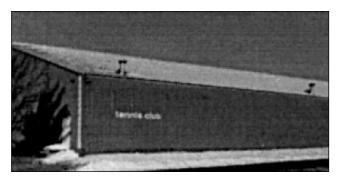
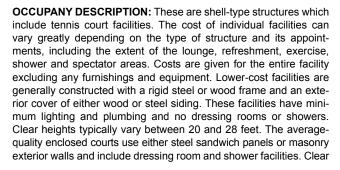
TENNIS CLUBS - INDOOR



LOW-COST CLASS S





LOW-COST/AVERAGE CLASS S

heights typically vary between 24 and 32 feet. The best qualities include high-cost lighting and fixtures, lounge areas, snackbar facilities, a sales area where equipment can be sold, showers, dressing rooms and saunas. Clear heights vary between 30 and 35 feet.

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

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

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Good	\$79.50	Brick or concrete, good entrance	Plaster or drywall, carpeting, good lounge and court areas, gym	Good sports lighting, restrooms, sauna, shower and locker rooms	Package A.C.
С	Average	58.65	Brick or block, concrete panels, some ornamentation	Drywall, concrete courts, snack bar area, exercise facilities	Adequate lighting, plumbing, showers, add for pool or spa	Forced air
	Low cost	41.30	Block or tilt-up	Little or none, no dressing rooms	Minimum lighting and plumbing	Space heaters
	Good	73.55	Brick veneer, best siding or stucco, trim, good entrance	Plaster or drywall, carpeting, good lounge and court areas, gym	Good sports lighting, restrooms, sauna, shower and locker rooms	Package A.C.
D	Average	53.80	Good stucco or siding, some brick or stone trim	Drywall, concrete courts, snack bar area, exercise facilities	Adequate lighting, plumbing, showers, add for pool or spa	Forced air
1	Low cost	37.40	Stucco or siding, very plain	Little or none, no dressing rooms	Minimum lighting and plumbing	Space heaters
DPOLE	Low cost	32.95	Pole frame, metal single wall, very plain	No dressing rooms or showers, few facilities	Minimum lighting and restrooms	Space heaters
	Good	70.45	Insulated metal sandwich panels, steel frame, good entrance	Plaster or drywall, carpeting, good lounge and court areas, gym	Good sports lighting, restrooms, sauna, shower and locker rooms	Package A.C.
S	Average	50.60	Good metal panels and roof, some interior finish, trim	Drywall, concrete courts, snack bar area, exercise facilities	Adequate lighting, plumbing, showers, add for pool or spa	Forced air
	Low cost	34.35	Single wall, very plain	Little or none, no dressing rooms	Minimum lighting and plumbing	Space heaters
CDS	Average mezzanine	16.60	Not included	Open, finished floors and soffit, add for spectator seating	Average lighting, no plumbing	In building cost

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

TENNIS CLUBS - INDOOR

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

1	LOCKERS: per opening,	COST RANGE	SPRINKLER	S: Apply to	o sprinklere	ed area.	
- 1		single tier \$95 - \$195	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		double 65 – 120	5,000	\$2.45	\$3.10	\$3.90	\$4.95
		triple 45 – 100	10,000	2.20	2.75	3.45	4.35
		box type 35 – 65	15,000	2.10	2.60	3.25	4.00
			20,000	2.00	2.45	3.05	3.80
	TENNIS EQUIPMENT: See Se	ection UIP 16 for tennis equipment	30,000	1.85	2.30	2.85	3.55
	and Section UIP 17 for air-supp	ported (bubble) structures.	40,000	1.80	2.20	2.70	3.35
			60,000	1.70	2.05	2.55	3.10
			80,000	1.60	1.95	2.40	2.95
			100,000	1.55	1.90	2.30	2.80
			150,000	1.45	1.75	2.15	2.60

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	\$ 5.80	Package A.C. (short ductwork)	\$11.60	Central refrigeration (zoned)	\$9.20
Electric wall heaters	2.35	Warm and cool air (zoned)	17.55	package (short ductwork)	6.55
Forced air furnace	7.15	Hot/chilled water (zoned)	25.70	Central evaporative	4.00
Hot water, baseboard/convector	10.80	Heat pump system	13.95	Pkg. refrig \$1,375 to \$1,760 per to	n capacity
Space heaters, with fan	2.25			Evap. coolers . \$205 to \$345 per MCFI	M capacity
radiant	2.80				
Steam (including boiler)	9.85				
without boiler	8.65	Small indiv. heat pumps cost \$1,225 to	\$1,650	VENTILATION ONLY	
Wall or floor furnace	2.60	per ton of rated capacity.		Vent. (blowers/ducts)	\$2.00

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
20	.88	28	1.04
22	.92	30	1.08
24	.96	34	1.16
26	1.00 (base)	38	1.24

Average						A	VERAG	E PERIM	IETER						Average
Floor Area Sq.Ft./Story	250	300	350	400	450	500	550	600	700	800	900	1000	1200	1500	Floor Area Sq. Ft./Story
5,000	1.04	1.07	1.09	1.11	1.14	1.16	1.19								5,000
10,000			1.00	1.01	1.02	1.04	1.06	1.07	1.09						10,000
12,000			.99	1.00	1.01	1.02	1.03	1.04	1.06						12,000
15,000				.98	.99	.99	1.00	1.01	1.02	1.04					15,000
20,000						.97	.98	.99	1.00	1.01	1.02	1.04	1.06		20,000
25,000						.95	.96	.97	.98	.99	1.01	1.01	1.03		25,000
30,000						.94	.95	.96	.97	.98	.99	1.00	1.01	1.03	30,000
40,000								.94	.95	.96	.96	.97	.99	1.01	40,000
50,000								.93	.94	.94	.95	.96	.97	.99	50,000
60,000									.93	.93	.94	.94	.96	.97	60,000
70,000										.92	.93	.94	.95	.96	70,000
80,000											.92	.93	.94	.95	80,000

THEATERS - CINEMA

OCCUPANCY DESCRIPTION: These buildings are designed for motion picture presentations. They include little or no stage area, restroom facilities, a projection area and sound system.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Projection area, lighting and sound systems commensurate with the overall quality.

NOT INCLUDED IN COSTS: Seating, projection and snack bar equipment.



FAIR CLASS C

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
Α	Good	\$188.60	Face brick, stone, marble, ornamental entrance and lobby	Cinema stage, ornamental plaster, marble trim, carpeting, good detail	Special lighting and sound system, good plumbing	Warm and cool air (zoned)
	Average	142.10	Face brick, concrete, some ornamentation, good entrance	Small stage, ornamental plaster and trim, carpeting, vinyl composition	Adequate lighting, sound system and plumbing	Warm and cool air (zoned)
В	Good	181.70	Face brick, stone, terrra cotta, ornamental entrance and lobby	Cinema stage, ornamental plaster, marble trim, carpeting, good detail	Special lighting and sound system, good plumbing	Warm and cool air (zoned)
	Average	138.50	Face brick, concrete, some ornamentation, good entrance	Small stage, ornamental plaster and trim, carpeting, vinyl composition	Adequate lighting, sound system and plumbing	Warm and cool air (zoned)
А-В	Average balcony	50.90	Not included	Stepped balcony with plaster soffit	Adequate lighting	In bldg. cost
Α-Β	Storage mezzanine	53.15	Not included	Plaster, unfinished floor, vinyl comp. tile, projection, storage rooms	Adequate lighting and outlets, no plumbing	In bldg. cost
	Excellent	185.40	Top design, best materials, very elaborate entrance	Special finishes, acoustic design, high-cost lobby finishes	High-qual. specialty lighting, best sound throughout, good plumbing	Warm and cool air (zoned)
	Very good	155.50	Face brick, stone, terra cotta, ornamental entrance and lobby	Cinema stages, ornamental interior, carpeting, good main-feature screen	Special lighting and sound systems, good plumbing	Warm and cool air (zoned)
С	Good	125.25	Brick, block, concrete, good decorative front and lobby	Some stage or ornamental plaster, some trim, carpeting, ceramic tile	Good lighting, sound systems and plumbing	Package A.C.
	Average	88.50	Brick, block, concrete, good front and lobby, some trim	Plaster or gypsum, suspended ceiling, stepped floor, carpeted lobby	Adequate lighting, good sound and plumbing	Package A.C.
	Fair	74.85	Brick, block, concrete panels, plain comm. bldg., small entry	Plain construction, small screens, vinyl composition in lobby	Minimum lighting, adequate sound, minimum plumbing	Package A.C.
	Low cost	59.25	Low-cost block, tilt-up, very plain, acoustic sound walls	Painted masonry, very plain, mini- mum multiplex cinema facility	Minimum code, sound per screen	Forced air
	Very good	149.40	Face brick or stone veneer, ornamental entrance and lobby	Cinema stages, ornamental interior, carpeting, good main-feature screen	Special lighting, sound systems, good plumbing	Warm and cool air (zoned)
	Good	119.85	Stucco, some brick or stone trim, decorative front and lobby	Some stage or ornamentation and trim, carpeting, ceramic tile	Good lighting, sound systems and plumbing	Package A.C.
D	Average	84.35	Stucco or siding, good front and lobby, some trim	Drywall, suspended ceiling, carpeted lobby, stepped floor	Adequate lighting, good sound and plumbing	Package A.C.
	Fair	71.20	Siding/stucco, small entrance, good acous./mason. sound walls	Drywall, acoustic tile, asphalt tile lobby, concrete slab, small screens	Minimum lighting, adequate sound, minimum plumbing	Package A.C.
	Low cost	56.10	Low-cost wood or stucco, very plain, acoustic sound walls	Few partitions, very plain, minimum multiplex cinema facility	Minimum code, sound per screen	Forced air
D POLE	Low cost	52.60	Pole frame and truss, metal sid- ing, lined, insulated, acoustic sound walls	Few partitions, very plain, minimum multiplex cinema facility	Minimum code, sound per screen	Forced air
	Good	115.55	Insulated sandwich panels, good storefront and trim	Some decorative and extras, carpet and tile, some small stagefronts	Good lighting, sound system and plumbing	Package A.C.
	Average	80.70	Good metal panels, roof, front and lobby, some trim	Finished interior, suspended ceiling, carpeted lobby, stepped floor	Adequate lighting, good sound and plumbing	Package A.C.
s	Fair	67.90	Metal panels, finished interior, small entrance, good sound walls	Drywall, acoustic tile, vinyl- composition lobby, concrete slab	Minimum lighting, adequate sound, minimum plumbing	Package A.C.
	Low cost	53.10	Single wall, low-cost interior finish and insulation, acoustic walls	Few partitions, very plain, minimum multiplex cinema facility	Minimum code, sound per screen	Forced air
CDS	Average balcony	41.85	Not included	Stepped balcony with drywall soffit	Adequate lighting	In bldg. cost
כטס	Storage mezzanine	46.20	Not included	Drywall, concrete or wood floor, vinyl comp. tile, projection, storage rooms		In bldg. cost

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

For basement theaters, use 85% of the comparable above ground base costs. For utility basements, see Auditorium basements, Page CAL 8.

THEATERS - CINEMA

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

ELEVATORS : A small passenger or freight elevator with simple call system.	SPRINKLEF	RS: Apply to	o sprinklere	ed area.	
and push-button control, and two or three stops, costs \$35,250 to \$55,500.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	5,000	\$2.45	\$3.10	\$3.90	\$4.95
Seating, curtains and snackbar equipment costs are located in Section UIP 15.	10,000	2.20	2.75	3.45	4.35
	15,000	2.10	2.60	3.25	4.00
	20,000	2.00	2.45	3.05	3.80
	30,000	1.85	2.30	2.85	3.55
	40,000	1.80	2.20	2.70	3.35
	60,000	1.70	2.05	2.55	3.10
	80,000	1.60	1.95	2.40	2.95
CANOPIES: Large entrance marquees or canopies generally cost 1/4 to 2/5	100,000	1.55	1.90	2.30	2.80
of the final base cost per square foot, or they may be computed from the	150,000	1.45	1.75	2.15	2.60
Segregated or Unit-in-Place costs.	200,000	1.40	1.70	2.05	2.45

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.	Sq.	. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING Co	osts	COOLING ONLY	Costs
Electric cable or baseboard	\$ 5.55	Package A.C. (short ductwork) \$11	1.15	Central refrigeration (zoned)	\$8.85
Electric wall heaters	2.25	Warm and cool air (zoned) 16	6.80	package (short ductwork)	6.30
Forced air furnace	6.85	Hot/chilled water (zoned) 24	4.60	Central evaporative	3.80
Hot water	10.35	Heat pump system	3.35	Pkg. refrig \$1,375 to \$1,760 per tor	n capacity
Space heaters, with fan	2.20			Evap. coolers . \$205 to \$345 per MCFN	M capacity
radiant	2.65				
Steam (including boiler)	9.45				
without boiler	8.30	Small indiv. heat pumps cost \$1,225 to \$1,6	650	VENTILATION ONLY	
Wall or floor furnace	2.50	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.95

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	.74	28	1.08	
14	.79	30	1.12	
16	.83	34	1.21	
18	.87	38	1.29	
20	.92	42	1.37	
22	.96	46	1.45	
24	1.00 (base)	50	1.53	
26	1.04	54	1.60	

Average Floor Area						A	VERAG	E PERIN	IETER						Average Floor Area
Sq.Ft./Story	150	200	250	300	400	500	600	700	800	900	1000	1200	1400	1600	Sq. Ft./Story
2,000	1.09	1.15	1.21	1.27											2,000
5,000		1.01	1.03	1.06	1.10	1.15	1.20								5,000
10,000				.99	1.01	1.03	1.06	1.08	1.10						10,000
15,000						1.00	1.01	1.03	1.04	1.06					15,000
20,000						.97	.99	1.00	1.01	1.02	1.04	1.06			20,000
25,000						.95	.97	.98	.99	1.00	1.01	1.03			25,000
30,000						.94	.95	.97	.98	.99	1.00	1.01	1.03		30,000
40,000							.94	.95	.96	.96	.97	.99	1.00	1.01	40,000
50,000							.93	.94	.94	.95	.95	.97	.98	.99	50,000
60,000									.93	.94	.94	.96	.97	.98	60,000
70,000										.93	.94	.95	.96	.97	70,000
80,000										.92	.93	.94	.95	.96	80,000

THEATERS - LIVE STAGE

OCCUPANCY DESCRIPTION: These buildings are designed for stage presentations and include a stage that is commensurate with the quality of construction. Restroom and live stage dressing room facilities, entrances and suitable office and cloak room facilities are included.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Projection area, lighting and sound systems commensurate with the overall quality.

NOT INCLUDED IN COSTS: Elevators, sprinklers, movable wings or lights, border lights, projection and snack bar equipment, scenery, curtains or seating. Balcony and basement costs are listed separately.



GOOD CLASS B

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$289.70	Top design, best materials, highly ornamented	Special finishes, acoustical design, major stage presentations	High-quality specialty lighting, best sound, good plumbing	Hot and chilled water (zoned)
Α	Good	212.00	Face brick, stone, marble, ornamented entrance & lobby	Large stage, ornamental plaster, marble trim, carpeting, good detail	Special lighting and sound system, good plumbing	Warm and cool air (zoned)
	Average	160.40	Face brick, concrete, some ornamentation, good entrance	Live stage, ornamental plaster and trim, carpeting, vinyl composition	Adequate lighting, sound system and plumbing	Warm and cool air (zoned)
	Excellent	277.25	Top design, best materials, highly ornamented	Special finishes, acoustical design, major stage presentations	High-quality specialty lighting, best sound, good plumbing	Hot and chilled water (zoned)
В	Good	204.80	Face brick, stone, terra cotta, ornamented entrance and lobby	Large stage, ornamental plaster, marble trim, carpeting, good detail	Special lighting and sound system, good plumbing	Warm and cool air (zoned)
	Average	156.55	Face brick, concrete, some ornamentation, good entrance	Live stage, ornamental plaster and trim, carpeting, vinyl composition	Adequate lighting, sound system and plumbing	Warm and cool air (zoned)
	Finished basement	84.60	Concrete or masonry, partly finished interior	Masonry partitions, utility, repair, storage, and dressing rooms	Adequate lighting and plumbing	Hot water
	Good live- stage balc.	60.20	Not included	Stepped balcony with ornate finishes, hardwood, carpet	Good lighting	In bldg. cost
A-B	Balcony	43.65	Not included	Stepped balcony with plaster soffit	Adequate lighting	In bldg. cost
	Finished mezzanine	65.75	Not included	Plaster, good detail, carpeting, tile, good intermission area, restrooms	Good lighting and plumbing, extra outlets and fixtures	In bldg. cost
	Open mezzanine	31.00	Not included	Finished floors, few partitions	Average lighting, no plumbing	In bldg. cost
	Excellent	223.80	Top design, best materials, highly ornamented	Special finishes, acoustical design, major stage presentations	High-quality specialty lighting, best sound, good plumbing	Warm and cool air (zoned)
С	Good	156.20	Face brick, stone, terra cotta, ornamental entrance and lobby	Large stage, ornamental interior, carpeting, good detail	Special lighting and sound system, good plumbing	Warm and cool air (zoned)
	Average	105.20	Brick, block, concrete, good decorative front and lobby	Live stage, ornamental plaster, some trim, carpeting, vinyl comp.	Adequate lighting, sound system and plumbing	Package A.C.
	Low cost	70.40	Brick, block, concrete, plain front and lobby, some trim	Plaster or gypsum, suspended ceiling, carpeted lobby, small stage	Minimum lighting, adequate sound, minimum plumbing	Forced air
	Good	150.60	Face brick or stone veneer, ornamental entrance and lobby	Large stage, ornamental interior, carpeting, good detail	Special lighting and sound system, good plumbing	Warm and cool air (zoned)
D	Average	100.35	Stucco, some masonry trim, decorative front and lobby	Live stage, some ornamentation and trim, carpeting, vinyl composition	Adequate lighting, sound system and plumbing	Package A.C.
	Low cost	66.40	Siding or stucco, plain entry	Drywall, acoustic tile, small stage	Minimum live stage facility	Forced air
DPOLE	Low cost	61.95	Metal panels on pole frame, finished interior, small entrance	Drywall, acoustic tile, vinyl composition lobby, small stage	Minimum lighting, adequate sound, minimum plumbing	Forced air
s	Average	95.20	Insulated sandwich panels, good storefront and trim	Some decoration and extras, carpet and tile, live stage presentations	Adequate lighting, sound system and plumbing	Package A.C.
	Low cost	62.30	Metal panels, finished interior	Drywall, acoustic tile, small stage	Minimum live stage facility	Forced air
	Basement [†]	61.25	Painted interior	Utility, repair, storage and dressing rooms	Adequate lighting and plumbing	Forced air
	Good live- stage balc.	52.55	Not included	Stepped balcony with ornate finishes, hardwood, carpet	Good lighting	In bldg. cost
CDS	Balcony	36.00	Not included	Stepped balcony with drywall soffit	Adequate lighting	In bldg. cost
CDS	Finished mezzanine	57.85	Not included	Drywall, vinyl, some tile, carpet or vinyl comp. tile, intermission area, restrooms	Adequate lighting and plumbing, extra outlets and fixtures	In bldg. cost
	Open mezzanine	23.65	Not included	Finished floors, few partitions	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 \$4.35 per square foot. **BALCONIES:** Do not use story height or area/perimeter multipliers with balcony cost.

THEATERS - LIVE STAGE

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

ELEVATORS: A small passenger or freight elevator with simple call system	SPRINKLER	RS: Apply to	sprinklere	ed area.	
and push-button control, and two or three stops, costs \$35,250 to \$55,500.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	5,000	\$2.45	\$3.10	\$3.90	\$4.95
ORCHESTRA LIFTS: \$75,000 – \$144,500	10,000	2.20	2.75	3.45	4.35
	15,000	2.10	2.60	3.25	4.00
Seating, curtains and snackbar equipment costs are located in Section UIP 15.	20,000	2.00	2.45	3.05	3.80
	30,000	1.85	2.30	2.85	3.55
	40,000	1.80	2.20	2.70	3.35
CANOPIES: Large entrance marquees or canopies generally cost 1/4 to 2/5	60,000	1.70	2.05	2.55	3.10
of the final base cost per square foot, or they may be computed from the	80,000	1.60	1.95	2.40	2.95
Segregated or Unit-in-Place costs.	100,000	1.55	1.90	2.30	2.80
	150,000	1.45	1.75	2.15	2.60
	200,000	1.40	1.70	2.05	2.45

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.	\$	Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$ 5.55	Package A.C. (short ductwork) \$	\$11.15	Central refrigeration (zoned)	\$8.85
Electric wall heaters	2.25	Warm and cool air (zoned)	16.80	package (short ductwork)	6.30
Forced air furnace	6.85	Hot/chilled water (zoned)	24.60	Central evaporative	3.80
Hot water	10.35	Heat pump system	13.35	Pkg. refrig \$1,375 to \$1,760 per tor	capacity
Space heaters, with fan	2.20			Evap. coolers . \$205 to \$345 per MCFI	of capacity
radiant	2.65				
Steam (including boiler)	9.45				
without boiler	8.30	Small indiv. heat pumps cost \$1,225 to \$	\$1,650	VENTILATION ONLY	
Wall or floor furnace	2.50	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.95

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
12	.74	28	1.08	58	1.68
14	.79	30	1.12	62	1.76
16	.83	34	1.21	66	1.83
18	.87	38	1.29	70	1.91
20	.92	42	1.37	74	1.98
22	.96	46	1.45	78	2.05
24	1.00 (base)	50	1.53	82	2.13
26	1.04	54	1.60	86	2.20

Average Floor Area						Α	VERAGI	E PERIN	IETER						Average Floor Area
Sq.Ft./Story	150	200	250	300	400	500	600	700	800	900	1000	1200	1400	1600	Sq. Ft./Story
2,000	1.09	1.15	1.21	1.27											2,000
5,000		1.01	1.03	1.06	1.10	1.15	1.20								5,000
10,000				.99	1.01	1.03	1.06	1.08	1.10						10,000
15,000						1.00	1.01	1.03	1.04	1.06					15,000
20,000						.97	.99	1.00	1.01	1.02	1.04	1.06			20,000
25,000						.95	.97	.98	.99	1.00	1.01	1.03			25,000
30,000						.94	.95	.97	.98	.99	1.00	1.01	1.03		30,000
40,000							.94	.95	.96	.96	.97	.99	1.00	1.01	40,000
50,000							.93	.94	.94	.95	.95	.97	.98	.99	50,000
60,000									.93	.94	.94	.96	.97	.98	60,000
70,000										.93	.94	.95	.96	.97	70,000
80,000										.92	.93	.94	.95	.96	80,000

VISITOR CENTERS

OCCUPANCY DESCRIPTION: These buildings include the low-quality travelers' aid or rest stop structure to the high-cost center with good orientation, exhibit, meeting, audiovisual theater and limited retail and food service facilities.

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

NOT INCLUDED IN COSTS: Sprinklers and display or food service equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
А-В	Good	\$145.40	Special architecture, good lobby	Good exhibit, theater, cafeteria	Good lighting, plumbing, kitchen	Warm/cool air
A-D	Average	108.00	Brick, concrete, metal and glass, some ornamentation	Adequate exhibit rooms and lobby, theater, limited food service	Fluorescent lighting, good sound, plumbing and restrooms	Heat pump system
	Excellent	143.40	Local stone, face brick, heavy timber or steel frame	Decorative lobby, pavers, carpet, good exhibit rooms or theater	Good display lighting, sound and restrooms, small kitchen	Heat pump system
С	Good	109.25	Face brick, ornamental trim, good entrance, lobby	Good finish and detail, carpeting and tile, display and food service areas	Good fluorescent lighting, good plumbing and restrooms	Package A.C.
	Average	81.25	Brick, block, concrete panels, some ornamentation	Drywall, acoustic tile, hardwood and vinyl composition tile	Adequate lighting and plumbing, large restrooms	Forced air
	Low cost	58.95	Low-cost block, concrete	Painted, some acoustic and asphalt tile	Minimum lighting and plumbing	Space heaters
	Excellent	138.35	Local stone or brick veneer, rustic log, heavy frame	Decorative lobby, pavers, carpet, good exhibit rooms or theater	Good display lighting, sound and restrooms, small kitchen	Heat pump system
D	Good	105.20	Brick veneer or best siding or stucco with trim, good entrance	Good finish and detail, carpet, vinyl, display and food service areas	Good fluorescent lighting, good plumbing and restrooms	Package A.C.
	Average	78.00	Stucco or siding, some brick or stone trim, small entrance	Drywall, acoustic tile, hardwood and vinyl composition	Adequate lighting and plumbing, large restrooms	Forced air
	Low cost	56.35	Low-cost wood or stucco	Drywall, some acoustic and asphalt tile	Minimum lighting and plumbing	Space heaters
Doore	Average	73.40	Pole frame, good metal siding, insulated, small entrance	Drywall, acoustic tile, hardwood and vinyl composition	Adequate lighting and plumbing, large restrooms	Forced air
DPOLE	Low cost	53.05	Metal skin on pole frame and truss, finished interior	Drywall, some acoustic and resilient tile, minimum visitor facility	Minimum lighting and plumbing	Space heaters
S	Low cost	53.30	Steel or aluminum panels	Drywall, some acoustic and asphalt tile, minimum visitor facility	Minimum lighting and plumbing	Space heaters

VISITOR CENTERS

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

ELEVATORS: A small passenger or freight elevator with simple SPRINKLERS: Apply to sprinklered area. call system and push-button control, and two or three stops, Sq. Ft. LOW AVG. GOOD EXCL. costs \$35,250 to \$55,500. 5,000 \$2.45 \$3.10 \$3.90 \$4.95 10,000 2.20 2.75 3.45 4.35 15,000 2.10 3.25 2 60 4 00 20,000 2.00 2.45 3.05 3.80 30,000 1.85 2.30 2.85 3.55 40,000 1.80 2.20 2.70 3.35 60,000 1.70 2.05 2.55 3.10 2.40 80,000 1.60 1.95 2.95 100,000 2.30 2.80 1.55 1.90

9 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	\$4.60	Package A.C. (short ductwork)	\$ 9.20	Central refrigeration (zoned)	\$7.30
Electric wall heaters	1.85	Warm and cool air (zoned)	13.90	package (short ductwork)	5.20
Forced air furnace	5.65	Hot/chilled water (zoned)	20.35	Central evaporative	3.15
Hot water	8.55	Heat pump system	11.05	Pkg. refrig \$1,375 to \$1,760 per to	n capacity
Space heaters, with fan	1.80			Evap. coolers . \$205 to \$345 per MCFI	√ capacity
radiant	2.20				
Steam (including boiler)	7.80				
without boiler	6.85	Small indiv. heat pumps cost \$1,225 to	\$1,650	VENTILATION ONLY	
Wall or floor furnace	2.05	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.60

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.

· · · · · · · · · · · · · · · · · · ·	manapi, sace eeer sy reneming manapi	ioro for arry variation in avorage offer	,g
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.78	18	1.05
10	.83	20	1.11
12	.89	22	1.16
14	.95	24	1.21
16	1.00 (base)	28	1.31

Average Floor Area						AVE	RAGE I	PERIME	TER						Average Floor Area
Sq.Ft./Story	250	300	350	400	450	500	550	600	700	800	900	1000	1200	1500	Sq.Ft./Story
5,000	1.03	1.05	1.07	1.09	1.11	1.13	1.15								5,000
8,000		1.00	1.02	1.03	1.04	1.07	1.07	1.08	1.11						8,000
10,000			1.00	1.01	1.02	1.03	1.04	1.05	1.07	1.09					10,000
12,000			.99	1.00	1.00	1.01	1.02	1.03	1.05	1.06					12,000
15,000				.98	.99	1.00	1.00	1.01	1.02	1.04	1.05				15,000
18,000					.98	.98	.99	1.00	1.01	1.02	1.03	1.04			18,000
20,000						.98	.98	.99	1.00	1.01	1.02	1.03	1.05		20,000
25,000							.97	.98	.98	.99	1.00	1.01	1.03		25,000
30,000								.97	.97	.98	.99	1.00	1.01	1.03	30,000
40,000									.96	.97	.97	.98	.99	1.00	40,000
50,000									.94	.95	.96	.97	.98	.99	50,000
60,000										.94	.95	.96	.97	.98	60,000

VOCATIONAL SCHOOLS

OCCUPANCY DESCRIPTION: This occupancy includes the entire school facility that includes 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 laboritories.

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
Λ	Good	\$144.60	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)
Α	Average	109.30	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)
В	Good	137.15	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)
Ь	Average	104.00	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)
	Classroom Basement	82.85	Reinforced concrete, plaster interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Warm and cool air (zoned)
	Parking Basement	40.15	Unfinished interior	Concrete with hardener, lines and stops	Exposed lighting, drains	Ventilation
А-В	Unfinished Basement	35.20	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None
	Classroom Mezzanine	55.40	Not included	Classroom and office, typical school finishes	Adequate school lighting and plumbing	In bldg. cost
	Open Mezzanine	22.20	Not included	Finished floors and soffit, add for spectator seating	Average lighting, no plumbing	In bldg. cost
	Excellent	143.50	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)
С	Good	108.00	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	80.45	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	61.30	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
	Excellent	139.05	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)
D	Good	104.00	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	77.00	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	58.35	Wood frame, stucco or siding, very plain	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Forced air
	Good	98.90	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)
DPOLE	Average	72.50	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	54.45	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
	Good	99.60	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)
S	Average	73.00	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	54.80	Pre-engineered, some finished interior, insulation	Painted walls, some ceiling and floor finish, sealed concrete	Adequate lighting and outlets, minimum plumbing	Forced air
	Classroom Basement	56.10	Reinforced concrete, plaster or drywall interior	Classrooms, school finishes, some utility and storage	Adequate lighting and plumbing	Forced air
	Parking Basement	27.05	Unfinished interior	Finished ceiling, concrete floor with hardener	Exposed lighting, adequate drains	Ventilation
CDS [†]	Unfinished Basement	22.50	Unfinished interior	Unfinished storage and utility	Minimum lighting,drains	None
	Classroom Mezzanine	43.10	Not included	Classroom and office, typical school finishes	Adequate school lighting and plumbing	In bldg. cost
	Open Mezzanine	17.70	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 \$4.35 per square foot. **MEZZANINES:** Do not use story height or area/perimeter multipliers with mezzanine costs.

VOCATIONAL SCHOOLS

REFINEMENTS: On this page are the means of making major adjustments to the base costs on the previous page. Follow Steps 1 through 5 to attain final costs, adjusted for lump sums, heating and cooling, story height, floor area/perimeter ratio and locality.

SPRINKLERS: Apply to sprinklered area. **ELEVATORS:** A small passenger elevator with simple call system and GOOD EXCL. Sq. Ft. LOW push-button control, four-passenger cab, and two or three stops, costs AVG. \$35,250 to \$55,500. 1,000 \$2.95 \$3.75 \$4.95 \$6.35 2,000 2.85 3.65 4.70 6.05 Vertical wheelchair lifts cost \$8,325 to \$16,100. 5,000 2.45 3.15 4.00 5.05 10,000 2.20 2.80 3.50 4.45 15,000 2.05 2.60 4.10 3.25 20,000 2.00 2.50 3.10 3.90 50,000 1.70 2.15 2.65 3.25 80,000 1.60 1.95 2.40 3.00 100,000 1.55 1.90 2.35 2.90

BALCONIES: Exterior balconies generally cost 1/5 to 1/3 of the final base cost per square foot of the building, or they may be computed from the Segregated or Unit-in-Place costs.

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	\$5.35	Package A.C. (short ductwork)	\$ 8.30	Central refrigeration (zoned)	\$7.15
Electric wall heaters	1.95	Warm and cool air (zoned)	13.80	package (short ductwork)	5.05
Forced air furnace	6.00	Hot/chilled water (zoned)	20.65	Central evaporative	3.10
Hot water	9.35	Heat pump system	11.00	Pkg. refrig \$1,335 to \$1,635 per ton	capacity
Space heaters, with fan	1.95			Evap. coolers . \$200 to \$350 per MCFN	/I capacity
radiant	2.30				
Steam (including boiler)	8.75				
without boiler	7.70	Small indiv. heat pumps cost \$1,100 to	\$1,475	VENTILATION ONLY	
Wall or floor furnace	2.10	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.65

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.

STORT HEIGHT MULTIPLIERS: M	ultiply base cost by following multipl	iers for any variation in average stor	y neight.
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.96	13	1.06
9	.98	14	1.07
10	1.00 (base)	15	1.09
11	1.02	16	1.11
12	1.04		

Average Floor Area						AVE	RAGE I	PERIME	TER						Average Floor Area
Sq. Ft./Story	125	150	175	200	250	300	400	500	600	800	1000	1200	1600	2000	Sq. Ft./Story
1,000	1.13	1.19	1.24	1.30	1.41										1,000
1,500	1.04	1.08	1.12	1.15	1.23										2,000
2,000	1.00	1.02	1.05	1.08	1.13	1.19									3,000
3,000		.97	.99	1.01	1.04	1.08	1.15								4,000
4,000			.96	.97	1.00	1.02	1.08	1.13							5,000
5,000				.95	.97	.99	1.04	1.08	1.12						6,000
6,000				.93	.95	.97	1.01	1.04	1.08						7,000
8,000					.93	.95	.97	1.00	1.02	1.08	1.13				8,000
10,000						.93	.95	.97	.99	1.04	1.08	1.12			9,000
12,000							.93	.96	.97	1.01	1.04	1.08	1.15		10,000
16,000							.92	.93	.94	.97	1.00	1.02	1.08	1.13	12,000
20,000								.92	.93	.95	.97	.99	1.04	1.08	15,000

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).