JAILS - CORRECTIONAL FACILITIES



GOOD CLASS A-B

OCCUPANCY DESCRIPTION: These are buildings used for the detention of people either awaiting trial or for convicted offenders serving sentences for law violations. They include a complete plant, from minimum to maximum security facilities, commensurate with the level. Divided into individual cells, most jails are built of steel frame, reinforced concrete or masonry.



GOOD CLASS C

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Elevators are included in costs designated with and jail handware.

NOT INCLUDED IN COSTS: Sprinklers, parking equipment or balconies.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent		Best brick, stone, architectural concrete, good ornamentation	Plaster, vinyl wall coverings, acoustic tile, terrazzo, vinyl tile	Best lighting and plumbing, maximum security	Hot and chilled water (zoned)
A-B	Good		Concrete, limestone, granite, some ornamentation	Plaster or drywall, ceramic tile, acoustic tile, and asphalt tile	Good lighting, plumbing and security	Warm and cool air (zoned)
	Average		Concrete, limestone, granite, little ornamentation	Painted concrete, some plaster, acoustic tile, and asphalt tile	Adequate lighting and plumbing	Heat pump sys- tem
	Excellent		Face brick, stone, architectural concrete, good ornamentation	Plaster or drywall, ceramic tile, acoustic tile and vinyl	Best lighting and security, good plumbing	Hot and chilled water (zoned)
с	Good		Heavy stone or brick masonry, some ornamentation	Plaster and acoustic tile, vinyl and ceramic floors	Good lighting and plumbing	Warm and cool air (zoned)
	Average	201.00	Block or brick, concrete, some ornamentation on front	Painted walls, few partitions, some acoustic and vinyl composition	Adequate lighting and plumbing	Heat pump sys- tem
	Low cost	150.70	Block, tilt-up, very plain	Unfinished walls and floors, low- cost ceilings	Minimum jail plumbing and lighting, minimum security	Hot water
	Excellent		Best siding, EIFS, face brick or stone veneer, good entrance	Plaster or drywall, ceramic tile, acoustic tile and vinyl	Best lighting and security, good plumbing for detention housing	Warm and cool air (zoned)
D	Good		Brick veneer, best stucco or siding with good trim	Plaster and acoustic tile, vinyl and ceramic floors	Good lighting and plumbing	Heat pump sys- tem
	Average	189.51	Brick veneer, good stucco or siding with brick trim	Drywall, few partitions, slabs, some acoustic and vinyl composition	Adequate lighting and plumbing for camp-dormitory type	Package A.C.
S	Average		Pre-engineered sandwich pan- els, metal liner	Metal walls, acoustic tile or liner panel ceiling, slabs, some asphalt tile	Adequate lighting and plumbing for camp-dormitory type	Package A.C.

JAILS - CORRECTIONAL FACILITIES

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

ELEVATORS: A small passenger elevator with simple call system and push -	SPRINKL	ERS: App	ly to area c	overed by	sprinklers.
button control, four passenger cab and two or three stops, costs \$56,250	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
to \$77,250.	1,000	\$4.59	\$5.97	\$7.78	\$10.12
	2,500	3.98	5.13	6.61	8.51
	5,000	3.57	4.57	5.84	7.46
ELEVATOR STOPS: For basements stops, add \$6,400 to \$9,850 per stop.	10,000	3.20	4.07	5.16	6.55
	15,000	3.01	3.80	4.80	6.06
	20,000	2.88	3.62	4.56	5.74
	30,000	2.70	3.38	4.24	5.32
	50,000	2.49	3.11	3.87	4.83
	75,000	2.34	2.90	3.60	4.47
	100,000	2.24	2.77	3.42	4.23

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	\$11.90	Package A.C. (short ductwork)	\$18.90	Central refrigeration (zoned)	\$14.60
Electric wall heaters	3.55	Warm and cool air (zoned)	30.75	package (short ductwork)	10.30
Forced air furnace	13.30	Hot/chilled water (zoned)	43.00	Central evaporative	5.65
Hot water	20.60	Heat pump system	25.75	Pkg. refrig \$2,030 to \$2,625 per to	n capacity
Space heaters, with fan	4.38			Evap. coolers . \$295 to \$515 per MCF	VI capacity
radiant	5.05				
Steam (including boiler)	19.40				
without boiler	17.80	Small indiv. heat pumps cost \$1,790	to \$2,390	VENTILATION ONLY	
Wall or floor furnace	3.89	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.49

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	.900	13	1.023
9	.928	14	1.046
10	.953	15	1.069
11	.977	16	1.092
12	1.000 (base)		

4

Average Floor Area						A	VERAG	E PERIN	IETER						Average Floor Area
Sq.Ft./Story	125	150	200	250	300	400	500	600	700	800	1000	1200	1400	1600	Sq. Ft./Story
1,000	1.168	1.235	1.364	1.494	1.624	1.884									1,000
3,000		.975	1.018	1.061	1.105	1.191									3,000
5,000			.949	.975	1.000	1.052	1.105	1.155							5,000
8,000				.926	.942	.975	1.007	1.040	1.072	1.105					8,000
10,000				.910	.923	.949	.975	1.000	1.027	1.052	1.105	1.155			10,000
14,000					.900	.920	.938	.956	.975	.993	1.030	1.067	1.105	1.140	14,000
20,000							.910	.923	.936	.949	.975	1.000	1.027	1.052	20,000
25,000							.897	.908	.918	.928	.948	.969	.990	1.011	25,000
30,000								.897	.906	.915	.932	.949	.965	.983	30,000
50,000										.887	.897	.908	.918	.928	50,000
75,000										.873	.879	.885	.892	.900	75,000
100,000										.866	.871	.876	.881	.887	100,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

© 2014 Marshall & Swift/Boeckh, LLC, all rights reserved.

Any reprinting, distribution, modification, reverse engineering, or creation of derivative works, is strictly prohibited.

CAL 154

JAILS - POLICE STATIONS



EXCELLENT CLASS A-B

OCCUPANCY DESCRIPTION: Police stations are basically law enforcement facilities with a limited number of jail cells. Secured entry facilities consistent with the quality are included.



GOOD CLASS C

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

NOT INCLUDED IN COSTS: Sprinklers, equipment, parking or balconies.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$293.01	Best brick, stone, architectur- al concrete, good lobby	Plaster, vinyl wall coverings, acoustic tile, terrazzo, vinyl tile, good detail	Best lighting, plumbing and security, major command center	Hot and chilled water (zoned)
A-B	Good		Best block, concrete, mason- ry and glass, some ornamen- tation	Plaster or drywall, ceramic tile, acoustic tile, carpet and asphalt tile	Good lighting, plumbing, security for law enforcement center	Warm and cool air (zoned)
	Average		Brick, precast concrete, good block, some trim	Plaster or drywall, ceramic tile, acoustic tile, and asphalt tile, good concrete	Good lighting, plumbing, security and sallyport, good holding facility	Warm and cool air (zoned)
	Low cost	138.19	Precast concrete, block, very plain	Painted concrete, some plaster, acoustic tile, and asphalt tile, slab	Adequate lighting and plumb- ing, some extras, holding cells	Heat pump sys- tem
	Excellent	252.16	Face brick, stone, architec- tural concrete, glass, good lobby	Plaster, paneling, carpet and terraz- zo, suspended ceilings, best adminis- trative	Good lighting, plumbing, security for law enforcement center	Warm and cool air (zoned)
с	Good	191.37	Heavy stone or brick mason- ry, some ornamentation	Plaster and acoustic tile, vinyl and ceramic floors, good slab	Good lighting, plumbing, security and sallyport, good holding facility	Heat pump sys- tem
	Average	143.24	Block or brick, concrete, some ornamentation on front	Painted walls, few partitions, some acoustic and vinyl compo- sition, slab	Adequate lighting and plumb- ing, some extras, holding cells	Package A.C.
	Low cost	106.83	Block, tilt-up, very plain	Unfinished walls and floors, low- cost ceilings and floors in public areas	Minimum plumbing and light- ing, minimum administrative and cells	Forced air
	Excellent	244.60	Face brick or stone veneer, metal and glass, good lobby	Plaster, paneling, carpet and terraz- zo, suspended ceilings, best adminis- trative	center	Warm and cool air (zoned)
D	Good	185.53	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, vinyl composition, carpet, good slab	Good lighting, plumbing, security and sallyport, good holding facility	Heat pump sys- tem
	Average	138.73	Wood frame or pipe columns, good stucco or siding with some trim	Painted walls, acoustic tile or dry- wall ceilings, some asphalt tile, slab	Adequate lighting and plumb- ing, some extras, holding cells	Package A.C.

JAILS - POLICE STATIONS

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

ELEVATORS: A small passenger elevator with simple call system and push-	SPRINKL	ERS: Appl	ly to area c	overed by	sprinklers.
button control, four passenger cab and two or three stops, costs \$56,250	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
to \$77,250.	1,000	\$4.59	\$5.97	\$7.78	\$10.12
	2,500	3.98	5.13	6.61	8.51
	5,000	3.57	4.57	5.84	7.46
ELEVATOR STOPS: For basements stops, add \$6,400 to \$9,850 per stop.	10,000	3.20	4.07	5.16	6.55
	15,000	3.01	3.80	4.80	6.06
	20,000	2.88	3.62	4.56	5.74
	30,000	2.70	3.38	4.24	5.32
	50,000	2.49	3.11	3.87	4.83
	75,000	2.34	2.90	3.60	4.47
	100,000	2.24	2.77	3.42	4.23

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	\$11.90	Package A.C. (short ductwork)	\$18.90	Central refrigeration (zoned)	\$14.60
Electric wall heaters	3.55	Warm and cool air (zoned)	30.75	package (short ductwork)	10.30
Forced air furnace	13.30	Hot/chilled water (zoned)	43.00	Central evaporative	5.65
Hot water	20.60	Heat pump system	25.75	Pkg. refrig \$2,030 to \$2,625 per to	n capacity
Space heaters, with fan	4.38			Evap. coolers . \$295 to \$515 per MCF	V capacity
radiant	5.05				
Steam (including boiler)	19.40				
without boiler	17.80	Small indiv. heat pumps cost \$1,790	to \$2,390	VENTILATION ONLY	
Wall or floor furnace	3.89	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.49

3 HEIGHT REFINEMENTS

MULTISTORY BUILDINGS: Up to 30 stories, add .5% (1/2%) for each story over three, above ground, to all base costs; over 30, add .4% (4/10%) for each additional story.

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	.900	13	1.023
9	.928	14	1.046
10	.953	15	1.069
11	.977	16	1.092
12	1.000 (base)		

_	
-	

- [Average Floor Area						A	VERAGI	E PERIN	IETER						Average Floor Area
	Sq.Ft./Story	125	150	200	250	300	400	500	600	700	800	1000	1200	1400	1600	Sq. Ft./Story
	1,000	1.168	1.235	1.364	1.494	1.624	1.884									1,000
	3,000		.975	1.018	1.061	1.105	1.191									3,000
	5,000			.949	.975	1.000	1.052	1.105	1.155							5,000
	8,000				.926	.942	.975	1.007	1.040	1.072	1.105					8,000
	10,000				.910	.923	.949	.975	1.000	1.027	1.052	1.105	1.155			10,000
	14,000					.900	.920	.938	.956	.975	.993	1.030	1.067	1.105	1.140	14,000
	20,000							.910	.923	.936	.949	.975	1.000	1.027	1.052	20,000
	25,000							.897	.908	.918	.928	.948	.969	.990	1.011	25,000
	30,000								.897	.906	.915	.932	.949	.965	.983	30,000
	50,000										.887	.897	.908	.918	.928	50,000
	75,000										.873	.879	.885	.892	.900	75,000
	100,000										.866	.871	.876	.881	.887	100,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

© 2014 Marshall & Swift/Boeckh, LLC, all rights reserved.

Any reprinting, distribution, modification, reverse engineering, or creation of derivative works, is strictly prohibited.

KENNELS



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: This occupancy is predominantly for the boarding of small animals, and has limited examination and treatment facilities. The better qualities include the large animal control facilities and the high cost pet hotels and salons.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit, cages and enclosed runs.

NOT INCLUDED IN COSTS: Sprinklers, canopies or outdoor runs.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$231.80	Face brick, stone or concrete, metal and glass, good lobby and trim	Plaster, carpet, glazed and epoxy finishes, indoor exercise facilities	Good electrical and plumbing, best pet hotel and salon	Warm and cool air (zoned)
	Very good	181.37	Face brick, block or concrete, good entrance and trim	Plaster, ceramic, glazed and epoxy finishes, indoor exercise facilities	Good lighting and plumbing, lab, better animal control facility	Warm and cool air (zoned)
с	Good	131.75	Face brick, ornamental block, good trim and fenestration	Plaster or drywall, vinyl, good masonry kennels, large animal control type facility	Good lighting and plumbing, good locker, shower and restrooms	Package A.C.
	Average	97.84	Brick, partially finished interior, some trim	Plaster or drywall, some vinyl comp., cages & runs, low cost animal control type facility	Adequate lighting and plumbing, few extras, small restroom	Forced air
	Low cost	67.23	Block or tilt up, plain entry	Drywall, small office, grooming, minimum cages and runs	Minimum lighting and plumbing	Wall furnace
	Cheap	47.45	Cheap block	Unfinished, workroom and runs only	Minimum services, good drains	None
	Excellent	220.85	Good masonry veneer, metal and glass, best siding, EIFS, good lobby	Plaster, carpet, glazed and epoxy finishes, indoor exercise facilities	Good electrical and plumbing, best pet hotel and salon	Warm and cool air (zoned)
	Very good	173.11	Face brick or stone veneer, good entrance and trim	Plaster, ceramic, glazed and epoxy finishes, indoor exercise facilities	Good lighting and plumbing, lab, better animal control facility	Warm and cool air (zoned)
D	Good	125.51	Good brick veneer, siding or stucco trim and fenestration	Plaster or drywall, vinyl, good masonry kennels, large animal control type facility	Good lighting and plumbing, good locker, shower, and restrooms	Package A.C.
	Average	93.13	Stucco or siding, brick trim or low cost brick veneer	Plaster or drywall, some vinyl comp., cages & runs, low-cost animal con- trol type facility	Adequate lighting and plumbing, few extras, small restroom	Forced air
	Low cost	63.67	Stucco or siding, finished interior	Drywall, small office, grooming, mininum cages and runs	Minimum lighting and plumbing	Wall furnace
	Cheap	44.77	Plywood or low cost boards	Unfinished, workroom and runs only	Minimum services, good drains	None
	Average	86.19	Pole frame, metal siding, brick trim, insulated, finished interior, lobby	Drywall, some vinyl comp., cages and runs, low-cost animal control facility	Adequate lighting and plumbing, few extras, small restroom	Forced air
D POLE	Low cost	57.60	Pole frame, metal siding, plain entry	Drywall, small office, grooming, minimum cages and runs	Minimum lighting and plumbing	Wall furnace
ľ	Cheap	39.57	Metal on light pole frame	Unfinished, workroom and runs only	Minimum services, good drains	None
	Good	122.39	Insulated sandwich panels, good trim and fenestration	Plaster or drywall, vinyl, good masonry kennels, large animal control type facility	Good lighting and plumbing, good locker, shower, and restrooms	Package A.C.
S	Average	89.96 Insulated sandwich panels or metal with finished interior, lobby		Drywall, vinyl composition, cages and runs, low-cost animal control type type facility	Adequate lighting and plumbing, few extras, small restroom	Forced air
	Low cost	60.68	Metal on light frame, plain entry	Drywall, small office, grooming, minimum cages and runs	Minimum lighting and plumbing	Wall furnace
	Cheap	42.07	Steel siding and frame	Unfinished, workroom and runs only	Minimum services, good drains	None
CDS	Finished basement	57.98	Reinforced concrete or block, slab floor, painted, epoxy walls	Few partitions, some acoustic tile, vinyl comp. tile, average cages included	Adequate lighting and plumbing, work and storage rooms	Space heaters

KENNELS

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

1 KENNEL CAGES AND RUNS: Costs of kennel caging are included in the SPRINKLERS: Apply to area covered by sprinklers. base kennel building costs, with a typical range of \$295 to \$830 each LOW AVG. GOOD EXCL Sq. Ft. Allocated on gross building area is listed below. For outdoor runs, see 1,000 \$4.59 \$5.97 \$7.78 \$10.12 Section UIP 16. 2,000 3.98 5.13 6.61 8.51 5,000 Sq. Ft. 3.57 4.57 5.84 7.46 Costs 10,000 3.20 4.07 5.16 6.55 \$9.20 - \$11.10 15,000 3.01 3.80 4.80 6.06 Good 20,000 2.88 3.62 4.56 5.74 Average 11.00 - 12.90 Low-cost (Minimum) 13.40 - 14.90 30,000 2.70 3.38 4.24 5.32 CANOPIES: LOW AVG. GOOD EXCL. \$27.00 Wood Frame \$33.50 \$41.75 \$52.00 Light false-mansard 14.90 18.40 23.00 28.50 33.00 41.50 52 00 66.00 Steel Frame Light false-mansard 18.20 22.80 28.50 36.25

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	\$11.90	Package A.C. (short ductwork)	\$18.90	Central refrigeration (zoned)	\$14.60
Electric wall heaters	3.55	Warm and cool air (zoned)	30.75	package (short ductwork)	10.30
Forced air furnace	13.30	Hot/chilled water (zoned)	43.00	Central evaporative	5.65
Hot water	20.60	Heat pump system	25.75	Pkg. refrig \$2,030 to \$2,625 per tor	n capacity
Space heaters, with fan	4.38			Evap. coolers . \$295 to \$515 per MCFM	A capacity
radiant	5.05				
Steam (including boiler)	19.40				
without boiler	17.80	Small indiv. heat pumps cost \$1,790 t	o \$2,390	VENTILATION ONLY	
Wall or floor furnace	3.89	per ton of rated capacity.		Vent. (blowers/ducts)	\$3.49

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	.900	14	1.046
9	.928	15	1.069
10	.953	16	1.092
11	.977	18	1.138
12	1.000 (base)	20	1.184
13	1.023		

4	Average Floor Area Sg.Ft./Story	125	150	175	200	250	A\ 300	/ERAGE	E PERIM	ETER 600	700	800	1000	1200	1400	Average Floor Area Sg. Ft./Story
	. ,								500	000	100	000	1000	1200	1400	
	1,000	1.168	1.235	1.299	1.364	1.494	1.624	1.884								1,000
	2,000	1.007	1.040	1.072	1.105	1.168	1.235	1.364								2,000
	5,000			.936	.949	.975	1.000	1.052	1.105	1.155						5,000
	6,000				.932	.952	.975	1.018	1.061	1.105	1.146					6,000
	8,000					.926	.942	.975	1.007	1.040	1.072	1.105				8,000
	10,000					.910	.923	.949	.975	1.000	1.027	1.052	1.105	1.155		10,000
	12,000						.910	.932	.952	.975	.997	1.018	1.061	1.105	1.146	12,000
	14,000						.900	.920	.938	.956	.975	.993	1.030	1.067	1.105	14,000
	18,000							.903	.918	.932	.946	.960	.990	1.018	1.046	18,000
	20,000								.910	.923	.936	.949	.975	1.000	1.027	20,000
	25,000								.897	.908	.918	.928	.948	.969	.990	25,000
	30,000									.897	.906	.915	.932	.949	.965	30,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

LABORATORIES



GOOD CLASS C

OCCUPANCY DESCRIPTION: Laboratories include commercial, research and development facilities exclusive of lab equipment. Interiors will have clean surfaces with good enamels, vinyls and glazed tiles and conductive flooring consistent with the level of quality. Costs include laboratory plumbing, electrical and cabinetry, but not fume hoods. The better qualities are highly ornamented with good offices, testing and research areas and numerous work stations.



AVERAGE CLASS C

Laboratories have higher requirements for heating, cooling and ventilation. Costs are included under complete H.V.A.C. systems. **INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Elevators are included in costs designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, parking, balconies or laboratory equipment.

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$404.94	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	307.49	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet and vinyl, good testing and research	*Good fluorescent fixtures, good lab stations and plumbing	Complete H.V.A.C.
А-В	Average	233.70	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, vinyl comp. tile, carpet, good labs and support	*Adequate lighting and plumbing, some extra features	Complete H.V.A.C.
	Low cost	177.42	Brick, precast concrete, block, little trim	Low-cost finishes, acoustic tile, vinyl comp. tile, plain labs, production and offices	*Minimum lab lighting and plumbing, few extras	Complete H.V.A.C.
A-B	Lab	142.83	Reinforced concrete, plaster	R&D finish, administrative and	Adequate lighting and plumbing	Complete
	basement Excellent	299.73	interior Steel frame, face brick, metal	technical facilities Plaster, glazed finishes, enamel, tile,	for R&D facilities *Best lab stations and plumbing,	H.V.A.C. Complete
	LAGenerit	233.15	panels, tile, highly ornamental	carpet, vinyl, good support facilities	good lighting and outlets	H.V.A.C.
	Good	232.28	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, vinyl or carpet, good research & develop- ment	Good fluorescent fixtures, lab stations and plumbing	Complete H.V.A.C.
С	Average	181.74	Steel frame or bearing walls, brick, block, or concrete, some trim	Plaster or drywall, acoustic tile, vinyl comp. tile, adequate labs, support facilities	Adequate lighting, plumbing and workstations	Complete H.V.A.C.
	Low cost	142.74	Brick, block, tilt-up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall, vinyl comp. tile, plain labs and offices	Minimum lab lighting and plumbing	Complete H.V.A.C.
	Excellent	290.74	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.
D	Good	224.93	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, vinyl or carpet, good research & develop- ment	Good fluorescent fixtures, lab stations and plumbing	Complete H.V.A.C.
	Average	175.75	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl comp. tile, adequate labs, support facilities	Adequate lighting, plumbing and workstations	Complete H.V.A.C.
	Low cost	137.86	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, vinyl comp., plain labs, production and offices	Minimum lab lighting and plumbing	Complete H.V.A.C.
	Good	227.61	Pre-engineered, good sand- wich panels, some brick or stone	Plaster or drywall, acoustic tile, vinyl or carpet, good research & develop- ment	Good fluorescent fixtures, lab stations and plumbing	Complete H.V.A.C.
S	Average	177.89	Pre-engineered, sandwich panels, some trim	Plaster or drywall, acoustic tile, vinyl comp. tile, adequate labs, support facilities	Adequate lighting, plumbing and workstations	Complete H.V.A.C.
	Low cost	139.58	Pre-engineered, finished interior, insulation	Drywall, acoustic tile, vinyl comp., plain labs, production and offices	Minimum lab lighting and plumbing	H.V.A.C.
CDS^{\dagger}	Lab basement	106.86	Reinforced concrete, plaster or drywall interior	R&D finish, administrative and technical facilities	Adequate lighting and plumbing for R&D 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.

LABORATORIES

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

marked with an asterisk (*). If the building under consideration has no ele-	Sq. Ft.	LÓW	AVG.	ered by spri GOOD	EXCL
vators, deduct the following from the base costs so marked. For detailed	5,000	\$2.86	\$3.79	\$5.01	\$6.63
costs, see Section UIP 8.	10,000	2.58	3.38	4.44	5.82
	20,000	2.32	3.02	3.93	5.11
	30,000	2.18	2.83	3.66	4.74
Classes A/B Sq. Ft. Costs	50,000	2.02	2.60	3.35	4.31
Excellent \$3.90	80,000	1.88	2.41	3.08	3.95
Good 3.08	100,000	1.82	2.32	2.96	3.79
Average 2.49	200,000	1.64	2.07	2.63	3.33
Low cost 2.01	400,000	1.47	1.85	2.33	2.92
Classes C/D Sq. Ft. Costs Excellent \$3.90					
ELEVATOR STOPS: For basement or mezzanine elevator stops, add					
\$6,400 to \$9,650 per stop.	DOCK HEIG foot to base			1.64 to \$6.2	20 per s
A small freight elevator with simple call system and push-button control, four-passenger cab and two or three stops, costs \$56,250 to \$77,250.	For loading of	docks, see	Page CAL	398.	
LABORATORY HEATING, COOLING AND AIR CONDITIONING					

The basement costs include low-quality complete H.V.A.C. 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.
Classes A/B	Costs	Classes C/D/S	Costs
Excellent	\$72.00	Excellent	\$60.00
Good	55.00	Good	46.25
Average	42.00	Average	35.00
Low cost	32.00	Low cost	27.00

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	.885	20	1.133
10	.921	22	1.181
12	.960	24	1.231
14	1.000 (base)	26	1.281
16	1.041	28	1.331
18	1.086	30	1.382

Л	
	Γ.

Average Floor Area						A١	/ERAGE	E PERIN	IETER						Average Floor Area
Sq.Ft./Story	300	400	500	600	800	1000	1200	1400	1600	1800	2000	2200	2400	3000	Sq. Ft./Story
5,000	1.083	1.168	1.252												5,000
10,000		.996	1.040	1.083	1.168										10,000
14,000		.945	.977	1.008	1.071	1.132									14,000
20,000			.926	.949	.996	1.040	1.083								20,000
25,000			.907	.924	.959	.996	1.032	1.066							25,000
30,000				.907	.935	.965	.995	1.025							30,000
40,000					.907	.926	.949	.972	.995	1.019					40,000
50,000					.891	.907	.924	.942	.959	.977	.996	1.015			50,000
80,000						.875	.887	.898	.907	.916	.926	.937	.949	.984	80,000
100,000						.863	.872	.882	.891	.899	.907	.916	.924	.950	100,000
200,000							.846	.850	.855	.859	.863	.868	.873	.887	200,000
400,000									.835	.838	.841	.843	.846	.853	400,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

© 2014 Marshall & Swift/Boeckh, LLC, all rights reserved.

Any reprinting, distribution, modification, reverse engineering, or creation of derivative works, is strictly prohibited.

LAUNDRIES/DRY CLEANERS



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: These structures are designed for full-service laundry cleaning, including typical retail storefront and laundry work space commensurate with the quality level. Better qualities have an area for a small amount of in house cleaning.

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

NOT INCLUDED IN COSTS: The sost do not reflect the cost of a dry cleaning plant.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
с	Good	\$110.23	Brick, stucco on block, best tilt- up, good front	Good store finish, carpet or vinyl, standard unfinished work area	Good lighting and outlets, adequate plumbing	Package A.C.
	Average	80.90	Brick, block, tilt-up, plain front, some ornamentation	Acoustic tile, vinyl composition in sales area, sealed concrete	Adequate store lighting, outlets and plumbing	Evaporative cooling
D	Good	103.09	Good stucco or siding, brick veneer, good front, ornamentation	Good store finish, carpet or vinyl, standard unfinished work area	Good lighting and outlets, adequate plumbing	Package A.C.
	Average	74.56	Stucco or siding, plain front	Finished sales, plain work area	Adequate lighting and plumbing	Evap. cooling
S	Average	71.00	Metal panels, little ornamentation, plain front	Acoustic tile, vinyl composition in sales area, sealed concrete	Adequate store lighting, outlets and plumbing	Evaporative cooling
CDS	Storage basement	34.19	Painted interior	Painted ceiling and floors, few partitions	Exposed lighting, few outlets, drains	Space heaters

LAUNDRIES/DRY CLEANERS

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

extends over an entrar	ice.				Sq. Ft.	LOW	AVG.	GOOD	EXCL
	LOW	AVG.	GOOD	EXCL.	1,000	\$4.14	\$5.36	\$6.94	\$8.98
Wood frame	\$25.25	\$31.50	\$39.00	\$48.50	2,000	3.73	4.32	5.46	7.87
Light false-mansard	12.65	15.75	19.50	24.25	3,000	3.50	4.47	5.71	7.29
Steel frame	31.00	39.25	50.00	64.00	4,000	3.35	4.29	5.46	6.91
Light false-mansard	15.50	19.65	25.00	32.00	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	11.40	Heat pump system	. 14.35	Pkg. refrig \$1,840 to \$2,350 per tor	n capacity
radiant floor/ceiling	12.40			Evap. coolers . \$250 to \$420 per MCF	A 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.

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		

Average Floor Area						A	/ERAGE	E PERIN	IETER						Average Floor Area
Sq.Ft./Story	50	75	100	125	150	175	200	225	250	275	300	350	400	500	Sq. Ft./Story
500	1.183	1.376	1.566	1.753											500
1,000	.969	1.079	1.183	1.283	1.376	1.470	1.566	1.660	1.753						1,000
1,500	.892	.969	1.042	1.115	1.183	1.256	1.322	1.384	1.445	1.506	1.566				1,500
2,000	.854	.912	.969	1.025	1.079	1.130	1.183	1.233	1.283	1.330	1.376	1.470			2,000
2,500	.831	.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	.815	.854	.892	.931	.969	1.005	1.042	1.079	1.115	1.149	1.183	1.256	1.322		3,000
3,500			.873	.907	.941	.973	1.006	1.038	1.070	1.101	1.131	1.194	1.253		3,500
4,000			.854	.883	.912	.941	.969	.997	1.025	1.052	1.079	1.131	1.183	1.280	4,000
5,000				.854	.878	.901	.924	.947	.969	.990	1.011	1.054	1.097	1.183	5,000
6,000						.873	.892	.912	.931	.950	.969	1.005	1.042	1.115	6,000
7,000							.870	.887	.904	.921	.937	.969	1.000	1.060	7,000
8,000									.883	.898	.912	.941	.969	1.025	8,000
10,000											.878	.901	.925	.969	10,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

LAUNDROMATS



AVERAGE CLASS C

OCCUPANCY DESCRIPTION: Structures built to hold automatic self-service washers, dryers and dry cleaning machines. Generally, these are large, open buildings with very little interior partitioning and with some countertop area. Floors are commonly resilient tile with ceilings of acoustical tile. Interiors are plain, with either painted plaster or drywall.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Plumbing and electrical facilities to operate washers and dryers.

NOT INCLUDED IN COSTS: Sprinklers, furnishings, laundry or cleaning machinery.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
С	Average	\$83.86	Brick, block, tilt-up, plain storefront	Plaster or drywall, acoustic tile, vinyl composition tile	Adequate lighting, outlets and plumbing	Space heaters
D	Average	76.68	Stucco or siding, plain storefront	Plaster, acoustic tile, little ornamentation, vinyl composition	Necessary electrical and plumbing outlets	Space heaters
D POLE	Average	70.67	Pole frame, metal panels, lined, plain front, little ornamentation	Acoustic tile, vinyl composition	Necessary electrical and plumbing outlets	Space heaters
S	Average	73.32	Insulated panels, little ornamentation, plain front	Acoustic tile, vinyl composition	Necessary electrical and plumbing outlets	Space heaters
CDS	Storage basement	34.19	Painted interior	Painted ceiling and floors, few partitions	Exposed lighting, few outlets, drains	Space heaters

LAUNDROMATS

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

					SPRINKLERS	Apply to are	a covered by	sprinklers.	
CANOPIES: This is the	cantilevered	portion of a b	uilding that		Sq. Ft.	LOW	AVG.	GOOD	EXCL
extends over an entran	ce.				1,000	\$4.14	\$5.36	\$6.94	\$8.98
					2,000	3.73	4.32	5.46	7.87
	LOW	AVG.	GOOD	EXCL.	3,000	3.50	4.47	5.71	7.29
Wood frame	\$25.25	\$31.50	\$39.00	\$48.50	4,000	3.35	4.29	5.46	6.91
Light false-mansard	12.65	15.75	19.50	24.25	5,000	3.24	4.11	5.22	6.62
Steel frame	31.00	39.25	50.00	64.00	10,000	2.91	3.67	4.61	5.81
Light false-mansard	15.50	19.65	25.00	32.00	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

For laundry equipment see UIP 12, page 6.

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) S	\$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	11.40	Heat pump system	14.35	Pkg. refrig \$1,840 to \$2,350 per tor	n capacity
radiant floor/ceiling	12.40			Evap. coolers . \$250 to \$420 per MCFN	A 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

TORY HEIGHT MULTIPLIERS: Mu		, 0 ,	
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

Average Floor Area						A	/ERAGE	E PERIN	IETER						Average Floor Area
Sq.Ft./Story	50	75	100	125	150	175	200	225	250	275	300	350	400	500	Sq. Ft./Story
500	1.183	1.376	1.566	1.753											500
1,000	.969	1.079	1.183	1.283	1.376	1.470	1.566	1.660	1.753						1,000
1,500	.892	.969	1.042	1.115	1.183	1.256	1.322	1.384	1.445	1.506	1.566				1,500
2,000	.854	.912	.969	1.025	1.079	1.130	1.183	1.233	1.283	1.330	1.376	1.470			2,000
2,500	.831	.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	.815	.854	.892	.931	.969	1.005	1.042	1.079	1.115	1.149	1.183	1.256	1.322		3,000
3,500			.873	.907	.941	.973	1.006	1.038	1.070	1.101	1.131	1.194	1.253		3,500
4,000			.854	.883	.912	.941	.969	.997	1.025	1.052	1.079	1.131	1.183	1.280	4,000
5,000				.854	.878	.901	.924	.947	.969	.990	1.011	1.054	1.097	1.183	5,000
6,000						.873	.892	.912	.931	.950	.969	1.005	1.042	1.115	6,000
7,000							.870	.887	.904	.921	.937	.969	1.000	1.060	7,000
8,000									.883	.898	.912	.941	.969	1.025	8,000
10,000											.878	.901	.925	.969	10,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

LIBRARIES - COLLEGE



EXCELLENT CLASS A-B

OCCUPANCY DESCRIPTION: This occupancy refers to structures used to provide books and services to meet the reading and research needs of colleges. Variations can be found in the design due primarily to the amount of service programs and the amount of students and faculty serviced by the center.

Typically, the college libraries can be subdivided into a number of different sections. Each library may not have all segments due to its design characteristics and services offered.

Commonly, there are control areas, staff work areas, reading areas, collection areas and restrooms in most libraries.

SQUARE FOOT COST TABLE



GOOD CLASS C

The better quality libraries may have, in addition to the sections specified, study cubicles, conference/meeting rooms, audiovisual facilities and various processing, cataloging and exhibiting areas for specialized studies, research or special collections.

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

NOT INCLUDED IN COSTS: Cabinets, counters, reader tables, book stacks and seating.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$327.96	Special architecture, metal and glass, marble, face brick, stone	Acoustical design, glazed finishes, enamel, vinyl, good media stations	*High-level lighting, audio- visual wiring, good plumb- ing	Hot and chilled water (zoned)
A-B	Good	256.84	Face brick, metal and glass, lime- stone, architectural concrete	Plaster or drywall, acoustic tile, carpet, vinyl and ceramic tiles	*High-level lighting, audio- visual wiring, good plumb- ing	Hot and chille water (zoned)
	Average	189.25	Brick, concrete or metal panels, formed concrete	Plaster or drywall, acoustic tile, hardwood or vinyl composition	*High-level lighting, TV cir- cuits, adequate plumbing	Warm and coo air (zoned)
	Low cost	147.64	Brick, precast concrete, good block, some trim	Plaster or drywall, acoustic tile, hardwood or vinyl composition	Good lighting, adequate wiring and plumbing	Warm and co air (zoned)
А-В	Finished basement	133.69	Finished interior, good water- proofing	Few partitions, acoustic tile, vinyl composition floors	High-level lighting, ade- quate wiring and plumbing	Warm and co air (zoned)
	Mezzanine	81.14	Not included	Few partitions, plaster soffit	High-level lighting	In bldg. cost
	Excellent	257.19	Special architecture, metal and glass, face brick, stone, concrete	Plaster, glazed finishes, enamel, carpet, vinyl, terrazzo or tile	High-level lighting, audio- visual wiring, good plumb- ing	Hot and chille water (zoned)
с	Good	188.42	Face brick, metal and glass, limestone, architectural concrete	Plaster or drywall, acoustic tile, carpet, vinyl composition	High-level lighting, TV cir- cuits, good plumbing	Warm and coc air (zoned)
Ŭ	Average	146.13	Good brick, ornamental block, metal and glass, some trim	Plaster or drywall, acoustic tile, vinyl composition, some carpet	Good lighting, adequate wiring and plumbing	Heat pump system
	Low cost	107.44	Brick, block, tilt-up panels, little ornamentation	Painted walls, acoustic tile or drywall ceilings, asphalt tile, few extras	Adequate lighting, wiring and plumbing	Package A.C.
	Excellent	250.81	Special architecture, best mason- ry veneer, metal and glass	Plaster, enamel, glazed or vinyl fin- ishes, carpet, vinyl and tile	High-level lighting, audio- visual wiring, good plumb- ing	Hot and chilled water (zoned)
D	Good	182.34	Brick veneer, metal and glass, EIFS, good entrance and orna- mentation	Plaster or drywall, acoustic tile, carpet, vinyl composition	High-level lighting, TV cir- cuits, good plumbing	Warm and coc air (zoned)
	Average	140.62	Brick veneer, good stucco or siding with brick trim	Plaster or drywall, acoustic tile, vinyl composition, some carpet	Good lighting, adequate wiring and plumbing	Heat pump system
	Low cost	102.59	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, few extras	Adequate lighting, wiring and plumbing	Package A.C.
	Good	179.08	Pre-engineered, good sandwich panels, some brick or stone trim	Plaster or drywall, acoustic tile, carpet, vinyl composition	High-level lighting, TV cir- cuits, good plumbing	Warm and cool air (zoned)
S	Average	137.20	Pre-engineered, sandwich pan- els, some ornamentation	Drywall, acoustic tile, vinyl compo- sition, some carpet	Good lighting, adequate wiring and plumbing	Heat pump system
	Low cost	99.32	Pre-engineered, finished interi- or, insulation, little trim	Drywall, acoustic tile ceilings, asphalt tile, few extras	Adequate lighting, wiring and plumbing	Package A.C.
CDS	Finished basement	91.08	Finished interior, good water- proofing	Few partitions, acoustic tile, vinyl composition floors Few partitions, plaster soffit	High-level lighting, ade- quate wiring and plumbing	Forced Air
603	Mezzanine	60.74	Not included	High-level lighting	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.

4,000

5,000

6,000

8,000

LIBRARIES - 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	ELEVATORS:											S: Apply				inklers.
•	push-button co		ur-passe	nger cal	o, and tv	vo or thre	ee stops,	costs		-	. Ft.	LO		AVG.	GOO	
	\$56,250 to \$7	7,250.									,000 .500	\$4.6 4.0		\$5.97 5.13	\$7.74 6.58	
											,000	3.6		4.57	5.81	
	Vertical wheel	chair lifts	s cost \$1	2,700 to	\$24,70	0.				10	,000	3.2		4.08	5.14	6.47
	ELEVATORS:	Building	is whose	base c	osts inc	lude elev	vators ar	e marke	d		,000 ,000	3.0 2.9		3.82 3.64	4.78 4.54	
	with an asteris	sk (*). If i	the build	ling und	er consi	deration	has no	elevators	S,		,000	2.5		3.04	4.54	
	deduct the foll Section UIP 8		m the ba	ase cost	s so mar	Ked. For	detailed	costs se	е	80	,000	2.3	36	2.89	3.55	5 4.35
										100	,000	2.2	28	2.79	3.41	4.17
	Classes A/B		Sc	I. Ft. Co						BAI	CONIE	S. Balcor	iv cost i	nclude 1	he suppo	orting structure
	Excellent Good			\$5.93 3.86								rails. App				
	Average			2.48						0	-		LOV			OD EXCL.
	, s		T. Tursiau			م الم مار		taalka			crete .		\$22.5 20.9			8.00\$49.508.0051.00
	cabinets, cour										d		19.3			4.50 46.00
	LOV	'	AVG.	GOO	0, ,	XCL.	ig chirch	103.		Add	for orna	te finishes	З,			
	\$13.3		518.45	\$25.7		5.50					strades		19.4			9.75 36.75
										Add	tor roots	or awnin	gs 10.5	0 13	.95 1	8.45 24.60
2	HEATING AN		ING													
2	_															
			0					0	0			• •				tors' overhead
	and profit and				0			, 0					,			
	costs of the tv	io and ad	dd to or			e base s	quare to	ot cost. F	or other		,	m adjustr	nents, s	ee Seg	regated	
				Sq.							Ft.					Sq. Ft.
	HEATING ON				sts		IG & CO				osts		NG ON			Costs
	Electric cable			•		0	`	hort duc	,				•	•	oned).	
	Electric wall h				.61			air (zone	,			•	•		twork) .	
	Forced air fur				.75			r (zoned)			.00		•			
	Hot water, bas				.00	Heat pu	mp syste	em		23	.85	0	0 .	, ,		er ton capacity
	Space heaters				.08							Evap.co	olers .	6300 to \$	\$500 per	MCFM capacity
	radiant				.71											
	Steam (includ	0	'		.00											
	without boi				.35			pumps c		0 to \$2,	500		ATION			
	Wall or floor fu	Irnace .		. 3	.73	per ton	of rated	capacity.				Vent. (b	lowers/	ducts)		\$3.31
	· · · · · · · · · · · · · · · · · · ·															
3	HEIGHT REF															
	STORY HEIG							· ·				•		•		
	Ave	rage Wal	II Height	t	Squa	re Foot	Multipli	er	Ave	erage W	/all Hei	ght	Sq	uare F	oot Mult	iplier
		8				.963	3			1:	3				1.055	
		9				.98	1			14	4				1.073	
		10				1.000	0 (base)			1	5				1.092	
		11				1.018	8			10	6				1.110	
		12				1.037	7									
	Average							VERAGE		ETER						Average
4	Average Floor Area						A	VERAGE		EIEK						Average Floor Area
	Sq.Ft./Story	125		175	200	250	300	400	500	600	800	1000	1200	1600	2000	Sq. Ft./Story
		125	150	1/5												
	1.000	1.134		1.244	1.298	1.407										1.000
	1,000	1.134	1.189	1.244												1,000 1,500
	1,500	1.134 1.043	1.189 1.079	1.244 1.116	1.153	1.227										1,500
	1 '	1.134	1.189	1.244				 1.153	 	 	 			 	 	,

10,000 10,000 _____ .927 .949 .968 .991 1.036 1.079 1.123 _____ -----____ ____ ____ 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 16,000 ------------------------------1.079 1.134 20,000 -----.915 .927 .949 .968 .991 1.036 1.079 20,000 ---------------_____ _____ -----

1.024 1.079 1.134

.968

.991 1.036 1.079 1.123 -----

.968 1.006 1.043 1.079 -----

.996

1.024 1.079 1.134

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.

.957

.968

.949

.934

.995

.968

.952

.929

.942

4,000

5,000

6,000

8,000

LIBRARIES - MEDIA CENTER (K-12)



GOOD CLASS A-B

OCCUPANCY DESCRIPTION: This occupancy refers to structures used to provide books and services to meet the reading and media resource needs of elementary and secondary schools. Variations can be found in the design due primarily to the amount of service programs and the amount of students serviced by the center.

Typically, the school libraries can be subdivided into a number of different sections. Each resource center may not have all segments due to its design characteristics and services offered.

Commonly, there are: control, staff work, reading and collection areas. The better quality libraries may have, in addition to the sections specified: study cubicles, conference/meeting rooms, multimedia facilities and various processing, cataloging and exhibiting or presentation areas.

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

NOT INCLUDED IN COSTS: Cabinets, counters, reader tables, book stacks and seating.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Good	\$234.85	Face brick, stone, concrete or metal panels, solar glass	Plaster or drywall, acoustic tile, carpet, vinyl and ceramic tile	High level lighting, audio visual wiring, good plumbing	Hot and chilled water (zoned)
А-В	Average	173.61	rick, concrete or metal panels, Plaster or drywall, acoustic tile, brmed concrete hardwood or carpet		High level lighting, good plumbing and media resource wiring	Warm and cool air (zoned)
	Low cost	136.93	Brick, precast concrete, block, very plain	Low cost finishes, acoustic tile, hardwood or vinyl composition	Good lighting, adequate plumbing and media wiring	Heat pump system
	Excellent	226.25	Steel frame, face brick, metal panels, tile, highly ornamental	Plaster, glazed finishes, enamel, carpet, vinyl and ceramic tile	High level lighting, audio visual wiring, good plumbing	Warm and cool air (zoned)
с	Good	176.57	Steel columns, web or bar joists, ornamental block or face brick	Plaster or drywall, acoustic tile, hardwood or carpet	High level lighting, good plumbing and media resource wiring	Heat pump system
	Average	131.64	Steel frame or bearing walls, brick, block or concrete, some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Good lighting, adequate plumbing and media wiring	Package A.C.
	Low cost	101.62	Brick, block, tilt up panels, bearing walls, wood joists, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Adequate lighting, plumbing and interactive wiring	Forced air
	Excellent	221.55	Steel or wood frame, brick or stone veneer, metal and glass, ornamen- tal	Plaster, enamel, glazed or vinyl finishes, carpet, vinyl and tile	High level lighting, audio-visual wiring, good plumbing	Warm and cool air (zoned)
D	Good	171.20	Steel or Glulam frame and joists, brick veneer, glass, best stucco	Plaster or drywall, acoustic tile, hardwood or carpet	High level lighting, good plumbing and media resource wiring	Heat pump system
	Average	126.22	Wood frame or pipe columns, good stucco or siding with some trim	Plaster or drywall, acoustic tile, vinyl composition or hardwood	Good lighting, adequate plumbing and media wiring	Package A.C.
	Low cost	96.49	Wood frame, stucco or siding, little ornamentation	Drywall, acoustic tile, asphalt tile, linoleum or wood floors	Adequate lighting, plumbing and interactive wiring	Forced air
D POLE	Average	119.35	Pole frame, insulated metal panels, some ornamentation	Drywall, acoustic tile, vinyl com- position	Good lighting, adequate plumbing and media wiring	Package A.C.
DFOLE	Low cost	90.79	Pole frame, good metal panels, fin- ished inside, little trim	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Adequate lighting, plumbing and interactive wiring	Forced air
	Good	169.48	Pre-engineered, good sandwich panels, some brick or stone trim	Drywall, acoustic tile, carpet, vinyl composition	High level lighting, good plumbing and media resource wiring	Heat pump system
s	Average	123.92	Pre-engineered, sandwich panels, some trim	Drywall, acoustic tile, vinyl com- position	Good lighting, adequate plumbing and media wiring	Package A.C.
	Low cost	94.02	Pre-engineered, finished interior, insulation	Painted walls, acoustic tile or drywall ceilings, asphalt tile	Adequate lighting, plumbing and interactive wiring	Forced air

LIBRARIES - MEDIA CENTERS

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

				a a a a				
ELEVATORS: A small passenger push-button control, four-passenger	r elevator wil	th simple call system and	SPRINKLER Sq. Ft.	S: Apply to a	area cove AVG			rs. EXCL.
\$56,250 to \$77,250.	ger oub, und		1.000	\$4.60	\$5.97			\$10.05
\$00,200 to \$11,200.			2,500	4.00	5.13		5.58	8.43
			5,000	3.60	4.57		5.81	7.39
Vertical wheelchair lifts cost \$12,	700 to \$24,7	700.	10,000	3.24	4.08		5.14	6.47
			15,000 20.000	3.04 2.91	3.82 3.64		.78 .54	5.99 5.67
LIBRARY EQUIPMENT: Typical	cost of fixtu	res including bookstacks	50,000	2.53	3.13		8.86	4.76
cabinets, counters, reader tables			80,000	2.36	2.89		3.55	4.35
			100,000	2.28	2.79) 3	3.41	4.17
		EXCL.						
\$13.30 \$18.45 \$	\$25.75 \$	35.50	BALCONIES decking and					structur
			decking and				GOOD	EXCL
			Concrete				\$38.00	\$49.50
			Steel			28.25	38.00	51.00
			Wood		19.35	25.75	34.50	46.00
			Add for ornat		10.15	~	00 75	26.75
			balustrades . Add for roofs			24.10 13.95	29.75 18 45	36.75 24.60
			Add for roofs			24.10 13.95	29.75 18.45	24.60
HEATING AND COOLING			Add for roofs	or awnings	10.50	13.95	18.45	24.60
These costs are averages of tota		ost of the entire heating or cooling ir	Add for roofs	or awnings ling its prora	ted share	13.95 e of cont	18.45	24.60 overhea
These costs are averages of tota and profit and architects' fees. If t	the heating f	ound in the building being assessed	Add for roofs	or awnings ling its prora	ted share	13.95 e of cont he differ	18.45 tractors' ence be	24.60 overhea tween th
These costs are averages of tota and profit and architects' fees. If t	the heating f Ibtract from	5 5	Add for roofs nstallation includ is different from types or system	or awnings ling its prora	ted share	13.95 e of cont he differ	18.45 tractors' ence be	24.60 overhea tween th
These costs are averages of tota and profit and architects' fees. If the costs of the two and add to or su	the heating f ibtract from Sq. Ft.	ound in the building being assessed the base square foot cost. For other	Add for roofs nstallation includ is different from types or system Sq. Ft.	or awnings ling its prora that indicate n adjustment	ted share d, take t s, see S	13.95 e of cont he differ	18.45 tractors' ence be	overhea tween th Sq. F1
These costs are averages of tota and profit and architects' fees. If the costs of the two and add to or su	the heating f Ibtract from Sq. Ft. Costs	ound in the building being assessed the base square foot cost. For other HEATING & COOLING	Add for roofs installation includ is different from types or syster Sq. Ft. Costs	or awnings ling its prora that indicate n adjustment COOLING	ted share ed, take t s, see S ONLY	13.95 e of cont he differ egregate	18.45 tractors' ence be	overhea tween the Sq. Ft Cost
These costs are averages of tota and profit and architects' fees. If the costs of the two and add to or su	the heating f ibtract from Sq. Ft.	ound in the building being assessed the base square foot cost. For other	Add for roofs installation includ is different from types or syster Sq. Ft. Costs	or awnings ling its prora that indicate n adjustment	ted share ed, take t s, see S ONLY	13.95 e of cont he differ egregate	18.45 tractors' ence be	24.60 overhea stween th s. Sq. Fi Cost
These costs are averages of tota and profit and architects' fees. If the costs of the two and add to or su	the heating f Ibtract from Sq. Ft. Costs	ound in the building being assessed the base square foot cost. For other HEATING & COOLING	Add for roofs installation includ is different from types or syster Sq. Ft. Costs \$15.85	or awnings ling its prora that indicate n adjustment COOLING	ted share ed, take t s, see S ONLY igeration	13.95 e of cont he differ egregate (zoned)	18.45 tractors' ence be ed costs	overhea etween the Sq. Fi Cost \$14.4
These costs are averages of tota and profit and architects' fees. If it costs of the two and add to or su HEATING ONLY Electric cable or baseboard	the heating f Ibtract from Sq. Ft. Costs \$12.05	ound in the building being assessed the base square foot cost. For other HEATING & COOLING Package A.C. (short ductwork).	Add for roofs installation includ is different from types or syster Sq. Ft. Costs \$15.85 \$25.00	or awnings ling its prora that indicate n adjustment COOLING Central refr	ted share ed, take t s, see S ONLY igeration (short d	13.95 e of cont he differ egregate (zoned) uctwork)	18.45 iractors' ence be ed costs	24.60 overhea tween the Sq. F Cost \$14.40 10.00
These costs are averages of tota and profit and architects' fees. If it costs of the two and add to or su HEATING ONLY Electric cable or baseboard Electric wall heaters	the heating f ibtract from Sq. Ft. Costs \$12.05 3.61	ound in the building being assessed the base square foot cost. For other HEATING & COOLING Package A.C. (short ductwork) . Warm and cool air (zoned)	Add for roofs installation includ is different from types or system Sq. Ft. Costs \$15.85 \$15.85 \$25.00 39.00	or awnings ling its prora that indicate n adjustmeni COOLING Central refr package	ted share ed, take t s, see S ONLY igeration (short di porative	13.95 e of cont he differ egregate (zoned) uctwork)	18.45 tractors' ence be ed costs	24.60 overhea tween th s. Sq. F Cost \$14.44 10.03 5.36
These costs are averages of tota and profit and architects' fees. If it costs of the two and add to or su HEATING ONLY Electric cable or baseboard Electric wall heaters Forced air furnace Hot water, baseboard/convector	the heating f ibtract from Sq. Ft. Costs \$12.05 3.61 13.75 20.00	ound in the building being assessed the base square foot cost. For other HEATING & COOLING Package A.C. (short ductwork) . Warm and cool air (zoned) Hot/chilled water (zoned)	Add for roofs installation includ is different from types or system Sq. Ft. Costs \$15.85 \$15.85 \$25.00 39.00	or awnings ling its prora that indicate n adjustmeni COOLING Central refr package Central eva Pkg. refrig.	ted share ted share ted, take t s, see S ONLY igeration (short d porative \$2,050	13.95 e of cont he differ egregate (zoned) uctwork)	18.45 tractors' ence be ed costs	24.60 overhea tween th s. Sq. Fr Cost \$14.40 10.09 5.30 n capaci
These costs are averages of tota and profit and architects' fees. If t costs of the two and add to or su HEATING ONLY Electric cable or baseboard Electric wall heaters Forced air furnace Hot water, baseboard/convector Space heaters, with fan	the heating f ubtract from Sq. Ft. Costs \$12.05 3.61 13.75 20.00 4.08	ound in the building being assessed the base square foot cost. For other HEATING & COOLING Package A.C. (short ductwork) . Warm and cool air (zoned) Hot/chilled water (zoned)	Add for roofs installation includ is different from types or system Sq. Ft. Costs \$15.85 \$15.85 \$25.00 39.00	or awnings ling its prora that indicate n adjustmeni COOLING Central refr package Central eva	ted share ted share ted, take t s, see S ONLY igeration (short d porative \$2,050	13.95 e of cont he differ egregate (zoned) uctwork)	18.45 tractors' ence be ed costs	24.60 overhea tween th s. Sq. Fr Cost \$14.40 10.09 5.30 n capaci
These costs are averages of tota and profit and architects' fees. If t costs of the two and add to or su HEATING ONLY Electric cable or baseboard Electric wall heaters Forced air furnace Hot water, baseboard/convector Space heaters, with fan radiant	the heating f bbtract from Sq. Ft. Costs \$12.05 3.61 13.75 20.00 4.08 4.71	ound in the building being assessed the base square foot cost. For other HEATING & COOLING Package A.C. (short ductwork) . Warm and cool air (zoned) Hot/chilled water (zoned)	Add for roofs installation includ is different from types or system Sq. Ft. Costs \$15.85 \$15.85 \$25.00 39.00	or awnings ling its prora that indicate n adjustmeni COOLING Central refr package Central eva Pkg. refrig.	ted share ted share ted, take t s, see S ONLY igeration (short d porative \$2,050	13.95 e of cont he differ egregate (zoned) uctwork)	18.45 tractors' ence be ed costs	24.60 overhea tween th s. Sq. F f Cost \$14.44 10.09 5.33 n capaci
These costs are averages of tota and profit and architects' fees. If t costs of the two and add to or su HEATING ONLY Electric cable or baseboard Electric wall heaters Forced air furnace Hot water, baseboard/convector Space heaters, with fan radiant Steam (including boiler)	the heating f bbtract from Sq. Ft. Costs \$12.05 3.61 13.75 20.00 4.08 4.71 18.00	ound in the building being assessed the base square foot cost. For other HEATING & COOLING Package A.C. (short ductwork) . Warm and cool air (zoned) Hot/chilled water (zoned) Heat pump system	Add for roofs installation includ is different from types or system Sq. Ft. Costs \$15.85 \$15.85 25.00 39.00 23.85	or awnings ting its prora that indicate n adjustment COOLING Central refr package Central eva Pkg. refrig. Evap. cooler	ted share ed, take t s, see S ONLY igeration (short d porative \$2,050 t s . \$300 t	13.95 e of cont he differ egregate (zoned) uctwork) to \$2,60 to \$500 p	18.45 tractors' ence be ed costs	24.60 overhea tween th s. Sq. F f Cost \$14.44 10.09 5.33 n capaci
These costs are averages of tota and profit and architects' fees. If t costs of the two and add to or su HEATING ONLY Electric cable or baseboard Electric wall heaters Forced air furnace Hot water, baseboard/convector Space heaters, with fan radiant	the heating f bbtract from Sq. Ft. Costs \$12.05 3.61 13.75 20.00 4.08 4.71	ound in the building being assessed the base square foot cost. For other HEATING & COOLING Package A.C. (short ductwork) . Warm and cool air (zoned) Hot/chilled water (zoned)	Add for roofs installation includ is different from types or system Sq. Ft. Costs \$15.85 \$15.85 25.00 39.00 23.85	or awnings ling its prora that indicate n adjustmeni COOLING Central refr package Central eva Pkg. refrig.	ted share ed, take t s, see S ONLY igeration (short d porative \$2,050 t s . \$300 t ON ONL	13.95 e of cont he differ egregate (zoned) uctwork) to \$2,60 to \$500 p	18.45 tractors' ence be ed costs)) 0 per ton per MCFI	24.60 overhe tween t 5. Sq. F Cost \$14.4 10.0 5.3 n capaci

3 HEIGHT REFINEMENTS

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						A	VERAGI	E PERIN	IETER						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	1.134	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.

LIBRARIES - PUBLIC



EXCELLENT CLASS C

OCCUPANCY DESCRIPTION: This occupancy refers to structures used to provide books and services to meet the reading and research needs of a community. Variations can be found in the design, due primarily to the amount of service programs and the amount of people serviced by the library.

Typically, libraries can be subdivided into a number of different sections. Each library may not have all segments due to its design characteristics and services offered.

Commonly there are: control areas, staff work areas, reading areas, collection areas and restrooms in most libraries. The better quality

libraries may have, in addition to the sections specified, study cubicles, conference/meeting rooms, audiovisual facilities and various processing, cataloging and exhibiting areas.

INCLUDED IN COSTS: Architects' fees and contractors' overhead and profit. Elevators are included in costs designated with an asterisk (*).

NOT INCLUDED IN COSTS: Sprinklers, parking or balconies.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
Α	Good	\$277.58	Special architecture, metal and glass, marble, face brick, stone	Plaster, carpeting, vinyl, typical large city library	*High level lighting, audio visu- al wiring, good plumbing	Hot and chilled water (zoned)
~	Average	205.46	Face brick, metal and glass, lime- stone, architectural concrete	Plaster or drywall, terrazzo and vinyl tile, typical main library	*High level lighting, TV circuits, adequate plumbing	Warm and cool air (zoned)
в	Good	268.48	Special architecture, metal and glass, face brick, stone, concrete	Plaster, carpeting, vinyl, typical large city library	*High level lighting, audio visu- al wiring, good plumbing	Hot and chilled water (zoned)
В	Average	198.44	Face brick, metal and glass, lime- stone, architectural concrete	Plaster or drywall, terrazzo and vinyl tile, typical main library	*High level lighting, TV circuits, adequate plumbing	Warm and cool air (zoned)
A-B	Finished Basement	142.57	Finished interior, good waterproofing	Few partitions, acoustic tile, vinyl composition floors	High level lighting, adequate plumbing	Warm and cool air (zoned)
	Mezzanine	80.48	Not included	Few partitions, plaster soffit	High level lighting	In bldg. cost
	Excellent	325.72	Special architecture, metal and glass, face brick, stone, concrete	Best plaster, carpeting, vinyl, best large city library, sustain- able construction	High level lighting, best cabling systems, good plumbing	Hot and chilled water (zoned)
	Very good	258.31	Good architecture, metal and glass, face brick, stone, concrete	Best plaster, carpeting, vinyl, typical large city library	High level lighting, audio visual wiring, good plumbing	Hot and chilled water (zoned)
С	Good	194.56	Face brick, metal and glass, lime- stone, architectural concrete	Plaster or drywall, vinyl compo- sition, typical small city	High level lighting, good plumbing	Warm and cool air (zoned)
			Good brick, ornamental block, metal and glass, some trim	Plaster or drywall, vinyl compo- sition, typical neighborhood branch	Good lighting, adequate plumbing	Package A.C.
	Low cost	108.21	Brick, block, tilt up, little ornamen- tation	Painted masonry, few partitions, acoustic tile, asphalt tile	Adequate lighting and plumb- ing	Forced air
	Excellent	305.51	Special architecture, best masonry veneer, metal and glass	Best plaster, carpeting, vinyl, best large city library, sustain- able construction	High level lighting, best cabling systems, good plumbing	Warm and cool air (zoned)
	Very good	239.08	Good architecture, best masonry veneer, metal and glass	Best plaster, carpeting, vinyl, typical large city library	High level lighting, audio visual wiring, good plumbing	Warm and cool air (zoned)
D	Good	188.57	Brick veneer, metal and glass, EIFS, good entrance and ornamen- tation	Plaster or drywall, vinyl compo- sition, typical branch library	High level lighting, good plumbing	Warm and cool air (zoned)
	Average	138.45	Brick veneer, good stucco or siding with brick trim	Drywall, acoustic and asphalt tile, typical small branch library	Good lighting, adequate plumbing	Package A.C.
	Low cost	103.95	Stucco or siding, little trim, residen- tial type windows	Drywall, asphalt tile, few extras	Adequate lighting and plumb- ing	Forced air
D POLE	Low cost	93.68	Pole frame, metal siding, fully lined and insulated	Drywall, asphalt tile, few extras	Adequate lighting and plumb- ing	Forced air
	Good	179.90	Sandwich panels, brick veneer and good fenestration	Drywall or plaster walls and ceil- ing, branch library	High level lighting, good plumbing	Warm and cool air (zoned)
S	Average	131.79	Metal panels, gypsum or metal interior, insulated, some trim	Drywall, acoustic and asphalt tile, typical small branch library	Good lighting, adequate plumbing	Package A.C.
	Low cost			Drywall, asphalt tile, few extras	Adequate lighting and plumb- ing	Forced air
000+	Finished Basement	90.73	Finished interior, good waterproofing	Few partitions, acoustic tile, vinyl composition tile	High level lighting, adequate plumbing	Forced air
CDS [†]	Mezzanine	59.76	Not included	Few partitions, acoustic tile	High level lighting	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.

LIBRARIES - PUBLIC

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

Г	ELEVATORS:	Building	whose	hase co	ete inclu		tors are	marked		SDDII		S: Apply	to area	cover	d by en	rinklo	-e
	with an asteris										. Ft.	LOW	AV		GOOD		XCL.
	deduct the foll										.000	\$4.59	\$5.9		\$7.78		0.12
	For detailed co				0 00 110		n aotaire				.500	3.98	+ -	13	6.61	*	3.51
	· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·		000000	••							000	3.57		57	5.84		7.46
											000	3.20	4.0	07	5.16	(6.55
	Classes A/B	Sc	. Ft.							15,	,000	3.01	3.8	80	4.80	(6.06
	- ·		osts								,000	2.88		62	4.56		5.74
	Good		\$3.95								,000	2.70		38	4.24 3.87		5.32
	Average		2.30								,000	2.49	3.	4.83			
						AO 400 1	\$0.050				,000	2.34	2.9	4.47			
	ELEVATOR ST	IOPS: FO	or basem	ients sto	ps, add	\$6,400 to	5 \$9,850	per stop	•		,000	2.24		77	3.42		4.23
I										BALCONIES: Balcony cost include the supporting s decking and rails. Apply costs to the balcony area.							structu
I	A small passer									deckir	ng and	rails. App					
I	trol, four-passe	enger cab	, and two	o or three	e stops,	costs \$5	6,250 to	\$77,250.		-			LOW		G. GO		EXCL
I											ete		\$21.90		.25 \$3		\$47.25
I										Steel			20.60	0 28	.00 3	8.00	52.00
I													17.80	0 23	.80 3	1.50	42.25
I												e finishes,	19.00	n 22	.40 2	8.50	35.25
I											rades .					8.50 8.50	
l										Auu Iu	10015	or awnings	s 10.50	0 13	.90 1	5.00	24.60
L r																	
	HEATING ANI	D COOL	NG														
	These costs a	re avera	nes of to	tal insta	lled cos	t of the e	entire he	ating or o	coolina in	stallatio	n inclu	dina its p	rorated a	share c	of contra	ctors'	overhe
l	and profit and																
l					0								,				
L	costs of the tw	io and ad	id to or s			e base s	quare to	ot cost. I	-or other			n adjustr	nents, s	ee Seg	regated	COSIS	
L				Sq.	Ft.					Sq.	Ft.						Sq. I
l	HEATING ON	LY		Co	sts	HEATIN	IG & CO	OLING		Cos	sts	COOLIN	IG ONL	Y			Cos
l	Electric cable	or baseb	oard	\$11	.90	Package	e A.C. (s	short duc	twork)	\$18.	90	Central	refrigera	ation (z	oned) .		\$14.6
L	Electric wall he	eaters		. 3	.55	0			d)				age (sho	-			10.3
l	Forced air furr)			Central	•				5.6
l												Central	evapula	uve .			J.(
	Listunator													020 40	¢0.00E		
Т	Hot water					neat pu	imp syst	em		25.	75	Pkg. ref	•				
	Space heaters	s, with far	۱	4	.38	neat pu	imp syst	em		25.	75	Pkg. refi Evap. co	•				
		s, with far	۱	4		neat pu	imp syst	em		25.	75	0	•				
	Space heaters	s, with far	۱	4 5	.38 .05	neat pu	imp syst	em		25.	75	0	•				
	Space heaters radiant	s, with far	1 	4 5 19	.38 .05 .40							0	olers . \$	295 to \$			
	Space heaters radiant Steam (includi without boil	s, with far)	4 5 19 17	.38 .05 .40 .80	Small in	ndiv. hea	t pumps	cost \$1,7			Evap. co	ATION	295 to S	515 per	MCF	A capa
	Space heaters radiant Steam (includi	s, with far)	4 5 19 17	.38 .05 .40	Small in	ndiv. hea		cost \$1,7			Evap. co	ATION	295 to S	515 per	MCF	A capa
	Space heaters radiant Steam (includi without boil	s, with fai	1 	4 5 19 17	.38 .05 .40 .80	Small in	ndiv. hea	t pumps	cost \$1,7			Evap. co	ATION	295 to S	515 per	MCF	л capa
	Space heaters radiant Steam (includi without boil Wall or floor fu	s, with fai))	4 5 19 17 3	.38 .05 .40 .80 .89	Small in per ton	ndiv. hea	t pumps capacity.	cost \$1,7	90 to \$2	2,390	Evap. co VENTIL Vent. (b	ATION	295 to S	515 per	MCF	л capa
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY	s, with far))))) S JGS: Ac	4 5 19 17 3 dd .5% (.38 .05 .40 .80 .89 1/2%) fo	Small in per ton	of rated	t pumps capacity.	cost \$1,7	90 to \$2 	1.,390	Evap. cc VENTIL Vent. (b costs.	ATION	ONLY	515 per	MCF	A capa
	Space heaters radiant Steam (includi without boil Wall or floor fu	s, with far))))) S JGS: Ac	4 5 19 17 3 dd .5% (.38 .05 .40 .80 .89 1/2%) fo	Small in per ton	of rated	t pumps capacity.	cost \$1,7	90 to \$2 	1.,390	Evap. cc VENTIL Vent. (b costs.	ATION	ONLY	515 per	MCF	A capa
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGH	s, with far ing boiler ler urnace NEMEN BUILDII HT MUL))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton	tory over	t pumps capacity. r three, a g multipli	cost \$1,7 bove grou	90 to \$2 ind, to a vy variat	2,390 Ill base ion in a	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	515 per	MCF	4 capa \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGH	s, with far))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by ire Foot	tory over following	t pumps capacity. r three, a g multipli	cost \$1,7 bove grou	90 to \$2 Ind, to a Ind variat	1,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	6515 per	MCF	4 capa \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGH	s, with far ing boiler ler Innace . NEMENT BUILDI HT MUL rage Wal))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by re Foot	ndiv. hea of rated tory over following Multipli 0	t pumps capacity. r three, a g multipli	cost \$1,7 bove grou	90 to \$2 Ind, to a Ind variat rage W 13	1,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	5515 per 000t Mul 1.023	MCF	4 capa \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGH	s, with far))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by ire Foot	ndiv. hea of rated tory over following Multipli 0	t pumps capacity. r three, a g multipli	cost \$1,7 bove grou	90 to \$2 Ind, to a Ind variat	1,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	6515 per	MCF	4 capa \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGH	s, with far ing boiler ler Innace . NEMENT BUILDI HT MUL rage Wal))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by re Foot	tory over following Multipli	t pumps capacity. r three, a g multipli	cost \$1,7 bove grou	90 to \$2 Ind, to a Ind variat rage W 13	all base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	5515 per 000t Mul 1.023	MCF	4 capad \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGH	s, with far ing boiler ler Irnace . NEMENT BUILDII HT MUL rage Wall 8 9 10))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by re Foot .90 .92 .95	tory over following Multipli 0 8	t pumps capacity. r three, a g multipli	cost \$1,7 bove grou	90 to \$2 Ind, to a Ind variat rage W 13 14 15	2,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	oot Mul 1.023 1.046 1.069	MCF	4 capad \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGH	s, with far ing boiler ler Innace . Internation NEMENT BUILDII HT MULT rage Wall 8 9 10 11))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by re Foot .90 .92 .95 .97	tory over following Multipli 0 8 3 7	t pumps capacity r three, a g multipli	cost \$1,7 bove grou	90 to \$2 und, to a ny variat rage W 13 14	2,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	oot Mul 1.023 1.046	MCF	4 capa \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGH	s, with far ing boiler ler Irnace . NEMENT BUILDII HT MUL rage Wall 8 9 10))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by re Foot .90 .92 .95 .97	tory over following Multipli 0 8	t pumps capacity r three, a g multipli	cost \$1,7 bove grou	90 to \$2 Ind, to a Ind variat rage W 13 14 15	2,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	oot Mul 1.023 1.046 1.069	MCF	4 capa \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIG	s, with far ing boiler ler Innace . Internation NEMENT BUILDII HT MULT rage Wall 8 9 10 11))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by re Foot .90 .92 .95 .97	tory over following Multipli 0 8 3 7	t pumps capacity r three, a g multipli	cost \$1,7 bove grou	90 to \$2 Ind, to a Ind variat rage W 13 14 15	2,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	oot Mul 1.023 1.046 1.069	MCF	4 capa \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGH	s, with far ing boiler ler Innace . Internation NEMENT BUILDII HT MULT rage Wall 8 9 10 11))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by re Foot .90 .92 .95 .97	tory over following Multipli 0 8 3 7	t pumps capacity r three, a g multipli	cost \$1,7 bove grou	90 to \$2 Ind, to a Ind variat rage W 13 14 15	2,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	oot Mul 1.023 1.046 1.069	MCF	4 capa \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGI Aver	s, with far ing boiler ler Innace . Internation NEMENT BUILDII HT MULT rage Wall 8 9 10 11))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by re Foot .90 .92 .95 .97	tory over following Multipli 0 8 3 7 0 (base)	t pumps capacity r three, a g multipli er	cost \$1,7 bove grou ers for an Ave	90 to \$2 Ind, to a ny variat rage W 13 14 15 16	2,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	oot Mul 1.023 1.046 1.069	tiplie	\$3.4 \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGI Aver	s, with far ing boiler ler Innace . Internation NEMENT BUILDII HT MULT rage Wall 8 9 10 11))) S NGS: Ac	4 5 19 17 3 dd .5% (5: Multip	.38 .05 .40 .80 .89 1/2%) fo	Small in per ton r each s cost by re Foot .90 .92 .95 .97	tory over following Multipli 0 8 3 7 0 (base)	t pumps capacity r three, a g multipli er	cost \$1,7 bove grou	90 to \$2 Ind, to a ny variat rage W 13 14 15 16	2,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	oot Mul 1.023 1.046 1.069	tiplier	\$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGI Aver	s, with far ing boiler ler INEMENT BUILDI HT MUL ⁻ rage Wal 8 9 10 11 12) S NGS: Ac TIPLIER I Height	4 5 19 17 3 dd .5% (S: Multip	.38 .05 .40 .80 .89 1/2%) fo bly base Squa	Small in per ton r each s cost by re Foot .90 .92 .95 .97 1.00	ndiv. hea of rated tory over followin; Multipli 0 8 3 7 0 (base)	t pumps capacity r three, a g multipli er	cost \$1,7 bove grou ers for an Ave E PERIMI	90 to \$2 ind, to a iy variat rage W 13 14 15 16 ETER	all base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s ght	ATION Covers/cov	ONLY ducts) ght. uare F	bot Mul 1.023 1.046 1.069 1.092	tiplier	\$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGI Aver Floor Area Sq.Ft./Story	s, with far ing boiler ler INEMENT BUILDI HT MUL rage Wal 8 9 10 11 12 125	1) NGS: Ac TIPLIER I Height	4 19 17 3 dd .5% (S: Multip	38 .05 .40 .80 .89 1/2%) fo bly base Squa	Small in per ton r each s cost by re Foot .90 .92 .95 .97 1.00 300	ndiv. hea of rated tory over following Multipli 0 8 3 7 0 (base) 0 A 400	t pumps capacity r three, a g multipli er) VERAG	cost \$1,7 bove grou ers for an Ave	90 to \$2 Ind, to a ny variat rage W 13 14 15 16	2,390 Ill base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s	ATION lowers/c	ONLY ducts)	oot Mul 1.023 1.046 1.092 1.092	tiplier	\$3.4 \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGI Aver Floor Area Sq.Ft./Story 1,000	s, with far ing boiler ler INEMENT BUILDI HT MUL ⁻ rage Wal 8 9 10 11 12	1) TS NGS: Ac TIPLIER I Height I Height 1 Height 1.235	4 5 19 17 3 dd .5% (S: Multip S: Multip 200 1.364	.38 .05 .40 .80 .89 1/2%) fo bly base Squa 250 1.494	Small in per ton r each s cost by re Foot .90 .92 .95 .97 1.00 	div. hea of rated tory over following Multipli 0 8 3 7 0 (base) 0 (base) A 400 1.884	t pumps capacity r three, a g multipli er	cost \$1,7 bove grou ers for an Ave E PERIMI	90 to \$2 ind, to a iy variat rage W 13 14 15 16 ETER	all base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s ght	ATION Covers/cov	ONLY ducts) ght. uare F	bot Mul 1.023 1.046 1.069 1.092	tiplier	\$3.4 \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGI Aver Floor Area Sq.Ft./Story	s, with far ing boiler ler INEMENT BUILDI HT MUL rage Wal 8 9 10 11 12 125	1) NGS: Ac TIPLIER I Height	4 19 17 3 dd .5% (S: Multip	38 .05 .40 .80 .89 1/2%) fo bly base Squa	Small in per ton r each s cost by re Foot .90 .92 .95 .97 1.00 300	ndiv. hea of rated tory over following Multipli 0 8 3 7 0 (base) 0 A 400	t pumps capacity r three, a g multipli er) VERAG	cost \$1,7 bove grou ers for an Ave E PERIMI	90 to \$2 ind, to a iy variat rage W 13 14 15 16 ETER	all base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s ght	ATION Covers/cov	ONLY ducts) ght. uare F	oot Mul 1.023 1.046 1.092 1.092	tiplier	\$3.4 \$3.4
	Space heaters radiant Steam (includi without boil Wall or floor fu HEIGHT REFI MULTISTORY STORY HEIGI Aver Floor Area Sq.Ft./Story 1,000	s, with far ing boiler ler INEMENT BUILDII HT MUL rage Wal 8 9 10 11 12 125 1.168	1) TS NGS: Ac TIPLIER I Height I Height 1 Height 1.235	4 5 19 17 3 dd .5% (S: Multip S: Multip 200 1.364	.38 .05 .40 .80 .89 1/2%) fo bly base Squa 250 1.494	Small in per ton r each s cost by re Foot .90 .92 .95 .97 1.00 300 1.624	div. hea of rated tory over following Multipli 0 8 3 7 0 (base) 0 (base) A 400 1.884	t pumps capacity r three, a g multipli er) VERAG	cost \$1,7 bove grou ers for an Ave E PERIMI	90 to \$2 ind, to a iy variat rage W 13 14 15 16 ETER	all base ion in a all Hei	Evap. cc VENTIL Vent. (b costs. average s ght	ATION of the second sec	ONLY ducts) ght. uare F	oot Mul 1.023 1.046 1.092 1.092	tiplier	4 capac \$3.4 \$3.4

.975

.936

.918

.906

.975 1.007 1.040 1.072 1.105

.956

.923

.908

.897

1.000 1.027 1.052 1.105 1.155

.993

.949

.928

.915

.887

.873

.866

1.030

.975

.948

.932

.897

.879

.871

1.027

.990

.965

.918

.892

.881

1.067

1.000

.969

.949

.908

.885

.876

1.052

1.011

.983

.928

.900

.887

1.105 1.140

8,000

10,000

14,000

20,000

25,000

30,000

50,000

75,000

100,000

8,000

10,000

14,000

20,000

25,000

30,000

50,000

75,000

100,000

-----5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

© 2014 Marshall & Swift/Boeckh, LLC, all rights reserved.

Any reprinting, distribution, modification, reverse engineering, or creation of derivative works, is strictly prohibited.

.926

.910

.942

.923

.900

.949

.920

.975

.938

.910

.897

LODGES



FAIR CLASS D

OCCUPANCY DESCRIPTION: Lodges are generally of rustic design with multiple sleeping units and lobby with some additional plumbing and kitchen facilities for the additional number of unrelated guests. The better qualities will include large formal dining and meeting rooms with one or more baths per guest room.

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

NOT INCLUDED IN COSTS: Fireplaces, elevators, balconies or porches, sprinklers, furnishings or service equipment.

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$202.87	Best masonry, cut stone, heavy roof structure, shakes, tile, slate	Plaster, ornamental detail, fine carpet, stone, parquet or plank	Some special fixtures, more than one bath per guestroom	Warm and cool air (zoned)
	Very good	172.54	Good masonry, stone, shakes or concrete tile roof on good structure	Very good plaster and detail, good- quality carpet or hardwood	Top quality standard fixtures, electrical and plumbing	Heat pump system
с	Good	147.25	Local stone, brick or good block and stucco, shakes or wood shingles	Good plaster or drywall, some orna- mentation, carpet or hardwood	Good lighting and outlets, one full bathroom per guestroom	Package A.C.
U	Average	104.68	Brick or block, local field stone, wood or good asphalt shingle, elastomeric	Plaster or drywall, hardwood, vinyl composition, average carpet	Adequate lighting/plumbing for each sleeping room	Forced air
	Fair	88.95	Block or brick, standard sash, asphalt shingle or built-up roof	Drywall or tinted plaster, carpet, vinyl composition tile, good softwood	Adequate standard lighting and plumbing	Electric base- board
	Low cost	73.57	Block or brick, asphalt shingle roof, few windows	Drywall, exposed block, vinyl composition tile, cheap hardwood	Minimum standard lighting and plumbing, cheap fixtures	Wall furnace
	Cheap	59.20	Cheap block or brick, composi- tion roof, low-cost sash	Painted block, few partitions, asphalt tile on slab or softwood	Minimum, common baths	Elec. wall heaters
	Excellent 199.08		Half-timber, stone trim, rustic log, heavy rafters, slate, shakes	Plaster, ornamental detail, fine carpet, stone, parquet or plank	Some special fixtures, more than one bath per guestroom	Warm and cool air (zoned)
	Very good	168.03	Select logs, best siding, brick or stone trim, good shakes	Very good plaster and detail, good quality carpet or hardwood	Top quality standard fixtures, electrical and plumbing	Heat pump system
	Good	142.34	Good siding or log, light shakes or good shingles	Good plaster or drywall, some orna- mentation, carpet or hardwood	Good lighting and outlets, one full bath per guestroom	Package A.C.
D	Average	99.59	Log, stucco or siding, some trim, wood or good asphalt shingles	Plaster or drywall, hardwood, carpet, vinyl composition	Adequate lighting/plumbing for each sleeping room	Forced air
	Fair	83.98	Stucco or siding, standard sash, asphalt shingles or built- up rock	Drywall or plaster, carpet, vinyl composition tile, good softwood	Adequate standard lighting and plumbing	Electric base- board
	Low cost	68.80	Low-cost log or siding, asphalt- shingle roof, few windows	Drywall/tinted plaster, vinyl composi- tion tile, cheap hardwood	Minimum standard lighting and plumbing, cheap fixtures	Wall furnace
	Cheap	54.79	Box frame or light studs, low- cost boards/siding, windows, comp. roof	Drywall, cheap ceiling or none, softwood or asphalt tile on slab	Minimum, common baths	Elec. wall heaters
CD	Utility basement	24.06	Unfinished	Unfinished interior, few partitions	Minimum lighting and plumbing	None

LODGES

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

	FIREPLACES: For each additional opening using the same chimney, add 30%	SPRINKLERS: Appl	v to area	covered I	ov sprink	lers
4	to 50%. Lodges with basements, add 40% to extend the foundation to the basement level. Custom oversized units can run 100% to 200% more.	Sq. Ft. LOW 3,000 \$3.11	Í AVO	G. GC	DÓD E	XCL. \$6.45
'	TYPE COST RANGE One-story \$2,630 - \$6,100 Two-stories 3,370 - 7,325 Three-stories 4,110 - 11,880	5,000 2.88 10,000 2.60 20,000 2.35 50,000 2.05 75.000 1.93	3.2 2.9 2.5	2 2 2	4.63 4.10 3.64 3.11 2.89	5.86 5.15 4.53 3.82 3.54
	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	100,000 1.85 BALCONIES: Balcor decking and rails. Ap	2.2 ly cost incl oply costs	de the si to the ba	2.75 upporting lcony are	3.36 structure, a.
	ELEVATOR STOPS: For basement stops, add \$5,550 to \$8,900 per stop.	Concrete	LOW \$22.35	AVG. \$28.50	GOOD \$36.25	EXCL. \$46.00
	SWIMMING POOLS: Swimming pools, complete, cost \$52.00 to \$76.00 per square foot. For detailed costs, see Section UIP 16.	Steel Wood Add for omate	21.85 18.15	29.25 23.95	38.75 31.75	52.00 42.00
		finishes, balustrades Add for roofs or awnings	18.90 10.50	23.30 13.95	28.75 18.55	35.50 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	\$5.08	Package A.C. (short ductwork)	. \$10.35	Central refrigeration (zoned)	\$9.14
Electric wall heaters	2.19	Warm and cool air (zoned)	. 13.15	package (short ductwork)	6.05
Forced air furnace	5.90	Hot/chilled water (zoned)	. 19.15	Central evaporative	3.76
Hot water, baseboard/convector	9.97	Heat pump system	. 11.45	Pkg. refrig\$1,600 to \$2,060 per to	n capacity
radiant floor/ceiling	10.85	Ind. thru-wall heat pumps	. 6.20	Evap. coolers. \$205 to \$310 per MCFM	A capacity
Space heaters, with fan	2.83				
radiant	3.18				
Steam (including boiler)	8.32				
without boiler	7.19				
Wall or floor furnace	2.36				
		Small indiv. heat pumps cost \$1,430	to \$1,950	VENTILATION ONLY	
		per ton of rated capacity.		Vent. (blowers/ducts)	\$1.55

3 HEIGHT REFINEMENTS

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

Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
7	.91	11	1.03
8	.94	12	1.06
9	.97	13	1.09
10	1.00 (base)	14	1.12

_	
-	h .

Average Floor Area						A	VERAG	E PERIN	IETER						Average Floor Area
Sq.Ft./Story	250	300	350	400	450	500	550	600	700	800	900	1000	1100	1200	Sq. Ft./Story
4,000	.989	1.021	1.052	1.083	1.113	1.143	1.175	1.206	1.268	1.329					4,000
6,000	.938	.959	.980	1.000	1.021	1.042	1.063	1.083	1.123	1.165	1.206	1.247	1.288	1.329	6,000
8,000	.913	.929	.944	.959	.974	.989	1.005	1.021	1.052	1.083	1.113	1.143	1.175	1.206	8,000
10,000		.910	.922	.935	.947	.959	.972	.984	1.009	1.034	1.059	1.083	1.108	1.133	10,000
12,000			.907	.917	.928	.938	.949	.959	.980	1.000	1.021	1.042	1.063	1.083	12,000
16,000				.898	.906	.913	.921	.929	.944	.959	.974	.989	1.005	1.021	16,000
20,000						.898	.904	.910	.922	.935	.947	.959	.972	.984	20,000
24,000						.886	.891	.896	.907	.917	.928	.938	.949	.959	24,000
28,000								.888.	.898	.906	.915	.924	.933	.942	28,000
32,000								.882	.889	.898	.906	.913	.921	.928	32,000
36,000								.877	.883	.890	.897	.904	.911	.917	36,000
40,000									.879	.885	.892	.898	.904	.910	40,000

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

LODGES – INNS AND COTTAGES



GOOD/EXCELLENT CLASS D

OCCUPANCY DESCRIPTION: Bed and breakfast inns are residential-type buildings designed for transient boarding and are more family style in character than lodges.

Guest cottages or cabins are individual sleeping bungalows without kitchen facilities. The lowest quality are camp facilities without plumbing, while the best resort types will contain luxury bathroom suites.



AVERAGE CLASS D

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

NOT INCLUDED IN COSTS: Fireplaces, built-in appliances, balconies or porches, sprinklers, furnishings or service equipment.

Costs given are for one-story units. For two-story units, deduct 4%; three-story, deduct 5%.

BED AND BREAKFAST INNS

SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$179.16	Fine masonry and windows,	Fine interior detail, ceramic tile,	Good fixtures, many outlets, one	Heat pump
			special architecture and trim	carpet, paneling, fine hardwood	full bath per bedroom	system
	Good	135.29	Face brick, stucco, stone trim,	Plaster or drywall, paneling, carpet	Individual baths, large kitchen,	Package A.C.
С			good windows and architecture	or hardwood and sheet vinyl	good electrical fixtures	
C	Average	98.88	Brick or block, some trim and	Plaster or drywall carpet, hardwood,	Adequate lighting/plumbing, one	Forced air
			entrance ornamentation	vinyl composition, good dining area	bath per two bedrooms	
	Low cost	74.34	Concrete block and stucco,	Drywall, some carpet, asphalt tile,	Minimum quantity and quality,	Electric base-
			very plain, residential sash	limited common area	small residential kitchen	board
	Excellent	173.15	Face brick or stone veneer,	Fine interior detail, ceramic tile,	Good fixtures, many outlets, one	Heat pump
			fine windows, special arch.	carpet, paneling, fine hardwood	full bath per bedroom	system
	Good	128.83	Brick veneer, best stucco or	Plaster or drywall, paneling, carpet	Individual baths, large kitchen,	Package A.C.
D			siding, good windows & arch.	or hardwood and sheet vinyl	good electrical fixtures	
U	Average	92.64	Brick veneer, good stucco or	Drywall, carpet, hardwood, vinyl	Adequate lighting/plumbing, one	Forced air
			siding, some trim & entry orn.	composition, good dining area	bath per two bedrooms	
	Low cost	68.63	Stucco or siding, very plain,	Drywall, some carpet, asphalt tile,	Minimum quantity and quality,	Electric base-
			residential sash	limited common area	small residential kitchen	board

GUEST COTTAGES

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$187.26	Face brick, stone, best windows, heavy roof, tile, slate, metal	Plaster, paint, paper, paneling, fine hardwood, vinyl, carpet	Best lighting and plumbing, one bath per sleeping room	Package A.C.
	Good	143.85	Adobe, brick, some trim or good stucco, good roof & fenestration	Plaster or gypsum board, paint, paper, hardwood, vinyl comp., carpet	Good lighting and plumbing, one bath, some extras	Package A.C.
C	Average	106.73	Brick, stucco on block, little trim, wood or good comp. shingles	Gypsum board and paint, hardwood, vinyl composition, carpet	Adequate lighting and plumbing, one bath, standard fixtures	Forced air
	Fair	92.67	Block or brick, cheap fieldstone, asphalt shingles or built-up rock	Drywall, carpet, vinyl composition tile, few partitions	Standard bathroom fixtures	Electric base- board
	Low cost	78.44	Block or cheap brick, low-cost roof and sash	Gypsum board and paint, asphalt tile, cheap hardwood	Minimum standard lighting and plumbing, low-cost fixtures	Wall furnace
	Excellent	178.83	Best brick veneer, good stone trim, heavy roof, tile, slate, metal	Plaster, paint, paper, paneling, fine hardwood, vinyl, carpet	Best lighting and plumbing, one bath per sleeping room	Package A.C.
	Good	136.55	Siding, log or brick veneer, some ornamentation, good fenestration	Plaster or gypsum board, paint, paper, hardwood, vinyl composition, carpet	Good lighting and plumbing, one bath, some extras	Package A.C.
	Average	100.51	Stucco or siding, some trim, wood or good comp. shingles	Plaster or drywall, hardwood, carpet, vinyl composition	Adequate lighting and plumbing, one bath, standard fixtures	Forced air
D	Fair	86.96	Stucco or siding, standard sash, asphalt shingles or built-up	Drywall, carpet, vinyl composition tile, few partitions	Adequate standard lighting and bathroom fixtures	Electric base- board
	Low cost	73.22	Stucco or siding, asphalt shingle roof, few windows	Drywall, vinyl composition tile, cheap hardwood	Minimum standard lighting and plumbing, low-cost fixtures	Wall furnace
	Cheap	46.10	Box frame or light studs, screen- ing or cheap siding, windows, comp. roof	Drywall, cheap ceiling or none, soft- wood or asphalt tile on slab	Minimum electrical, no plumbing, seasonal use	None

LODGES – INNS AND COTTAGES

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

KITCHENETTES: For units having kitchenettes or built-in kitchen units add	SPRINKLERS:	Apply to a	rea covered	d bv sprinkle	ers.
the following:	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
Excellent (stove, refrigerator, sink and cabinet unit) \$5,250	500	\$3.66	\$4.73	\$6.12	\$7.91
Good	1.000	3.20	4.08	5.22	6.67
Average (cabinets and sink) 2,850	2,000	3.11	3.97	5.06	6.45
Low cost	4.000	2.88	3.65	4.63	5.86
2,130	6.000	2.00	3.42	4.31	5.44
BUILT-IN APPLIANCES: For individual listing, see Segregated costs, Section SEG 2.	0,000	2.12	0.42	ч. 5 1	0.44
LOW AVG. GOOD EXCL.	BALCONIES: B	alcony cost	t include the	supporting s	structure,
Allowance (if not itemized) \$1,540 \$3,475 \$6,400 \$10,700	decking and rail	 Apply co 	osts to the b	alcony area	
FIRED ACES. For each additional energing using the same chimney, add 200/		LOV	N AVG	GOOD	EX(
FIREPLACES: For each additional opening using the same chimney, add 30%	Concrete	\$22.3	5 \$28.50	\$36.25	\$46
to 50%. Lodges with basements, add 40% to extend the foundation to the basement level. Custom oversized units can run 100% to 200% more.	Steel	21.8	5 29.25	38.75	5 52
basement level. Custom oversized units can full 100% to 200% more.	Wood	18.1	5 23.95	31.75	i 42
	Add for ornate				
TYPE COST RANGE	finishes, balustrac	es 18.9	0 23.30	28.75	5 35
One-story \$2,630 - \$8,510	Add for roofs or aw	ninas 10.5	0 13.95	18.55	5 24
Two-stories					
Three-stories 4,110 – 11,880					
	CARPORTS: Fo				
	garages, see Ga				

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	\$5.08	Package A.C. (short ductwork)	. \$10.35	Central refrigeration (zoned)	\$9.14
Electric wall heaters	2.19	Warm and cool air (zoned)	. 13.15	package (short ductwork)	6.05
Forced air furnace	5.90	Hot/chilled water (zoned)	. 19.15	Central evaporative	3.76
Hot water, baseboard/convector	9.97	Heat pump system	. 11.45	Pkg. refrig\$1,600 to \$2,060 per to	n capacity
radiant floor/ceiling	10.85	Ind. thru-wall heat pumps	. 6.20	Evap. coolers. \$205 to \$310 per MCF	A capacity
Space heaters, with fan	2.83				
radiant	3.18				
Steam (including boiler)	8.32				
without boiler	7.19				
Wall or floor furnace	2.36				
		Small indiv. heat pumps cost \$1,430	to \$1,950	VENTILATION ONLY	
		per ton of rated capacity.		Vent. (blowers/ducts)	\$1.55

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
7	.97	11	1.09
8	1.00 (base)	12	1.12
9	1.03	13	1.15
10	1.06	14	1.18

4	L

			AVERAGE FLOO	OR AREA PER UNIT			
BED AND BREAKFAST INNS				GUEST COTTAGES			
Sq. Ft.	Multiplier	Sq. Ft.	Multiplier	Sq. Ft.	Multiplier	Sq. Ft.	Multiplier
800	1.08	2,800	.92	100	1.21	900	.93
1,000	1.05	3,200	.91	200	1.11	1,000	.92
1,200	1.03	3,600	.89	300	1.06	1,200	.90
1,400	1.01	4,000	.88	400	1.03	1,400	.89
1,600	.99	4,400	.87	500	1.00		
1,800	.98	4,800	.86	600	.98		
2,000	.96	5,200	.85	700	.96		
2,400	.94	5,600	.84	800	.95		

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.