# CASINOS

**OCCUPANCY DESCRIPTION:** These buildings are designed mainly for gaming and entertainment, and include bars and lounges, showrooms, retail and food service facilities commensurate with the quality level.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Projection area, lighting and sound systems commensurate with the overall quality. The costs include security and sound system, with better qualities having special lighting, stages, separate parlor and betting rooms, and restaurants.

**NOT INCLUDED IN COSTS:** Gaming or food service equipment.

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ.FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| C | Very good | $187.85 | Good architecture and trim, steel frame, best masonry | Central gaming, restaurants, retail, show, betting and meeting rooms | Special lighting and show sound system, good plumbing, security | Hot and chilled water (zoned) |
| | Good | 154.15 | Face brick, concrete and glass panels, good architecture, entry | Good gaming floor, betting, lounge and food areas, some good ornamention | Good lighting and security system, good plumbing, food services | Warm and cool air (zoned) |
| | Average | 114.10 | Block, concrete panels, some trim, good entry | Drywall, vinyl, carpet, pavers, some lounge, betting rooms, coffee shop | Adequate lighting and plumbing, security system, bar and kitchen | Warm and cool air (zoned) |
| | Low cost | 82.45 | Low-cost block, tilt-up | Very plain, vinyl composition tile, carpet, few extras | Minimum lighting and plumbing | Heat pump system |
| D | Good | 149.50 | Brick veneer, best stucco, EIFS, siding, good trim, ornamental front | Good gaming floor, betting, lounge and food areas, some good ornamentation | Good lighting and security system, good plumbing, food services | Warm and cool air (zoned) |
| | Average | 110.30 | Good stucco or siding, some trim, good entry | Drywall, vinyl, carpet, pavers, some lounge, betting rooms, coffee shop | Adequate lighting and plumbing, security system, bar and kitchen | Warm and cool air (zoned) |
| | Low cost | 79.30 | Low-cost stucco or siding, very plain, low-cost entry | Drywall, some acoustic, vinyl composition tile, carpet, few rooms or extras | Minimum lighting and plumbing, limited lounge and food prep. | Heat pump system |
| S | Average | 105.45 | Metal sandwich panels, some trim, good entry | Drywall, vinyl, carpet, pavers, some lounge, betting rooms, coffee shop | Adequate lighting and plumbing, security system, bar and kitchen | Warm and cool air (zoned) |
| | Low cost | 75.50 | Metal panels, very plain | Drywall, vinyl composition tile, carpet, few extras | Minimum lighting and plumbing | Heat pump system |
| CDS | Finished basement | 97.70 | Concrete masonry, finished interior | Adequate gaming, lounge area, restrooms, some utility and storage | Adequate lighting, plumbing and security, some extras | Heat pump system |

For utility basements, see Auditorium basements, Page CAL 8.

# CASINOS

**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**

**ELEVATORS:** A small passenger or freight elevator with simple call system and push-button control, and two or three stops, costs $35,250 to $55,500.

**CANOPIES:** Large entrance marquees or canopies generally cost 1/4 to 2/5 of the final base cost per square foot, or they may be computed from the Segregated or Unit-in-Place costs.

**SPRINKLERS:** Apply to sprinklered area.

| 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 |
| 150,000 | 1.45 | 1.75 | 2.15 | 2.60 |
| 200,000 | 1.40 | 1.70 | 2.05 | 2.45 |

**2**

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs | HEATING & COOLING | Sq. Ft. Costs | COOLING ONLY | Sq. Ft. 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 ton capacity |
| Space heaters, with fan | 2.20 | | | Evap. coolers | $205 to $345 per MCFM capacity |
| radiant | 2.65 | | | | |
| Steam (including boiler) | 9.45 | | | | |
| without boiler | 8.30 | Small indiv. heat pumps cost $1,225 to $1,650 per ton of rated capacity. | | **VENTILATION ONLY** | |
| Wall or floor furnace | 2.50 | | | Vent. (blowers/ducts) | $1.95 |

**3**

**HEIGHT REFINEMENTS**

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

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 12 | .71 | 28 | 1.08 |
| 14 | .79 | 30 | 1.12 |
| 16 | .83 | 34 | 1.21 |
| 18 | .87 | 38 | 1.29 |
| 20 | .92 | 42 | 1.37 |
| 22 | .96 | 46 | 1.45 |
| 24 | 1.00 (base) | 50 | 1.53 |
| 26 | 1.04 | 54 | 1.60 |

**4**

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

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

# CITY CLUBS

GOOD CLASS A/B

AVERAGE CLASS A

**OCCUPANCY DESCRIPTION:** City Clubs are private hotels, and, as such, the structures are generally three or more stories in height, with multiple sleeping units having no individual kitchen facilities. Structures normally have combined heating and cooling systems.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Allowance for dining, gymnasium and library facilities and a lobby area. Service areas with good lighting, plumbing fixtures, and steam rooms. Elevators are included in costs designated with an asterisk (*).

**NOT INCLUDED IN COSTS:** Sprinklers, swimming pools, kitchen equipment, exercise equipment.

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| A-B | Good | $132.95 | Face brick or stone veneer, best metal and glass, concrete | Good plaster, paneling, carpet, fine detail, add for olympic pool | *TV and phone jacks in rooms, service and fixtures | Hot and chilled water (zoned) |
| | Average | 103.70 | Brick, stone, metal or precast panels, little trim | Plaster or drywall, carpeting, good lounge and public area, gym | *Adequate, steam room, gym, add for swimming pool | Warm and cool air (zoned) |
| A-B | Finished basement | 62.35 | Plaster or drywall interior | Plaster or drywall, vinyl comp., acoustic ceiling, shops, service functions | Adequate lighting/plumbing, restrooms, utility rooms | Hot water |
| | Parking basement | 36.55 | Unfinished | Concrete floor with hardener, lines and wheel stops | Minimum lighting/floor drains | Ventilation |
| | Utility basement | 33.70 | Painted interior | Few partitions and fire walls | Utility lighting/plumbing | None |
| C | Good | 109.85 | Face brick, stone or concrete & glass, good trim & entrance | Good plaster, paneling, carpet, good detail, add for olympic pool | *TV and phone jacks in rooms, good service and fixtures | Warm and cool air (zoned) |
| | Average | 88.85 | Brick, stone, metal or precast panels, little trim | Plaster or drywall, carpeting, good lounge and public areas, gym | *Adequate, steam room, gym, add for swimming pool | Warm and cool air (zoned) |
| C† | Finished basement | 46.00 | Plaster or drywall interior | Plaster or drywall, vinyl composition, finished ceiling, service functions | Adequate lighting/plumbing, utility outlets and fixtures | Forced air |
| | Parking basement | 24.40 | Unfinished | Plaster ceiling, concrete floor with hardener | Minimum lighting/floor drains | Ventilation |
| | Utility basement | 22.40 | Unfinished | Unfinished, no ceiling | Minimum lighting/plumbing | None |

†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.

# CITY CLUBS

**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

**ELEVATORS:** Buildings whose base costs include elevators are marked with an asterisk (*). If the building under consideration has no elevators, deduct the following from the base costs so marked. For detailed costs see Section UIP 8.

| Classes A/B | Sq. Ft. Costs | Class C | Sq. Ft. Costs |
|---|---|---|---|
| Good | $3.60 | Good | $2.30 |
| Average | 2.75 | Average | 1.80 |

**ELEVATOR STOPS:** For basement stops, add $4,250 to $6,450 per stop.

**SWIMMING POOLS:** Swimming pools, complete, cost $44.25 to $127.75 per square foot. For detailed costs, see Section UIP 16.

**SPRINKLERS:** Apply to sprinklered area.

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $2.25 | $2.85 | $3.65 | $4.70 |
| 10,000 | 2.00 | 2.55 | 3.25 | 4.10 |
| 20,000 | 1.80 | 2.25 | 2.85 | 3.60 |
| 50,000 | 1.55 | 1.95 | 2.45 | 3.05 |
| 75,000 | 1.50 | 1.85 | 2.25 | 2.80 |
| 100,000 | 1.40 | 1.75 | 2.15 | 2.65 |

**BALCONIES:** Exterior balconies generally cost 1/3 to 1/2 of the final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs.

## 2

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs | HEATING & COOLING | Sq. Ft. Costs | COOLING ONLY | Sq. Ft. Costs |
|---|---|---|---|---|---|
| Electric cable or baseboard | $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 MCFM 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.

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 8 | .95 | 14 | 1.11 |
| 9 | .97 | 15 | 1.14 |
| 10 | 1.00 (base) | 16 | 1.18 |
| 11 | 1.03 | 17 | 1.21 |
| 12 | 1.06 | 18 | 1.24 |
| 13 | 1.08 | | |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1400 | Average Floor Area Sq. Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2,000** | 1.09 | 1.15 | 1.22 | 1.29 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **2,000** |
| **4,000** | .96 | .99 | 1.02 | 1.06 | 1.09 | 1.12 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **4,000** |
| **6,000** | ----- | .93 | .96 | .98 | 1.00 | 1.02 | 1.04 | 1.09 | ----- | ----- | ----- | ----- | ----- | ----- | **6,000** |
| **8,000** | ----- | ----- | .92 | .94 | .96 | .97 | .99 | 1.02 | 1.06 | ----- | ----- | ----- | ----- | ----- | **8,000** |
| **10,000** | ----- | ----- | ----- | .92 | .93 | .94 | .96 | .98 | 1.01 | 1.04 | ----- | ----- | ----- | ----- | **10,000** |
| **12,000** | ----- | ----- | ----- | .90 | .91 | .92 | .93 | .96 | .98 | 1.00 | ----- | ----- | ----- | ----- | **12,000** |
| **15,000** | ----- | ----- | ----- | ----- | .89 | .90 | .91 | .93 | .95 | .96 | .98 | ----- | ----- | ----- | **15,000** |
| **20,000** | ----- | ----- | ----- | ----- | ----- | ----- | .89 | .90 | .92 | .93 | .94 | .96 | .98 | ----- | **20,000** |
| **25,000** | ----- | ----- | ----- | ----- | ----- | ----- | .88 | .89 | .90 | .91 | .92 | .93 | .95 | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .88 | .89 | .89 | .90 | .91 | .93 | .95 | **30,000** |
| **35,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .87 | .88 | .88 | .89 | .90 | .91 | .93 | **35,000** |
| **40,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .87 | .88 | .88 | .89 | .90 | .92 | **40,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# CLUBHOUSES

GOOD CLASS C

AVERAGE CLASS S

**OCCUPANCY DESCRIPTION:** Clubhouses are general-purpose recreation buildings such as Community Halls/ Centers, Veteran Organization buildings, Senior Citizen facilities. Large multipurpose complexes with auditoriums, kitchens, gamerooms and offices are classified as fraternal clubs.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Allowance for light kitchen facilities, large general-use room with stage, and multiple restrooms. The better facilities will have moveable partition walls and some small meeting rooms or offices.

**NOT INCLUDED IN COSTS:** Elevators, sprinklers, balconies, kitchen equipment or stage equipment.

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| C | Excellent | $123.75 | Face brick, glass panels, stone, top quality | Plaster, terrazzo, tile pavers, hardwood, carpet, stage | Tiled restrooms, full kitchen, special lighting | Warm & cool air (zoned) |
| | Good | 91.60 | Face brick, concrete or metal panels, ornamentation | Plaster or drywall, carpet, hard-wood, small stage, vinyl composition | Tiled restrooms, good kitchen, adequate lighting/plumbing | Heat pump system |
| | Average | 66.10 | Brick, block, concrete panels, some trim | Plaster or drywall, acoustic tile, vinyl composition, concrete slab | Adequate lighting/plumbing, average restrooms/kitchen | Forced air |
| | Low cost | 46.85 | Brick, block, tilt-up, no trim | Painted walls, concrete floor | Minimum lighting/plumbing | Wall furnace |
| D | Excellent | 120.40 | Stone or brick veneer, metal and glass panels, best quality | Plaster, terrazzo, tile pavers, hardwood, carpet, stage | Tiled restrooms, full kitchen, special lighting | Warm & cool air (zoned) |
| | Good | 88.20 | Brick veneer, good stucco or siding, ornamentation | Plaster or drywall, carpet, hard-wood, vinyl composition, small stage | Tiled restrooms, good kitchen, adequate lighting/plumbing | Heat pump system |
| | Average | 62.95 | Brick veneer, stucco or siding, little trim | Plaster or drywall, acoustic tile, vinyl composition, concrete slab | Adequate lighting/plumbing, average restrooms/kitchen | Forced air |
| | Low cost | 44.05 | Stucco or siding, very plain | Drywall, concrete slab | Minimum lighting/plumbing | Wall furnace |
| DPOLE | Low cost | 38.80 | Metal skin on pole frame and truss, some interior finish | Few partitions, concrete slab, part ceiling | Minimum electric/plumbing | Electric wall heaters |
| S | Excellent | 106.80 | Best sandwich panels, good fenestration and ornamentation | Drywall, terrazzo, tile pavers, hard-wood, carpet, stage | Tiled restrooms, full kitchen, special lighting | Warm & cool air (zoned) |
| | Good | 78.55 | Insulated sandwich panels, some trim | Drywall, carpet and vinyl composition, small stage | Adequate lighting/plumbing, good kitchen and restrooms | Heat pump system |
| | Average | 56.00 | Insulated sandwich panels, pre-engineered frame | Gypsum or plywood, acoustic tile, vinyl composition | Adequate lighting/plumbing, average restrooms/kitchen | Forced air |
| | Low cost | 38.95 | Metal skin on pre-engineered frame, some interior finish | Few partitions, concrete slab, part ceiling | Minimum electric/plumbing | Electric wall heaters |
| CDS | Semifin. basement | 28.25 | Low-cost finishes | Minimum social functions | Minimum lighting/plumbing | Space heaters |
| | Unfin. bsmt. | 21.25 | Unfinished interior | Unfinished storage and utility | Minimum lighting/drains | None |

# CLUBHOUSES

**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

**ELEVATORS:** A small clubhouse elevator with simple call system and push-button control, four-passenger cab and two or three stops costs $35,250 to $55,500.

**KITCHEN UNITS:** Average costs per linear foot of single-unit steel kitchens such as are found in clubhouses, containing sink, stove, oven and refrigerator. Add $600 to $1,265 for microwave oven.

| | COST RANGE |
|---|---|
| Base section only | $525 – $975 |
| Base section and upper cabinets | $700 – $775 |

**SPRINKLERS:** Apply to sprinklered area.

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 3,000 | $2.45 | $3.15 | $4.00 | $5.15 |
| 5,000 | 2.25 | 2.85 | 3.65 | 4.70 |
| 10,000 | 2.00 | 2.55 | 3.25 | 4.10 |
| 20,000 | 1.80 | 2.25 | 2.85 | 3.60 |
| 50,000 | 1.55 | 1.95 | 2.45 | 3.05 |

**BALCONIES:** Exterior balconies generally cost 1/3 to 1/2 of the final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs.

## 2

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs | HEATING & COOLING | Sq. Ft. Costs | COOLING ONLY | Sq. Ft. Costs |
|---|---|---|---|---|---|
| Electric cable or baseboard | $3.55 | Package A.C. (short ductwork) | $ 7.00 | Central refrigeration (zoned) | $5.70 |
| Electric wall heaters | 1.25 | 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 MCFM 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**

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

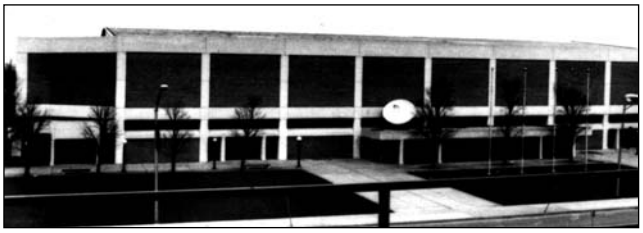
| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 8 | .95 | 14 | 1.11 |
| 9 | .97 | 15 | 1.14 |
| 10 | 1.00 (base) | 16 | 1.18 |
| 11 | 1.03 | 17 | 1.21 |
| 12 | 1.06 | 18 | 1.24 |
| 13 | 1.08 | 19 | 1.27 |
| | | 20 | 1.31 |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER | | | | | | | | | | | | | | Average Floor Area Sq. Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 1000 | |
| **2,000** | 1.10 | 1.17 | 1.25 | 1.32 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **2,000** |
| **4,000** | .95 | .99 | 1.02 | 1.06 | 1.10 | 1.14 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **4,000** |
| **6,000** | ----- | .93 | .95 | .98 | 1.00 | 1.02 | 1.05 | 1.07 | ----- | ----- | ----- | ----- | ----- | ----- | **6,000** |
| **8,000** | ----- | ----- | .91 | .93 | .95 | .97 | .99 | 1.01 | 1.02 | 1.04 | ----- | ----- | ----- | ----- | **8,000** |
| **10,000** | ----- | ----- | ----- | .91 | .92 | .94 | .95 | .97 | .98 | 1.00 | 1.01 | 1.02 | ----- | ----- | **10,000** |
| **12,000** | ----- | ----- | ----- | .89 | .90 | .91 | .93 | .94 | .95 | .96 | .98 | .99 | 1.00 | ----- | **12,000** |
| **14,000** | ----- | ----- | ----- | ----- | .89 | .90 | .91 | .92 | .93 | .94 | .95 | .96 | .97 | 1.01 | **14,000** |
| **16,000** | ----- | ----- | ----- | ----- | ----- | .89 | .90 | .91 | .92 | .92 | .93 | .94 | .95 | .99 | **16,000** |
| **20,000** | ----- | ----- | ----- | ----- | ----- | ----- | .89 | .89 | .90 | .91 | .91 | .92 | .93 | .95 | **20,000** |
| **24,000** | ----- | ----- | ----- | ----- | ----- | ----- | .87 | .88 | .89 | .89 | .90 | .90 | .91 | .93 | **24,000** |
| **28,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .87 | .88 | .88 | .89 | .89 | .90 | .91 | **28,000** |
| **32,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .86 | .87 | .87 | .88 | .88 | .89 | .90 | **32,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# COMPUTER CENTERS



AVERAGE CLASS B

AVERAGE CLASS C

**OCCUPANCY DESCRIPTION:** Computer centers are electronic data processing plants, including ancillary offices. Most facilities will have a rather plain exterior appearance with little fenestration. The cost and quality selection will depend primarily on the amount of interior finish. An amount of raised computer floor is included, commensurate with the quality level. The better qualities have a large amount of good support room and many offices.

**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 computer equipment.

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| A-B | Excellent | $179.80 | Good curtain walls, good brick and glass, with ornamentation | Plaster, acoustic ceilings, raised floor, much office space | Fluorescent lighting, many outlets, good plumbing | Hot and chilled water (zoned) |
| | Good | 146.70 | Face brick, metal panels, good glass, ornamentation | Drywall or plaster, raised floors, good support rooms and offices | Good lighting, many outlets, adequate plumbing | Hot and chilled water (zoned) |
| | Average | 120.15 | Brick, block, concrete panels, low-cost metal and glass | Painted walls and ceilings, raised floors, office and support rooms | Fluorescent lighting, adequate restrooms and plumbing | Hot and chilled water (zoned) |
| | Low cost | 92.95 | Low-cost brick, structural tile, block, concrete panels | Painted walls, large open areas, offices and support rooms | Fluorescent lighting, minimum plumbing | Warm and cool air (zoned) |
| A-B | Office basement | 85.90 | Plaster interior | Average office building finish, acoustic tile, vinyl composition | Adequate office lighting and plumbing | Warm and cool air (zoned) |
| | Parking basement | 43.05 | Unfinished concrete, waterproofed walls | Unfinished, concrete floor, striped | Minimum lighting, adequate drains | Ventilation |
| | Office mezzanine | 55.15 | In building cost | Enclosed average office building finish, plaster soffit | Average office lighting and plumbing | Included in building cost |
| C | Good | 114.90 | Masonry or concrete, some ornamentation, steel frame | Plaster, raised floors, good support rooms and detail | Fluorescent lighting, adequate restrooms and plumbing | Warm and cool air (zoned) |
| | Average | 94.35 | Brick, block, concrete, load-bearing walls or frame | Gypsum board, raised floors, adequate office and support areas | Adequate lighting and plumbing | Warm and cool air (zoned) |
| | Low cost | 75.65 | Low-cost brick, concrete, block, tilt-up, very plain | Minimum finish and detail, small office and support areas | Minimum lighting and plumbing | Package A.C. |
| D | Average | 92.45 | Light frame or studs, stucco, siding, EIFS | Drywall or plaster, raised floors, adequate office and support areas | Fluorescent lighting, adequate plumbing | Warm and cool air (zoned) |
| | Low cost | 74.25 | Bearing studs and stucco or wood siding, very plain | Minimum finish and detail, small office and support areas | Minimum lighting and plumbing | Package A.C. |
| S | Average | 88.50 | Steel frame, transite, steel siding or sandwich panels | Drywall or plaster, raised floors, adequate office and support areas | Adequate lighting and plumbing | Warm & cool air (zoned) |
| CDS† | Office basement | 56.95 | Plaster or drywall interior | Average office building finish, acoustic tile, vinyl composition | Typical office lighting and plumbing | Forced air |
| | Parking basement | 29.55 | Unfinished concrete, waterproofed | Plaster or drywall ceiling, concrete floor, striped | Minimum lighting, adequate drains | Ventilation |
| | Office mezzanine | 41.90 | In building cost | Enclosed average building office finish, acoustic tile soffit | Average office lighting and plumbing | Included in building cost |

†For fire-resistant Type I basements, with concrete slab separation under Class C, D or S units, add $4.35 per square foot.

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

**NOTE:** H.V.A.C costs must be carefully examined in older facilities where older, high-heat-producing equipment may have required very high-capacity systems. Adjustments can be made from Page CAL 113 when warranted.

# COMPUTER 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.

## 1

**ELEVATORS**: A small passenger elevator with simple call system and push-button control, four-passenger cab, and two or three stops, costs $35,250 to $55,500.
For greater detail, see Section UIP 8.

**ELEVATOR STOPS:** For basement or mezzanine elevator stops, add $4,275 to $6,475 per stop.

**SPRINKLERS:** Apply to sprinklered area.

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $2.05 | $2.65 | $3.50 | $4.55 |
| 10,000 | 1.85 | 2.35 | 3.10 | 4.00 |
| 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 |
| 80,000 | 1.35 | 1.70 | 2.15 | 2.70 |
| 100,000 | 1.30 | 1.65 | 2.05 | 2.60 |
| 200,000 | 1.20 | 1.45 | 1.85 | 2.30 |
| 400,000 | 1.05 | 1.30 | 1.60 | 2.00 |

**DOCK HEIGHT FLOORS:** Add $1.50 to $3.35 per square foot to base cost of first floor.

## 2

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs | HEATING & COOLING | Sq. Ft. Costs | COOLING ONLY | Sq. Ft. Costs |
|---|---|---|---|---|---|
| Electric cable or baseboard . . | $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. . $1,000 to $1,325 per ton capacity | |
| Space heaters, with fan . . . . . | 1.60 | | | Evap. coolers . $135 to $225 per MCFM capacity | |
| radiant . . . . . | 1.90 | | | | |
| Steam (including boiler) . . . . . | 5.50 | Small indiv. heat pumps cost $1,125 to $1,500 | | **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 |
|---|---|---|---|
| 8 | .89 | 20 | 1.13 |
| 10 | .92 | 22 | 1.18 |
| 12 | .96 | 24 | 1.23 |
| 14 | 1.00 (base) | 26 | 1.28 |
| 16 | 1.04 | 28 | 1.33 |
| 18 | 1.09 | 30 | 1.38 |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 300 | 400 | 500 | 600 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 3000 | Average Floor Area Sq. Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **5,000** | 1.07 | 1.15 | 1.23 | 1.30 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **10,000** | .95 | .99 | 1.03 | 1.07 | 1.15 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **10,000** |
| **15,000** | ----- | .94 | .97 | .99 | 1.05 | 1.10 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **15,000** |
| **20,000** | ----- | ----- | .94 | .95 | .99 | 1.03 | 1.07 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **20,000** |
| **25,000** | ----- | ----- | .92 | .93 | .96 | .99 | 1.02 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | .92 | .94 | .97 | .99 | 1.02 | ----- | ----- | ----- | ----- | ----- | ----- | **30,000** |
| **40,000** | ----- | ----- | ----- | .90 | .92 | .94 | .95 | .97 | .99 | ----- | ----- | ----- | ----- | ----- | **40,000** |
| **50,000** | ----- | ----- | ----- | .89 | .90 | .92 | .93 | .95 | .96 | ----- | ----- | ----- | ----- | ----- | **50,000** |
| **80,000** | ----- | ----- | ----- | ----- | .88 | .89 | .90 | .91 | .92 | .93 | .94 | .95 | ----- | ----- | **80,000** |
| **100,000** | ----- | ----- | ----- | ----- | ----- | .88 | .89 | .89 | .90 | .91 | .92 | .92 | .93 | ----- | **100,000** |
| **200,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .86 | .87 | .87 | .88 | .88 | .89 | .90 | **200,000** |
| **400,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .86 | .86 | .87 | **400,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# CONVENTION CENTERS

**AVERAGE CLASS C**

**OCCUPANCY DESCRIPTION:** These structures are large, open, arena/auditorium-type facilities for short-term meeting and/or trade show/display of products. The better facilities will have varied multifunctional space with movable partitions and ancillary eating and entertainment facilities.

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

**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 |
|---|---|---|---|---|---|---|
| A | Good | $203.25 | Special architecture, good materials, good entrance & lobbies | Large clear-span halls, good meeting rooms, theater, grand ballrooms | Special lighting, good sound system and plumbing, kitchens | Warm and cool air (zoned) |
| | Average | 146.05 | Heavy frame, metal or concrete panels, good architecture | Good exhibit hall, meeting rooms and lobby, some extras | Good lighting and sound system, good plumbing and kitchen | Warm and cool air (zoned) |
| | Low cost | 106.45 | Face brick, concrete panels with trim, plain architecture | Plain exhibit space and meeting rooms, few extras | Adequate lighting and plumbing, sound system, food service | Warm and cool air (zoned) |
| B | Good | 196.60 | Special architecture, good materials, good entrance & lobbies | Large clear-span halls, good meeting rooms, theater, grand ballrooms | Special lighting, good sound system and plumbing, kitchens | Warm and cool air (zoned) |
| | Average | 141.85 | Heavy frame, metal or concrete panels, good architecture | Good exhibit hall, meeting rooms and lobby, some extras | Good lighting and sound system, good plumbing and kitchen | Warm and cool air (zoned) |
| | Low cost | 103.80 | Face brick, concrete panels with trim, plain architecture | Plain exhibit space and meeting rooms, few extras | Adequate lighting and plumbing, sound system, food service | Warm and cool air (zoned) |
| A-B | Unfinished basement | 48.45 | Unfinished interior | Unfinished storage and utility | Minimum lighting, drains | None |
| | Parking basement | 53.30 | Unfinished interior | Unfinished (service booth) | Exposed lighting, drains | Ventilation |
| C | Excellent | 180.95 | Heavy frame, best masonry walls, good entrance and lobby | Good exhibit hall, meeting rooms and lobby, some extras | Special lighting, good sound system and plumbing, kitchens | Warm and cool air (zoned) |
| | Good | 142.65 | Steel columns and girders, face brick, best ornamental block | Plain exhibit space, average meeting rooms, few extras | Good lighting and sound system, good plumbing and kitchen | Warm and cool air (zoned) |
| | Average | 107.60 | Brick, block, concrete panels, little trim, good conference-type facility | Drywall, some ornamentation, vinyl composition, terrazzo lobby | Adequate lighting and plumbing, sound system, food service | Package A.C. |
| | Low cost | 80.80 | Block, tilt-up, light frame | Painted, acoustic tile, carpet | Minimum lighting and plumbing | Forced air |
| D | Excellent | 174.10 | Face brick or stone veneer, heavy frame, good entrance and lobby | Good exhibit hall, meeting rooms and lobby, some extras | Special lighting, good sound system and plumbing, kitchens | Warm and cool air (zoned) |
| | Good | 137.35 | Steel and Glulam frame, trusses and girders, brick veneer, best stucco | Plain exhibit space, average meeting rooms, few extras | Good lighting and sound system, good plumbing and kitchen | Warm and cool air (zoned) |
| | Average | 103.50 | Good stucco, some trim, good conference-type facility | Drywall, some ornamentation, vinyl composition, terrazzo lobby | Adequate lighting and plumbing, sound system, food service | Package A.C. |
| | Low cost | 77.60 | Low-cost stucco or siding, very plain | Drywall, acoustic tile, carpet | Minimum lighting and plumbing | Forced air |
| DPOLE | Low cost | 73.95 | Metal panels on pole frame, low-cost hotel-type facility | Few partitions, acoustic tile, carpet, tiled restrooms | Minimum lighting, plumbing and sound system | Forced air |
| S | Low cost | 74.05 | Steel or aluminum panels, low-cost hotel-type facility | Few partitions, acoustic tile, carpet, tiled restrooms | Minimum lighting, plumbing and sound system | Forced air |
| CDS† | Unfinished basement | 31.60 | Unfinished interior | Unfinished storage and utility | Minimum lighting, drains | None |
| | Parking basement | 36.20 | Unfinished interior | Finished ceiling, concrete floor with hardener | Exposed lighting, adequate drains | Ventilation |

†For fire-resistant Type I basements with concrete slab separation, under Class C, D or S units, add $4.35 per square foot.
For finished basements and mezzanines, see Auditoriums and Theaters.

# CONVENTION 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.

**1**

**ELEVATORS**: A small passenger or freight elevator with simple call system. and push-button control, and two or three stops, costs $35,250 to $55,500. For detailed costs, see Section UIP 8.

**CANOPIES:** Large entrance canopies generally cost 1/4 to 2/5 of the final base cost per square foot of the building.

For pedestrian bridges or tunnels, see Page CAL 248.

**SPRINKLERS:** Apply to sprinklered area.

| 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 | 1.55 | 1.90 | 2.30 | 2.80 |
| 150,000 | 1.45 | 1.75 | 2.15 | 2.60 |
| 200,000 | 1.40 | 1.70 | 2.05 | 2.45 |

**BALCONIES**: Exterior balconies generally cost 1/3 to 1/2 of the final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs.

**2**

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs |
|---|---|
| Electric cable or baseboard | $ 5.55 |
| Electric wall heaters | 2.25 |
| Forced air furnace | 6.85 |
| Hot water | 10.35 |
| Space heaters, with fan | 2.20 |
| radiant | 2.65 |
| Steam (including boiler) | 9.45 |
| without boiler | 8.30 |
| Wall or floor furnace | 2.50 |

| HEATING & COOLING | Sq. Ft. Costs |
|---|---|
| Package A.C. (short ductwork) | $11.15 |
| Warm and cool air (zoned) | 16.80 |
| Hot/chilled water (zoned) | 24.60 |
| Heat pump system | 13.35 |

Small indiv. heat pumps cost $1,225 to $1,650 per ton of rated capacity.

| COOLING ONLY | Sq. Ft. Costs |
|---|---|
| Central refrigeration (zoned) | $8.85 |
| package (short ductwork) | 6.30 |
| Central evaporative | 3.80 |
| Pkg. refrig. | $1,375 to $1,760 per ton capacity |
| Evap. coolers | $205 to $345 per MCFM capacity |

**VENTILATION ONLY**

Vent. (blowers/ducts) . . . . . $1.95

**3**

**HEIGHT REFINEMENTS**

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

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|---|---|
| 8 | .65 | 22 | .96 | 38 | 1.29 |
| 12 | .74 | 24 | 1.00 (base) | 42 | 1.37 |
| 14 | .79 | 26 | 1.04 | 50 | 1.53 |
| 16 | .83 | 28 | 1.08 | 58 | 1.68 |
| 18 | .87 | 30 | 1.12 | 66 | 1.83 |
| 20 | .92 | 34 | 1.21 | 74 | 1.98 |

**4**

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 150 | 200 | 250 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1400 | 1600 | Average Floor Area 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** |

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

# COUNTRY CLUBS

GOOD CLASS C

GOOD CLASSES C/D

**OCCUPANCY DESCRIPTION:** Structures are designed for entertainment and have few, if any, sleeping rooms. Entertaining groups requires good kitchen facilities, minimum restrooms with or without lockers and showers, and large general-use rooms.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Minimum allowance for small offices or meeting rooms. Higher-quality structures will have ballroom, bar, banquet and pro shop facilities, as well as extensive locker and shower rooms.

**NOT INCLUDED IN COSTS:** Elevators, sprinklers, balconies, fireplaces, swimming pools, lockers, kitchen or bar equipment

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| C | Excellent | $154.90 | Ashlar and face brick, metal and glass, top architecture | Plaster, quality carpet, hardwood, ceramic tile, sheet vinyl | High-capacity electrical service, fine electric/plumbing fixtures | Warm & cool air (zoned) |
| | Good | 118.70 | Stone trim, brick, metal or concrete panels and glass | Plaster or drywall, carpet, hardwood, vinyl composition | Good lighting, bar, dining room, kitchen, good plumbing | Heat pump system |
| | Average | 91.65 | Brick or block, concrete panels, some ornamentation | Plaster or drywall, carpet and vinyl composition | Adequate lighting, showers, bars, kitchen, adequate restrooms | Package A.C. |
| | Low cost | 69.25 | Concrete block or low-cost brick, very plain | Unfinished block, drywall partitions, minimum facilities | Minimum shower and locker rooms, minimum lighting | Forced air |
| D | Excellent | 152.30 | Ashlar or face brick veneer, top architecture, much glass | Plaster, quality carpet, hardwood, ceramic tile, sheet vinyl | High-capacity electrical service, fine electrical/plumbing fixtures | Warm & cool air (zoned) |
| | Good | 115.30 | Brick veneer, best stucco or siding, ornamentation | Plaster or drywall, carpeting, hardwood, vinyl composition | Good lighting, bar, dining room, kitchen, good plumbing | Heat pump system |
| | Average | 88.05 | Good stucco or siding, some brick or stone trim | Plaster or drywall, some carpet, vinyl composition | Adequate lighting, showers, bar, kitchen, adequate restrooms | Package A.C. |
| | Low cost | 65.70 | Stucco or siding, very plain | Drywall, vinyl composition, few partitions, minimum facilities | Minimum shower and locker rooms, minimum lighting | Forced air |
| S | Average | 81.55 | Insulated metal sandwich panels, steel frame, some trim | Drywall, carpet, cork, rubber, vinyl composition | Average quality and quantity, adequate facilities | Package A.C. |
| | Low cost | 59.95 | Enameled metal siding, finished interior, insulated | Drywall, rubber, vinyl composition, exposed concrete | Minimum electrical/plumbing, minimum facilities | Forced air |
| CDS | Finished basement | 51.10 | Reinforced concrete, plaster or drywall interior | Utility and dressing room finishes | Adequate lighting and plumbing, showers and restrooms | Forced air |
| | Utility basement | 23.55 | Painted interior, outside entry | Paint only, some partitions, golf cart maintenance and storage | Adequate lighting and outlets, drains | None |

# COUNTRY CLUBS

**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

**FIREPLACES:** For each additional opening using the same chimney, add 30% to 50%. Country Clubs with basements, add 40% to extend the foundation to the basement level. Custom oversized units can run 100% to 200% more.

| TYPE | COST RANGE |
|---|---|
| One-story | $1,875 – $6,100 |
| Two-stories | 2,375 – 7,325 |

**SWIMMING POOLS:** Swimming pools, complete, cost $44.25 to $127.75 per square foot. For detailed costs, see UIP Section 16.

**CANOPIES:** Large entrance carport canopies generally cost 1/4 to 2/5 of the final base cost per square foot of the building.

**SPRINKLERS:** Apply to sprinklered area.

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 3,000 | $2.45 | $3.15 | $4.00 | $5.15 |
| 5,000 | 2.25 | 2.85 | 3.65 | 4.70 |
| 10,000 | 2.00 | 2.55 | 3.25 | 4.10 |
| 15,000 | 1.90 | 2.40 | 3.00 | 3.80 |
| 20,000 | 1.80 | 2.25 | 2.85 | 3.60 |
| 25,000 | 1.70 | 2.20 | 2.80 | 3.55 |
| 35,000 | 1.65 | 2.10 | 2.55 | 3.20 |

**BALCONIES:** Exterior balconies generally cost 1/3 to 1/2 of the final base cost per square foot of the building or they may be computed from the Segregated or Unit-in-Place costs.

## 2

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs |
|---|---|
| Electric cable or baseboard | $3.55 |
| Electric wall heaters | 1.40 |
| Forced air furnace | 4.55 |
| Hot water, baseboard/convector | 6.75 |
| radiant floor/ceiling | 7.05 |
| Steam (including boiler) | 6.10 |
| without boiler | 5.40 |
| Wall or floor furnace | 1.55 |

| HEATING & COOLING | Sq. Ft. Costs |
|---|---|
| Package A.C. (short ductwork) | $ 7.00 |
| Warm and cool air (zoned) | 9.75 |
| Hot/chilled water (zoned) | 15.40 |
| Heat pump system | 7.95 |
| Ind. thru-wall heat pumps | 3.50 |

Small indiv. heat pumps cost $1,075 to $1,475 per ton of rated capacity

| COOLING ONLY | Sq. Ft. Costs |
|---|---|
| Central refrigeration (zoned) | $5.70 |
| package (short ductwork) | 3.95 |
| Central evaporative | 2.70 |

Pkg. refrig. . $1,200 to $1,575 per ton capacity

Evap. coolers . $155 to $240 per MCFM capacity

**VENTILATION ONLY**

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.

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 8 | .95 | 14 | 1.11 |
| 9 | .97 | 15 | 1.14 |
| 10 | 1.00 (base) | 16 | 1.18 |
| 11 | 1.03 | 17 | 1.21 |
| 12 | 1.06 | 18 | 1.24 |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 200 | 250 | 300 | 350 | 400 | 450 | 500 | 550 | 600 | 650 | 700 | 750 | 800 | 1000 | Average Floor Area Sq. Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2,000** | 1.07 | 1.13 | 1.18 | 1.24 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **2,000** |
| **4,000** | .96 | .99 | 1.02 | 1.05 | 1.07 | 1.10 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **4,000** |
| **6,000** | ----- | .95 | .96 | .98 | 1.00 | 1.02 | 1.04 | 1.05 | 1.07 | ----- | ----- | ----- | ----- | ----- | **6,000** |
| **8,000** | ----- | ----- | .94 | .95 | .96 | .98 | .99 | 1.00 | 1.02 | 1.03 | ----- | ----- | ----- | ----- | **8,000** |
| **10,000** | ----- | ----- | ----- | .93 | .94 | .95 | .96 | .97 | .99 | 1.00 | 1.01 | 1.02 | ----- | ----- | **10,000** |
| **12,000** | ----- | ----- | ----- | .92 | .93 | .94 | .95 | .95 | .96 | .97 | .98 | .99 | 1.00 | ----- | **12,000** |
| **14,000** | ----- | ----- | ----- | ----- | .91 | .91 | .92 | .93 | .94 | .95 | .95 | .96 | .97 | 1.01 | **14,000** |
| **16,000** | ----- | ----- | ----- | ----- | .90 | .91 | .91 | .92 | .93 | .93 | .94 | .95 | .96 | .99 | **16,000** |
| **20,000** | ----- | ----- | ----- | ----- | ----- | ----- | .90 | .90 | .91 | .92 | .92 | .93 | .94 | .96 | **20,000** |
| **24,000** | ----- | ----- | ----- | ----- | ----- | ----- | .88 | .89 | .90 | .90 | .91 | .91 | .92 | .94 | **24,000** |
| **28,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .88 | .89 | .89 | .90 | .90 | .91 | .92 | **28,000** |
| **32,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .87 | .88 | .89 | .89 | .90 | .90 | .91 | **32,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# CREAMERIES

GOOD CLASS C

GOOD CLASS C

**OCCUPANCY DESCRIPTION:** These buildings are designed for milk processing and butter making. They contain the necessary plumbing and electrical to operate the facility and have built-in refrigerators. The costs for special fixtures or equipment are not included. They are built of masonry or wood frame construction and typically have plaster interiors. Floor finishes are commonly tile or epoxy over a concrete slab. The better qualities have a designated lab, process, storage and distribution areas.

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

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

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| A | Average | $79.50 | Brick, concrete,solid construction | Plaster ceilings, tile floors, wainscot in production areas | Good lighting and plumbing, many outlets, lab | Steam |
| C | Good | 80.10 | Brick, block, concrete, retail entrance and storefront | Plaster, tile floors and wainscot, freezer and cooler rooms | Good lighting and plumbing, many outlets and drains, lab | Steam |
| | Average | 59.00 | Brick, block, little trim, steel or wood trusses or joists | Plaster walls and ceiling, epoxy and tile on concrete floor, freezer room | Adequate lighting, plumbing, power outlets, and drains | Steam |
| | Low cost | 40.05 | Low-cost brick, block, tilt-up, no trim, wood rafters | Painted walls, slab floor, partly finished ceiling, chiller room | Minimum electrical and plumbing | Space heaters |
| D | Good | 75.55 | Brick veneer, good stucco and trim, EIFS, retail entrance and storefront | Plaster, tile floors and wainscot, freezer and cooler rooms | Good lighting and plumbing, many outlets and drains, lab | Steam |
| | Average | 55.00 | Brick veneer, good stucco, insulated, wood truss & rafters | Plaster walls and ceiling, some tile, concrete floor, freezer room | Adequate lighting, plumbing, power outlets, and drains | Steam |
| | Low cost | 36.65 | Stucco or siding, no trim, light roof structure | Plaster or gypsum board, concrete slab, chiller room | Minimum lighting and outlets, minimum plumbing | Space heaters |
| S | Good | 72.60 | Good steel frame, sandwich panels, retail entrance and storefront | Plaster, tile floors and wainscot, freezer and cooler rooms | Good lighting and plumbing, many outlets and drains, lab | Steam |
| | Average | 52.95 | Rigid steel frame, insulated siding or sandwich panels, good roof | Plaster walls and ceiling, some tile, concrete floor, freezer room | Adequate lighting, plumbing, power outlets, and drains | Steam |
| | Low cost | 35.25 | Pre-engineered frame, metal siding, lined | Plaster or gypsum board, concrete slab, chiller room | Minimum lighting and outlets, minimum plumbing | Space heaters |

For basements and mezzanines, see Page CAL 104.

# CREAMERIES

**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

**ELEVATORS:** Small passenger or freight elevators with simple call system and push-button control, and two or three stops, cost $35,250 to $55,000 For detailed cost, see Section UIP 8.

**DOCK-HEIGHT FLOORS:** Add $1.50 to $3.35 per square foot to base cost of first floor.

Loading docks, see Page CAL 244.

**SPRINKLERS:** Apply to sprinklered area.

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 1,000 | $2.60 | $3.40 | $4.65 | $6.15 |
| 2,500 | 2.25 | 3.00 | 3.95 | 5.20 |
| 5,000 | 2.05 | 2.65 | 3.50 | 4.55 |
| 7,500 | 1.90 | 2.40 | 3.25 | 4.20 |
| 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 |
| 40,000 | 1.50 | 1.90 | 2.45 | 3.10 |

## 2

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs | HEATING & COOLING | Sq. Ft. Costs | COOLING ONLY | Sq. Ft. Costs |
|---|---|---|---|---|---|
| Electric cable or baseboard . . | $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 |
| Space heaters, with fan . . . . . | 1.60 | Hot/chilled water (zoned) . . . . . | 15.10 | Evaporative coolers . . . . . | 2.70 |
| radiant . . . . . | 1.90 | Heat pump system | 8.05 | Pkg. refrig. . . . $1,180 to $1,540 per ton capacity | |
| Forced air . . . . . | 3.45 | | | Evap. coolers . $160 to $270 per MCFM capacity | |
| Steam (including boiler) . . . . . | 5.50 | | | | |
| without boiler . . . . . | 4.65 | Small indiv. heat pumps cost $1,125 to $1,510 | | **VENTILATION ONLY** | |
| Hot water . . . . . | 6.15 | 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 |
|---|---|---|---|
| 8 | .89 | 20 | 1.13 |
| 10 | .92 | 22 | 1.18 |
| 12 | .96 | 24 | 1.23 |
| 14 | 1.00 (base) | 26 | 1.28 |
| 16 | 1.04 | 28 | 1.33 |
| 18 | 1.09 | 30 | 1.38 |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 300 | 400 | 500 | 600 | 800 | 1000 | 1200 | 1400 | 1600 | 1800 | 2000 | 2200 | 2400 | 3000 | Average Floor Area Sq. Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **5,000** | 1.07 | 1.15 | 1.23 | 1.30 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **10,000** | .97 | .99 | 1.03 | 1.07 | 1.15 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **10,000** |
| **15,000** | ----- | .94 | .97 | .99 | 1.05 | 1.10 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **15,000** |
| **20,000** | ----- | ----- | .94 | .95 | .99 | 1.03 | 1.07 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **20,000** |
| **25,000** | ----- | ----- | .92 | .93 | .96 | .99 | 1.02 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | .92 | .94 | .96 | .99 | 1.02 | ----- | ----- | ----- | ----- | ----- | ----- | **30,000** |
| **40,000** | ----- | ----- | ----- | .90 | .92 | .94 | .95 | .97 | .99 | ----- | ----- | ----- | ----- | ----- | **40,000** |
| **50,000** | ----- | ----- | ----- | .89 | .90 | .92 | .93 | .95 | .96 | .93 | ----- | ----- | ----- | ----- | **50,000** |
| **80,000** | ----- | ----- | ----- | ----- | .88 | .89 | .90 | .91 | .92 | .93 | .94 | .95 | ----- | ----- | **80,000** |
| **100,000** | ----- | ----- | ----- | ----- | ----- | .88 | .89 | .89 | .90 | .91 | .92 | .92 | .93 | ----- | **100,000** |
| **200,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .86 | .87 | .87 | .88 | .88 | .88 | .90 | **200,000** |
| **400,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .86 | .86 | .87 | **400,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.