# **CALCULATOR OCCUPANCIES**

## **APARTMENTS**

**OCCUPANCY DESCRIPTION:** High-rise apartments are structures with three or more stories of multiple dwelling units. Each dwelling unit consists of its own separate living area and kitchen facility.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Allowance for lobby area and interior hall access to dwelling units. Elevators included where designated with an (\*) asterisk

NOT INCLUDED IN COSTS: Sprinklers, appliances or balconies.



**AVERAGE CLASS B** 

#### **SQUARE FOOT COST TABLE**

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Good	\$106.25	Face brick, limestone, metal or concrete and glass panels	Good interior detail, carpet, or hard- wood, sheet vinyl or ceramic tile	*Many good fixtures, TV jacks good baths and kitchens	Warm and cool air (zoned)
Α	Average	83.85	Little trim, brick, block, metal or concrete and glass	Drywall or plaster, average carpet and vinyl composition floors	*Few electric fixtures, average plumbing, one bath per unit	Heat pump system
	Low cost	66.60	Very plain, brick or block, or low-cost concrete panels	Drywall, sprayed or painted ceilings, very plain, asphalt tile	*Minimum uniform code, one bath per unit	Hot water
	Good	101.05	Face brick, limestone, metal or concrete and glass panels	Good interior detail, carpet or hard- wood, sheet vinyl or ceramic tile	*Many good fixtures, TV jacks, good baths and kitchens	Warm and cool air (zoned)
В	Average	79.85	Little trim, brick, block, metal or concrete and glass	Drywall or plaster, vinyl composition tile and average carpet	*Few electric fixtures, average plumbing, one bath per unit	Heat pump system
	Low cost	63.50	Very plain, brick or block or low-cost concrete panels	Drywall, sprayed or painted ceilings, very plain, asphalt tile	*Minimum uniform code, one bath per unit	Hot water
	Basement units	69.40	Half exposed, good fenestration	Drywall or plaster, painted, vinyl composition and average carpet	Few electric fixtures, average plumbing, one bath per unit	Hot water
A-B	Finished basement	44.25	Finished interior	Finished floor and ceilings, game room	Adequate lighting/plumbing	Forced air
A-D	Parking basements	36.25	Unfinished interior	Concrete w/ hardener, lines & stops	Minimum lighting, floor drains	Ventilation
	Utility basement.	31.95	Painted interior	Utility and storage areas	Utility lighting and plumbing	None
	Good	81.90	Brick, metal or concrete and glass panels, some trim	Drywall or plaster, good carpet or hardwood, vinyl composition, cer. tile	*Good electric/plumbing, good baths and kitchens	Heat pump system
С	Average	62.30	Little ornamentation, brick or block, concrete panels	Drywall or plaster, average carpet and vinyl composition	*Average fixtures, one bath per unit, average circuits	Forced air
	Low cost	46.95	Very plain brick or block, minimum fenestration	Drywall and painted masonry/plaster coat, asph. tile, low-cost carpet	Minimum uniform code, one bath per unit	Indiv. thru-wall heat pumps
C	Good	92.90	Mill type construction, heavy brick wall, trusses, good sash	Drywall, or plaster, good carpet or hardwood, vinyl comp., ceramic tile	*Good electric/plumbing, good baths and kitchens	Heat pump system
CMILL	Average	75.85	Mill type construction, brick and block, wood trusses	Drywall, or plaster, average carpet and vinyl composition, softwood	*Average fixtures, one bath per unit, average circuits	Hot water
	Good	77.90	Good stucco or siding with ornamentation	Good drywall or plaster, carpet, good vinyl composition tile or sheet	*Good fixtures, many outlets, over one bath per unit	Heat pump system
D	Average	59.15	Frame and stucco, little trim, standard design	Plaster or drywall, carpet or hardwood, vinyl composition tile	*Average fixtures, one bath per unit, average circuits	Forced air
	Low cost	44.45	Low-cost siding or stucco	Drywall, low-cost carpet, asphalt tile	Minimum uniform code, one bath per unit	Indiv. thru-wall heat pumps
D	Good	80.80	Good brick veneer with ornamentation	Good drywall or plaster, carpet, good vinyl composition tile or sheet	*Good fixtures, many outlets, over one bath per unit	Heat pump system
MASONRY VEENER	Average	61.40	Brick veneer, little trim, standard design	Plaster or drywall, carpet or hardwood, vinyl composition tile	*Average fixtures, one bath per unit, average circuits	Forced air
	Good	74.35	Best insulated sandwich walls, good fenestration, good frame	Drywall, carpet and vinyl composition, ceramic tile	*Good fixtures, many outlets, over one bath per unit	Heat pump system
S	Average	56.10	Sandwich walls, fenestration to code, little trim	Drywall, carpet and vinyl comp., average cabinetry and finish	*Average fixtures, one bath per unit, average circuits	Forced air
	Basement units	51.90	Half exposed, good fenestration	Drywall or plaster, vinyl composition tile and average carpet	Few electric fixtures, average plumbing, one bath per unit	Forced air
000 <sup>†</sup>	Finished basement.	29.70	Finished interior, add for saunas, pools, bars and equip.	Gypsum board ceiling, vinyl composition tile sheet vinyl	Adequate lighting/plumbing	Electric wall heaters
CDS <sup>†</sup>	Parking basementt.	23.60	Unfinished interior	Plaster or drywall ceiling, concrete floor	Minimum lighting, floor drains	Ventilation
	Utility basment.	20.90	Unfinished interior	Unfinished floor and ceiling	Minimum lighting/plumbing	None

<sup>&</sup>lt;sup>†</sup>For fire-resistant Type I basements, with concrete slab separation under Class C, D or S units, add \$4.35 per square foot to the basement cost.

## **APARTMENTS**

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

BUILT-IN APPL	JANCES	: For individua	l listing	, see Seg	regated	cost,	SPRINKLER	RS: Apply to	sprinklered	d area.	
Section SEG 1.			_				Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		LOV	/ A	VG. GO	OD EX	(CL.	3,000	\$2.45	\$3.15	\$4.00	\$5.15
Allowance (if not i	temized)	\$875	5 \$1,	,425 \$2,3	300 \$3	,775	5,000	2.25	2.85	3.65	4.70
<b>ELEVATORS:</b> Buildings whose base costs include elevators are marked 10,000 2.00 2.55 3.25 4.10											
with an asterisk (*). If the building under consideration has no elevators, 20,000 1.80 2.25 2.85 3.60											
deduct the follo	wing fro	m the base cost	s so ma	osts	50,000	1.55	1.95	2.45	3.05		
see Section UIF	8.						100,000	1.40	1.75	2.15	2.65
Classes A/B	Sq. Ft.	Class C	Sq. Ft.	Classes D	D/S So	ı. Ft.	200,000	1.25	1.55	1.90	2.35
	Costs		Costs		С	osts					
Good	3.70	Good	2.35	Good		2.30	BALCONIE	2. Exterior l	adaaniaa aa	norally cost	1/2 to 1/2
Average	2.80	Average	1.90	Average .		1.90	the final bas			,	
Low cost	2.15						may be cor				
ELEVATOR STOR	PS: For b	asement stops, add	\$4,250	to \$6,450 pe	er stop.		costs.	iipatod iioi	ale oegi	oguica of o	in in inc

#### **9** HEATING AND COOLING

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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	\$3.55	Package A.C. (short ductwork)	\$ 7.00	Central refrigeration (zoned)	\$5.70
Electric wall heaters	1.40	Warm and cool air (zoned)	9.75	package (short ductwork)	3.95
Forced air furnace	4.55	Hot/chilled water (zoned)	15.40	Central evaporative	2.70
Hot water, baseboard/convector	6.75	Heat pump system	7.95	Pkg. refrig \$1,200 to \$1,575 per ton	capacity
radiant floor/ceiling	7.05	Ind. thru-wall heat pumps	3.50	Evap. coolers . \$155 to \$240 per MCFN	/I capacity
Steam (including boiler)	6.10				
without boiler	5.40	Small indiv. heat pumps cost \$1,075 to	\$1,475	VENTILATION ONLY	
Wall or floor furnace	1.55	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.10

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 12 .95 1.06 9 .97 13 1.08 10 1.00 (base) 14 1.11

1.03

Average Floor Area						AVE	RAGE I	PERIME	TER						Average Floor Area
Sq. Ft./Story	200	250	300	350	400	450	500	550	600	650	700	750	800	850	Sq. Ft./Story
2,000	1.09	1.15	1.23	1.29											2,000
4,000	.95	.99	1.02	1.06	1.09	1.12									4,000
6,000		.93	.95	.98	1.00	1.02	1.05	1.07							6,000
8,000			.92	.94	.95	.97	.99	1.01	1.02	1.04					8,000
10,000				.91	.93	.94	.95	.97	.98	1.00	1.01	1.02			10,000
12,000				.90	.91	.92	.93	.94	.95	.97	.98	.99	1.00		12,000
14,000					.89	.90	.91	.92	.93	.94	.95	.96	.97	.98	14,000
16,000					.88	.89	.90	.91	.92	.93	.94	.95	.95	.96	16,000
18,000						.88	.89	.90	.91	.92	.92	.93	.94	.95	18,000
20,000							.88	.89	.90	.91	.91	.92	.93	.93	20,000
22,000							.88	.88	.89	.90	.90	.91	.92	.92	22,000
25,000								.88	.88	.89	.89	.90	.90	.91	25,000

## **APARTMENTS – LUXURY**

OCCUPANCY DESCRIPTION: High-rise luxury apartments are structures with three or more floors of multiple dwelling units, typically owner or time-share occupied. Each dwelling unit consists of its own separate living area and kitchen facility. Normally, structures over three stories have elevators, but this dwelling units and some type of stairway for fire exit. Although apartments built as co-ops, condominiums, or time-shares sometimes are required by building and zoning codes to have certain items not required for typical rental units, basically, "condominium" is a type of ownership and not a type of construction and the luxury apartment costs are valid.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Allowance for lobby area and interior hall access to dwelling units. Elevators are included where designated with an (\*) asterisk.

**NOT INCLUDED IN COSTS:** Appliances, fireplaces, canopies, balconies, swimming pools, yard improvements and any developers' or soft costs related to a type of ownership such as condominium.

#### SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ.FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A	Good	\$171.85	Best metal or stone, brick or block backup, solar glass, best lobby	Finest interior detail, hardwoods, ceramic, custom carpet, built-ins	*Master antennas, fine fixtures, more than one bath per bedroom	Hot and chilled water (zoned)
	Average	137.90	Good metal and solar glass, face brick, precast concrete panels, EIFS	Good interior detail, carpet, ceramic tile, some vinyl and fine hardwood	*Master antennas, fine fixtures, one full bath per bedroom	Hot and chilled water (zoned)
В	Good	163.10	Best metal or stone, brick or block backup, solar glass, best lobby	Finest interior detail, hardwoods, ceramic, custom carpet, built-ins	*Master antennas, fine fixtures, more than one bath per bedroom	Hot and chilled water (zoned)
	Average	131.20	Good metal and solar glass, face brick, precast concrete panels, EIFS	Good interior detail, carpet, ceramic tile, some vinyl and fine hardwood	*Master antennas, fine fixtures, one full bath per bedroom	Hot and chilled water (zoned)
	Excellent	164.55	Best stones, metal, solar glass, highly ornamented lobby	Best interior detail, hardwoods, ceramic, carpet, built-ins	*Master antennas, fine fixtures, more than one bath per bedroom	Hot and chilled water (zoned)
С	Good	128.65	Good masonry and glass, good ornamentation and lobby	Good interior detail, sheet vinyl, ceramic tile/carpet, paneling, fine hardwood	*Master antennas, extra fixtures, one full bath per bedroom	Warm and cool air (zoned)
	Average	104.55	Stone, brick, metal and glass, individual design, good lobby	Good plaster, paneling/paper, vinyl, carpeting or hardwood, some extras	*Master antennas, fine fixtures, one full bath per bedroom	Warm and cool air (zoned)
_	Excellent	162.60	Best brick or stone veneer, highly ornamental lobby	Best interior detail, hardwoods, ceramic, carpet, built-ins	*Master antennas, fine fixtures, more than one bath per bedroom	Hot and chilled water (zoned)
MASONRY VENEER	Good	126.80	Good veneers and trim, good ornamentation and lobby	Good interior detail, sheet vinyl, ceramic tile/carpet, paneling, fine hardwood	*Master antennas, extra fixtures, more than one bath per bedroom	Warm and cool air (zoned)
	Average	102.90	Face brick or stone veneer, individual design, good lobby	Good plaster, paneling/paper, vinyl, carpeting or hardwood, some extras	*TV and phone jacks, good fixtures, one bath per bedroom	Warm and cool air (zoned)
	Excellent	159.65	Best EIFS, stone trim, highly ornamental lobby	Best interior detail, hardwoods, ceramic, carpet, built-ins	*Master antennas, fine fixtures, more than one bath per bedroom	Hot and chilled water (zoned)
D	Good	123.30	Good EIFS or sidings, good ornamentation and lobby	Good interior detail, sheet vinyl, ceramic tile/carpet, paneling, fine hardwood	*Master antennas, extra fixtures, more than one bath per bed- room	Warm and cool air (zoned)
	Average	99.15	Good stucco or siding, brick and stone trim, good lobby	Good plaster, paneling/paper, vinyl, carpeting or hardwood, some extras	*TV and phone jacks, good fixtures, one bath per bedroom	Warm and cool air (zoned)

## **APARTMENTS - LUXURY**

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

BUILT-IN APPL	IANCES	: For individua	listing	, see Segreg	ated cost,	SPRINKLER	RS: Apply to	sprinklered	d area.	
Section SEG 1.						Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		LOV	V A	VG. GOOD	EXCL.	3,000	\$2.45	\$3.15	\$4.00	\$5.15
Allowance (if not i	itemized)	\$1,25	0 \$2,	,100 \$3,625	\$6,125	5,000	2.25	2.85	3.65	4.70
ELEVATORS: B	uildings	whose base cos	ts inclu	re marked	10,000	2.00	2.55	3.25	4.10	
with an asterisk	(*). If th	ne building under	conside	eration has no	elevators,	20,000	1.80	2.25	2.85	3.60
	_	m the base cost	s so ma	ailed costs	50,000	1.55	1.95	2.45	3.05	
see Section UIP	8.					100,000	1.40	1.75	2.15	2.65
Classes A/B	Sq. Ft.	Class C	Sq. Ft.	Classes D/S	Sq. Ft.	200,000	1.25	1.55	1.90	2.35
	Costs		Costs		Costs					
Excellent	\$5.55	Excellent	\$3.75	Excellent	\$3.30	BALCONIES	S: Exterior I	nalconies de	nerally cost	1/3 to 1/2 of
Good	4.80	Good	3.30	Good	2.95	the final bas				
		Average	2.90	Average	2.60	may be con				
ELEVATOR STOR	<b>PS</b> : For b	asement stops, add	\$4,250	to \$6,450 per st	op.	costs.				

#### **9** HEATING AND COOLING

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

	Sq. Ft.		Sq. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$3.55	Package A.C. (short ductwork)	\$ 7.00	Central refrigeration (zoned)	\$5.70
Electric wall heaters	1.40	Warm and cool air (zoned)	9.75	package (short ductwork)	3.95
Forced air furnace	4.55	Hot/chilled water (zoned)	15.40	Central evaporative	2.70
Hot water, baseboard/convector	6.75	Heat pump system	7.95	Pkg. refrig \$1,200 to \$1,575 per to	n capacity
radiant floor/ceiling	7.05	Ind. thru-wall heat pumps	3.50	Evap. coolers . \$155 to \$240 per MCFN	√ capacity
Steam (including boiler)	6.10				
without boiler	5.40	Small indiv. heat pumps cost \$1,075 to	\$1,475	VENTILATION ONLY	
Wall or floor furnace	1.55	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.10

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

OKI HEIGHT MOETH EILKO.	viditiply base cost by following multipli	cra for arry variation in average ator	y noigni.
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.95	12	1.06
9	.97	13	1.08
10	1.00 (base)	14	1.11
11	1.03		

Average Floor Area					400		RAGE F			252		750	800	252	Average Floor Area
Sq. Ft./Story	200	250	300	350	400	450	500	550	600	650	700	850	Sq. Ft./Story		
2,000	1.09	1.15	1.22	1.29											2,000
4,000	.95	.99	1.02	1.06	1.09	1.12									4,000
6,000		.93	.95	.98	1.00	1.02	1.05	1.07							6,000
8,000			.92	.94	.95	.97	.99	1.01	1.02	1.04					8,000
10,000				.91	.93	.94	.95	.97	.98	1.00	1.01	1.02			10,000
12,000				.90	.91	.92	.93	.94	.95	.97	.98	.99	1.00		12,000
14,000					.89	.90	.91	.92	.93	.94	.95	.96	.97	.98	14,000
16,000					.88	.89	.90	.91	.92	.93	.94	.95	.95	.96	16,000
18,000						.88	.89	.90	.91	.92	.92	.93	.94	.95	18,000
20,000							.88	.89	.90	.91	.91	.92	.93	.93	20,000
22,000							.88	.88	.89	.90	.90	.91	.92	.92	22,000
25,000								.88	.88	.89	.89	.90	.90	.91	25,000

# **ARCADE BUILDINGS**



GOOD CLASS C

**OCCUPANCY DESCRIPTION:** These buildings are designed mainly for coin-operated game entertainment, while better qualities will include limited food service and lounges typically found at fun centers, miniature golf complexes, etc.



GOOD CLASS D

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

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

#### **SQUARE FOOT COST TABLE**

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$104.75	Steel columns/girders, face brick, best ornamental block, storefront	Sports flooring, theme rooms, shops, resturants, gaming facilities	Best lighting and outlets, good plumbing, kitchen, bar	Warm and cool air (zoned)
С	Good	76.95	Steel frame, good brick, block or tilt-up, tapered girders, good trim	Acoustic treatment, some theme finishes and extra facilities and rooms	Good game lighting, sound, rest- rooms, limited food service	Heat pump system
	Average	57.00	Steel or wood frame or bearing walls, brick, block or tilt-up	Painted walls, vinyl comp. tile, car- pet, large eating or game rooms	Adequate lighting, outlets and plumbing, snack bar	Package A.C.
	Low Cost	40.30	Block, tilt-up, light roof construction	Low-cost finishes, few partitions	Minimum lighting and plumbing	Forced air
	Good	73.85	Heavy wood frame, wood, stucco or brick veneer, good ornamentation	Acoustic treatment, some theme finishes and extra facilities and rooms	Good game lighting, sound, rest- rooms, limited food service	Heat pump system
D	Average	54.70	Stucco on wood frame, wood trusses, small front	Drywall, acoustic tile, vinyl comp. tile, carpet, large eating area and game rooms	Adequate lighting, outlets and plumbing, snack bar	Package A.C.
	Low Cost	38.60	Stucco or siding on studs	Low-cost finishes, few partitions	Minimum lighting and plumbing	Forced air
DPOLE	Average	50.55	Pole frame, good metal siding, insulated, small front	Drywall, acoustic tile, vinyl comp. tile, carpet, large eating area and game rooms	Adequate lighting, outlets and plumbing, snack bar	Package A.C.
	Low Cost	35.35	Pole frame, metal siding	Low-cost game area, minimum finish, asphalt tile, open counter	Minimum lighting and plumbing, adequate outlets	Forced air
s	Average	51.70	Good metal panels and roof, little ornamentation, small front	Drywall, acoustic tile, vinyl comp. tile, carpet, large eating area and game rooms	Adequate lighting, outlets and plumbing, small snack bar	Package A.C.
	Low Cost	35.90	Steel or aluminum panels	Drywall, acoustic and asphalt tile	Minimum lighting and plumbing	Forced air
CDS	Storage basement	26.10	Unfinished interior	Unfinished storage and utility	Minimum lighting, drains	None
CD3	Open mezzanine	23.65	Not included	Finished floors, few partitions	Average lighting, no plumbing	In building cost

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

## **ARCADE BUILDINGS**

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

ELEVATORS: A small passenger or freight elevator with simple call system	SPRINKLER	S: Apply to	sprinklered	area.	
and push-button control, and two or three stops, costs \$35,250 to \$55,500.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
	5,000	\$2.45	\$3.10	\$3.90	\$4.95
	10,000	2.20	2.75	3.45	4.35
	15,000	2.10	2.60	3.25	4.00
	20,000	2.00	2.45	3.05	3.80
	30,000	1.85	2.30	2.85	3.55
	40,000	1.80	2.20	2.70	3.35
	60,000	1.70	2.05	2.55	3.10
	80,000	1.60	1.95	2.40	2.95
	100,000	1.55	1.90	2.30	2.80

#### 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.	S	q. Ft.		Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING	Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$4.60	Package A.C. (short ductwork) \$	9.20	Central refrigeration (zoned)	\$7.30
Electric wall heaters	1.85	Warm and cool air (zoned)	13.90	package (short ductwork)	5.20
Forced air furnace	5.65	Hot/chilled water (zoned)	20.35	Central evaporative	3.15
Hot water	8.55	Heat pump system	11.05	Pkg. refrig \$1,200 to \$1,575 per tor	n capacity
Space heaters, with fan	1.80			Evap. coolers . \$205 to \$245 per MCFM	√ capacity
radiant	2.20				
Steam (including boiler)	7.80				
without boiler	6.85	Small indiv. heat pumps cost \$1,225 to \$	1,650	VENTILATION ONLY	
Wall or floor furnace	2.05	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.60

3 **HEIGHT REFINEMENTS** MULTISTORY BUILDINGS: Add .5% (1/2%) for each story over three, above ground, to all base costs. STORY HEIGHT MULTIPLIERS: Multiply base cost by following multipliers for any variation in average story height. Average Wall Height **Square Foot Multiplier** Average Wall Height **Square Foot Multiplier** 8 .78 18 1.05 10 .83 20 1.11 .89 22 12 1.16 14 .95 24 1.21

28

1.31

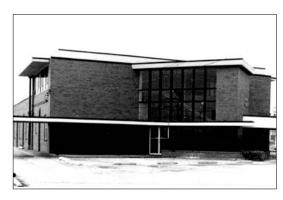
1.00 (base)

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

5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

16

## **AUDITORIUMS**



**AVERAGE CLASS C** 

**OCCUPANCY DESCRIPTION:** These buildings are designed for mass seating for visual and voice presentations. They include a stage or arena, basic floor, lobby or foyer at the main entrance and necessary lighting. The better qualities include special lighting, sound systems and high-cost plumbing fixtures and restrooms. Costs do not include seating, movable floors and other special equipment.



AVERAGE/GOOD CLASS C

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Stage area, special lighting and sound system.

**NOT INCLUDED IN COSTS:** Elevators, sprinklers, movable floors and lights, seating, special equipment or kitchen equipment

#### **SQUARE FOOT COST TABLE**

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Excellent	\$283.35	Special architecture and trim, best materials, highly orna- mented	Best ornamental plaster and detail, carpeting, marble, vinyl	Special lighting and sound system, good plumbing	Hot and chilled water (zoned)
Α	Good	199.95	Good masonry, metal or concrete panels, good architecture	Plaster, good ornamental detail, carpeting, vinyl, terrazzo lobby	Good lighting and sound system, good plumbing	Warm and cool air (zoned)
	Average	146.80	Face brick, concrete panels with trim, plain architecture	Drywall, vinyl finishes, some ornamentation, carpeting	Adequate lighting and plumbing, sound system	Warm and cool air (zoned)
	Excellent	271.25	Special architecture and trim, best materials, highly orna- mented	Best ornamental plaster and detail, carpeting, marble, vinyl	Special lighting and sound system, good plumbing	Hot and chilled water (zoned)
В	Good	192.40	Good masonry, metal or concrete panels, good architecture	Plaster, good ornamental detail, carpeting, vinyl, terrazzo lobby	Good lighting and sound system, good plumbing	Warm and cool air (zoned)
	Average	142.15	Face brick, concrete panels with trim, plain architecture	Drywall, vinyl finishes, some ornamentation, carpeting	Adequate lighting and plumbing, sound system	Warm and cool air (zoned)
A-B	Finished basement	84.60	Concrete masonry, partly finished interior	Masonry partitions, utility, repair, storage and dressing rooms	Adequate lighting and plumbing, some extras	Hot water
A-D	Semifin. basement	75.30	Low-cost finishes	Finished lounge/restrooms, some utility and storage	Minimum lighting, adequate plumbing	Hot water
	Excellent	204.20	Special architecture and trim, steel frame, best masonry	Best ornamental plaster and detail, carpeting, marble, vinyl	Special lighting and sound system, good plumbing	Warm and cool air (zoned)
С	Good	149.00	Face brick, concrete and glass panels, good architecture	Plaster, good ornamental detail, carpeting, vinyl, terrazzo lobby	Good lighting and sound system, good plumbing	Warm and cool air (zoned)
C	Average	104.55	Brick, block, concrete panels, little trim, good high school type	Drywall, some ornamentation, vinyl composition, terrazzo lobby	Adequate lighting and plumbing, sound system	Package A.C.
	Low cost	72.95	Low-cost brick, block, tilt-up	Painted, acoustic and asphalt tile	Minimum lighting and plumbing	Forced air
	Good	143.10	Brick veneer, best stucco, good trim, ornamental front	Plaster, good ornamental detail, carpeting, vinyl, terrazzo lobby	Good lighting and sound system, good plumbing	Warm and cool air (zoned)
D	Average	99.60	Good stucco, some trim, good high school type	Drywall, some ornamentation, vinyl composition, terrazzo lobby	Adequate lighting and plumbing, sound system	Package A.C.
	Low cost	68.95	Low-cost stucco or siding, very plain, low-cost school type	Drywall, plywood, acoustic tile, wood or asphalt tile floors	Minimum lighting and plumbing	Forced air
DPOLE	Low cost	64.40	Metal panels on wood pole frame	Few partitions, acoustic tile, wood or asphalt tile floors	Minimum lighting and plumbing	Forced air
s	Average	94.45	Metal sandwich panels	Drywall partitions, some ornament, acoustic tile, terrazzo lobby	Adequate lighting and plumbing, sound system	Package A.C.
-	Low cost	64.55	Steel or aluminum panels	Few partitions, acoustic tile	Minimum lighting and plumbing	Forced air
05°+	Finished bsmt.	61.25	Painted interior	Utility, workshops, storage and dressing rooms	Adequate lighting and plumbing	Forced air
CDS <sup>†</sup>	Semifin. bsmt.	52.15	Low-cost finishes	Minimum lounge area, restrooms, some utility and storage	Minimum lighting, adequate plumbing	Forced air

<sup>&</sup>lt;sup>†</sup>For fire-resistant Type I basements with concrete slab separation under Class C, D or S units, add \$4.35 per square foot. For balconies, see Page CAL 226.

## **AUDITORIUMS**

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

1	<b>ELEVATORS</b> : A small passenger or freight elevator with simple call system.	SPRINKLER	S: Apply to	sprinklered	d area.	
-	and push-button control, and two or three stops, costs \$35,250 to \$55,500.	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
		5,000	\$2.45	\$3.10	\$3.90	\$4.95
		10,000	2.20	2.75	3.45	4.35
		20,000	2.00	2.45	3.05	3.80
		40,000	1.80	2.20	2.70	3.35
		60,000	1.70	2.05	2.55	3.10
		80,000	1.60	1.95	2.40	2.95
		100,000	1.65	1.90	2.30	2.80
		150,000	1.45	1.75	2.15	2.60
		200,000	1.40	1.70	2.05	2.45
		BALCONIES	: Exterior b	alconies g	enerally cos	st 1/3 to 1/2 of
		the final base	e cost per so	quare foot o	of the building	ng or they may
		be computed	I from the S	egregated	or Unit-in-P	lace costs.

## 2 HEATING AND COOLING

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

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

## 3 HEIGHT REFINEMENTS

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

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

OTOTAL TIESOTTI MOETIN ESERVOI III	iditiply bacc cock by following malap	nord for any variation in avorage	otory morgint.
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
8	.65	24	1.00 (base)
12	.74	26	1.04
14	.79	28	1.08
16	.83	30	1.12
18	.87	34	1.21
20	.92	38	1.29
22	.96	42	1.37

4	Average Floor Area								E PERIM							Average Floor Area
	Sq.Ft./Story	150	200	250	300	400	500	600	700	800	900	1000	1200	1400	1600	Sq. Ft./Story
	2,000	1.10	1.17	1.25	1.32	1.46										2,000
	5,000			1.04	1.07	1.11	1.17	1.23								5,000
	10,000				.98	1.01	1.04	1.07	1.09	1.11						10,000
	15,000					.97	.99	1.01	1.03	1.05	1.07					15,000
	20,000						.97	.98	1.00	1.01	1.03	1.04	1.07			20,000
	25,000						.95	.97	.98	.99	1.00	1.01	1.04			25,000
	40,000								.95	.95	.96	.97	.98	1.00	1.01	40,000
	50,000								.94	.94	.95	.95	.97	.98	.99	50,000
	60,000									.93	.94	.94	.95	.96	.97	60,000
	70,000										.93	.94	.94	.95	.96	70,000
	80,000											.93	.94	.95	.95	80,000
	100,000											.92	.93	.94	.94	100,000

## **AUTOMOBILE SHOWROOMS**



LOW-COST CLASS C



LOW-COST/AVERAGE CLASS S

**OCCUPANCY DESCRIPTION:** Primarily sales and showrooms for dealerships, whether automobile, boat or farm implement. The large open areas used for display typically have storefronts. There is also some office and storage area next to the sales cubicles. Most are finished with drywall and plaster. Floors are finished with a combination of resilient floor covering and some terrazzo. Ceilings in the offices may be tile panels on a suspended system. Lighting is usually very similar to store and office lighting, and the better qualities

have special display spotlights. Plumbing and restrooms are adequate to service the sales, clerical and managerial personnel using the building. The higher-quality showrooms may also have kitchen and/or lounge support facilities.

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

**NOT INCLUDED IN COSTS:** Elevators, sprinklers, special signage, furnishings or kitchen equipment.

#### **SQUARE FOOT COST TABLE**

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$101.60	Masonry, concrete or metal and glass, good ornamentation	Plaster, acoustic tile, terrazzo display floor, adequate office area	Good lighting and restrooms, some special fixtures	Warm and cool air (zoned)
	Excellent	134.55	Face brick or stone, good metal or concrete and glass panels	Plaster, good acoustic tile, good ter- razzo, stone, rubber tile, carpet	Special lighting, good fixtures and plumbing throughout	Warm and cool air (zoned)
C	Good	95.30	Brick, concrete, good storefront, good ornamentation	Plaster, acoustic tile, terrazzo display floor, good office area	Good display and office lighting, restrooms	Package A.C.
	Average	69.15	Brick, block, concrete, good storefront, some ornamentation	Plaster or drywall, acoustic tile, vinyl composition, office, sales cubicles	Store and office lighting, small restrooms	Package A.C.
	Low cost	47.20	Brick, block, tilt-up, simple storefront, low-cost entrance	Painted walls, few drywall partitions, asphalt tile	Adequate lighting, minimum plumbing	Forced air
	Excellent	133.45	Face brick or stone veneer, good EIFS, metal and glass panels	Plaster, good acoustic tile, good ter- razzo, stone, rubber tile, carpet	Special lighting, good fixtures and plumbing throughout	Warm and cool air (zoned)
D	Good	93.45	Masonry veneer, best stucco or siding, good front & trim	Plaster, acoustic tile, terrazzo display floor, good office area	Good display and office lighting, restrooms	Package A.C.
	Average	67.10	Siding, veneer trim, storefront, some ornamentation	Plaster or drywall, acoustic tile, vinyl composition, office, sales cubicles	Store-type lighting, small restrooms	Package A.C.
	Low cost	45.45	Stucco or siding, simple front, low-cost entrance	Drywall, few partitions or extras	Adequate lighting, minimum plumbing	Forced air
Dag: -	Average	61.45	Pole frame, metal siding, store- front, some ornamentation	Fully lined and insulated, tile, vinyl composition, small office area	Store-type lighting, small restrooms	Package A.C.
DPOLE	Low cost	40.95	Metal on pole frame, simple storefront, low-cost entrance	Some finish, few partitions, asphalt tile, few extras	Adequate lighting, minimum plumbing	Forced air
	Good	85.50	Sandwich panels, good store- front, good ornamentation	Plaster, acoustic tile, terrazzo display floor, good office area	Good display and office lighting, restrooms	Package A.C.
S	Average	62.90	Sandwich panels, storefront, some ornamentation	Plaster or drywall, acoustic tile, vinyl composition, small office area	Store-type lighting, small restrooms	Package A.C.
	Low cost	42.00	Single wall, simple storefront, low-cost entrance	Drywall, few partitions or extras	Adequate lighting, minimum plumbing	Forced air
CDS	Office mezzanine	41.90	In buildng cost	Enclosed, average office finish, acoustic tile soffit	Average office lighting and plumbing	Included in building cost

For load-bearing parking roofs, add \$4.30 per square foot. Access ramps cost \$15.00 to \$27.00 per square foot.

**NOTE:** Vehicular showrooms are sales rooms. Where a sales room and service garage or warehouse constitute one building, the cost for each portion should be modified by its area/perimeter multiplier, considering half of the common wall to belong to each of the portions.

## **AUTOMOBILE SHOWROOMS**

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

<b>ELEVATORS:</b> Small two- or three-passenger elevators with simple call	SPRINKLE	RS: Apply t	o sprinkler	ed area.	
systems and push-button control, and two or three stops, cost \$32,250	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
to \$55,500.	1,000	\$2.60	\$3.40	\$4.65	\$6.15
	2,000	2.40	3.10	4.15	4.40
	5,000	2.05	2.65	3.50	4.55
	10,000	1.85	2.35	3.10	4.00
	15,000	1.75	2.25	2.85	3.70
	20,000	1.65	2.15	2.75	3.50
	30,000	1.55	2.00	2.55	3.25
	50,000	1.45	1.45	2.35	2.95

#### 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	\$3.15	Package A.C. (short ductwork)	\$6.85	Central refrigeration (zoned)	\$5.95
Electric wall heaters	1.35	Warm and cool air (zoned)	9.05	package (short ductwork)	4.05
Forced air furnace	3.45	Hot/chilled water (zoned)	15.10	Central evaporative	2.70
Hot water	6.15	Heat pump system	8.05	Pkg. refrig \$1,180 to \$1,540 per to	n capacity
Space heaters, with fan	1.60			Evap. coolers . \$160 to \$270 per MCFN	M capacity
radiant	1.90				
Steam (including boiler)	5.50	Small indiv. heat pumps cost \$1,125 to	\$1,510	VENTILATION ONLY	
without boiler	4.65	per ton of rated capacity.		Vent. (blowers/ducts)	\$1.05

#### 3 HEIGHT REFINEMENTS

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

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

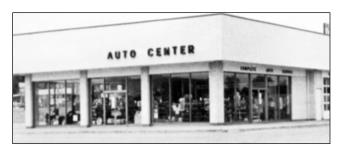
Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
10	.92	20	1.13
12	.96	22	1.18
14	1.00 (base)	24	1.23
16	1.04	26	1.28
18	1.09	28	1.33

Average Floor Area						Α	VERAGI	PERIN	IETER						Average Floor Area
Sq. Ft./Story	100	150	200	250	300	350	400	450	500	600	800	1000	1200	1500	Sq. Ft./Story
1,000	1.24	1.44	1.64	1.84											1,000
2,000		1.14	1.24	1.34	1.44	1.64									2,000
3,000			1.10	1.17	1.24	1.31	1.39	1.44	1.54	1.64					3,000
5,000				1.04	1.08	1.13	1.17	1.20	1.24	1.32	1.52				5,000
8,000					.99	1.01	1.04	1.06	1.08	1.14	1.24				8,000
10,000						.97	.99	1.01	1.04	1.08	1.17	1.24			10,000
15,000							.94	.96	.97	.99	1.05	1.10	1.17		15,000
20,000									.94	.96	.99	1.04	1.08	1.15	20,000
25,000									.92	.94	.97	.99	1.03	1.08	25,000
30,000										.92	.94	.96	.99	1.04	30,000
40,000										.90	.92	.94	.96	.99	40,000
50,000										.88	.90	.92	.94	.96	50,000

## **AUTOMOTIVE CENTERS**



AVERAGE/GOOD CLASS C



**GOOD CLASS C** 

**OCCUPANCY DESCRIPTION:** These buildings are designed for both sales and service, with display rooms, office, storage and repair space commensurate with the quality. The better qualities are a combination retail store (with storefronts and finish) and garage. Average quality contains sales area of between 20% and 30% of the total floor area. The lighting in the sales area is similar to store lighting in both quantity and types of fixtures, with industrial fluores-

cent fixtures in the service areas. Plumbing is adequate to service the personnel.

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

**NOT INCLUDED IN COSTS:** Elevators, sprinklers, hoists or service equipment.

#### **SQUARE FOOT COST TABLE**

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
	Good	\$64.00	Brick, block, good front, 30% or more sales area	Good store finish in sales, good garage finish in balance	Good store illumination, good restrooms	Space heaters
С	Average	51.45	Block, typical storefront, 20% – 30% sales area	Store finish in sales, garage finish in balance	Average store illumination and restrooms	Space heaters
	Low cost	41.45	Block, simple storefront, 15% – 25% finished sales area	Minimum store finish in sales, garage finish in balance	Minimum lighting, outlets and plumbing fixtures	Space heaters
D	Good	61.20	Siding, veneer, 30% or more sales area	Good store finish in sales, good garage finish in balance	Good store illumination, good restrooms	Space heaters
	Average	49.15	Siding, storefront, 20% – 30% finished sales area	Store finish in sales, garage finish in balance	Average store illumination and restrooms	Space heaters
DPOLE	Low cost	35.85	15% – 25% finished sales area, storefront, steel on wood pole frame	Minimum store finish in sales, garage finish in balance	Minimum lighting, outlets and plumbing fixtures	Space heaters
S	Average	45.75	20% – 30% sales area, store- front, some trim, sandwich panels	Store finish in sales, garage finish in balance	Average store illumination and restrooms	Space heaters
	Low cost	36.70	Single wall, simple storefront, 15% – 25% finished sales area	Minimum store finish in sales, garage finish in balance	Minimum lighting, outlets and plumbing fixtures	Space heaters
CDS	Storage basement	21.85	Reinforced concrete, unfinished interior	Unfinished storage area	Minimum lighting and drains	None
	Storage mezzanine	11.05	In building cost	Light storage on plywood, minimum supports, no soffit	Minimum lighting	Included in building cost

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

## **AUTOMOTIVE CENTERS**

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

<b>HOISTS:</b> Automobile and light truck hoists cost \$6,000 to \$9,275 each.	<b>SPRINKLERS:</b> Apply to sprinklered area.							
See Section UIP 14 for greater detail.	Sq. Ft.	LOW	AVG.	GOOD	EXCL			
	1,000	\$2.60	\$3.40	\$4.65	\$6.15			
	2,000	2.40	3.10	4.15	5.40			
	5,000	2.05	2.65	3.50	4.55			
	10,000	1.85	2.35	3.10	4.00			
	15,000	1.75	2.25	2.85	3.70			
	20,000	1.65	2.15	2.75	3.50			
	30,000	1.55	2.00	2.55	3.25			
	50,000	1.45	1.85	2.35	2.95			

## 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	\$3.15	Package A.C. (short ductwork) \$ 6.85	Central refrigeration (zoned)	\$5.95
Electric wall heaters	1.35	Warm and cool air (zoned) 9.05	package (short ductwork)	4.00
Forced air furnace	3.45	Hot/chilled water (zoned) 15.10	Central evaporative	2.70
Hot water	6.15	Heat pump system 8.05	Pkg. refrig \$1,180 to \$1,510 per ton	capacity
Space heaters, with fan	1.60		Evap. coolers . \$160 to \$270 per MCFM	I capacity
radiant	1.90			
Steam (including boiler)	5.50	Small indiv. heat pumps cost \$1,125 to\$1,510	VENTILATION ONLY	
without boiler	4.65	per ton of rated capacity.	Vent. (blowers/ducts)	\$1.05

**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** .92 10 16 1.04 12 .96 18 1.09 14 1.00 (base) 20 1.13

<b>4</b> $\lceil$	Average Floor Area														Average Floor Area	
8	Sq.Ft./Story	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	Sq. Ft./Story
	1,000	1.23	1.40	1.58	1.76											1,000
	2,000		1.14	1.23	1.32	1.40	1.58									2,000
	4,000			1.05	1.09	1.14	1.23	1.32								4,000
	5,000				1.05	1.09	1.16	1.23	1.30							5,000
	8,000					1.01	1.05	1.09	1.14	1.18						8,000
	10,000					.98	1.02	1.05	1.09	1.12	1.16					10,000
	15,000						.97	.99	1.02	1.04	1.06	1.09				15,000
	20,000							.96	.98	1.00	1.02	1.03	1.05	1.09		20,000
	25,000							.94	.96	.97	.99	1.00	1.02	1.04		25,000
	30,000								.94	.96	.97	.98	.99	1.02	1.05	30,000
	40,000									.94	.94	.95	.96	.98	1.01	40,000
	50,000									.91	.92	.93	.94	.96	.98	50,000

## **AUTO DEALERSHIPS - COMPLETE**



**GOOD CLASS C** 



**AVERAGE CLASS S** 

OCCUPANCY DESCRIPTION: These structures include show-room/office and parts/service facilities. Because of the wide range in mix of facilities, (15% to 55% showroom) and qualities, it is best to price each area individually, using the appropriate showroom and service repair garage cost. The large open areas used for display typically have storefronts. There are also some office and storage areas next to the sales cubicles. The service area is designed pri-

marily for vehicular repair and maintenance. Better qualities will have more showroom space.

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

**NOT INCLUDED IN COSTS:** Service equipment, hoists, office furnishings and equipment or special signage.

#### SQUARE FOOT COST TABLE

CLASS	TYPE	COST/ SQ. FT.	EXTERIOR WALLS	INTERIOR FINISH	LIGHTING, PLUMBING AND MECHANICAL	HEAT
A-B	Average	\$ 89.95	Brick, concrete or metal and glass, good showroom front	Plaster, acoustic tile, terrazzo display floor, adequate offices, garage area	Good display, adequate office and service lighting, restrooms	Warm and cool air (zoned)
	Excellent	121.40	Masonry, metal or concrete, highly ornamental, over 30% sales	Plaster, good acoustic panel, best display floors, sealed work floors	Special lighting, good fixtures and plumbing throughout	Warm and cool air (zoned)
С	Good	85.20	Brick, concrete, good show- room front, good sales and service	Drywall, acoustic tile, terrazzo dis- play floor, good office area, garage finish	Good display, office and service lighting, restrooms	Package A.C.
	Average	61.45	Brick, block, concrete, store- front, average sales and service	Drywall, acoustic tile, vinyl composition, office, sales cubicles	Store and office lighting, parts and garage lighting in balance	Package A.C.
	Low cost	41.55	Block, tilt-up, simple front, 15% – 25% sales and office area	Minimum store finish in sales, garage finish in balance	Adequate lighting/plumbing, minimum services	Forced air
	Excellent	119.95	Masonry veneer, EIFS, highly ornamental, over 30% sales	Plaster, good acoustic panel, best display floors, sealed work floors	Special lighting, good fixtures and plumbing throughout	Warm and cool air (zoned)
D	Good	83.10	Masonry veneer, good front and trim, good sales and service	Drywall, acoustic tile, terrazzo dis- play floor, good office area, garage finish	Good display, office and service lighting, restrooms	Package A.C.
"	Average	59.25	Siding, veneer trim, showroom front, average sales and service	Drywall, acoustic tile, vinyl composition, office, sales cubicles	Store and office lighting, parts and garage lighting in balance	Package A.C.
	Low cost	39.50	Stucco or siding, simple front, 15% – 25% sales-office area	Minimum store finish in sales, garage finish in balance	Adequate lighting/plumbing, minimum services	Forced air
DPOLE	Average	54.70	Pole frame, metal siding, storefront, average sales and service	Drywall, acoustic tile, vinyl composition, office, sales cubicles	Store and office lighting, parts and garage lighting in balance	Package A.C.
DPOLE	Low cost	36.10	Metal on pole frame, simple storefront, 15% – 25% show-room	Minimum store finish in sales, garage finish in balance	Adequate lighting/plumbing, minimum services	Forced air
_	Good	78.85	Sandwich panels, good front, good sales and service	Drywall, acoustic tile, terrazzo dis- play floor, good office area, garage finish	Good display, office and service lighting, restrooms	Package A.C.
s	Average	56.00	Sandwich panels, showroom front, average sales and service	Drywall, acoustic tile, vinyl composition, office, sales cubicles	Store and office lighting, parts and garage lighting in balance	Package A.C.
	Low cost	37.05	Single wall, simple storefront, 15% – 25% sales-office area	Minimum store finish in sales, garage finish in balance	Adequate lighting/plumbing, minimum services	Forced air

For load-bearing parking roofs, add \$4.30 per square foot. Access ramps cost \$15.00 to \$27.00 per square foot. For office mezzanines, see Page CAL 10; storage mezzanines, see Page CAL 12.

**CANOPIES**: Large entrance marquees or carport canopies generally cost 1/3 to 3/5 of the final base cost per square foot of the building, or they may be computed from Section SEG 4, or from Unit-in-Place Costs.

## **AUTO DEALERSHIPS - COMPLETE**

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

<b>ELEVATORS:</b> Small two- or three-passenger elevators with simple call	SPRINKLE	RS: Apply to	o sprinklere	ed area.	
systems and push-button control, and two or three stops, cost \$35,250	Sq. Ft.	LOW	AVG.	GOOD	EXCL.
to \$55,500.	1,000	\$2.60	\$3.40	\$4.65	\$6.15
	2,000	2.40	3.10	4.15	5.40
HOISTS: Automobile hoists cost \$6,000 to \$9,275 each.	5,000	2.05	2.65	3.50	4.55
Truck hoists, \$8,250 to \$15,500. See Section UIP 14 for greater detail.	10,000	1.85	2.35	3.10	4.00
	15,000	1.75	2.25	2.85	3.70
	20,000	1.65	2.15	2.75	3.50
	30,000	1.55	2.00	2.55	3.25
	50,000	1.45	1.85	2.35	2.95

#### 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.	S	Sq. Ft.
HEATING ONLY	Costs	HEATING & COOLING Costs	COOLING ONLY	Costs
Electric cable or baseboard	\$3.15	Package A.C. (short ductwork) \$ 6.85	Central refrigeration (zoned)	\$5.95
Electric wall heaters	1.35	Warm and cool air (zoned) 7.85	package (short ductwork)	4.05
Forced air furnace	3.45	Hot/chilled water (zoned) 15.10	Central evaporative	2.70
Hot water	6.15	Heat pump system 8.05	Pkg. refrig \$1,180 to \$1,540 per ton c	apacity
Space heaters, with fan	1.60		Evap. coolers . \$160 to \$270 per MCFM c	apacity
radiant	1.90			
Steam (including boiler)	5.50	Small indiv. heat pumps cost \$1,125 to \$1,510	VENTILATION ONLY	
without boiler	4.65	per ton of rated capacity.	Vent. (blowers/ducts)	\$1.05

3	HEIGHT REFINEMENTS			
	STORY HEIGHT MULTIPLIERS: MI	ultiply base cost by following multip	liers for any variation in average	story height.
	Average Wall Height	Square Foot Multiplier	Average Wall Height	Square Foot Multiplier
	10	.92	20	1.13
	12	.96	22	1.18
	14	1.00 (base)	24	1.23
	16	1.04	26	1.28
	18	1.09	28	1.33

Average Floor Area		AVERAGE PERIMETER												Average Floor Area	
Sq. Ft./Story	100	150	200	250	300	400	500	600	700	800	900	1000	1200	1500	Sq. Ft./Story
1,000	1.23	1.43	1.63	1.83											1,000
2,000		1.13	1.23	1.33	1.43	1.63									2,000
4,000			1.03	1.08	1.13	1.23	1.33								4,000
5,000				1.03	1.07	1.15	1.23	1.31							5,000
8,000					.98	1.03	1.08	1.13	1.18						8,000
10,000					.95	.99	1.03	1.07	1.11	1.15					10,000
15,000						.94	.97	.99	1.02	1.05	1.07				15,000
20,000							.93	.95	.97	.99	1.01	1.03	1.07		20,000
25,000							.91	.93	.95	.96	.98	.99	1.03		25,000
30,000								.91	.93	.94	.95	.97	.99	1.03	30,000
40,000									.90	.91	.92	.93	.95	.98	40,000
50,000									.88	.89	.90	.91	.93	.95	50,000