and plumbing	Package A.C.
CDS	Finished basement	88.76	Reinforced concrete, plaster or drywall interior	Exercise and dressing room finishes, some utility and storage	Adequate lighting and plumbing, showers and restrooms	Forced air
	Good mezzanine	35.19	Not included	Open, finished running track, drywall soffit	Average lighting, no plumbing	In building cost
	Average mezzanine	23.82	Not included	Open, finished floors and soffit, add for spectator seating	Average lighting, no plumbing	In building cost

Artificially made ice rinks are manufactured in various forms, but all include pumps, compressors, refrigerant fluids and freezing (piping) systems.

Refrigeration piping system may be found:

1. Laid on bare earth.
2. On bare earth with a concrete curbing.
3. On a concrete slab with a curbing.
4. In a formed concrete slab.

Basic mechanical equipment, pumps, compressors, fluid and freezing (piping) installed in a standard-size hockey rink:

(85' x 200') \$22.15 to \$31.25 per sq. ft. of frozen area

Smaller rinks tend to be more expensive, stage-size rinks, etc.
\$49.00 to \$69.00 per sq. ft. of frozen area

Additive costs, per square foot of rink:	COST RANGE
Excavation	\$.42 – \$.87
Subsoil heating	1.95 – 2.60
Sand floor	.95 – 1.58
Wood sleepers	.60 – .83
Gravel base, 4"	.61 – 1.06
Plastic water barrier	.44 – .69
Insulation, rigid, 2"	1.95 – 3.11
Concrete slab, 5" – 6"	4.72 – 6.23
Concrete curbing	.50 – .96
Dehumidifier, per unit	3.47 – 5.38
Side boards, wood frame	4.53 – 6.69
metal frame	4.06 – 8.92
add for spectator protection, clear shield	2.85 – 3.47
chain link	.60 – 1.26

SKATING RINKS - ICE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger or freight elevator with simple call system and push button control, and two or three stops, costs \$56,250 to \$77,250.		SPRINKLERS: Apply to area covered by sprinklers.					
			Sq. Ft.	LOW	AVG.	GOOD	EXCL.	
			5,000	\$3.56	\$4.51	\$5.71	\$7.22	
			10,000	3.21	4.02	5.05	6.33	
		COST RANGE	15,000	3.01	3.76	4.70	5.86	
	LOCKERS: per opening,	single tier	\$135 – \$260	20,000	2.88	3.59	4.46	5.55
		double	89 – 170	30,000	2.71	3.35	4.15	5.14
		triple	64 – 140	40,000	2.59	3.20	3.94	4.87
		box type	46 – 86	60,000	2.44	2.99	3.67	4.50
		ICE SKATING RINKS: See Section UIP 17 for ice-making equipment.		80,000	2.33	2.85	3.49	4.27
			100,000	2.25	2.75	3.35	4.09	

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
		Sq. Ft.		Sq. Ft.		Sq. Ft.
	HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
	Electric cable or baseboard . . .	\$ 9.25	Package A.C. (short ductwork)	\$20.00	Central refrigeration (zoned)	\$14.20
	Electric wall heaters	3.40	Warm and cool air (zoned)	30.00	package (short ductwork)	9.90
	Forced air furnace	12.60	Hot/chilled water (zoned)	40.25	Central evaporative	5.50
	Hot water	17.10	Heat pump system	24.90	Pkg. refriger. . \$1,980 to \$2,575 per ton capacity	
	Space heaters, with fan	3.88			Evap. coolers . \$295 to \$485 per MCFM capacity	
	radiant	4.44				
Steam (including boiler)	15.50	Small indiv. heat pumps cost \$1,750 to \$2,440		VENTILATION ONLY		
without boiler	13.90	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.17	
Wall or floor furnace	3.75					

3	HEIGHT REFINEMENTS			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	12	.889	20	1.106
	14	.945	22	1.158
	16	1.000 (base)	24	1.210
	18	1.054	28	1.313

4	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER													Average Floor Area Sq.Ft./Story	
		250	300	350	400	450	500	600	700	800	900	1000	1200	1400		1600
	5,000	1.034	1.056	1.078	1.100	----	----	----	----	----	----	----	----	----	----	5,000
	8,000	----	1.005	1.020	1.034	1.048	1.061	1.089	----	----	----	----	----	----	----	8,000
	10,000	----	----	.999	1.011	1.023	1.034	1.056	1.078	1.100	----	----	----	----	----	10,000
	12,000	----	----	----	.995	1.005	1.015	1.034	1.052	1.071	1.089	----	----	----	----	12,000
	14,000	----	----	----	.982	.992	1.001	1.018	1.034	1.049	1.063	----	----	----	----	14,000
	18,000	----	----	----	----	.971	.979	.995	1.008	1.021	1.034	1.047	----	----	----	18,000
	20,000	----	----	----	----	----	.971	.986	.999	1.011	1.023	1.034	1.056	----	----	20,000
	25,000	----	----	----	----	----	.954	.967	.980	.992	1.003	1.011	1.027	----	----	25,000
30,000	----	----	----	----	----	.943	.954	.965	.976	.986	.995	1.011	1.026	----	30,000	
40,000	----	----	----	----	----	----	.938	.945	.954	.963	.971	.986	.999	1.011	40,000	
50,000	----	----	----	----	----	----	.930	.935	.941	.947	.954	.967	.980	.992	50,000	
75,000	----	----	----	----	----	----	.920	.923	.926	.930	.934	.941	.949	.958	75,000	

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

SKATING RINKS - ROLLER



AVERAGE CLASS S

OCCUPANCY DESCRIPTION: Large, open structures which include areas for roller skating, lobby, restrooms and equipment storage. Roller skating rinks include the basic skating surface. For ice skating, the cost must be adjusted to account for the ice surface.

Lounge, snack bar, locker or shower room facilities are consistent with the quality as indicated.



GOOD CLASS C

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Suitable office and gathering and/or lounge areas.

NOT INCLUDED IN COSTS: Elevators, sprinklers, snack bar equipment, seating, lockers or ice making equipment or surface.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$125.27	Brick or concrete, good entrance	Acoustic treatment, good viewers' seating, snack bar and locker	Good lighting and restrooms, some entertainment-type lighting	Package A.C.
	Average	94.34	Block or brick, little trim	Gypsum board, acoustic tile	Adequate lighting and plumbing	Package A.C.
	Low-cost	65.20	Block or tilt-up	Little or none, no dressing rooms	Minimum lighting and plumbing	Forced air
D	Good	121.63	Brick veneer, good siding or stucco, trim, good entrance	Acoustic treatment, good viewers' seating, snack bar and locker	Good lighting and restrooms, some entertainment lighting	Package A.C.
	Average	90.75	Stucco or siding, some trim	Gypsum board, acoustic tile	Adequate lighting and plumbing	Package A.C.
	Low cost	61.94	Stucco or siding, very plain	Little or none, no dressing rooms	Minimum lighting and plumbing	Forced air
D POLE	Low cost	57.15	Pole frame, metal, finished inside	No dressing rooms or showers	Minimum lighting and plumbing	Forced air
S	Good	118.35	Metal sandwich panels, steel frame, good entrance	Acoustic treatment, good viewers' seating, snack bar and locker	Good lighting and restrooms, some entertainment-type lighting	Package A.C.
	Average	87.39	Good metal panels and roof, some interior finish, trim	Some gypsum board and acoustic tile, few extras	Adequate lighting and plumbing	Package A.C.
	Low cost	58.87	Single wall, finished interior	Little or none, no dressing rooms	Minimum lighting and plumbing	Forced air

SKATING RINKS - ROLLER

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

ELEVATORS: A small passenger or freight elevator with simple call system and push button control, and two or three stops, costs \$56,250 to \$77,250.		SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		5,000	\$3.56	\$4.51	\$5.71	\$7.22
		10,000	3.21	4.02	5.05	6.33
		15,000	3.01	3.76	4.70	5.86
		20,000	2.88	3.59	4.46	5.55
		30,000	2.71	3.35	4.15	5.14
		40,000	2.59	3.20	3.94	4.87
		60,000	2.44	2.99	3.67	4.50
		80,000	2.33	2.85	3.49	4.27
		100,000	2.25	2.75	3.35	4.09
	COST RANGE					
LOCKERS: per opening,	single tier	\$135 – \$260				
	double	89 – 170				
	triple	64 – 140				
	box type	46 – 86				

2

HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard . . .	\$ 9.25	Package A.C. (short ductwork)	\$20.00	Central refrigeration (zoned)	\$14.20
Electric wall heaters	3.40	Warm and cool air (zoned)	30.00	package (short ductwork)	9.90
Forced air furnace	12.60	Hot/chilled water (zoned)	40.25	Central evaporative	5.50
Hot water	17.10	Heat pump system	24.90	Pkg. refrig. . \$1,980 to \$2,575 per ton capacity	
Space heaters, with fan	3.88			Evap. coolers . \$295 to \$485 per MCFM capacity	
radiant	4.44				
Steam (including boiler)	15.50				
without boiler	13.90	Small indiv. heat pumps cost \$1,750 to \$2,440		VENTILATION ONLY	
Wall or floor furnace	3.75	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.17

3

HEIGHT REFINEMENTS			
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
12	.889	20	1.106
14	.945	22	1.158
16	1.000 (base)	24	1.210
18	1.054	28	1.313

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq.Ft./Story	
	250	300	350	400	450	500	600	700	800	900	1000	1200	1400	1600		
5,000	1.034	1.056	1.078	1.100	----	----	----	----	----	----	----	----	----	----	5,000	
8,000	----	1.005	1.020	1.034	1.048	1.061	1.089	----	----	----	----	----	----	----	8,000	
10,000	----	----	.999	1.011	1.023	1.034	1.056	1.078	1.100	----	----	----	----	----	10,000	
12,000	----	----	----	.995	1.005	1.015	1.034	1.052	1.071	1.089	----	----	----	----	12,000	
14,000	----	----	----	.982	.992	1.001	1.018	1.034	1.049	1.063	----	----	----	----	14,000	
18,000	----	----	----	----	.971	.979	.995	1.008	1.021	1.034	1.047	----	----	----	18,000	
20,000	----	----	----	----	----	.971	.986	.999	1.011	1.023	1.034	1.056	----	----	20,000	
25,000	----	----	----	----	----	----	.954	.967	.980	.992	1.003	1.011	1.027	----	25,000	
30,000	----	----	----	----	----	----	.943	.954	.965	.976	.986	.995	1.011	1.026	30,000	
40,000	----	----	----	----	----	----	----	.938	.945	.954	.963	.971	.986	.999	1.011	40,000
50,000	----	----	----	----	----	----	----	.930	.935	.941	.947	.954	.967	.980	.992	50,000
75,000	----	----	----	----	----	----	----	.920	.923	.926	.930	.934	.941	.949	.958	75,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – DEPARTMENT



GOOD CLASS C



GOOD CLASS B

OCCUPANCY DESCRIPTION: These buildings are often two or more stories designed to display and sell multiple lines of merchandise. The front elevations usually vary with the quality of the store. The higher-quality department stores have large, ornate display areas and fronts, while at the average quality level, the displays are relatively smaller. Most department stores have elevators and escalators to transport people to the various levels in the building. Floor coverings are a mixture of carpet and resilient tile, with the better qualities utilizing high traffic type floor finishes such as terrazzo. Department stores generally have combined heating and cooling systems and good store lighting.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Allowances are included for suitable office and employee areas and restroom facilities. Elevators are included where designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, furnishings, signs or equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A	Excellent	\$217.29	Stone, face brick, best metal and glass, fine display fronts	Best plaster, vinyl and ornamental finishes, terrazzo, carpet	*High luminosity, many good outlets, tiled restrooms	Hot and chilled water (zoned)
	Good	176.84	Brick, concrete, or metal and glass, good display fronts	Plaster, acoustic plaster or tile ceiling, carpet and vinyl floors	*Good lighting and outlets, tiled restrooms	Hot and chilled water (zoned)
	Average	136.64	Brick, concrete or metal and glass, shallow displays	Plaster or drywall, acoustic tile, rubber or vinyl tile, some carpet	*Adequate store lighting and restrooms	Warm and cool air (zoned)
B	Excellent	208.34	Stone, face brick, best metal and glass, fine display fronts	Best plaster, vinyl and ornamental finishes, terrazzo, carpet	*High luminosity, many good outlets, tiled restrooms	Hot and chilled water (zoned)
	Good	169.44	Brick, concrete, or metal and glass, good display fronts	Plaster, acoustic plaster or tile ceiling, carpet and vinyl floors	*Good lighting and outlets, tiled restrooms	Hot and chilled water (zoned)
	Average	130.52	Brick, concrete or metal and glass, shallow displays	Plaster or drywall, acoustic tile, rubber or vinyl tile, some carpet	*Adequate store lighting and restrooms	Warm and cool air (zoned)
A-B	Display basement	102.48	Plaster interior	Store finish, acoustic tile, vinyl composition or rubber tile	Average store lighting and plumbing	Warm and cool air (zoned)
	Storage basement	54.03	Painted interior	Painted floor and ceiling	Exposed lighting, restrooms	Space heaters
	Parking basement	57.25	Unfinished interior	Unfinished (service booth)	Exposed lighting, drains	Ventilation
	Display mezzanine	51.81	(in store cost)	Store finish, acoustic tile, carpet, vinyl composition	Average store lighting and plumbing	(in store cost)
	Office mezzanine	70.33	(in store cost)	Office finish, drywall or plaster, vinyl composition	Average office lighting and plumbing	(in store cost)
	Storage mezzanine	28.77	(in store cost)	Painted soffit, unfinished floor	Minimum, exposed lighting	(in store cost)
C	Excellent	183.70	Stone, face brick, metal or concrete panels, good fronts	Plaster, acoustic plaster or tile, carpet and vinyl floors	*High-intensity lighting, good quality plumbing	Hot and chilled water (zoned)
	Good	139.76	Brick, concrete, metal panels, good display fronts	Plaster, acoustic tile ceilings, carpet and vinyl tile	*Good lighting and outlets, good restrooms	Warm and cool air (zoned)
	Average	112.40	Brick, stucco, concrete panels, adequate displays	Drywall or plaster, acoustic tile, some carpet, vinyl or ceramic	*Adequate lighting and restrooms, competitive fixtures	Warm and cool air (zoned)
C	Display basement	62.38	Plastered interior [†]	Store finish, acoustic tile, vinyl composition tile	Average store lighting and plumbing	Forced air
	Storage basement	34.19	Painted interior [†]	Painted ceiling and floors, few partitions	Exposed lighting, few outlets, drains	Space heaters
	Parking basement	37.59	Unfinished interior [†]	Finished ceiling, concrete floor with hardener	Exposed lighting, few outlets, drains	Ventilation
	Display mezzanine	35.34	(in store cost)	Plaster or drywall soffit, carpet and vinyl composition	Average store lighting and plumbing	(in store cost)
	Office mezzanine	47.34	(in store cost)	Plaster or drywall soffit, office partitions and finish	Average office lighting and plumbing	(in store cost)
	Storage mezzanine	21.01	(in store cost)	Drywall soffit, wood floor, light storage	Minimum lighting, no plumbing	(in store cost)

[†]For fire-resistant Type I basement, with concrete slab separation under Class C units, add \$5.95 per square foot.

MEZZANINES: Do not use story height or area/perimeter multipliers with mezzanine costs.

STORES – DEPARTMENT

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

<p>ELEVATORS: Buildings whose base costs include elevators are marked with an asterisk (*). If the building under consideration has no elevators, deduct the following from the base costs so marked. For detailed costs see Section UIP 8.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Classes A/B</th> <th style="text-align: center;">Sq. Ft. Costs</th> <th style="text-align: left;">Class C</th> <th style="text-align: center;">Sq. Ft. Costs</th> </tr> </thead> <tbody> <tr> <td>Excellent</td> <td style="text-align: center;">\$9.60</td> <td>Excellent</td> <td style="text-align: center;">\$7.17</td> </tr> <tr> <td>Good</td> <td style="text-align: center;">7.20</td> <td>Good</td> <td style="text-align: center;">5.39</td> </tr> <tr> <td>Average</td> <td style="text-align: center;">5.42</td> <td>Average</td> <td style="text-align: center;">4.04</td> </tr> </tbody> </table> <p>ELEVATOR STOPS: For basement or mezzanine elevator stops, add \$6,350 to \$9,650 per stop.</p> <p>Loading docks, see Page CAL 398.</p>				Classes A/B	Sq. Ft. Costs	Class C	Sq. Ft. Costs	Excellent	\$9.60	Excellent	\$7.17	Good	7.20	Good	5.39	Average	5.42	Average	4.04	<p>SPRINKLERS: Apply to area covered by sprinklers.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Sq. Ft.</th> <th style="text-align: center;">LOW</th> <th style="text-align: center;">AVG.</th> <th style="text-align: center;">GOOD</th> <th style="text-align: center;">EXCL.</th> </tr> </thead> <tbody> <tr> <td>5,000</td> <td style="text-align: center;">\$3.24</td> <td style="text-align: center;">\$4.11</td> <td style="text-align: center;">\$5.22</td> <td style="text-align: center;">\$6.62</td> </tr> <tr> <td>10,000</td> <td style="text-align: center;">2.91</td> <td style="text-align: center;">3.67</td> <td style="text-align: center;">4.61</td> <td style="text-align: center;">5.81</td> </tr> <tr> <td>15,000</td> <td style="text-align: center;">2.74</td> <td style="text-align: center;">3.43</td> <td style="text-align: center;">4.30</td> <td style="text-align: center;">5.38</td> </tr> <tr> <td>20,000</td> <td style="text-align: center;">2.62</td> <td style="text-align: center;">3.27</td> <td style="text-align: center;">4.08</td> <td style="text-align: center;">5.09</td> </tr> <tr> <td>30,000</td> <td style="text-align: center;">2.47</td> <td style="text-align: center;">3.06</td> <td style="text-align: center;">3.80</td> <td style="text-align: center;">4.72</td> </tr> <tr> <td>50,000</td> <td style="text-align: center;">2.28</td> <td style="text-align: center;">2.81</td> <td style="text-align: center;">3.47</td> <td style="text-align: center;">4.28</td> </tr> <tr> <td>75,000</td> <td style="text-align: center;">2.14</td> <td style="text-align: center;">2.63</td> <td style="text-align: center;">3.23</td> <td style="text-align: center;">3.97</td> </tr> <tr> <td>100,000</td> <td style="text-align: center;">2.05</td> <td style="text-align: center;">2.51</td> <td style="text-align: center;">3.07</td> <td style="text-align: center;">3.76</td> </tr> <tr> <td>200,000</td> <td style="text-align: center;">1.85</td> <td style="text-align: center;">2.24</td> <td style="text-align: center;">2.72</td> <td style="text-align: center;">3.29</td> </tr> </tbody> </table>					Sq. Ft.	LOW	AVG.	GOOD	EXCL.	5,000	\$3.24	\$4.11	\$5.22	\$6.62	10,000	2.91	3.67	4.61	5.81	15,000	2.74	3.43	4.30	5.38	20,000	2.62	3.27	4.08	5.09	30,000	2.47	3.06	3.80	4.72	50,000	2.28	2.81	3.47	4.28	75,000	2.14	2.63	3.23	3.97	100,000	2.05	2.51	3.07	3.76	200,000	1.85	2.24	2.72	3.29
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2

HEATING AND COOLING					
<p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>					
HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
Hot water, baseboard/convector radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refrig. . \$1,840 to \$2,350 per ton capacity	
Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
radiant	3.60				
Steam (including boiler)	9.20				
without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY	
Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$1.77

3

HIGH REFINEMENTS			
<p>MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>			
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
10	.957	16	1.085
11	.979	18	1.127
12	1.000 (base)	20	1.170
13	1.021	22	1.213
14	1.042	24	1.255
15	1.064		

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq.Ft./Story
	300	350	400	450	500	550	600	700	800	900	1000	1500	2000	2600	
5,000	1.011	1.054	1.097	1.140	1.183	----	----	----	----	----	----	----	----	----	5,000
10,000	.878	.901	.925	.948	.969	.990	1.011	1.054	1.097	1.140	1.183	----	----	----	10,000
14,000	----	----	.870	.886	.904	.921	.937	.969	1.000	1.030	1.060	----	----	----	14,000
20,000	----	----	----	.843	.854	.866	.878	.901	.924	.948	.969	----	----	----	20,000
25,000	----	----	----	----	.831	.841	.850	.868	.887	.906	.925	1.011	----	----	25,000
30,000	----	----	----	----	----	----	.831	.847	.862	.878	.894	.969	----	----	30,000
40,000	----	----	----	----	----	----	----	.820	.831	.843	.854	.913	----	----	40,000
50,000	----	----	----	----	----	----	----	----	----	----	.831	.877	----	----	50,000
80,000	----	----	----	----	----	----	----	----	----	----	----	.825	.854	----	80,000
100,000	----	----	----	----	----	----	----	----	----	----	----	.807	.831	.859	100,000
150,000	----	----	----	----	----	----	----	----	----	----	----	.781	.799	.819	150,000
200,000	----	----	----	----	----	----	----	----	----	----	----	----	.780	.797	200,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – DISCOUNT



AVERAGE CLASS C DISCOUNT



AVERAGE CLASS S WAREHOUSE DISCOUNT

OCCUPANCY DESCRIPTION: Discount stores are built as large, open shell, one story structures. Even though areas in better discount stores are commonly divided by departments, they generally do not match the quality of construction found in department stores. The better qualities will have some storefront and well-finished interiors. Some storage and office area consistent with the overall quality of the building are included.

Warehouse discount stores are of warehouse construction with minimal interior partitioning. Membership stores typically fall into this category.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Sprinklers, furnishings, trade fixtures, checkout or food service equipment or signs.

DISCOUNT STORES

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$86.57	Til up panels, brick, good front, some ornamentation	Acoustic tile, vinyl tile, some built ins and extras	Adequate lighting, outlets, and plumbing	Package A.C.
C	Good	87.79	Brick, good tilt up, steel columns, wide spans	Plaster, good offices, acoustic tile, rubber or vinyl composition	Good lighting and outlets, good restrooms	Warm and cool air (zoned)
	Average	69.70	Brick or block, tilt up, wood or steel columns and trusses	Drywall, small office area, acoustic tile, vinyl composition	Adequate lighting and restrooms, competitive fixtures	Package A.C.
	Low cost	52.03	Minimum block or tilt-up, pipe or wood columns	Painted exterior walls, minimum finish and office	Minimum lighting and plumbing	Forced air
D	Good	82.66	Brick or stone veneer, wood or steel columns and trusses	Plaster or drywall, good offices, good acoustic tile, vinyl or rubber	Good lighting and outlets, good restrooms	Warm and cool air (zoned)
	Average	64.67	Good stucco or siding on wood frame or heavy studs	Drywall, small office area, acoustic tile, vinyl composition	Adequate lighting and restrooms	Package A.C.
	Low cost	47.28	Stucco or siding on studs, small front	Drywall, few partitions, minimum finish and office	Minimum lighting and plumbing	Forced air
D POLE	Low cost	42.04	Pole frame, metal siding, lined, small front	Drywall, few partitions, minimum finish and office	Minimum lighting and plumbing	Forced air
S	Good	81.04	Good sandwich panels, frame, some ornamentation	Drywall, good offices, acoustic tile, rubber or vinyl composition	Good lighting and outlets, good restrooms	Warm and cool air (zoned)
	Average	62.25	Sandwich panels, plain front	Few partitions, small office area, acoustic tile and vinyl composition	Adequate lighting and restrooms	Package A.C.
	Low cost	44.48	Steel panels, partly finished on interior, small front	Drywall, few partitions, minimum finish and office	Minimum lighting and plumbing	Forced air

WAREHOUSE DISCOUNT STORES

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$71.25	Brick, block, tilt up, open frame, plain fronts	Plaster/drywall, partitioned offices, good finished ceilings, vinyl floor	Fluorescent lighting, adequate outlets & restrooms, good extras	Package A.C.
	Average	52.64	Average block or tilt up, open pipe/wood columns, some trim	Painted walls, some partitions, office area, vinyl composition and acoustic	Adequate lighting, restrooms, small snack bar or deli/fast food	Forced air
	Low cost	39.77	Cheap block/tilt up, light panel roof, no glass storefront	Unfinished, shell type, few partitions, concrete floor	Minimum code throughout	Space heaters
D	Good	65.39	Stucco or siding, open frame, plain fronts	Plaster/drywall, partitioned offices, good finished ceilings, vinyl floor	Fluorescent lighting, adequate outlets & restrooms, good extras	Package A.C.
	Average	47.69	Stucco or siding, open frame, small front, some trim	Painted walls, some partitions, office area, vinyl composition and acoustic	Adequate lighting, restrooms, small snack bar or deli/fast food	Forced air
	Low cost	35.62	Siding on box frame/studs, very plain, no glass except entry door	Unfinished, shell type, few partitions, concrete floor	Minimum code throughout	Space heaters
D POLE	Low cost	33.55	Metal panels on light pole-frame, very plain, no glass storefront	Unfinished, shell type, few partitions, concrete floor	Minimum code throughout	Space heaters
S	Good	62.99	Steel frame, sandwich panels, plain fronts	Plaster/drywall, partitioned offices, good finished ceilings, vinyl floor	Fluorescent lighting, adequate outlets & restrooms, good extras	Package A.C.
	Average	47.14	Pre-engineered frame and siding, small front, some trim	Painted walls, some partitions, office area, vinyl composition and acoustic	Adequate lighting, restrooms, small snack bar or deli/fast food	Forced air
	Low cost	36.27	Siding on box frame/studs, very plain, no glass except entry door	Unfinished, shell type, few partitions, concrete floor	Minimum code throughout	Space heaters

STORES – DISCOUNT

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small freight elevator with simple call system and push button control, and two or three stops, costs \$56,250 to \$77,250. For detailed costs, see Section UIP 8. For dock-height floors, add the cost per square foot to the base cost of the first floor. Elevated on compacted fill: \$3.50 to \$6.98 per square foot. For cut and balance, use proportional cost. Loading docks, see Page CAL 398.	SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		5,000	\$3.24	\$4.11	\$5.22	\$6.62
		10,000	2.91	3.67	4.61	5.81
		15,000	2.74	3.43	4.30	5.38
		20,000	2.62	3.27	4.08	5.09
		30,000	2.47	3.06	3.80	4.72
		50,000	2.28	2.81	3.47	4.28
		75,000	2.14	2.63	3.23	3.97
		100,000	2.05	2.51	3.07	3.76
	150,000	1.93	2.35	2.86	3.48	

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
		Sq. Ft.		Sq. Ft.		Sq. Ft.
	HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
	Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
	Hot water, baseboard/convactor radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refriger. . \$1,840 to \$2,350 per ton capacity	
	Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
	radiant	3.60				
Steam (including boiler)	9.20					
without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY		
Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$1.77	

3	HEIGHT REFINEMENTS			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	10	.957	16	1.085
	11	.979	18	1.127
	12	1.000 (base)	20	1.170
	13	1.021	22	1.213
	14	1.042	24	1.255
	15	1.064		

4	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story	
		300	350	400	450	500	550	600	700	800	900	1000	1200	1500	2000		
	5,000	1.011	1.054	1.097	1.140	1.183	----	----	----	----	----	----	----	----	----	5,000	
	10,000	.878	.901	.925	.948	.969	.990	1.011	1.054	1.097	1.140	1.183	----	----	----	10,000	
	15,000	----	----	.862	.877	.894	.909	.925	.955	.985	1.014	1.043	1.101	----	----	15,000	
	20,000	----	----	----	.843	.854	.866	.878	.901	.924	.948	.969	1.011	----	----	20,000	
	25,000	----	----	----	----	.831	.841	.850	.868	.887	.906	.925	.959	1.011	----	25,000	
	30,000	----	----	----	----	----	----	.831	.847	.862	.878	.894	.925	.969	----	30,000	
	40,000	----	----	----	----	----	----	----	.820	.831	.843	.854	.878	.913	----	40,000	
	50,000	----	----	----	----	----	----	----	----	----	----	.831	.850	.877	----	50,000	
	60,000	----	----	----	----	----	----	----	----	----	----	----	.815	.831	.854	----	60,000
	80,000	----	----	----	----	----	----	----	----	----	----	----	----	.807	.825	.854	80,000
	100,000	----	----	----	----	----	----	----	----	----	----	----	----	.792	.807	.831	100,000
	125,000	----	----	----	----	----	----	----	----	----	----	----	----	.792	.812	125,000	

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – DRUG STORES



GOOD CLASS C



EXCELLENT CLASS C

These buildings include both small neighborhood pharmacies and the large chain discount-type with a variety of merchandise departments including convenience foods containing built-in refrigerators.

The better qualities have some storefront and well-finished interiors. Some storage and office areas consistent with overall quality of the building are included.

NOT INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Suitable office and restroom facilities.

NOT INCLUDED IN COSTS: Furnishings, signs, display freezers and cooler or other trade fixtures, checkout or prescription and food service equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ.FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$126.96	Brick or concrete, usually part of a building	Plaster or drywall, acoustic tile, VCT, small private or chain outlet	Adequate lighting, outlets, plumbing and pharmacy	Warm and cool air (zoned)
C	Excellent	149.19	Face brick, best design, highly ornamental exterior	Typically best variety type, good acoustic, vinyl tile and carpet	Good departmental lighting, good pharmacy and convenience foods	Package A.C.
	Good	125.66	Brick, best block, stucco, good storefront and ornamentation	Drywall, acoustic tile, vinyl comp., includes typical mini-drive-thru	Good lighting and outlets, standard fixtures and pharmacy	Package A.C.
	Average	106.19	Brick or block, some mansard, parapet ornamentation	Drywall, some vinyl, acoustic tile, vinyl composition tile	Adequate lighting, restrooms, prescription and sundries departments	Package A.C.
	Low cost	90.06	Minimum block or cheap brick, bar joists, built-up roof	Painted exterior walls, minimum retail finish, typical low-end chain	Adequate lighting and pharmacy, small employees' restroom	Package A.C
D	Excellent	141.41	Face brick veneer, best design, highly ornamental exterior	Typically best variety type, good acoustic, vinyl tile and carpet	Good departmental lighting, good pharmacy and convenience foods	Package A.C.
	Good	118.80	Brick veneer or good siding, good frame and storefront entrance	Drywall, acoustic tile, vinyl comp., includes typical mini-drive-thru	Good lighting and outlets, standard fixtures and pharmacy	Package A.C
	Average	100.16	Stucco or siding, some mansard, parapet ornamentation	Drywall, some vinyl, acoustic tile, vinyl composition tile	Adequate lighting, restrooms, prescription and sundries departments	Package A.C.
	Low cost	84.79	Stucco or siding on studs, small front, little trim	Painted exterior walls, minimum retail finish, typical low-end chain	Adequate lighting, plumb. and pharmacy, small employees' restroom	Package A.C
S	Low cost	82.15	Steel panels, finished interior, small front, little trim	Painted exterior walls, minimum retail finish, typical low-end chain	Adequate lighting, plumb. and pharmacy, small employees' restroom	Package A.C

BASEMENTS AND MEZZANINES: Use costs listed under Stores-Department, Page CAL 358.

STORES – DRUG STORES

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

<p>1 ELEVATORS: A small passenger or freight elevator with simple call system and push button control, and two or three stops. cost \$56,250 to \$77,250. For detailed costs, see Section UIP 8.</p> <p>ELEVATOR STOPS: For basement or mezzanine elevator stops, add \$6,350 to \$9,650.</p>	SPRINKLERS: Apply to area covered by sprinklers.				
	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	1,000	\$4.14	\$5.36	\$6.94	\$8.98
	2,000	3.73	4.32	5.46	7.87
	3,000	3.50	4.47	5.71	7.29
	4,000	3.35	4.29	5.46	6.91
	5,000	3.24	4.11	5.22	6.62
	10,000	2.91	3.67	4.61	5.81
	20,000	2.62	3.27	4.08	5.09
	30,000	2.47	3.06	3.80	4.72
50,000	2.28	2.81	3.47	4.28	

<p>2 HEATING AND COOLING</p> <p>These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.</p>	Sq. Ft.	Costs	HEATING & COOLING	Sq. Ft.	Costs	COOLING ONLY	Sq. Ft.	Costs	
	HEATING ONLY		HEATING & COOLING		COOLING ONLY				
	Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45			
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97			
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31			
	Hot water, baseboard/convector radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refriger. . \$1,840 to \$2,350 per ton capacity				
	Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity				
	radiant	3.60			VENTILATION ONLY				
	Steam (including boiler)	9.20	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		Vent. (blowers/ducts)	\$1.77			
	without boiler	7.90							
	Wall or floor furnace	2.59							

<p>3 HEIGHT REFINEMENTS</p> <p>STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.</p>	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.915	14	1.042
	10	.957	15	1.064
	11	.979	16	1.085
	12	1.000 (base)	18	1.127
	13	1.021	20	1.170

<p>4</p>	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq. Ft./Story
	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	1,000	
	1,000	1.183	1.376	1.566	1.753	---	---	---	---	---	---	---	---	---	---	1,000
	2,000	.969	1.079	1.183	1.283	1.376	---	---	---	---	---	---	---	---	---	2,000
	5,000	---	.878	.924	.969	1.011	1.097	1.183	---	---	---	---	---	---	---	5,000
	7,000	---	---	.870	.904	.937	1.000	1.060	1.121	1.183	---	---	---	---	---	7,000
	10,000	---	---	---	---	.878	.925	.969	1.011	1.054	1.097	1.140	1.183	---	---	10,000
	12,000	---	---	---	---	---	.892	.931	.969	1.005	1.042	1.079	1.117	1.183	---	12,000
	14,000	---	---	---	---	---	.870	.904	.937	.969	1.000	1.030	1.060	1.121	---	14,000
	18,000	---	---	---	---	---	---	.866	.892	.917	.943	.969	.992	1.040	---	18,000
	20,000	---	---	---	---	---	---	.854	.878	.901	.924	.948	.969	1.011	---	20,000
	30,000	---	---	---	---	---	---	---	.831	.847	.862	.878	.894	.925	.969	30,000
	40,000	---	---	---	---	---	---	---	---	.820	.831	.843	.854	.878	.913	40,000
	50,000	---	---	---	---	---	---	---	---	---	---	---	.831	.850	.877	50,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – FLORIST SHOPS



LOW COST CLASS S



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: These structures are convenience stores for the sale of cut flowers, with the better stores containing finished display areas for other gift merchandise.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Display cases, coolers and other trade fixtures.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$108.59	Brick or concrete, usually part of a building	Drywall or plaster, good acoustic, some vinyl tile and carpet	Adequate lighting outlets, adequate plumbing	Warm and cool air (zoned)
C	Excellent	128.80	Individual design, highly ornamental storefront	Plaster, acoustic tile, some terrazzo, carpet or vinyl, good trim	Special lighting, good fixtures and plumbing	Package A.C.
	Good	107.75	Brick, best block, stucco, good storefront and ornamentation	Drywall or plaster, good acoustic, some vinyl tile & carpet	Good lighting and outlets, standard fixtures	Package A.C.
	Average	84.06	Brick or block, some mansard, parapet ornamentation	Acoustic tile, some vinyl composition, sundry display area	Adequate lighting and outlets, small employees' restroom	Forced air
	Low cost	66.79	Minimum block or cheap brick, low-cost front	Painted exterior walls, minimum finish, sealed concrete	Minimum code throughout, minimum display wiring	Space heaters
D	Excellent	120.86	Individual design, highly ornamental storefront	Plaster, acoustic tile, some terrazzo, carpet or vinyl, good trim	Special lighting, good fixtures and plumbing	Package A.C.
	Good	100.99	Brick veneer or good siding, good frame and front	Drywall or plaster, good acoustic, some vinyl tile and carpet	Good lighting and outlets, standard fixtures	Package A.C.
	Average	78.33	Stucco or siding, some mansard, parapet ornamentation	Acoustic tile, vinyl composition, sundry display area	Adequate lighting and outlets, small employees' restroom	Forced air
	Low cost	61.93	Stucco or siding, small front	Drywall, few partitions, sealed slab	Minimum code throughout	Space heaters
D POLE	Low cost	57.75	Pole frame, metal, lined	Minimum finish and partitions, sealed concrete	Minimum code throughout, minimum display wiring	Space heaters
S	Low cost	59.36	Steel panels, partly finished interior	Minimum finish and partitions, sealed concrete	Minimum code throughout, minimum display wiring	Space heaters
CDS	Storage basement	34.19	Painted interior	Painted ceiling and floors, few partitions	Exposed lighting, few outlets, drains	Space heaters

STORES – FLORIST SHOP

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1 **SPRINKLERS:** Apply to area covered by sprinklers.

Sq. Ft.	LOW	AVG.	GOOD	EXCL.
1,000	\$4.14	\$5.36	\$6.94	\$8.98
2,000	3.73	4.78	6.14	7.87
3,000	3.50	4.47	5.71	7.29
4,000	3.35	4.26	5.43	6.91
5,000	3.24	4.11	5.22	6.62
10,000	2.91	3.67	4.61	5.81
20,000	2.62	3.27	4.08	5.09
30,000	2.47	3.06	3.80	4.72
50,000	2.28	2.81	3.47	4.28

2 **HEATING AND COOLING**

These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

HEATING ONLY		Sq. Ft. Costs	HEATING & COOLING		Sq. Ft. Costs	COOLING ONLY		Sq. Ft. Costs
Electric cable or baseboard		\$ 5.67	Package A.C. (short ductwork)		\$12.55	Central refrigeration (zoned)		\$10.45
Electric wall heaters		2.30	Warm and cool air (zoned)		16.50	package (short ductwork)		6.97
Forced air furnace		6.18	Hot/chilled water (zoned)		25.00	Central evaporative		4.31
Hot water, baseboard/convactor		11.40	Heat pump system		14.35	Pkg. refrig. . \$1,840 to \$2,350 per ton capacity		
radiant floor/ceiling		12.40				Evap. coolers . \$250 to \$420 per MCFM capacity		
Space heaters, with fan		3.01						
radiant		3.60						
Steam (including boiler)		9.20						
without boiler		7.90	Small indiv. heat pumps cost \$1,575 to \$2,275			VENTILATION ONLY		
Wall or floor furnace		2.59	per ton of rated capacity.			Vent. (blowers/ducts)		\$1.77

3 **HEIGHT REFINEMENTS**

MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.915	14	1.042
10	.957	15	1.064
11	.979	16	1.085
12	1.000 (base)	18	1.127
13	1.021	20	1.170

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq.Ft./Story
	75	100	125	150	175	200	225	250	275	300	350	400	450	500	
500	1.376	1.566	1.753	----	----	----	----	----	----	----	----	----	----	----	500
1,000	1.079	1.183	1.283	1.376	1.470	1.566	1.660	1.753	----	----	----	----	----	----	1,000
1,500	.969	1.042	1.115	1.183	1.256	1.322	1.384	1.445	1.506	1.566	----	----	----	----	1,500
2,000	.912	.969	1.025	1.079	1.130	1.183	1.233	1.283	1.330	1.376	1.470	----	----	----	2,000
2,500	.878	.924	.969	1.011	1.054	1.097	1.140	1.183	1.227	1.270	1.351	1.420	----	----	2,500
3,000	.854	.892	.931	.969	1.005	1.042	1.079	1.115	1.149	1.183	1.256	1.322	1.380	----	3,000
3,500	----	.873	.907	.941	.973	1.006	1.038	1.070	1.101	1.131	1.194	1.253	1.300	----	3,500
4,000	----	.854	.883	.912	.941	.969	.997	1.025	1.052	1.079	1.131	1.183	1.232	1.280	4,000
5,000	----	----	.854	.878	.901	.924	.947	.969	.990	1.011	1.054	1.097	1.140	1.183	5,000
6,000	----	----	----	----	.873	.892	.912	.931	.950	.969	1.005	1.042	1.079	1.115	6,000
7,000	----	----	----	----	----	.870	.887	.904	.921	.937	.969	1.000	1.030	1.060	7,000
8,000	----	----	----	----	----	----	----	.883	.898	.912	.941	.969	.997	1.025	8,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – LUXURY BOUTIQUE



GOOD CLASS C



AVERAGE CLASS D

OCCUPANCY DESCRIPTION: These are one or two story buildings designed for upscale retail sales and display. They usually have very high cost display and/or decorative fronts. This occupancy includes small stores generally with limited merchandise lines or specialty shops designed to cater to a select clientele.

The stores are usually designed with designated areas for servicing customers, employee operations, merchandise storage, display areas, office and restroom facilities, all with expensive exterior and interior finishes and special lighting.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Suitable office and restroom facilities.

NOT INCLUDED IN COSTS: Elevators, sprinklers, furnishings or equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$311.27	Best cut stone, face brick, metals, fine marble and display front	Best plaster and paneling, highly ornamental, stone, carpet, fine woods	Special lighting fixtures and effects, deluxe restrooms	Hot and chilled water (zoned)
	Average	245.46	Brick or concrete, high-cost metal, stone and display fronts	Plaster, acoustic plaster, ornamental detail, custom carpet, parquet, vinyl	Good lighting and outlets, good restrooms and fixtures	Warm and cool air (zoned)
C	Good	273.94	Custom marble, face brick, metal, fine ornamentation and displays	Best plaster, ornamental ceilings, paneling, stone, carpet, fine woods	Special lighting effects, deluxe restrooms and fixtures	Warm and cool air (zoned)
	Average	216.73	Fine brick, cut stone and trim, special site-built custom sash	Good plaster, ornamental detail, marble, custom carpet, parquet, vinyl	Some special fixtures, good restrooms	Warm and cool air (zoned)
	Low cost	170.23	Face brick, stone trim, best metal, tile, some custom sash fronts	Plaster, good detail, custom ceiling, wall and floor finishes	Top quality standard fixtures, electrical and plumbing	Heat pump system
D	Good	262.50	Custom face brick or stone veneer, fine ornamentation and displays	Best plaster, ornamental ceilings, paneling, stone, carpet, fine woods	Special lighting effects, deluxe restrooms and fixtures	Warm and cool air (zoned)
	Average	206.86	Fine masonry veneer and trims, special site-built sash and entries	Good plaster, ornamental detail, marble, custom carpet, parquet, vinyl	Some special fixtures, good restrooms	Warm and cool air (zoned)
	Low cost	161.78	Best siding, stucco, marble trim, best metal, tile, some custom sash	Plaster, good detail, custom ceiling, wall and floor finishes	Top quality standard fixtures, electrical and plumbing	Heat pump system

BASEMENTS AND MEZZANINES: Use costs listed under Stores – Department, Page CAL 358.

STORES- LUXURY BOUTIQUE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger or freight elevator with simple call system and push button control, and two or three stops, costs \$56,250 to \$77,250. For detailed costs, see Section UIP 8.	SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		1,000	\$4.14	\$5.36	\$6.94	\$8.98
		2,000	3.73	4.32	5.46	7.87
		3,000	3.50	4.47	5.71	7.29
	ELEVATOR STOPS: For basements or mezzanine stops, add \$6,350 to \$9,650 per stop.	5,000	3.24	4.11	5.22	6.62
		10,000	2.91	3.67	4.61	5.81
		20,000	2.62	3.27	4.08	5.09
		30,000	2.47	3.06	3.80	4.72
		50,000	2.28	2.81	3.47	4.28

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
		Sq. Ft.		Sq. Ft.		Sq. Ft.
	HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
	Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
	Hot water, baseboard/convector radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refrig. . \$1,840 to \$2,350 per ton capacity Evap. coolers . \$250 to \$420 per MCFM capacity	
	Space heaters, with fan	3.01				
	radiant	3.60				
	Steam (including boiler)	9.20				
	without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY	
	Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$1.77

3	HEIGHT REFINEMENTS			
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	8	.936	14	1.042
	10	.957	15	1.064
	11	.979	16	1.085
	12	1.000 (base)	18	1.127
	13	1.021	20	1.170

4	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER													Average Floor Area Sq.Ft./Story	
		100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	
	1,000	1.183	1.376	1.566	1.753	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	1,000
	2,000	.969	1.079	1.183	1.283	1.376	-----	-----	-----	-----	-----	-----	-----	-----	-----	2,000
	5,000	-----	.878	.924	.969	1.011	1.097	1.183	-----	-----	-----	-----	-----	-----	-----	5,000
	7,000	-----	-----	.870	.904	.937	1.000	1.060	1.121	1.183	-----	-----	-----	-----	-----	7,000
	10,000	-----	-----	-----	-----	.878	.925	.969	1.011	1.054	1.097	1.140	1.183	-----	-----	10,000
	12,000	-----	-----	-----	-----	-----	.892	.931	.969	1.005	1.042	1.079	1.117	1.183	-----	12,000
	14,000	-----	-----	-----	-----	-----	.870	.904	.937	.969	1.000	1.030	1.060	1.121	-----	14,000
	18,000	-----	-----	-----	-----	-----	-----	.866	.892	.917	.943	.969	.992	1.040	-----	18,000
	20,000	-----	-----	-----	-----	-----	-----	.854	.878	.901	.924	.948	.969	1.011	-----	20,000
	30,000	-----	-----	-----	-----	-----	-----	-----	.831	.847	.862	.878	.894	.925	.969	30,000
	40,000	-----	-----	-----	-----	-----	-----	-----	-----	.820	.831	.843	.854	.878	.913	40,000
	50,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.831	.850	.877	50,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – MALL ANCHOR DEPARTMENT STORE



GOOD CLASS A-B



GOOD CLASS A-B

OCCUPANCY DESCRIPTION: These buildings are often one or two stories that are a transition between the pure discount store and the old full-line department store. The front elevations usually vary with the quality of the store. The higher quality anchor stores have some display areas and fronts while at the lower quality levels, the entries are relatively plain.

Most anchor stores have some elevators and escalators. Floor coverings are a mixture of carpet and resilient tile, with the better qualities utilizing high traffic type floor finishes such as terrazzo. Anchor stores generally have combined heating and cooling systems and good store lighting. Allowances are included for suitable office and employee areas and restroom facilities.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Allowances are included for suitable office and employee areas and restroom facilities. Elevators are included where designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, furnishings, signs for equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/SQ.FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Good	\$134.52	Brick, concrete or metal and glass, adequate entry displays	Plaster or drywall, acoustic tile, rubber or vinyl, some wood or carpet	*Good display lighting and restrooms	Warm and cool air (zoned)
	Average	110.26	Brick, concrete or face block, some entry display and mall front trim only	Drywall, some covering, acoustic tile, some carpet, vinyl, wood or ceramic	*Adequate lighting, outlets and plumbing fixtures	Warm and cool air (zoned)
	Low cost	87.10	Brick, concrete, EIFS or block, little trim, plain entries, no displays	Painted, some drywall, acoustic and VCT, typical big box or jr. dept. store	*Adequate lighting and plumbing	Package A.C.
C	Good	112.86	Brick, stucco on block, concrete panels, adequate entry displays	Drywall or plaster, acoustic tile, some carpet, vinyl, wood or ceramic	*Good display lighting and restrooms	Warm and cool air (zoned)
	Average	91.90	Brick, concrete or face block, some entry display and mall front trim only	Drywall, some coverings, acoustic tile, some carpet or vinyl	*Adequate lighting, outlets and plumbing fixtures	Warm and cool air (zoned)
	Low cost	71.60	Tilt up, concrete or block, some EIFS trim, plain entries, no displays	Painted, some drywall, acoustic and VCT, typical big box or jr. dept. store	*Adequate lighting and plumbing	Package A.C.
D	Good	106.48	Brick veneer, EIFS or best siding, adequate entry displays	Drywall or plaster, acoustic tile, some carpet, vinyl, wood or ceramic	*Good display lighting and restrooms	Warm and cool air (zoned)
	Average	86.20	Good siding, masonry trim, some entry displays and mall front trim only	Drywall, some coverings, acoustic tile, some carpet or vinyl	*Adequate lighting, outlets and plumbing fixtures	Warm and cool air (zoned)
	Low cost	66.59	Stucco, EIFS or siding, very plain, plain entries, no displays	Painted, some drywall, acoustic and VCT, typical big box or jr. dept. store	*Adequate lighting and plumbing	Package A.C.
S	Low cost	64.26	Metal panels, little trim, plain entries, no displays	Painted, some drywall, acoustic and VCT, typical big box or jr. dept. store	*Adequate lighting and plumbing	Package A.C.

NOTES: The best anchor stores approach the good or better department stores in cost, with many departments, best lighting, elevators and escalators and fine detail. If the design and amenities appear closer to department finish to anchor, the department store cost should be used.

STORES – MALL ANCHOR DEPARTMENT STORE

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: Buildings whose base costs include elevators are marked with an asterisk (*). If the building under consideration has no elevators, deduct the following from the base costs so marked. For detailed costs see Section UIP 8.				SPRINKLERS: Apply to area covered by sprinklers.				
	Classes A/B	Sq. Ft. Costs	Class C/D/S	Sq. Ft. Costs	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	Good	\$5.33	Good	\$4.98	5,000	\$3.24	\$4.11	\$5.22	\$6.62
	Average	4.10	Average	3.89	10,000	2.91	3.67	4.61	5.81
	Low	3.15	Low	2.36	15,000	2.74	3.43	4.30	5.38
					20,000	2.62	3.27	4.08	5.09
					30,000	2.47	3.06	3.80	4.72
					50,000	2.28	2.81	3.47	4.28
					75,000	2.14	2.63	3.23	3.97
					100,000	2.05	2.51	3.07	3.76
					200,000	1.85	2.24	2.72	3.29
	ELEVATOR STOPS: For basement or mezzanine elevator stops, add \$6,350 to \$9,650 per stop.								
	Loading docks, see Page CAL 398.								

2	HEATING AND COOLING			
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.			
	HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs
	Electric cable or baseboard ..	\$ 5.67	Package A.C. (short ductwork)	\$12.55
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00
	Hot water, baseboard/convactor radiant floor/ceiling	11.40	Heat pump system	14.35
	Space heaters, with fan	3.01		
	radiant	3.60		
	Steam (including boiler)	9.20		
	without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.	
	Wall or floor furnace	2.59		
			COOLING ONLY	Sq. Ft. Costs
			Central refrigeration (zoned)	\$10.45
			package (short ductwork)	6.97
			Central evaporative	4.31
			Pkg. refrig. . \$1,840 to \$2,350 per ton capacity	
			Evap. coolers . \$250 to \$420 per MCFM capacity	
			VENTILATION ONLY	
			Vent. (blowers/ducts)	\$1.77

3	HEIGHT REFINEMENTS			
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	10	.957	16	1.085
	11	.979	18	1.127
	12	1.000 (base)	20	1.170
	13	1.021	22	1.213
	14	1.042	24	1.255
	15	1.064		

4	Average Floor Area	AVERAGE PERIMETER														Average Floor Area
	Sq. Ft./Story	300	350	400	450	500	550	600	700	800	900	1000	1500	2000	2600	Sq. Ft./Story
	5,000	1.011	1.054	1.097	1.140	1.183	-----	-----	-----	-----	-----	-----	-----	-----	-----	5,000
	10,000	.878	.901	.925	.948	.969	.990	1.011	1.054	1.097	1.140	1.183	-----	-----	-----	10,000
	14,000	-----	-----	.870	.886	.904	.921	.937	.969	1.000	1.030	1.060	-----	-----	-----	14,000
	20,000	-----	-----	-----	.843	.854	.866	.878	.901	.924	.948	.969	-----	-----	-----	20,000
	25,000	-----	-----	-----	-----	.831	.841	.850	.868	.887	.906	.925	1.011	-----	-----	25,000
	30,000	-----	-----	-----	-----	-----	-----	.831	.847	.862	.878	.894	.969	-----	-----	30,000
	40,000	-----	-----	-----	-----	-----	-----	-----	.820	.831	.843	.854	.913	-----	-----	40,000
	50,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.831	.877	-----	-----	50,000
	80,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.825	.854	-----	80,000
	100,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.807	.831	.859	100,000
	150,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.781	.799	.819	150,000
	200,000	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	.780	.797	200,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – MEGA WAREHOUSE (DISCOUNT)



GOOD CLASS C



GOOD CLASS C

OCCUPANCY DESCRIPTION: These structures are very large discount stores of warehouse type construction, over 200,000 square feet, with minimal interior partitioning. Low quality structures are unfinished shell types with minimum code throughout. Better qualities have partitioned offices and some finished sales areas for specialty personal products, auto supplies, groceries and fast food/snack bar outlets consistent with the quality.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Furnishings, signs, trade fixtures and checkout or food service equipment.

MEGA WAREHOUSE STORES

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$65.87	Decorative block, tilt-up, open frame, small front, some trim	Painted walls, partitioned departments, partial finished ceilings, vinyl floors	Good fluorescent lighting, outlets and restrooms, good extras	Package A.C.
	Average	48.84	Open steel or wood frame, block or tilt-up, good roof, web joists	Painted walls, some partitions, offices, some vinyl composition and acoustic	Adequate lighting, restrooms, small snack bar or deli/fast food outlet	Forced air
	Low cost	37.14	Large tilt-up, light panelized const., built-up roof, exposed insulation	Painted walls or unfinished, small offices, hardened slab throughout	Adequate lighting and plumbing fixtures, food services, snack bar	Space heaters
S	Average	43.60	Good steel frame, siding and fenestration, bar or web joints	Painted walls, some partitions, offices, some vinyl composition and acoustic	Adequate lighting, restrooms small snack bar or deli/fast food outlet	Forced air
	Low cost	33.80	Rigid steel frame, good metal siding and roof, exposed insulation	Unfinished, small offices, hardened slab throughout, retail, auto, foods	Adequate lighting and plumbing fixtures, food services, snack bar	Space heaters

STORES – MEGA WAREHOUSE (DISCOUNT)

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	ELEVATORS: A small passenger or freight elevator with simple call system. and push button control, and two or three stops, costs \$56,250 to \$77,250. For detailed costs, see Section UIP 8. For dock-height floors, add the cost per square foot to the base cost of the first floor. Elevated on compacted fill: \$3.50 to \$6.98 per square foot. For cut and balance, use proportional cost.	SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		100,000	\$2.05	\$2.51	\$3.07	\$3.76
		125,000	1.98	2.42	2.95	3.60
		150,000	1.93	2.35	2.86	3.48
		200,000	1.85	3.67	4.61	5.81
		250,000	1.78	2.16	2.61	3.16
		300,000	1.74	2.09	2.53	3.05
		400,000	1.66	2.00	2.40	2.89
		500,000	1.61	1.93	2.31	2.77
		600,000	1.56	1.87	2.24	2.68
800,000	1.49	1.78	2.12	2.53		
1,000,000	1.44	1.72	2.04	2.43		

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
		Sq. Ft.		Sq. Ft.		Sq. Ft.
	HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
	Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
	Hot water, baseboard/convactor	11.40	Heat pump system	14.35	Pkg. refriger. . \$1,840 to \$2,350 per ton capacity	
	radiant floor/ceiling	12.40			Evap. coolers . \$250 to \$420 per MCFM capacity	
	Space heaters, with fan	3.01				
	radiant	3.60				
	Steam (including boiler)	9.20				
	without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275		VENTILATION ONLY	
	Wall or floor furnace	2.59	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.77

3	HEIGHT REFINEMENTS					
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.					
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.					
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	10	.957	16	1.085	28	1.340
	11	.979	18	1.127	30	1.383
	12	1.000 (base)	20	1.170	32	1.425
	13	1.021	22	1.213	34	1.468
	14	1.042	24	1.255		
	15	1.064	26	1.298		

4	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq.Ft./Story
		1100	1200	1400	1600	2000	2400	2600	3000	3500	4000	5000	6000	7000	8000	
	70,000	.810	.817	.831	.845	.872	----	----	----	----	----	----	----	----	----	70,000
	80,000	.800	.807	.820	.831	.854	----	----	----	----	----	----	----	----	----	80,000
	90,000	----	.799	.810	.821	.842	.861	----	----	----	----	----	----	----	----	90,000
	100,000	----	.792	.802	.812	.831	.850	.859	----	----	----	----	----	----	----	100,000
	150,000	----	----	----	.785	.799	.812	.819	.831	----	----	----	----	----	----	150,000
	200,000	----	----	----	.767	.780	.792	.797	.807	.819	.831	----	----	----	----	200,000
	250,000	----	----	----	.759	.767	.778	.783	.792	.802	.812	----	----	----	----	250,000
	300,000	----	----	----	----	.760	.767	.771	.780	.791	.799	.815	----	----	----	300,000
	350,000	----	----	----	----	----	.761	.764	.770	.780	.789	.803	.817	----	----	350,000
	400,000	----	----	----	----	----	----	.759	.765	.771	.780	.795	.807	.820	----	400,000
	450,000	----	----	----	----	----	----	----	.760	.766	.773	.787	.799	.810	.821	450,000
	500,000	----	----	----	----	----	----	----	----	.761	.767	.780	.792	.802	.812	500,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – RETAIL



GOOD CLASS C



GOOD CLASS C

OCCUPANCY DESCRIPTION: These buildings are designed for retail sales and display and usually have display and/or decorative fronts. Both one and two story stores are included in the cost sampling. They include stores occupied by secondary department stores with limited merchandise lines, specialty shops and commercial buildings designed for a general occupancy. The stores usually are designed with designated areas for servicing customers, employee operations, merchandise storage and display areas. The

higher quality store has expensive exterior and interior finishes, large display areas, attractive storefronts and special lighting. Lower quality structures have small displays, minimum finish and mechanical items.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Suitable office and restroom facilities.

NOT INCLUDED IN COSTS: Elevators, sprinklers, furnishings or equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A	Excellent	\$187.55	Stone, face brick, best metal, fine display fronts	Best plaster and paneling, highly ornamental, terrazzo, carpet	Special lighting fixtures and effects, deluxe restrooms	Hot and chilled water (zoned)
	Good	140.99	Brick or concrete, good metal or stone display front	Plaster, acoustic plaster or tile, carpet, plain terrazzo, vinyl	Good lighting and outlets, good restrooms and fixtures	Warm and cool air (zoned)
	Average	112.03	Brick or concrete, average metal display fronts	Plaster or drywall, acoustic tile, rubber or vinyl composition tile	Adequate lighting and outlets, small restrooms	Warm and cool air (zoned)
	Low cost	84.77	Block and brick, concrete panels, plain front	Very plain, acoustic tile, asphalt tile	Minimum lighting, outlets and plumbing fixtures	Hot water
B	Excellent	180.31	Stone, face brick, best metal walls, fine display fronts	Best plaster and paneling, highly ornamental, terrazzo, carpet	Special lighting fixtures and effects, deluxe restrooms	Hot and chilled water (zoned)
	Good	134.79	Brick or concrete, good walls, fine display fronts	Plaster, acoustic plaster or tile, carpet, plain terrazzo, vinyl	Good lighting and outlets, good restrooms and fixtures	Warm and cool air (zoned)
	Average	106.76	Brick or concrete, average metal display fronts	Plaster or drywall, acoustic tile, rubber or vinyl composition tile	Adequate lighting and outlets, small restrooms	Warm and cool air (zoned)
	Low cost	80.34	Block and brick, concrete panels, plain front	Very plain, acoustic tile, asphalt tile	Minimum lighting, outlets, and plumbing fixtures	Hot water
C	Excellent	150.54	Face brick, metal, fine ornamentation and displays	Best plaster, ornamental ceilings, paneling, terrazzo, carpet	Special lighting effects, good restrooms and fixtures	Warm and cool air (zoned)
	Good	111.57	Brick, stucco on block, best tilt up, good display front	Plaster, acoustic plaster or tile ceilings, carpet, vinyl tile	Good lighting and outlets, adequate restrooms	Package A.C.
	Average	85.83	Brick, block, tilt up, plain front, some ornamentation	Drywall/plaster, exposed masonry, acoustic tile, vinyl composition	Adequate lighting and outlets, small employees' restrooms	Package A.C.
	Low cost	60.46	Low cost brick, block, tilt up, low cost front	Painted walls, drywall or acoustic tile, asphalt tile	Minimum lighting and employees' restroom	Forced air
D	Excellent	142.76	Good brick or stone veneer, good front and entrance	Plaster, acoustic plaster or good mineral tile, carpet and vinyl	High level lighting and outlets, good restrooms	Warm and cool air (zoned)
	Good	105.23	Good stucco or siding, brick veneer, good display front, ornamentation	Plaster, acoustic plaster or good acoustic tile, vinyl composition	Good lighting and outlets, restrooms, standard fixtures	Package A.C.
	Average	80.71	Stucco or siding, plain front, little ornamentation	Plaster or drywall, acoustic tile, vinyl composition, little trim	Adequate store lighting, restrooms, low cost fixtures	Package A.C.
	Low cost	56.35	Low cost stucco, siding, very plain exterior	Drywall, cheap acoustic tile, asphalt tile, few partitions	Minimum lighting and outlets, minimum plumbing	Forced air
D POLE	Low cost	51.46	Pole frame, metal panels, lined and insulated, small front	Drywall, cheap acoustic tile, vinyl composition, few partitions	Minimum lighting and employees' restroom	Forced air
S	Good	103.39	Sandwich panels, metal & glass, ornamentation, good display front	Acoustic tile, vinyl composition and carpet, some trim	Good lighting and outlets, restrooms, standard fixtures	Package A.C.
	Average	77.94	Good colored panels, little ornamentation, plain front	Acoustic tile, vinyl composition, carpet, interior finish	Adequate store lighting, restrooms, low cost fixtures	Package A.C.
	Low cost	53.30	Metal panels on light frame, finished interior, small front	Acoustic tile, gypsum board wall finish, vinyl composition	Minimum lighting and outlets, minimum plumbing	Forced air

BASEMENTS AND MEZZANINES: Use costs listed under Stores – Department, Page CAL 358, and for classes D, D pole and S, use class C

STORES - RETAIL

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1 ELEVATORS: A small passenger or freight elevator with simple call system and push button control, and two or three stops, costs \$56,250 to \$77,250. For detailed costs, see Section UIP 8. ELEVATOR STOPS: For basement or mezzanine stops, add \$6,350 to \$9,650 per stop.	SPRINKLERS: Apply to area covered by sprinklers.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	1,000	\$4.14	\$5.36	\$6.94	\$8.98	
	2,000	3.73	4.32	5.46	7.87	
	3,000	3.50	4.47	5.71	7.29	
	5,000	3.24	4.11	5.22	6.62	
	10,000	2.91	3.67	4.61	5.81	
	20,000	2.62	3.27	4.08	5.09	
	30,000	2.47	3.06	3.80	4.72	
	50,000	2.28	2.81	3.47	4.28	

2 HEATING AND COOLING					
These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
HEATING ONLY	Sq. Ft.	Costs	HEATING & COOLING	Sq. Ft.	Costs
Electric cable or baseboard . . .	\$ 5.67		Package A.C. (short ductwork)	\$12.55	
Electric wall heaters	2.30		Warm and cool air (zoned)	16.50	
Forced air furnace	6.18		Hot/chilled water (zoned)	25.00	
Hot water, baseboard/convactor radiant floor/ceiling	11.40 12.40		Heat pump system	14.35	
Space heaters, with fan	3.01				
radiant	3.60				
Steam (including boiler)	9.20				
without boiler	7.90		Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		
Wall or floor furnace	2.59				
				VENTILATION ONLY	
				Vent. (blowers/ducts)	\$1.77

3 HEIGHT REFINEMENTS				
MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.				
STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.				
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier	
8	.936	14	1.042	
10	.957	15	1.064	
11	.979	16	1.085	
12	1.000 (base)	18	1.127	
13	1.021	20	1.170	

4	Average Floor Area	AVERAGE PERIMETER													Average Floor Area	
	Sq.Ft./Story	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	Sq.Ft./Story
	1,000	1.183	1.376	1.566	1.753	----	----	----	----	----	----	----	----	----	----	1,000
	2,000	.969	1.079	1.183	1.283	1.376	----	----	----	----	----	----	----	----	----	2,000
	5,000	----	.878	.924	.969	1.011	1.097	1.183	----	----	----	----	----	----	----	5,000
	7,000	----	----	.870	.904	.937	1.000	1.060	1.121	1.183	----	----	----	----	----	7,000
	10,000	----	----	----	.878	.925	.969	1.011	1.054	1.097	1.140	1.183	----	----	----	10,000
	12,000	----	----	----	----	.892	.931	.969	1.005	1.042	1.079	1.117	1.183	----	----	12,000
	14,000	----	----	----	----	.870	.904	.937	.969	1.000	1.030	1.060	1.121	----	----	14,000
	18,000	----	----	----	----	----	.866	.892	.917	.943	.969	.992	1.040	----	----	18,000
	20,000	----	----	----	----	----	.854	.878	.901	.924	.948	.969	1.011	----	----	20,000
	30,000	----	----	----	----	----	----	.831	.847	.862	.878	.894	.925	.969	----	30,000
	40,000	----	----	----	----	----	----	----	.820	.831	.843	.854	.878	.913	----	40,000
	50,000	----	----	----	----	----	----	----	----	----	----	.831	.850	.877	----	50,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – WAREHOUSE SHOWROOM AND FOOD



GOOD CLASS C WAREHOUSE FOOD



LOW COST CLASS S SHOWROOM

OCCUPANCY DESCRIPTION: Warehouse showrooms are typical of the large walk through furniture outlets with a semifinished showroom and large carryout warehouse as one complete facility. Low quality structures are unfinished shell types with minimum code throughout. Better qualities have partitioned offices.

Warehouse food stores are large markets of warehouse construction offering limited perishable products, excluding any built in coolers or refrigerated storage. The better qualities will merge into the

market occupancy, with a number of finished major product departments, but excluding any storage/display walk in boxes. The better qualities will also have partitioned offices. Low quality structures are unfinished shell types with minimum code throughout.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Furnishings, signs, trade fixtures and checkout or food service equipment.

WAREHOUSE SHOWROOM STORES

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$75.73	Brick, block, tilt up, open frame, small front, some trim	Plaster or drywall, partitioned offices, finished showroom ceilings & floors	Good display and office lighting, adequate restrooms	Package A.C.
	Average	56.80	Average block or tilt up, open pipe or wood columns	Painted walls, some partitions, office area, vinyl composition, sales cubicles	Display, warehouse and office lighting, small restrooms	Forced air
	Low cost	43.61	Cheap block or tilt up, light panelized roof	Unfinished, shell type, few partitions, concrete floor, little display finish	Adequate lighting, minimum plumbing	Space heaters
D	Good	69.92	Stucco or siding, open frame, small front, some trim	Plaster or drywall, partitioned offices, finished showroom ceilings & floors	Good display and office lighting, adequate restrooms	Package A.C.
	Average	51.82	Stucco or siding, open frame, plain front	Painted walls, some partitions, office area, vinyl composition, sales cubicles	Display, warehouse and office lighting, small restrooms	Forced air
	Low cost	39.35	Siding on box frame or studs, very plain	Unfinished, shell type, few partitions, concrete floor, little display finish	Adequate lighting, minimum plumbing	Space heaters
D POLE	Low cost	37.46	Metal panels on light pole frame, very plain, some lining	Unfinished, shell type, few partitions, concrete floor, little display finish	Adequate lighting, minimum plumbing	Space heaters
S	Good	68.03	Steel frame, sandwich panels, small front, some trim	Plaster or drywall, partitioned offices, finished showroom ceilings & floors	Good display and office lighting, adequate restrooms	Package A.C.
	Average	51.36	Pre-engineered frame and siding, plain front	Painted walls, some partitions, office area, vinyl composition, sales cubicles	Display, warehouse and office lighting, small restrooms	Forced air
	Low cost	39.84	Single wall on light frame, very plain, some lining	Unfinished, shell type, few partitions, concrete floor, little display finish	Adequate lighting, minimum plumbing	Space heaters

WAREHOUSE FOOD STORES

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Good	\$90.66	Brick, block, tilt up, open frame, plain fronts	Plaster or drywall, partitioned offices, finished ceilings, vinyl composition	Good lighting, plumbing for frozen food, snack bar, etc.	Package A.C.
	Average	68.96	Average block or tilt up, open pipe or wood columns	Painted walls, some partitions, office area, some vinyl composition	Adequate lighting and plumbing, few extra services	Forced air
	Low cost	53.47	Cheap block or tilt up, light panelized roof	Unfinished, shell type, few partitions, sealed concrete floor	Minimum food store lighting and plumbing, small restrooms	Space heaters
D	Good	83.99	Stucco or siding, open frame, plain fronts	Plaster or drywall, partitioned offices, finished ceilings, vinyl composition	Good lighting, plumbing for frozen food, snack bar, etc.	Package A.C.
	Average	63.41	Stucco or siding, open frame, small front	Painted walls, some partitions, office area, some vinyl composition	Adequate lighting and plumbing, few extra services	Forced air
	Low cost	48.86	Siding on box frame or studs, very plain	Unfinished, shell type, few partitions, sealed concrete floor	Minimum food store lighting and plumbing, small restrooms	Space heaters
D POLE	Low cost	44.16	Metal panels on light pole frame, very plain	Unfinished, shell type, few partitions, sealed concrete floor	Minimum food store lighting and plumbing, small restrooms	Space heaters
S	Good	81.49	Steel frame, sandwich panels, plain fronts	Plaster or drywall, partitioned offices, finished ceilings, vinyl composition	Good lighting, plumbing for frozen food, snack bar, etc.	Package A.C.
	Average	60.42	Pre-engineered frame and siding, small front	Painted walls, some partitions, office area, some vinyl composition	Adequate lighting and plumbing, few extra services	Forced air
	Low cost	45.68	Single wall on light frame, very plain	Unfinished, shell type, few partitions, sealed concrete floor	Minimum food store lighting and plumbing, small restrooms	Space heaters

STORES – WAREHOUSE SHOWROOM AND FOOD

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1	DOCK-HEIGHT FLOORS: Add the cost per square foot to the base cost of the first floor. Elevated on compacted fill: \$3.50 to \$6.98 per square foot. For cut and balance, use proportional cost. For loading docks, see Page CAL 398.	SPRINKLERS: Apply to area covered by sprinklers.				
		Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		5,000	\$3.24	\$4.11	\$5.22	\$6.62
		10,000	2.91	3.67	4.61	5.81
		15,000	2.74	3.43	4.30	5.38
		20,000	2.62	3.27	4.08	5.09
		30,000	2.47	3.06	3.80	4.72
		50,000	2.28	2.81	3.47	4.28
		75,000	2.14	2.63	3.23	3.97
		100,000	2.05	2.51	3.07	3.76
150,000	1.93	2.35	2.86	3.48		

2	HEATING AND COOLING					
	These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.					
	HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
	Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
	Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
	Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
	Hot water, baseboard/convactor radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refrig. . \$1,840 to \$2,350 per ton capacity	
	Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
	radiant	3.60				
	Steam (including boiler)	9.20				
without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY		
Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$1.77	

3	HEIGHT REFINEMENTS			
	MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.			
	STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.			
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	10	.957	16	1.085
	11	.979	18	1.127
	12	1.000 (base)	20	1.170
	13	1.021	22	1.213
	14	1.042	24	1.255
	15	1.064	28	1.340

4	Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq.Ft./Story
		300	350	400	450	500	550	600	700	800	900	1000	1200	1500	2000	
	5,000	1.011	1.054	1.097	1.140	1.183	----	----	----	----	----	----	----	----	----	5,000
	10,000	.878	.901	.925	.948	.969	.990	1.011	1.054	1.097	1.140	1.183	----	----	----	10,000
	14,000	----	----	.870	.886	.904	.921	.937	.969	1.000	1.030	1.060	1.121	----	----	14,000
	20,000	----	----	----	.843	.854	.866	.878	.901	.924	.948	.969	1.011	----	----	20,000
	25,000	----	----	----	----	.831	.841	.850	.868	.887	.906	.925	.959	1.011	----	25,000
	30,000	----	----	----	----	----	----	.831	.847	.862	.878	.894	.925	.969	----	30,000
	40,000	----	----	----	----	----	----	----	.820	.831	.843	.854	.878	.913	----	40,000
	50,000	----	----	----	----	----	----	----	----	----	----	.831	.850	.877	----	50,000
	60,000	----	----	----	----	----	----	----	----	----	----	.815	.831	.854	----	60,000
	80,000	----	----	----	----	----	----	----	----	----	----	----	.807	.825	.854	80,000
	100,000	----	----	----	----	----	----	----	----	----	----	----	.792	.807	.831	100,000
	125,000	----	----	----	----	----	----	----	----	----	----	----	----	.792	.812	125,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

STORES – WINERY (TASTING - DISPLAY)



AVERAGE/GOOD CLASS D

OCCUPANCY DESCRIPTION: These generally rural style structures, are designed for the display, tasting and sale of wines directly from the vineyard, with the better shops containing finished display areas for other gift merchandise. Lower quality structures are simple sales barn outlets, while the better quality structures are highly decorative estate type facilities that can include some food services. Built-in refrigerated storage is included consistent with the quality.

The following are not included in the costs: Display cases and coolers, kitchen and bar equipment, other trade fixtures and signs.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit.

NOT INCLUDED IN COSTS: Elevators, sprinklers, furnishings or equipment.

WINERY (TASTING – DISPLAY) SHOPS

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
C	Excellent	\$318.38	Individual design, highly ornamental, ashlar or face brick	Custom ceilings and plaster, inlaid parquet, matched stones and woods	Special lighting, custom fixtures and plumbing, best estate type	Hot and chilled water (zoned)
	Good	188.97	Best masonry, much fine trim and fenestration, heavy roof	High-quality detail, good wall and ceiling finishes, hardwoods, tile	Good lighting and outlets, some custom fixtures, food prep. area	Warm and cool air (zoned)
	Average	115.55	Brick or block, some mansard parapet ornamentation, good front	Acoustic tile, vinyl composition, paneling, some sundry display area	Adequate store lighting, restrooms, service fixtures and storage	Heat pump system
	Low cost	71.81	Minimum block or cheap brick, low-cost entry	Painted exterior walls, minimum finish, sealed concrete, vinyl composition	Minimum lighting and outlets, minimum plumbing, cooler room	Package A.C.
D	Excellent	305.31	Individual design, highly ornamental, stone or face brick veneer	Custom ceilings and plaster inlaid parquet, matched stones and woods	Special lighting, custom fixtures and plumbing, best estate type	Hot and chilled water (zoned)
	Good	178.62	Best siding, EIFS, masonry veneers, much fine trim and fenestration	High-quality detail, good wall and ceiling finishes, hardwood, tile	Good lighting and outlets, some custom fixtures, food prep. area	Warm and cool air (zoned)
	Average	107.68	Stucco or siding, some parapet ornamentation, half-timber framing	Acoustic tile, vinyl composition, paneling, some sundry display area	Adequate store lighting, restrooms, service fixtures and storage	Heat pump system
	Low cost	66.18	Stucco or siding, small entry	Drywall, few partitions, sealed slab, vinyl composition tile	Minimum lighting and outlets, minimum plumbing, cooler room	Package A.C.
D POLE	Low cost	61.83	Pole frame, metal, partial finished interior, small entry	Minimum finish and partitions, sealed concrete, vinyl composition	Minimum lighting and outlets, minimum plumbing, cooler room	Package A.C.
S	Average	103.39	Good colored panels, little ornamentation, good front and trim	Acoustic tile, vinyl composition, paneling, some sundry display area	Adequate store lighting, restrooms, service fixtures and storage	Heat pump system
	Low cost	64.00	Metal panels on light frame, partial finished interior, small entry	Acoustic tile, gypsum board wall finish, vinyl composition and sealed slab	Minimum lighting and outlets, minimum plumbing, cooler room	Package A.C.
CDS	Finished Basement	72.40	Reinforced concrete, plaster or drywall interior	Utility and tasting room finishes	Adequate lighting/plumbing, utility outlets and fixtures	Forced air
	Utility Basement	42.79	Painted interior	Paint only, some partitions	Adequate lighting and outlets, drains	Space heaters

STORES – WINERY (TASTING - DISPLAY)

REFINEMENTS: On this page are adjustments to the base costs from the previous page. Follow steps 1 through 5 to obtain final costs.

1

NOTES: Highly decorative estate type structures can run 100% to 200% more. Wine storage caves will cost \$96.00 to \$220.00 per square foot.

SPRINKLERS: Apply to area covered by sprinklers.

	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	500	\$4.59	\$6.00	\$7.84	\$10.24
FIREPLACES: For each additional opening using the same chimney, add 30% to 50%. Multiples with basements, add 40% to extend the foundation to the basement level. Custom oversized units can run 100% to 200% more.	1,000	4.14	5.36	6.94	8.98
	1,500	3.89	5.01	6.46	8.32
	2,000	3.73	4.78	6.14	7.87
	2,500	3.60	4.61	5.90	7.55
	3,000	3.50	4.47	5.71	7.29
	4,000	3.35	4.26	5.43	6.91
	5,000	3.24	4.11	5.22	6.62

TYPE	COST RANGE
One-story	\$2,630 - \$ 8,510
Two-story	3,370 - 10,195

2

HEATING AND COOLING

These costs are averages of total installed cost of the entire heating or cooling installation including its prorated share of contractors' overhead and profit and architects' fees. If the heating found in the building being assessed is different from that indicated, take the difference between the costs of the two and add to or subtract from the base square foot cost. For other types or system adjustments, see Segregated costs.

HEATING ONLY	Sq. Ft. Costs	HEATING & COOLING	Sq. Ft. Costs	COOLING ONLY	Sq. Ft. Costs
Electric cable or baseboard . . .	\$ 5.67	Package A.C. (short ductwork)	\$12.55	Central refrigeration (zoned)	\$10.45
Electric wall heaters	2.30	Warm and cool air (zoned)	16.50	package (short ductwork)	6.97
Forced air furnace	6.18	Hot/chilled water (zoned)	25.00	Central evaporative	4.31
Hot water, baseboard/convector radiant floor/ceiling	11.40 12.40	Heat pump system	14.35	Pkg. refrig. . \$1,840 to \$2,350 per ton capacity	
Space heaters, with fan	3.01			Evap. coolers . \$250 to \$420 per MCFM capacity	
radiant	3.60				
Steam (including boiler)	9.20				
without boiler	7.90	Small indiv. heat pumps cost \$1,575 to \$2,275 per ton of rated capacity.		VENTILATION ONLY	
Wall or floor furnace	2.59			Vent. (blowers/ducts)	\$1.77

3

HEIGHT REFINEMENTS

MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs.

STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height.

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.915	14	1.042
10	.957	15	1.064
11	.979	16	1.085
12	1.000 (base)	18	1.127
13	1.021	20	1.170

4

Average Floor Area Sq.Ft./Story	AVERAGE PERIMETER														Average Floor Area Sq.Ft./Story
	75	100	125	150	175	200	225	250	275	300	350	400	450	500	
500	1.376	1.566	1.753	----	----	----	----	----	----	----	----	----	----	----	500
1,000	1.079	1.183	1.283	1.376	1.470	1.566	1.660	1.753	----	----	----	----	----	----	1,000
1,500	.969	1.042	1.115	1.183	1.256	1.322	1.384	1.445	1.506	1.566	----	----	----	----	1,500
2,000	.912	.969	1.025	1.079	1.130	1.183	1.233	1.283	1.330	1.376	1.470	----	----	----	2,000
2,500	.878	.924	.969	1.011	1.054	1.097	1.140	1.183	1.227	1.270	1.351	1.420	----	----	2,500
3,000	.854	.892	.931	.969	1.005	1.042	1.079	1.115	1.149	1.183	1.256	1.322	1.380	----	3,000
3,500	----	.873	.907	.941	.973	1.006	1.038	1.070	1.101	1.131	1.194	1.253	1.300	----	3,500
4,000	----	.854	.883	.912	.941	.969	.997	1.025	1.052	1.079	1.131	1.183	1.232	1.280	4,000
5,000	----	----	.854	.878	.901	.924	.947	.969	.990	1.011	1.054	1.097	1.140	1.183	5,000
6,000	----	----	----	----	.873	.892	.912	.931	.950	.969	1.005	1.042	1.079	1.115	6,000
7,000	----	----	----	----	----	.870	.887	.904	.921	.937	.969	1.000	1.030	1.060	7,000
8,000	----	----	----	----	----	----	----	.883	.898	.912	.941	.969	.997	1.025	8,000
9,000	----	----	----	----	----	----	----	----	----	.892	.917	.943	.969	.992	9,000
10,000	----	----	----	----	----	----	----	----	----	.878	.901	.925	.948	.969	10,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.