# TENNIS CLUBS – INDOOR

**AVERAGE CLASS S**

**OCCUPANY DESCRIPTION:** These are shell-type structures which include tennis court facilities. The cost of individual facilities can vary greatly depending on the type of structure and its appointments, including the extent of the lounge, refreshment, exercise, shower and spectator areas. Costs are given for the entire facility excluding any furnishings and equipment. Lower cost facilities are generally constructed with a rigid steel or wood frame and an exterior cover of either wood or steel siding. These facilities have minimum lighting and plumbing and no dressing rooms or showers. Clear heights typically vary between 20 and 28 feet. The average-quality enclosed courts use either steel sandwich panels or masonry exterior walls and include dressing room and shower facilities. Clear heights typically vary between 24 and 32 feet. The best qualities include high cost lighting and fixtures, lounge areas, snackbar facilities, a sales area where equipment can be sold, showers, dressing rooms and saunas. Clear heights vary between 30 and 35 feet.

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

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

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| C | Good | $94.97 | Brick or concrete, good entrance | Plaster or drywall, carpeting, good lounge and court areas, gym | Good sports lighting, restrooms, sauna, shower and locker rooms | Package A.C. |
| | Average | 69.44 | Brick or block, concrete panels, some ornamentation | Drywall, concrete courts, snack bar area, exercise facilities | Adequate lighting, plumbing, showers, add for pool or spa | Forced air |
| | Low cost | 46.97 | Block or tilt up | Little or none, no dressing rooms | Minimum lighting and plumbing | Space heaters |
| D | Good | 88.99 | Brick veneer, best siding or stucco, trim, good entrance | Plaster or drywall, carpeting, good lounge and court areas, gym | Good sports lighting, restrooms, sauna, shower and locker rooms | Package A.C. |
| | Average | 64.56 | Good stucco or siding, some brick or stone trim | Drywall, concrete courts, snack bar area, exercise facilities | Adequate lighting, plumbing, showers, add for pool or spa | Forced air |
| | Low cost | 43.02 | Stucco or siding, very plain | Little or none, no dressing rooms | Minimum lighting and plumbing | Space heaters |
| D POLE | Low cost | 38.03 | Pole frame, metal single wall, very plain | No dressing rooms or showers, few facilities | Minimum lighting and restrooms | Space heaters |
| S | Good | 86.48 | Insulated metal sandwich panels, steel frame, good entrance | Plaster or drywall, carpeting, good lounge and court areas, gym | Good sports lighting, restrooms, sauna, shower and locker rooms | Package A.C. |
| | Average | 61.70 | Good metal panels and roof, some interior finish, trim | Drywall, concrete courts, snack bar area, exercise facilities | Adequate lighting, plumbing, showers, add for pool or spa | Forced air |
| | Low cost | 40.14 | Single wall, very plain | Little or none, no dressing rooms | Minimum lighting and plumbing | Space heaters |
| CDS | Average mezzanine | 23.82 | Not included | Open, finished floors and soffit, add for spectator seating | Average lighting, no plumbing | In building cost |

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

# TENNIS CLUBS – INDOOR

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

## 1

| | | COST RANGE |
|---|---|---|
| **LOCKERS:** per opening, | single tier | $135 – $260 |
| | double | 89 – 170 |
| | triple | 64 – 140 |
| | box type | 46 – 86 |

**TENNIS EQUIPMENT:** See Section UIP 16 for tennis equipment. and Section UIP 17 for air-supported (bubble) structures.

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $3.56 | $4.51 | $5.71 | $7.22 |
| 10,000 | 3.21 | 4.02 | 5.05 | 6.33 |
| 15,000 | 3.01 | 3.76 | 4.70 | 5.86 |
| 20,000 | 2.88 | 3.59 | 4.46 | 5.55 |
| 30,000 | 2.71 | 3.35 | 4.15 | 5.14 |
| 40,000 | 2.59 | 3.20 | 3.94 | 4.87 |
| 60,000 | 2.44 | 2.99 | 3.67 | 4.50 |
| 80,000 | 2.33 | 2.85 | 3.49 | 4.27 |
| 100,000 | 2.25 | 2.75 | 3.35 | 4.09 |
| 150,000 | 2.12 | 2.57 | 3.12 | 3.79 |

## 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 | $ 9.25 |
| Electric wall heaters | 3.40 |
| Forced air furnace | 12.60 |
| Hot water | 17.10 |
| Space heaters, with fan | 3.88 |
| radiant | 4.44 |
| Steam (including boiler) | 15.50 |
| without boiler | 13.90 |
| Wall or floor furnace | 3.75 |

| HEATING & COOLING | Sq. Ft. Costs |
|---|---|
| Package A.C. (short ductwork) | $20.00 |
| Warm and cool air (zoned) | 30.00 |
| Hot/chilled water (zoned) | 40.25 |
| Heat pump system | 24.90 |

Small indiv. heat pumps cost $1,750 to $2,440 per ton of rated capacity.

| COOLING ONLY | Sq. Ft. Costs |
|---|---|
| Central refrigeration (zoned) | $14.20 |
| package (short ductwork) | 9.90 |
| Central evaporative | 5.50 |

Pkg. refrig. . $1,980 to $2,575 per ton capacity
Evap. coolers . $295 to $485 per MCFM capacity

**VENTILATION ONLY**

Vent. (blowers/ducts) . . . . . $3.17

## 3

**HEIGHT REFINEMENTS**

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 20 | 1.106 | 28 | 1.313 |
| 22 | 1.158 | 30 | 1.364 |
| 24 | 1.210 | 34 | 1.463 |
| 26 | 1.262 | 38 | 1.561 |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1400 | 1600 | Average Floor Area Sq.Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **5,000** | 1.034 | 1.056 | 1.078 | 1.100 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **10,000** | ----- | ----- | .999 | 1.011 | 1.023 | 1.034 | 1.056 | 1.078 | 1.100 | --- | ----- | ----- | ----- | ----- | **10,000** |
| **12,000** | ----- | ----- | ----- | .995 | 1.005 | 1.015 | 1.034 | 1.052 | 1.071 | 1.089 | ----- | ----- | ----- | ----- | **12,000** |
| **14,000** | ----- | ----- | ----- | .982 | .992 | 1.001 | 1.018 | 1.034 | 1.049 | 1.063 | ----- | ----- | ----- | ----- | **14,000** |
| **20,000** | ----- | ----- | ----- | ----- | ----- | .971 | .986 | .999 | 1.011 | 1.023 | 1.034 | 1.056 | ----- | ----- | **20,000** |
| **25,000** | ----- | ----- | ----- | ----- | ----- | .954 | .967 | .980 | .992 | 1.003 | 1.011 | 1.027 | ----- | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | ----- | ----- | .943 | .954 | .965 | .976 | .986 | .995 | 1.011 | 1.026 | ----- | **30,000** |
| **35,000** | ----- | ----- | ----- | ----- | ----- | .936 | .945 | .954 | .964 | .973 | .982 | .997 | 1.011 | ----- | **35,000** |
| **40,000** | ----- | ----- | ----- | ----- | ----- | ----- | .938 | .945 | .954 | .963 | .971 | .986 | .999 | 1.011 | **40,000** |
| **50,000** | ----- | ----- | ----- | ----- | ----- | ----- | .930 | .935 | .941 | .947 | .954 | .967 | .980 | .992 | **50,000** |
| **75,000** | ----- | ----- | ----- | ----- | ----- | ----- | .920 | .923 | .926 | .930 | .934 | .941 | .949 | .958 | **75,000** |
| **100,000** | ----- | ----- | ----- | ----- | ----- | ----- | .914 | .917 | .920 | .922 | .925 | .930 | .935 | .941 | **100,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# THEATERS – CINEMA

GOOD CLASS C

AVERAGE CLASS B

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

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

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

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| A | Good | $243.02 | Face brick, stone, marble, ornamental entrance and lobby | Cinema stage, ornamental plaster, marble trim, carpeting, good detail | Special lighting and sound system, good plumbing | Warm and cool air (zoned) |
| | Average | 185.33 | Face brick, concrete, some ornamentation, good entrance | Small stage, ornamental plaster and trim, carpeting, vinyl composition | Adequate lighting, sound system and plumbing | Warm and cool air (zoned) |
| B | Good | 227.24 | Face brick, stone, terrra cotta, ornamental entrance and lobby | Cinema stage, ornamental plaster, marble trim, carpeting, good detail | Special lighting and sound system, good plumbing | Warm and cool air (zoned) |
| | Average | 175.55 | Face brick, concrete, some ornamentation, good entrance | Small stage, ornamental plaster and trim, carpeting, vinyl composition | Adequate lighting, sound system and plumbing | Warm and cool air (zoned) |
| A-B | Average balcony | 62.01 | Not included | Stepped balcony with plaster soffit | Adequate lighting | In bldg. cost |
| | Storage mezzanine | 78.61 | Not included | Plaster, unfinished floor, vinyl comp. tile, projection, storage rooms | Adequate lighting and outlets, no plumbing | In bldg. cost |
| C | Excellent | 224.07 | Top design, best materials, very elaborate entrance | Special finishes, acoustic design, high-cost lobby finishes | High-qual. specialty lighting, best sound throughout, good plumbing | Warm and cool air (zoned) |
| | Very good | 189.68 | Face brick, stone, terra cotta, ornamental entrance and lobby | Cinema stages, ornamental interior, carpeting, good main-feature screen | Special lighting and sound systems, good plumbing | Warm and cool air (zoned) |
| | Good | 151.38 | Brick, block, concrete, good decorative front and lobby | Some stage or ornamental plaster, some trim, carpeting, ceramic tile | Good lighting, sound systems and plumbing | Package A.C. |
| | Average | 109.10 | Brick, block, concrete, good front and lobby, some trim | Plaster or gypsum, suspended ceiling, stepped floor, carpeted lobby | Adequate lighting, good sound and plumbing | Package A.C. |
| | Fair | 93.33 | Brick, block, concrete panels, plain comm. bldg., small entry | Plain construction, small screens, vinyl composition in lobby | Minimum lighting, adequate sound, minimum plumbing | Package A.C. |
| | Low cost | 72.91 | Low-cost block, tilt-up, very plain, acoustic sound walls | Painted masonry, very plain, minimum multiplex cinema facility | Minimum code, sound per screen | Forced air |
| D | Very good | 184.32 | Face brick or stone veneer, ornamental entrance and lobby | Cinema stages, ornamental interior, carpeting, good main-feature screen | Special lighting, sound systems, good plumbing | Warm and cool air (zoned) |
| | Good | 146.52 | Stucco, some brick or stone trim, decorative front and lobby | Some stage or ornamentation and trim, carpeting, ceramic tile | Good lighting, sound systems and plumbing | Package A.C. |
| | Average | 105.19 | Stucco or siding, good front and lobby, some trim | Drywall, suspended ceiling, carpeted lobby, stepped floor | Adequate lighting, good sound and plumbing | Package A.C. |
| | Fair | 89.83 | Siding/stucco, small entrance, good acous./mason. sound walls | Drywall, acoustic tile, asphalt tile lobby, concrete slab, small screens | Minimum lighting, adequate sound, minimum plumbing | Package A.C. |
| | Low cost | 69.85 | Low-cost wood or stucco, very plain, acoustic sound walls | Few partitions, very plain, minimum multiplex cinema facility | Minimum code, sound per screen | Forced air |
| D POLE | Low cost | 65.66 | Pole frame and truss, metal siding, lined, insulated, acoustic sound walls | Few partitions, very plain, minimum multiplex cinema facility | Minimum code, sound per screen | Forced air |
| S | Good | 143.09 | Insulated sandwich panels, good storefront and trim | Some decorative and extras, carpet and tile, some small stagefronts | Good lighting, sound system and plumbing | Package A.C. |
| | Average | 102.02 | Good metal panels, roof, front and lobby, some trim | Finished interior, suspended ceiling, carpeted lobby, stepped floor | Adequate lighting, good sound and plumbing | Package A.C. |
| | Fair | 86.89 | Metal panels, finished interior, small entrance, good sound walls | Drywall, acoustic tile, vinyl-composition lobby, concrete slab | Minimum lighting, adequate sound, minimum plumbing | Package A.C. |
| | Low cost | 67.15 | Single wall, low-cost interior finish and insulation, acoustic walls | Few partitions, very plain, minimum multiplex cinema facility | Minimum code, sound per screen | Forced air |
| CDS | Average balcony | 48.67 | Not included | Stepped balcony with drywall soffit | Adequate lighting | In bldg. cost |
| | Storage mezzanine | 65.22 | Not included | Drywall, concrete or wood floor, vinyl comp. tile, projection, storage rooms | Adequate lighting and outlets, no plumbing | In bldg. cost |

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

For basement theaters, use 85% of the comparable above ground base costs. For utility basements, see Auditorium basements, Page CAL 18.

# THEATERS – CINEMA

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

## 1

**ELEVATORS**: A small passenger or freight elevator with simple call system and push button control, and two or three stops, costs $56,250 to $77,250.

Seating, curtains and snackbar equipment costs are located in Section UIP 15.

**CANOPIES:**

| | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| Wood Frame | $27.25 | $33.50 | $41.50 | $51.00 |
| Light false-mansard | 15.00 | 18.40 | 22.80 | 28.00 |
| Steel Frame | 33.25 | 41.75 | 53.00 | 67.00 |
| Light false-mansard | 18.30 | 23.00 | 29.25 | 36.75 |

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $3.56 | $4.51 | $5.71 | $7.22 |
| 10,000 | 3.21 | 4.02 | 5.05 | 6.33 |
| 15,000 | 3.01 | 3.76 | 4.70 | 5.86 |
| 20,000 | 2.88 | 3.59 | 4.46 | 5.55 |
| 30,000 | 2.71 | 3.35 | 4.15 | 5.14 |
| 40,000 | 2.59 | 3.20 | 3.94 | 4.87 |
| 60,000 | 2.44 | 2.99 | 3.67 | 4.50 |
| 80,000 | 2.33 | 2.85 | 3.49 | 4.27 |
| 100,000 | 2.25 | 2.75 | 3.35 | 4.09 |
| 150,000 | 2.12 | 2.57 | 3.12 | 3.79 |
| 200,000 | 2.03 | 2.45 | 2.96 | 3.58 |

## 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 | $ 9.25 |
| Electric wall heaters | 3.40 |
| Forced air furnace | 12.60 |
| Hot water | 17.10 |
| Space heaters, with fan | 3.88 |
| radiant | 4.44 |
| Steam (including boiler) | 15.50 |
| without boiler | 13.90 |
| Wall or floor furnace | 3.75 |

| HEATING & COOLING | Sq. Ft. Costs |
|---|---|
| Package A.C. (short ductwork) | $20.00 |
| Warm and cool air (zoned) | 30.00 |
| Hot/chilled water (zoned) | 40.25 |
| Heat pump system | 24.90 |

Small indiv. heat pumps cost $1,750 to $2,440 per ton of rated capacity.

| COOLING ONLY | Sq. Ft. Costs |
|---|---|
| Central refrigeration (zoned) | $14.20 |
| package (short ductwork) | 9.90 |
| Central evaporative | 5.50 |
| Pkg. refrig. | $1,980 to $2,575 per ton capacity |
| Evap. coolers | $295 to $485 per MCFM capacity |

**VENTILATION ONLY**

Vent. (blowers/ducts) $3.17

## 3

**HEIGHT REFINEMENTS**

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 12 | .889 | 28 | 1.313 |
| 14 | .945 | 30 | 1.364 |
| 16 | 1.000 (base) | 34 | 1.463 |
| 18 | 1.054 | 38 | 1.561 |
| 20 | 1.106 | 42 | 1.658 |
| 22 | 1.158 | 46 | 1.754 |
| 24 | 1.210 | 50 | 1.849 |
| 26 | 1.262 | 54 | 1.943 |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 175 | 200 | 250 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1400 | 1600 | Average Floor Area Sq.Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2,000** | 1.117 | 1.147 | 1.205 | 1.264 | 1.381 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **2,000** |
| **5,000** | .999 | 1.011 | 1.034 | 1.056 | 1.100 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **10,000** | ----- | ----- | ----- | ----- | 1.011 | 1.034 | 1.056 | 1.078 | 1.100 | ----- | ----- | ----- | ----- | ----- | **10,000** |
| **14,000** | ----- | ----- | ----- | ----- | .982 | 1.001 | 1.018 | 1.034 | 1.049 | 1.063 | ----- | ----- | ----- | ----- | **14,000** |
| **20,000** | ----- | ----- | ----- | ----- | ----- | .971 | .986 | .999 | 1.011 | 1.023 | 1.034 | 1.056 | ----- | ----- | **20,000** |
| **25,000** | ----- | ----- | ----- | ----- | ----- | .954 | .967 | .980 | .992 | 1.003 | 1.011 | 1.027 | ----- | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | ----- | ----- | .943 | .954 | .965 | .976 | .986 | .995 | 1.011 | 1.026 | ----- | **30,000** |
| **40,000** | ----- | ----- | ----- | ----- | ----- | ----- | .938 | .945 | .954 | .963 | .971 | .986 | .999 | 1.011 | **40,000** |
| **45,000** | ----- | ----- | ----- | ----- | ----- | ----- | .934 | .939 | .946 | .954 | .962 | .976 | .989 | 1.001 | **45,000** |
| **50,000** | ----- | ----- | ----- | ----- | ----- | ----- | .930 | .935 | .941 | .947 | .954 | .967 | .980 | .992 | **50,000** |
| **75,000** | ----- | ----- | ----- | ----- | ----- | ----- | .920 | .923 | .926 | .930 | .934 | .941 | .949 | .958 | **75,000** |
| **100,000** | ----- | ----- | ----- | ----- | ----- | ----- | .914 | .917 | .920 | .922 | .925 | .930 | .935 | .941 | **100,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# THEATERS – LIVE STAGE

GOOD CLASS B

GOOD CLASS A

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

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

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

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| A | Excellent | $379.70 | Top design, best materials, highly ornamented | Special finishes, acoustical design, major stage presentations | High-quality specialty lighting, best sound, good plumbing | Hot and chilled water (zoned) |
| | Good | 277.27 | Face brick, stone, marble, ornamented entrance & lobby | Large stage, ornamental plaster, marble trim, carpeting, good detail | Special lighting and sound system, good plumbing | Warm and cool air (zoned) |
| | Average | 209.95 | Face brick, concrete, some ornamentation, good entrance | Live stage, ornamental plaster and trim, carpeting, vinyl composition | Adequate lighting, sound system and plumbing | Warm and cool air (zoned) |
| B | Excellent | 352.64 | Top design, best materials, highly ornamented | Special finishes, acoustical design, major stage presentations | High-quality specialty lighting, best sound, good plumbing | Hot and chilled water (zoned) |
| | Good | 259.87 | Face brick, stone, terra cotta, ornamented entrance and lobby | Large stage, ornamental plaster, marble trim, carpeting, good detail | Special lighting and sound system, good plumbing | Warm and cool air (zoned) |
| | Average | 198.99 | Face brick, concrete, some ornamentation, good entrance | Live stage, ornamental plaster and trim, carpeting, vinyl composition | Adequate lighting, sound system and plumbing | Warm and cool air (zoned) |
| A-B | Finished basement | 108.17 | Concrete or masonry, partly finished interior | Masonry partitions, utility, repair, storage, and dressing rooms | Adequate lighting and plumbing | Hot water |
| | Good live-stage balc. | 88.90 | Not included | Stepped balcony with ornate finishes, hardwood, carpet | Good lighting | In bldg. cost |
| | Balcony | 64.52 | Not included | Stepped balcony with plaster soffit | Adequate lighting | In bldg. cost |
| | Finished mezzanine | 97.14 | Not included | Plaster, good detail, carpeting, tile, good intermission area, restrooms | Good lighting and plumbing, extra outlets and fixtures | In bldg. cost |
| | Open mezzanine | 45.97 | Not included | Finished floors, few partitions | Average lighting, no plumbing | In bldg. cost |
| C | Excellent | 273.20 | Top design, best materials, highly ornamented | Special finishes, acoustical design, major stage presentations | High-quality specialty lighting, best sound, good plumbing | Warm and cool air (zoned) |
| | Good | 192.68 | Face brick, stone, terra cotta, ornamental entrance and lobby | Large stage, ornamental interior, carpeting, good detail | Special lighting and sound system, good plumbing | Warm and cool air (zoned) |
| | Average | 129.02 | Brick, block, concrete, good decorative front and lobby | Live stage, ornamental plaster, some trim, carpeting, vinyl comp. | Adequate lighting, sound system and plumbing | Package A.C. |
| | Low cost | 85.79 | Brick, block, concrete, plain front and lobby, some trim | Plaster or gypsum, suspended ceiling, carpeted lobby, small stage | Minimum lighting, adequate sound, minimum plumbing | Forced air |
| D | Good | 187.49 | Face brick or stone veneer, ornamental entrance and lobby | Large stage, ornamental interior, carpeting, good detail | Special lighting and sound system, good plumbing | Warm and cool air (zoned) |
| | Average | 124.46 | Stucco, some masonry trim, decorative front and lobby | Live stage, some ornamentation and trim, carpeting, vinyl composition | Adequate lighting, sound system and plumbing | Package A.C. |
| | Low cost | 82.01 | Siding or stucco, plain entry | Drywall, acoustic tile, small stage | Minimum live stage facility | Forced air |
| D POLE | Low cost | 76.46 | Metal panels on pole frame, finished interior, small entrance | Drywall, acoustic tile, vinyl composition lobby, small stage | Minimum lighting, adequate sound, minimum plumbing | Forced air |
| S | Average | 119.76 | Insulated sandwich panels, good storefront and trim | Some decoration and extras, carpet and tile, live stage presentations | Adequate lighting, sound system and plumbing | Package A.C. |
| | Low cost | 77.94 | Metal panels, finished interior | Drywall, acoustic tile, small stage | Minimum live stage facility | Forced air |
| CDS | Basement† | 76.48 | Painted interior | Utility, repair, storage and dressing rooms | Adequate lighting and plumbing | Forced air |
| | Good live-stage balc. | 74.25 | Not included | Stepped balcony with ornate finishes, hardwood, carpet | Good lighting | In bldg. cost |
| | Balcony | 50.89 | Not included | Stepped balcony with drywall soffit | Adequate lighting | In bldg. cost |
| | Finished mezzanine | 81.70 | Not included | Drywall, vinyl, some tile, carpet or vinyl comp. tile, intermission area, restrooms | Adequate lighting and plumbing, extra outlets and fixtures | In bldg. cost |
| | Open mezzanine | 33.49 | Not included | Finished floors, few partitions | Average lighting, no plumbing | In bldg. cost |

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

**BALCONIES:** Do not use story height or area/perimeter multipliers with balcony cost.

# THEATERS – LIVE STAGE

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

## 1

**ELEVATORS**: A small passenger or freight elevator with simple call system and push button control, and two or three stops, costs $56,250 to $77,250.

**ORCHESTRA LIFTS:** $107,000 – $207,000

Seating, curtains and snackbar equipment costs are located in Section UIP 15.

**CANOPIES:**

| | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| Wood Frame | $27.25 | $33.50 | $41.50 | $51.00 |
| Light false-mansard | 15.00 | 18.40 | 22.80 | 28.00 |
| Steel Frame | 33.25 | 41.75 | 53.00 | 67.00 |
| Light false-mansard | 18.30 | 23.00 | 29.25 | 36.75 |

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $3.56 | $4.51 | $5.71 | $7.22 |
| 10,000 | 3.21 | 4.02 | 5.05 | 6.33 |
| 15,000 | 3.01 | 3.76 | 4.70 | 5.86 |
| 20,000 | 2.88 | 3.59 | 4.46 | 5.55 |
| 30,000 | 2.71 | 3.35 | 4.15 | 5.14 |
| 40,000 | 2.59 | 3.20 | 3.94 | 4.87 |
| 60,000 | 2.44 | 2.99 | 3.67 | 4.50 |
| 80,000 | 2.33 | 2.85 | 3.49 | 4.27 |
| 100,000 | 2.25 | 2.75 | 3.35 | 4.09 |
| 150,000 | 2.12 | 2.57 | 3.12 | 3.79 |
| 200,000 | 2.03 | 2.45 | 2.96 | 3.58 |

## 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 | $ 9.25 |
| Electric wall heaters | 3.40 |
| Forced air furnace | 12.60 |
| Hot water | 17.10 |
| Space heaters, with fan | 3.88 |
| radiant | 4.44 |
| Steam (including boiler) | 15.50 |
| without boiler | 13.90 |
| Wall or floor furnace | 3.75 |

| HEATING & COOLING | Sq. Ft. Costs |
|---|---|
| Package A.C. (short ductwork) | $20.00 |
| Warm and cool air (zoned) | 30.00 |
| Hot/chilled water (zoned) | 40.25 |
| Heat pump system | 24.90 |

Small indiv. heat pumps cost $1,750 to $2,440 per ton of rated capacity.

| COOLING ONLY | Sq. Ft. Costs |
|---|---|
| Central refrigeration (zoned) | $14.20 |
| package (short ductwork) | 9.90 |
| Central evaporative | 5.50 |
| Pkg. refrig. | $1,980 to $2,575 per ton capacity |
| Evap. coolers | $295 to $485 per MCFM capacity |

**VENTILATION ONLY**

| | |
|---|---|
| Vent. (blowers/ducts) | $3.17 |

## 3

**HEIGHT REFINEMENTS**

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

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|---|---|
| 12 | .889 | 28 | 1.313 | 58 | 2.036 |
| 14 | .945 | 30 | 1.364 | 62 | 2.128 |
| 16 | 1.000 (base) | 34 | 1.463 | 66 | 2.219 |
| 18 | 1.054 | 38 | 1.561 | 70 | 2.309 |
| 20 | 1.106 | 42 | 1.658 | 74 | 2.398 |
| 22 | 1.158 | 46 | 1.754 | 78 | 2.486 |
| 24 | 1.210 | 50 | 1.849 | 82 | 2.573 |
| 26 | 1.262 | 54 | 1.943 | 86 | 2.659 |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 175 | 200 | 250 | 300 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1400 | 1600 | Average Floor Area Sq.Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2,000** | 1.117 | 1.147 | 1.205 | 1.264 | 1.381 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **2,000** |
| **5,000** | .999 | 1.011 | 1.034 | 1.056 | 1.100 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **10,000** | ----- | ----- | ----- | ----- | 1.011 | 1.034 | 1.056 | 1.078 | 1.100 | ----- | ----- | ----- | ----- | ----- | **10,000** |
| **14,000** | ----- | ----- | ----- | ----- | .982 | 1.001 | 1.018 | 1.034 | 1.049 | 1.063 | ----- | ----- | ----- | ----- | **14,000** |
| **20,000** | ----- | ----- | ----- | ----- | ----- | .971 | .986 | .999 | 1.011 | 1.023 | 1.034 | 1.056 | ----- | ----- | **20,000** |
| **25,000** | ----- | ----- | ----- | ----- | ----- | .954 | .967 | .980 | .992 | 1.003 | 1.011 | 1.027 | ----- | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | ----- | ----- | .943 | .954 | .965 | .976 | .986 | .995 | 1.011 | 1.026 | ----- | **30,000** |
| **40,000** | ----- | ----- | ----- | ----- | ----- | ----- | .938 | .945 | .954 | .963 | .971 | .986 | .999 | 1.011 | **40,000** |
| **45,000** | ----- | ----- | ----- | ----- | ----- | ----- | .934 | .939 | .946 | .954 | .962 | .976 | .989 | 1.001 | **45,000** |
| **50,000** | ----- | ----- | ----- | ----- | ----- | ----- | .930 | .935 | .941 | .947 | .954 | .967 | .980 | .992 | **50,000** |
| **75,000** | ----- | ----- | ----- | ----- | ----- | ----- | .920 | .923 | .926 | .930 | .934 | .941 | .949 | .958 | **75,000** |
| **100,000** | ----- | ----- | ----- | ----- | ----- | ----- | .914 | .917 | .920 | .922 | .925 | .930 | .935 | .941 | **100,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# VISITOR CENTERS

**GOOD CLASS D**

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

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

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

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| A-B | Good | $242.76 | Special architecture, good lobby | Good exhibit, theater, cafeteria | Good lighting, plumbing, kitchen | Warm/cool air |
| | Average | 177.34 | Brick, concrete, metal and glass, some ornamentation | Adequate exhibit rooms and lobby, theater, limited food service | Fluorescent lighting, good sound, plumbing and restrooms | Heat pump system |
| C | Excellent | 225.46 | Local stone, face brick, heavy timber or steel frame | Decorative lobby, pavers, carpet, good exhibit rooms or theater | Good display lighting, sound and restrooms, small kitchen | Heat pump system |
| | Good | 167.39 | Face brick, ornamental trim, good entrance, lobby | Good finish and detail, carpeting and tile, display and food service areas | Good fluorescent lighting, good plumbing and restrooms | Package A.C. |
| | Average | 120.91 | Brick, block, concrete panels, some ornamentation | Drywall, acoustic tile, hardwood and vinyl composition tile | Adequate lighting and plumbing, large restrooms | Forced air |
| | Low cost | 83.47 | Low-cost block, concrete | Painted, some acoustic and asphalt tile | Minimum lighting and plumbing | Space heaters |
| D | Excellent | 219.84 | Local stone or brick veneer, rustic log, heavy frame | Decorative lobby, pavers, carpet, good exhibit rooms or theater | Good display lighting, sound and restrooms, small kitchen | Heat pump system |
| | Good | 162.74 | Brick veneer or best siding or stucco with trim, good entrance | Good finish and detail, carpet, vinyl, display and food service areas | Good fluorescent lighting, good plumbing and restrooms | Package A.C. |
| | Average | 117.12 | Stucco or siding, some brick or stone trim, small entrance | Drywall, acoustic tile, hardwood and vinyl composition | Adequate lighting and plumbing, large restrooms | Forced air |
| | Low cost | 80.41 | Low-cost wood or stucco | Drywall, some acoustic and asphalt tile | Minimum lighting and plumbing | Space heaters |
| D POLE | Average | 110.63 | Pole frame, good metal siding, insulated, small entrance | Drywall, acoustic tile, hardwood and vinyl composition | Adequate lighting and plumbing, large restrooms | Forced air |
| | Low cost | 75.74 | Metal skin on pole frame and truss, finished interior | Drywall, some acoustic and resilient tile, minimum visitor facility | Minimum lighting and plumbing | Space heaters |
| S | Low cost | 77.40 | Steel or aluminum panels | Drywall, some acoustic and asphalt tile, minimum visitor facility | Minimum lighting and plumbing | Space heaters |

# VISITOR CENTERS

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

**1**

**ELEVATORS**: A small passenger or freight elevator with simple call system and push button control, and two or three stops, costs $56,250 to $77,250.

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $3.56 | $4.51 | $5.71 | $7.22 |
| 10,000 | 3.21 | 4.02 | 5.05 | 6.33 |
| 15,000 | 3.01 | 3.76 | 4.70 | 5.86 |
| 20,000 | 2.88 | 3.59 | 4.46 | 5.55 |
| 30,000 | 2.71 | 3.35 | 4.15 | 5.14 |
| 40,000 | 2.59 | 3.20 | 3.94 | 4.87 |
| 60,000 | 2.44 | 2.99 | 3.67 | 4.50 |
| 80,000 | 2.33 | 2.85 | 3.49 | 4.27 |
| 100,000 | 2.25 | 2.75 | 3.35 | 4.09 |

**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 . . | $ 9.25 | Package A.C. (short ductwork) . . . . | $20.00 | Central refrigeration (zoned) . . . . . | $14.20 |
| Electric wall heaters . . . . . | 3.40 | Warm and cool air (zoned) . . . . . | 30.00 | package (short ductwork) . . . . . | 9.90 |
| Forced air furnace . . . . . | 12.60 | Hot/chilled water (zoned) . . . . . | 40.25 | Central evaporative . . . . . | 5.50 |
| Hot water . . . . . | 17.10 | Heat pump system . . . . . | 24.90 | Pkg. refrig. . $1,980 to $2,575 per ton capacity | |
| Space heaters, with fan . . . . . | 3.88 | | | Evap. coolers . $295 to $485 per MCFM capacity | |
| radiant . . . . . | 4.44 | | | | |
| Steam (including boiler) . . . . . | 15.50 | | | | |
| without boiler . . . . . | 13.90 | Small indiv. heat pumps cost $1,750 to $2,440 | | **VENTILATION ONLY** | |
| Wall or floor furnace . . . . . | 3.75 | per ton of rated capacity. | | Vent. (blowers/ducts) . . . . . | $3.17 |

**3**

**HEIGHT REFINEMENTS**

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 8 | .776 | 18 | 1.054 |
| 10 | .833 | 20 | 1.106 |
| 12 | .889 | 22 | 1.158 |
| 14 | .945 | 24 | 1.210 |
| 16 | 1.000 (base) | 28 | 1.313 |

**4**

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | 1400 | 1600 | Average Floor Area Sq.Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **2,000** | 1.205 | 1.264 | 1.322 | 1.381 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **2,000** |
| **5,000** | 1.034 | 1.056 | 1.078 | 1.100 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **10,000** | ----- | ----- | .999 | 1.011 | 1.023 | 1.034 | 1.056 | 1.078 | 1.100 | ----- | ----- | ----- | ----- | ----- | **10,000** |
| **14,000** | ----- | ----- | ----- | .982 | .992 | 1.001 | 1.018 | 1.034 | 1.049 | 1.063 | ----- | ----- | ----- | ----- | **14,000** |
| **20,000** | ----- | ----- | ----- | ----- | ----- | .971 | .986 | .999 | 1.011 | 1.023 | 1.034 | 1.056 | ----- | ----- | **20,000** |
| **25,000** | ----- | ----- | ----- | ----- | ----- | .954 | .967 | .980 | .992 | 1.003 | 1.011 | 1.027 | ----- | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | ----- | ----- | .943 | .954 | .965 | .976 | .986 | .995 | 1.011 | 1.026 | ----- | **30,000** |
| **40,000** | ----- | ----- | ----- | ----- | ----- | ----- | .938 | .945 | .954 | .963 | .971 | .986 | .999 | 1.011 | **40,000** |
| **45,000** | ----- | ----- | ----- | ----- | ----- | ----- | .934 | .939 | .946 | .954 | .962 | .976 | .989 | 1.001 | **45,000** |
| **50,000** | ----- | ----- | ----- | ----- | ----- | ----- | .930 | .935 | .941 | .947 | .954 | .967 | .980 | .992 | **50,000** |
| **75,000** | ----- | ----- | ----- | ----- | ----- | ----- | .920 | .923 | .926 | .930 | .934 | .941 | .949 | .958 | **75,000** |
| **100,000** | ----- | ----- | ----- | ----- | ----- | ----- | .914 | .917 | .920 | .922 | .925 | .930 | .935 | .941 | **100,000** |

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

# WAREHOUSES – DISTRIBUTION

GOOD CLASS C

AVERAGE CLASS C

**OCCUPANCY DESCRIPTION:** These buildings are designed with large areas to accommodate the breakdown and shipment of small lots of materials and goods. They have more plumbing and lighting than storage warehouses in order to service the large personnel load.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Heating and ventilation sufficient to protect goods from freezing or other forms of spoilage. Elevators are included in costs designated with an asterisk (*).

**NOT INCLUDED IN COSTS:** Sprinklers, material-handling equipment or dock levelers.

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| A | Good | $111.44 | Ornamental concrete, brick, or metal/glass panels, office front | Plaster or drywall with partitions, distribution areas, fin. ceilings, vaults | *Good lighting, plumbing, rest-rooms for personnel | Hot water |
| | Average | 82.71 | Brick on block or tile, concrete panels, good fenestration | Painted walls, offices and distribution areas | *Reading-level lighting and adequate plumbing | Space heaters |
| B | Good | 104.20 | Ornamental concrete, brick, or metal/glass panels, office front | Plaster or drywall with partitions, distribution areas, fin. ceilings, vaults | *Good lighting, plumbing, adequate restrooms | Hot water |
| | Average | 76.62 | Brick on block or tile, concrete panels, good fenestration | Painted walls, offices and distribution areas | *Reading-level lighting, adequate plumbing | Space heaters |
| A-B | Storage basement | 47.83 | Reinforced concrete, unfinished interior | Unfinished storage areas, some partitions | Minimum lighting and plumbing, drains | None |
| | Good stor-age mezz. | 52.12 | In building cost | Metal grating on good steel structure, no partitions | Minimum lighting, no plumbing | Included in building cost |
| | Avg. stor-age mezz. | 44.01 | In building cost | Metal deck and concrete on good steel structure, no partitions | Minimum lighting, no plumbing | Included in building cost |
| C | Excellent | 107.95 | Brick, metal/glass, ornamental facades and fenestration | Completely finished, drugs, food, or bonded storage, large offices | High-level lighting and good plumbing | Package A.C. |
| | Good | 73.21 | Steel frame, good brick, block, or tilt-up, tapered girders | Plaster or drywall, some masonry partitions, good offices | Reading-level lighting, adequate plumbing | Forced air |
| | Average | 50.05 | Steel or wood frame or bearing walls, brick, block, or tilt-up | Painted walls, finished offices and distribution areas, hardened slab | Good lighting, adequate plumbing | Space heaters |
| | Low cost | 36.25 | Block, tilt-up, very plain, light construction | Unfinished, shell type, adequate offices, partitioned areas | Adequate lighting, plumbing fixtures | Space heaters |
| D | Good | 66.10 | Good wood frame with stucco or siding, some ornamentation | Some good offices and distribution areas | Reading-level lighting, adequate plumbing | Forced air |
| | Average | 45.09 | Stucco or siding on wood, good fenestration | Small office, partitions and distribution areas | Good lighting, adequate plumbing | Space heaters |
| D POLE | Average | 39.77 | Good pole frame, metal siding | Distribution areas, small offices | Adequate lighting/plumbing | Space heaters |
| | Low cost | 29.16 | Wood pole frame, metal siding | Unfinished, adequate offices, partitioned areas | Adequate lighting, plumbing fixtures | Space heaters |
| S | Excellent | 100.69 | Heavy steel frame, sandwich panels, good ornamentation | Completely finished, drugs, food, or bonded storage, large offices | High-level lighting and good plumbing | Package A.C. |
| | Good | 67.59 | Good steel frame, siding and fenestration | Some good offices and interior fi nish, distribution areas | Reading-level lighting, adequate plumbing | Forced air |
| | Average | 45.75 | Rigid steel frame and siding | Distribution areas, small offices | Adequate lighting/plumbing | Space heaters |
| | Low cost | 32.98 | Pre-eng. frame, plain shell | Adequate office, partitioned areas | Adequate lighting/plumbing | Space heaters |
| CDS | Storage basement† | 31.03 | Reinforced concrete, unfinished interior | Unfinished storage area, some partitions | Minimum lighting and drains | None |
| | Avg. stor. mezz. | 21.05 | In building cost | Heavy plywood or plank on wood or light steel structure, no partitions | Minimum lighting, no plumbing | Included in building cost |
| | Low stor. mezz. | 15.70 | In building cost | Light storage on plywood, minimum supports, no soffit | Minimum lighting | Included in building cost |

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

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

# WAREHOUSES – DISTRIBUTION

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

## 1

**ELEVATORS:** Buildings whose base costs include service 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 |
|---|---|
| Good | $2.66 |
| Average | 2.07 |

**ELEVATOR STOPS:** For basement or mezzanine elevator stops, add $6,400 to $9,650 per stop.

A small passenger elevator with simple call system and pushbutton control, four-passenger cab, and two or three stops, costs $56,250 to $77,250.

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $2.86 | $3.79 | $5.01 | $6.63 |
| 10,000 | 2.58 | 3.38 | 4.44 | 5.82 |
| 20,000 | 2.32 | 3.02 | 3.93 | 5.11 |
| 30,000 | 2.18 | 2.83 | 3.66 | 4.74 |
| 50,000 | 2.02 | 2.60 | 3.35 | 4.31 |
| 80,000 | 1.88 | 2.41 | 3.08 | 3.95 |
| 100,000 | 1.82 | 2.32 | 2.96 | 3.79 |
| 200,000 | 1.64 | 2.07 | 2.63 | 3.33 |

**DOCK HEIGHT FLOORS:** Add $1.64 to $6.20 per square foot to base cost of first floor.

For loading docks, see Page CAL 398.

## 2

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs |
|---|---|
| Electric cable or baseboard | $ 6.21 |
| Electric wall heaters | 2.53 |
| Forced air furnace | 7.01 |
| Hot water, baseboard/convector | 12.40 |
| Space heaters, with fan | 3.54 |
| radiant | 3.96 |
| Steam (including boiler) | 10.80 |
| without boiler | 9.42 |

| HEATING & COOLING | Sq. Ft. Costs |
|---|---|
| Package A.C. (short ductwork) | $13.65 |
| Warm and cool air (zoned) | 18.65 |
| Hot/chilled water (zoned) | 31.25 |
| Heat pump system | 17.10 |

Small indiv. heat pumps cost $1,600 to $2,160 per ton of rated capacity.

| COOLING ONLY | Sq. Ft. Costs |
|---|---|
| Central refrigeration (zoned) | $11.50 |
| package (short ductwork) | 7.63 |
| Central evaporative | 4.77 |
| Pkg. refrig. | $1,660 to $2,180 per ton capacity |
| Evap. coolers | $235 to $385 per MCFM capacity |

**VENTILATION ONLY**

| | |
|---|---|
| Vent. (blowers/ducts) | $2.04 |

## 3

**HEIGHT REFINEMENTS**

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

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 8 | .885 | 20 | 1.133 |
| 10 | .921 | 22 | 1.181 |
| 12 | .960 | 24 | 1.231 |
| 14 | 1.000 (base) | 26 | 1.281 |
| 16 | 1.041 | 28 | 1.331 |
| 18 | 1.086 | 30 | 1.382 |

## 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** | 1.083 | 1.168 | 1.252 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **10,000** | ----- | .996 | 1.040 | 1.083 | 1.168 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **10,000** |
| **14,000** | ----- | .945 | .977 | 1.008 | 1.071 | 1.132 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **14,000** |
| **20,000** | ----- | ----- | .926 | .949 | .996 | 1.040 | 1.083 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **20,000** |
| **25,000** | ----- | ----- | .907 | .924 | .959 | .996 | 1.032 | 1.066 | ----- | ----- | ----- | ----- | ----- | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | .907 | .935 | .965 | .995 | 1.025 | ----- | ----- | ----- | ----- | ----- | ----- | **30,000** |
| **40,000** | ----- | ----- | ----- | ----- | .907 | .926 | .949 | .972 | .995 | 1.019 | ----- | ----- | ----- | ----- | **40,000** |
| **50,000** | ----- | ----- | ----- | ----- | .891 | .907 | .924 | .942 | .959 | .977 | .996 | 1.015 | ----- | ----- | **50,000** |
| **80,000** | ----- | ----- | ----- | ----- | ----- | .875 | .887 | .898 | .907 | .916 | .926 | .937 | .949 | .984 | **80,000** |
| **100,000** | ----- | ----- | ----- | ----- | ----- | .863 | .872 | .882 | .891 | .899 | .907 | .916 | .924 | .950 | **100,000** |
| **200,000** | ----- | ----- | ----- | ----- | ----- | ----- | .846 | .850 | .855 | .859 | .863 | .868 | .873 | .887 | **200,000** |
| **400,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .835 | .838 | .841 | .843 | .846 | .853 | **400,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# WAREHOUSES – MEGA (STORAGE/DISTRIBUTION)

AVERAGE CLASS S

GOOD CLASS S

**OCCUPANCY DESCRIPTION:** Typically 200,000 to over 1,000,000 square feet, designed for major regional distribution and storage centers. They include an amount of office and personnel support space consistent with the quality of the building (typically 1 to 5 percent). Support areas typically have plaster or drywall interior partitions and finished ceilings. The better qualities have large cafeterias and kitchens.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Heating and ventilation sufficient to protect goods from freezing or other forms of spoilage.

**NOT INCLUDED IN COSTS:** Sprinklers, material-handling equipment, dock levelers or site improvements.

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| C | Good | $56.24 | Glulam or steel frame, decorative block or tilt up, elastomeric roof | Plaster or drywall, some masonry partitions, good offices, cafeteria | Good lighting and plumbing, kitchen | Space heaters |
| | Average | 37.44 | Open steel or wood frame, block or tilt up, good roof | Painted walls, finished offices and break room, good flat slab | Adequate lighting, good plumbing fixtures, food service | Space heaters |
| | Low cost | 25.35 | Large tilt up, light panelized const., built up roof, exposed insulation | Painted walls or unfinished, small offices, hardened slab | Adequate lighting and plumbing, some extras | Space heaters |
| | Cheap | 21.00 | Tilt up, very large shell type | Unfinished, bulk storage, few offices | Minimum lighting and plumbing | Space heaters |
| S | Good | 54.73 | Heavy steel frame, insulated panels, good facade, some trim | Plaster or drywall, partitioned, good offices, cafeteria | Good lighting and plumbing, kitchen | Space heaters |
| | Average | 37.89 | Good steel frame, siding and fenestration, bar or web joints | Some good offices, interior finish and floor, break room, good flat slab | Adequate lighting, good plumbing fixtures, food service | Space heaters |
| | Low cost | 26.60 | Rigid steel frame, good metal siding and roof, exposed insulation | Unfinished, small offices, hardened slab | Adequate lighting and plumbing, some extras | Space heaters |
| | Cheap | 19.02 | Steel frame, siding, large shell type | Unfinished, bulk storage, few offices | Minimum lighting and plumbing | Space heaters |

# WAREHOUSES – MEGA (STORAGE/DISTRIBUTION)

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

## 1

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 100,000 | $1.82 | $2.32 | $2.96 | $3.79 |
| 200,000 | 1.64 | 2.07 | 2.63 | 3.33 |
| 300,000 | 1.54 | 1.94 | 2.45 | 3.08 |
| 400,000 | 1.47 | 1.85 | 2.33 | 2.92 |
| 500,000 | 1.43 | 1.79 | 2.24 | 2.80 |
| 600,000 | 1.39 | 1.73 | 2.17 | 2.71 |
| 700,000 | 1.36 | 1.69 | 2.11 | 2.64 |
| 800,000 | 1.33 | 1.65 | 2.06 | 2.57 |
| 1,000,000 | 1.28 | 1.59 | 1.98 | 2.46 |
| 1,200,000 | 1.28 | 1.59 | 1.98 | 2.46 |
| 1,500,000 | 1.28 | 1.59 | 1.98 | 2.46 |

**DOCK HEIGHT FLOORS:** Add $1.64 to $6.20 per square foot to base cost of first floor. Loading docks, see Page CAL 398.

## 2

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs | HEATING & COOLING | Sq. Ft. Costs | COOLING ONLY | Sq. Ft. Costs |
|---|---|---|---|---|---|
| Electric cable or baseboard . . | $ 6.21 | Package A.C. (short ductwork) . . . . | $13.65 | Central refrigeration (zoned) . . . . | $11.50 |
| Electric wall heaters . . . . . | 2.53 | Warm and cool air (zoned) . . . . . | 18.65 | package (short ductwork) . . . . | 7.63 |
| Forced air furnace . . . . . | 7.01 | Hot/chilled water (zoned) . . . . . | 31.25 | Central evaporative . . . . . | 4.77 |
| Hot water, baseboard/convector | 12.40 | Heat pump system . . . . . | 17.10 | Pkg. refrig. . $1,660 to $2,180 per ton capacity | |
| Space heaters, with fan . . . . . | 3.54 | | | Evap. coolers . . $235 to $385 per MCFM capacity | |
| radiant . . . . . | 3.96 | | | | |
| Steam (including boiler) . . . . . | 10.80 | Small indiv. heat pumps cost | $1,600 to $2,160 | **VENTILATION ONLY** | |
| without boiler . . . . . | 9.42 | per ton of rated capacity. | | Vent. (blowers/ducts) . . . . . | $2.04 |

## 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 |
|---|---|---|---|---|---|
| 14 | 1.000 (base) | 24 | 1.231 | 50 | 1.930 |
| 16 | 1.041 | 30 | 1.382 | 55 | 2.075 |
| 18 | 1.086 | 35 | 1.515 | 60 | 2.225 |
| 20 | 1.133 | 40 | 1.650 | 70 | 2.530 |
| 22 | 1.181 | 45 | 1.788 | 80 | 2.845 |

## 4

| Average Floor Area | AVERAGE PERIMETER | | | | | | | | | | | | | | Average Floor Area |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sq.Ft./Story | 1000 | 1200 | 1400 | 1600 | 2000 | 2400 | 2600 | 3000 | 3500 | 4000 | 5000 | 6000 | 7000 | 8000 | Sq. Ft./Story |
| **100,000** | .863 | .872 | .882 | .891 | .907 | .924 | .933 | .950 | ----- | ----- | ----- | ----- | ----- | ----- | **100,000** |
| **200,000** | ----- | .846 | .850 | .855 | .863 | .873 | .877 | .887 | ----- | ----- | ----- | ----- | ----- | ----- | **200,000** |
| **300,000** | ----- | ----- | .839 | .842 | .849 | .855 | .857 | .863 | .872 | .880 | ----- | ----- | ----- | ----- | **300,000** |
| **400,000** | ----- | ----- | ----- | .835 | .841 | .846 | .848 | .853 | .858 | .863 | .875 | ----- | ----- | ----- | **400,000** |
| **500,000** | ----- | ----- | ----- | .831 | .835 | .840 | .842 | .846 | .850 | .855 | .863 | .873 | ----- | ----- | **500,000** |
| **600,000** | ----- | ----- | ----- | ----- | ----- | ----- | .837 | .841 | .845 | .849 | .856 | .863 | ----- | ----- | **600,000** |
| **700,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .836 | .841 | .845 | .851 | .857 | .863 | ----- | **700,000** |
| **800,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .834 | .837 | .841 | .847 | .853 | .858 | .863 | **800,000** |
| **900,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .832 | .835 | .838 | .843 | .849 | .854 | .858 | **900,000** |
| **1,000,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .832 | .835 | .841 | .846 | .850 | .855 | **1,000,000** |
| **1,200,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .832 | .836 | .841 | .845 | .849 | **1,200,000** |
| **1,500,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .832 | .835 | .839 | .843 | **1,500,000** |

**NOTE:** For larger buildings, enter the table by taking half the area and half the perimeter.

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# WAREHOUSES – MINI

GOOD CLASS C

AVERAGE CLASS D

**OCCUPANCY DESCRIPTION:** Mini warehouses are subdivided into cubicles of generally small size and are designed primarily to be rented for noncommercial storage. The interior cubicles are divided with either masonry, metal or wood frame walls. Drywall is a common interior finish on the framed walls. They are typically built with slab floors and have some electrical in each unit. This occupancy also has minimum plumbing with no heating.

High-rise Mini warehouses are multistory warehouses subdivided into cubicles of generally small size and are designed primarily to be rented for noncommercial storage. They will include some office/living space at the better qualities. The density of storage cubicles and ancillary support facilities will influence cost level.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Elevators are included in high rise structures only.

**NOT INCLUDED IN COSTS:** Sprinklers, security equipment or yard improvements.

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| C | Good | $47.25 | Brick, block or tilt up, many doors | Subdivided cubicles, good security partitions, office apartment | Elect. outlets and lighting in each space, minimum plumbing | None |
| | Average | 35.28 | Block, tilt up, light construction | Subdivided into cubicles, mixed sizes, unfinished slab, small office | Adequate electrical service per space, minimum water | None |
| | Low cost | 26.35 | Low cost block, tilt up, light roof, low cost door entries | Subdivided into large cubicles, light slab, no support facilities | Minimum electrical service | None |
| D | Good | 43.96 | Stucco, siding or brick veneer, many doors | Subdivided cubicles, good security partitions, office apartment | Elect. outlets and lighting in each space, minimum plumbing | None |
| | Average | 32.87 | Wood frame and stucco or wood | Subdivided into cubicles, mixed sizes, unfinished slab, small office | Adequate electrical service per space, minimum water | None |
| | Low cost | 24.58 | Low cost stucco or siding, low cost door entries | Subdivided into large cubicles, light slab, no support facilities | Minimum electrical service | None |
| D POLE | Good | 39.27 | Good pole frame, metal siding, many doors | Subdivided cubicles, good security partitions, office apartment | Elect. outlets and lighting in each space, minimum plumbing | None |
| | Average | 29.28 | Wood pole frame, metal siding | Subdivided into cubicles, mixed sizes, unfinished slab, small office | Adequate electrical service per space, minimum water | None |
| | Low cost | 21.83 | Pole frame, metal siding, low cost door entries | Subdivided into large cubicles, light slab, no support facilities | Minimum electrical service | None |
| S | Good | 44.07 | Pre-engineered frame, insulated, many doors | Subdivided cubicles, good security partitions, office apartment | Elect. outlets and lighting in each space, minimum plumbing | None |
| | Average | 32.94 | Light steel frame and metal siding | Subdivided into cubicles, mixed sizes, unfinished slab, small office | Adequate electrical service per space, minimum water | None |
| | Low cost | 24.61 | Light steel frame, siding, low cost door entries | Subdivided into large cubicles, light slab, no support facilities | Minimum electrical service | None |
| | Cheap | 18.25 | Light steel frame, siding and doors | Extra large only; all cubes >300 sq. ft. | Minimum electrical only | None |

## HIGH-RISE MINI-WAREHOUSES

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| A-B | Average | $64.63 | Brick, block, concrete, some metal and glass | Subdivided cubicles, good security partitions, office/apartment | *Good outlets and lighting, minimum plumbing | Ventilation |
| C | Good | 60.35 | Brick, block or tilt up, metal and glass, good trim | Subdivided cubicles, good security partitions, office/apartment | *Good outlets and lighting, minimum plumbing | Ventilation |
| | Average | 46.08 | Block, tilt up, some metal and glass trim | Subdivided into cubicles, mixed sizes, unfinished slab, adequate office | *Adequate electrical service, minimum plumbing | Ventilation |
| D | Good | 55.34 | Brick veneer, stucco, EIFS, metal and glass trim | Subdivided cubicles, good security partitions, office/apartment | *Good outlets and lighting, minimum plumbing | Ventilation |
| S | Good | 56.61 | Pre-engineered frame, good sandwich panels | Subdivided cubicles, good security partitions, office/apartment | *Good outlets and lighting, minimum plumbing | Ventilation |

# WAREHOUSES – MINI

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

## 1

**ELEVATORS:** Buildings whose base costs include service 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.

| High-Rise All Classes | Sq. Ft. Costs |
|---|---|
| Good | $2.19 |
| Average | 1.59 |

**ELEVATORS:** A small passenger or freight elevator with simple call system and push button control, four passenger cab, and two or three stops, costs $56,250 to $77,250.

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $2.86 | $3.79 | $5.01 | $6.63 |
| 10,000 | 2.58 | 3.38 | 4.44 | 5.82 |
| 15,000 | 2.42 | 3.16 | 4.13 | 5.40 |
| 20,000 | 2.32 | 3.02 | 3.93 | 5.11 |
| 40,000 | 2.09 | 2.70 | 3.48 | 4.49 |

For load-bearing parking roofs, add $6.05 per square foot.

Access ramps cost $21.30 to $38.00 per square foot of ramp.

**DOCK HEIGHT FLOORS:** Add $1.64 to $6.20 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 | $ 6.21 | Package A.C. (short ductwork) | $13.65 | Central refrigeration (zoned) | $11.50 |
| Electric wall heaters | 2.53 | Warm and cool air (zoned) | 18.65 | package (short ductwork) | 7.63 |
| Forced air furnace | 7.01 | Hot/chilled water (zoned) | 31.25 | Central evaporative | 4.77 |
| Hot water, baseboard/convector | 12.40 | Heat pump system | 17.10 | Pkg. refrig. | $1,660 to $2,180 per ton capacity |
| Space heaters, with fan | 3.54 | | | Evap. coolers | $235 to $385 per MCFM capacity |
| radiant | 3.96 | | | | |
| Steam (including boiler) | 10.80 | Small indiv. heat pumps cost | $1,600 to $2,160 | **VENTILATION ONLY** | |
| without boiler | 9.42 | per ton of rated capacity. | | Vent. (blowers/ducts) | $2.04 |

## 3

**HEIGHT REFINEMENTS**

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

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 8 | .885 | 16 | 1.041 |
| 10 | .921 | 18 | 1.086 |
| 12 | .960 | 20 | 1.133 |
| 14 | 1.000 (base) | | |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 100 | 150 | 200 | 250 | 300 | 400 | 450 | 500 | 600 | 700 | 800 | 900 | 1000 | 1200 | Average Floor Area Sq. Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1,000** | 1.252 | 1.468 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **1,000** |
| **2,000** | ----- | 1.147 | 1.252 | 1.360 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **2,000** |
| **3,000** | ----- | ----- | 1.112 | 1.182 | 1.252 | 1.395 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **3,000** |
| **4,000** | ----- | ----- | 1.040 | 1.094 | 1.147 | 1.252 | 1.306 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **4,000** |
| **5,000** | ----- | ----- | .996 | 1.040 | 1.083 | 1.168 | 1.210 | 1.252 | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **6,000** | ----- | ----- | ----- | 1.004 | 1.040 | 1.112 | 1.147 | 1.182 | 1.252 | ----- | ----- | ----- | ----- | ----- | **6,000** |
| **8,000** | ----- | ----- | ----- | ----- | .984 | 1.040 | 1.068 | 1.094 | 1.147 | 1.199 | 1.252 | ----- | ----- | ----- | **8,000** |
| **10,000** | ----- | ----- | ----- | ----- | ----- | .996 | 1.019 | 1.040 | 1.083 | 1.125 | 1.168 | 1.210 | ----- | ----- | **10,000** |
| **12,000** | ----- | ----- | ----- | ----- | ----- | .965 | .984 | 1.003 | 1.040 | 1.077 | 1.112 | 1.147 | 1.182 | ----- | **12,000** |
| **14,000** | ----- | ----- | ----- | ----- | ----- | .945 | .961 | .977 | 1.008 | 1.040 | 1.071 | 1.102 | 1.132 | ----- | **14,000** |
| **18,000** | ----- | ----- | ----- | ----- | ----- | ----- | .929 | .942 | .967 | .991 | 1.016 | 1.040 | 1.065 | ----- | **18,000** |
| **20,000** | ----- | ----- | ----- | ----- | ----- | ----- | ----- | .926 | .949 | .972 | .996 | 1.019 | 1.040 | 1.083 | **20,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# WAREHOUSES – STORAGE

**AVERAGE CLASS S**

**OCCUPANCY DESCRIPTION:** These buildings are designed for storage. An amount of office space, typically 3 to 12 percent, consistent with the quality of the building is included in the structure. They may be built in all classes of construction. Typically, they have plaster or drywall interior partitions and may have some finished ceilings. The better qualities have small office fronts with ornamental materials at the front elevation, while lower cost structures are plain with very little, if any, ornamentation.

**AVERAGE CLASS S**

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Heating and ventilating facilities are sufficient to protect goods from freezing and other spoilage. Elevators are included in costs designated with an asterisk (*).

**NOT INCLUDED IN COSTS:** Sprinklers, special climate-control equipment, dock levelers or material handling equipment.

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| A | Good | $95.65 | Ornamental concrete or brick, small office front | Plaster or drywall with partitions, some finished ceilings | *Good lighting, plumbing, adequate restrooms | Hot water |
| | Average | 68.52 | Brick on block or tile, concrete panels, very plain | Painted walls, few partitions, small offices | *Adequate lighting and plumbing | Space heaters |
| | Low cost | 54.22 | Low cost block, tile or concrete | Unfin., small office, few partitions | *Minimum lighting/plumbing | Space heaters |
| B | Good | 88.74 | Ornamental concrete or brick, small office front | Plaster or drywall with partitions, finished ceilings in most areas | *Good lighting, plumbing, adequate restrooms | Hot water |
| | Average | 62.80 | Brick on block or tile, concrete panels, very plain | Painted walls, few partitions, small offices | *Adequate lighting and plumbing | Space heaters |
| | Low cost | 49.50 | Low cost block, tile or concrete | Unfin., small office, few partitions | *Minimum lighting/plumbing | Space heaters |
| A-B | Storage basement | 47.83 | Reinforced concrete, unfinished interior | Unfinished storage areas, some partitions | Minimum lighting and plumbing, drains | None |
| | Good storage mezz. | 52.12 | In building cost | Metal grating on good steel structure, no partitions | Minimum lighting, no plumbing | Included in building cost |
| | Avg. storage mezz. | 44.01 | In building cost | Metal deck and concrete on good steel structure, no partitions | Minimum lighting, no plumbing | Included in building cost |
| C | Excellent | 96.97 | Brick, concrete, good facade | Plaster or drywall, partitioned, finished ceilings in most areas | Good lighting and plumbing | Package A.C. |
| | Good | 61.11 | Steel frame, good brick, block, or tilt up, tapered girders | Plaster or drywall, some masonry partitions, good offices | Good lighting, adequate plumbing | Space heaters |
| | Average | 43.35 | Steel or wood frame or bearing walls, brick, block, or tilt up | Painted walls, finished office, hardened slab | Adequate lighting, low cost plumbing fixtures | Space heaters |
| | Low cost | 31.09 | Block, cheap brick, tilt up, light construction | Unfinished, small office, shell type, minimum code | Minimum lighting and plumbing | Space heaters |
| CMILL | Good | 85.20 | Mill type construction, brick walls, wood or steel trusses | Plaster walls, masonry partitions, painted trusses | *Good lighting, adequate plumbing | Steam |
| | Average | 58.02 | Mill type construction, brick and block, wood trusses | Painted walls, few partitions, small offices | *Adequate lighting and plumbing | Space heaters |
| D | Good | 55.30 | Heavy wood frame, wood or stucco siding | Heavy slab or mill-type floors | Good lighting, adequate plumbing | Space heaters |
| | Average | 39.16 | Stucco on wood frame, wood trusses | Small office, average slab | Adequate lighting, low cost plumbing fixtures | Space heaters |
| | Low cost | 28.08 | Stucco or siding on wood | Unfinished, slab, utility type, minimum office | Minimum lighting and plumbing | Space heaters |
| D POLE | Average | 33.80 | Pole frame, good metal siding, insulated | Small office, some finish, slab | Adequate lighting, little plumbing | Space heaters |
| | Low cost | 24.39 | Pole frame, metal siding | Unfinished utility type, light slab, minimum office | Minimum lighting and plumbing | Space heaters |
| S | Excellent | 91.46 | Heavy steel frame, insulated panels, good facade | Plaster or drywall, partitioned, finished ceilings in most areas | Good lighting and plumbing | Package A.C. |
| | Good | 56.57 | Good steel frame, siding and fenestration | Some good office, interior finish and floor | Good lighting, adequate plumbing | Space heaters |
| | Average | 39.71 | Rigid steel frame, siding | Small office, average slab | Adequate lighting, low cost plumbing fixtures | Space heaters |
| | Low cost | 28.24 | Pre-eng. frame, metal siding | Unfin. utility type, light slab, min. office | Minimum lighting and plumbing | Space heaters |
| CDS† | Storage basement | 31.03 | Reinforced concrete, unfinished interior | Unfinished storage area | Minimum lighting and drains | None |
| | Avg. stor. mezz. | 21.05 | In building cost | Heavy plywood or plank on wood or light steel structure, no partitions | Minimum lighting, no plumbing | Included in building cost |
| | Low stor. mezz. | 15.70 | In building cost | Light storage on plywood, minimum supports, no soffit | Minimum lighting | Included in building cost |

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

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

# WAREHOUSES – STORAGE

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

## 1

**ELEVATORS:** Buildings whose base costs include service 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/C$_{MILL}$ | Sq. Ft. Costs |
|---|---|
| Good | $2.54 |
| Average | 2.07 |
| Low cost | 1.59 |

**ELEVATOR STOPS:** For basement or mezzanine elevator stops, add $6,400 to $9,650 per stop.

A small freight elevator with simple call system and push button control, four passenger cab, and two or three stops, costs $56,250 to $77,250.

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $2.86 | $3.79 | $5.01 | $6.63 |
| 10,000 | 2.58 | 3.38 | 4.44 | 5.82 |
| 20,000 | 2.32 | 3.02 | 3.93 | 5.11 |
| 30,000 | 2.18 | 2.83 | 3.66 | 4.74 |
| 40,000 | 2.09 | 2.70 | 3.48 | 4.49 |
| 50,000 | 2.02 | 2.60 | 3.35 | 4.31 |
| 80,000 | 1.88 | 2.41 | 3.08 | 3.95 |
| 100,000 | 1.82 | 2.32 | 2.96 | 3.79 |
| 200,000 | 1.64 | 2.07 | 2.63 | 3.33 |

**DOCK HEIGHT FLOORS:** Add $1.64 to $6.20 per square foot to base cost of first floor.
Loading docks, see Page CAL 398.

## 2

**HEATING AND COOLING**

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

| HEATING ONLY | Sq. Ft. Costs | HEATING & COOLING | Sq. Ft. Costs | COOLING ONLY | Sq. Ft. Costs |
|---|---|---|---|---|---|
| Electric cable or baseboard | $ 6.21 | Package A.C. (short ductwork) | $13.65 | Central refrigeration (zoned) | $11.50 |
| Electric wall heaters | 2.53 | Warm and cool air (zoned) | 18.65 | package (short ductwork) | 7.63 |
| Forced air furnace | 7.01 | Hot/chilled water (zoned) | 31.25 | Central evaporative | 4.77 |
| Hot water, baseboard/convector | 12.40 | Heat pump system | 17.10 | Pkg. refrig. | $1,660 to $2,180 per ton capacity |
| Space heaters, with fan | 3.54 | | | Evap. coolers | $235 to $385 per MCFM capacity |
| radiant | 3.96 | | | | |
| Steam (including boiler) | 10.80 | Small indiv. heat pumps cost | $1,600 to $2,160 | **VENTILATION ONLY** | |
| without boiler | 9.42 | per ton of rated capacity. | | Vent. (blowers/ducts) | $2.04 |

## 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 | .885 | 20 | 1.133 | 45 | 1.788 |
| 10 | .921 | 22 | 1.181 | 50 | 1.930 |
| 12 | .960 | 24 | 1.231 | 55 | 2.075 |
| 14 | 1.000 (base) | 30 | 1.382 | 60 | 2.225 |
| 16 | 1.041 | 35 | 1.515 | 70 | 2.530 |
| 18 | 1.086 | 40 | 1.650 | 80 | 2.845 |

## 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** | 1.083 | 1.168 | 1.252 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **10,000** | ----- | .996 | 1.040 | 1.083 | 1.168 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **10,000** |
| **14,000** | ----- | .945 | .977 | 1.008 | 1.071 | 1.132 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **14,000** |
| **20,000** | ----- | ----- | .926 | .949 | .996 | 1.040 | 1.083 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **20,000** |
| **25,000** | ----- | ----- | .907 | .924 | .959 | .996 | 1.032 | 1.066 | ----- | ----- | ----- | ----- | ----- | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | .907 | .935 | .965 | .995 | 1.025 | ----- | ----- | ----- | ----- | ----- | ----- | **30,000** |
| **40,000** | ----- | ----- | ----- | ----- | .907 | .926 | .949 | .972 | .995 | 1.019 | ----- | ----- | ----- | ----- | **40,000** |
| **50,000** | ----- | ----- | ----- | ----- | .891 | .907 | .924 | .942 | .959 | .977 | .996 | 1.015 | ----- | ----- | **50,000** |
| **80,000** | ----- | ----- | ----- | ----- | ----- | .875 | .887 | .898 | .907 | .916 | .926 | .937 | .949 | .984 | **80,000** |
| **100,000** | ----- | ----- | ----- | ----- | ----- | .863 | .872 | .882 | .891 | .899 | .907 | .916 | .924 | .950 | **100,000** |
| **200,000** | ----- | ----- | ----- | ----- | ----- | ----- | .846 | .850 | .855 | .859 | .863 | .868 | .873 | .887 | **200,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.

# WAREHOUSES – TRANSIT

AVERAGE CLASS S

AVERAGE CLASS S

**OCCUPANCY DESCRIPTION:** This occupancy is designed for temporary closed storage, freight segregation and loading. Most commonly built with either masonry, wood frame or steel frame walls. The interiors have some finished offices and driver areas. Lighting and plumbing, although adequate to service the personnel, are not excessive or ornate.

**INCLUDED IN COSTS:** Architects' fees and contractors' overhead and profit. Heating and ventilation are sufficient to protect stored goods and materials from freezing or other forms of spoilage. Costs include dock height floors.

**NOT INCLUDED IN COSTS:** Elevators, sprinklers, dock-leveling equipment or special material handling facilities.

**SQUARE FOOT COST TABLE**

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| C | Good | $95.89 | Brick or block, best tilt up, good overhead doors | Good finished office, drivers' rest areas, dock height floor | Good lighting, plumbing for transient drivers | Forced air |
| | Average | 67.03 | Block, good tilt up, overhead doors | Some finished office, drivers' rest areas, dock height floor | Adequate lighting, plumbing for transient drivers | Space heaters |
| D | Average | 60.41 | Wood frame, siding or stucco | Some finished office/drivers' rest areas, dock height floor | Adequate lighting/plumbing | Space heaters |
| D POLE | Average | 55.75 | Wood pole frame, metal siding | Some finished office/drivers' rest areas, dock height floor | Adequate lighting/plumbing | Space heaters |
| S | Good | 88.01 | Heavy steel frame and siding, good overhead doors | Good finished office, drivers' rest areas, dock height floor | Good lighting, plumbing for transient drivers | Forced air |
| | Average | 61.30 | Steel frame and siding | Some finished office/drivers' rest areas, dock height floor | Adequate lighting/plumbing | Space heaters |
| CDS | Storage basement | 31.03 | Reinforced concrete, unfinished interior | Finished storage area | Minimum lighting and drains | None |

# WAREHOUSES – TRANSIT

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

**1**

**AUTOMATIC DOCK LEVELERS:** Cost $6,100 to $11,600 each.

See Section UIP 12, page 12 for greater detail.

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 5,000 | $2.86 | $3.79 | $5.01 | $6.63 |
| 10,000 | 2.58 | 3.38 | 4.44 | 5.82 |
| 15,000 | 2.42 | 3.16 | 4.13 | 5.40 |
| 20,000 | 2.32 | 3.02 | 3.93 | 5.11 |
| 30,000 | 2.18 | 2.83 | 3.66 | 4.74 |
| 40,000 | 2.09 | 2.70 | 3.48 | 4.49 |
| 50,000 | 2.02 | 2.60 | 3.35 | 4.31 |
| 80,000 | 1.88 | 2.41 | 3.08 | 3.95 |
| 100,000 | 1.82 | 2.32 | 2.96 | 3.79 |
| 150,000 | 1.71 | 2.17 | 2.76 | 3.51 |

**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 . . | $ 6.21 | Package A.C. (short ductwork) . . . . | $13.65 | Central refrigeration (zoned) . . . . | $11.50 |
| Electric wall heaters . . . . . | 2.53 | Warm and cool air (zoned) . . . . . | 18.65 | package (short ductwork) . . . . | 7.63 |
| Forced air furnace . . . . . | 7.01 | Hot/chilled water (zoned) . . . . . | 31.25 | Central evaporative . . . . . | 4.77 |
| Hot water, baseboard/convector | 12.40 | Heat pump system . . . . . | 17.10 | Pkg. refrig. . $1,660 to $2,180 per ton capacity | |
| Space heaters, with fan . . . . . | 3.54 | | | Evap. coolers . . $235 to $385 per MCFM capacity | |
| radiant . . . . . | 3.96 | | | | |
| Steam (including boiler) . . . . . | 10.80 | Small indiv. heat pumps cost $1,600 to $2,160 | | **VENTILATION ONLY** | |
| without boiler . . . . . | 9.42 | per ton of rated capacity. | | Vent. (blowers/ducts) . . . . . | $2.04 |

**3**

**HEIGHT REFINEMENTS**

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

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|
| 8 | .885 | 20 | 1.133 |
| 10 | .921 | 22 | 1.181 |
| 12 | .960 | 24 | 1.231 |
| 14 | 1.000 (base) | 26 | 1.281 |
| 16 | 1.041 | 28 | 1.331 |
| 18 | 1.086 | 30 | 1.382 |

**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** | 1.083 | 1.168 | 1.252 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **5,000** |
| **10,000** | ----- | .996 | 1.040 | 1.083 | 1.168 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **10,000** |
| **14,000** | ----- | .945 | .977 | 1.008 | 1.071 | 1.132 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **14,000** |
| **20,000** | ----- | ----- | .926 | .949 | .996 | 1.040 | 1.083 | ----- | ----- | ----- | ----- | ----- | ----- | ----- | **20,000** |
| **25,000** | ----- | ----- | .907 | .924 | .959 | .996 | 1.032 | 1.066 | ----- | ----- | ----- | ----- | ----- | ----- | **25,000** |
| **30,000** | ----- | ----- | ----- | .907 | .935 | .965 | .995 | 1.025 | ----- | ----- | ----- | ----- | ----- | ----- | **30,000** |
| **40,000** | ----- | ----- | ----- | ----- | .907 | .926 | .949 | .972 | .995 | 1.019 | ----- | ----- | ----- | ----- | **40,000** |
| **50,000** | ----- | ----- | ----- | ----- | .891 | .907 | .924 | .942 | .959 | .977 | .996 | 1.015 | ----- | ----- | **50,000** |
| **60,000** | ----- | ----- | ----- | ----- | ----- | .895 | .907 | .921 | .935 | .949 | .965 | .980 | .995 | ----- | **60,000** |
| **70,000** | ----- | ----- | ----- | ----- | ----- | .884 | .896 | .907 | .919 | .932 | .945 | .957 | .969 | ----- | **70,000** |
| **80,000** | ----- | ----- | ----- | ----- | ----- | .875 | .887 | .898 | .907 | .916 | .926 | .937 | .949 | .984 | **80,000** |
| **100,000** | ----- | ----- | ----- | ----- | ----- | .863 | .872 | .882 | .891 | .899 | .907 | .916 | .924 | .950 | **100,000** |

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

# WAREHOUSES – MISCELLANEOUS STORAGE BUILDING

CLASS S FERTILIZER STORAGE

**OCCUPANCY DESCRIPTION:** Flathouses are large grain storage structures.
Bulk oil storage buildings provide for the temporary closed storage of bulk oil drums and include a dock-height floor. Interiors are basically unfinished, with adequate sparkproof lighting fixtures, but no plumbing.
Fertilizer storage buildings provide for the blending and distribution of dry fertilizers in bulk or bag. Bag structures include dock-height floors.
**INCLUDED IN COSTS:** architects' fees and contractors' overhead and profit.
**NOT INCLUDED IN COSTS:** Sprinklers, heating and special storage and handling equipment are not included.

SQUARE FOOT COST TABLE

## FLATHOUSE STORAGE

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| C | Good | $42.44 | Steel truss, good concrete, metal/composition shingle roof | Heavy-duty floor, grain, storage, etc. | Good wiring and lighting | None |
| | Average | 29.56 | Concrete walls, light roof | Good concrete slab | Adequate electric service | None |
| D | Good | 34.43 | Heavy wood frame, siding or stucco, sheathing | Finished walls, heavy-duty concrete slab and stem wall | Good wiring and lighting | None |
| | Average | 23.22 | Post frame, siding or stucco, bulkheads | Finished walls, good slab, grain storage | Adequate wiring and lighting | None |
| D POLE | Good | 29.90 | Heavy laminated frame, metal siding, sheathing | Sealed walls, heavy-duty concrete slab and stem wall | Good wiring and lighting | None |
| | Average | 20.91 | Post frame and truss, metal siding, sheathing, bulkheads | Lined walls, good slab, grain storage | Adequate wiring and lighting | None |
| S | Good | 34.09 | Heavy steel frame and truss, heavy steel panels | Heavy concrete slab and stem wall, grain, storage, etc. | Good wiring and lighting | None |
| | Average | 23.90 | Steel frame and truss, heavy steel panels, bulkheads | Good concrete slab, grain storage | Adequate wiring and lighting | None |
| S SLANT WALL | Good | 32.01 | Heavy steel slant frame and truss, heavy steel panels | Heavy concrete slab and stem wall, grain, storage, etc. | Good wiring and lighting | None |
| | Average | 22.43 | Steel frame and truss, heavy steel panels, bulkheads | Good concrete slab, grain storage | Adequate wiring and lighting | None |

## BULK OIL STORAGE

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| D | Average | $30.61 | Heavy wood frame, roof, stucco/ wood siding, plywood skirting | Unfinished, concrete or plank dock-height floor | Rigid conduit, sparkproof fixtures, no plumbing | None |
| D POLE | Average | 28.16 | Metal siding on poles, sheathing, metal skirting | Unfinished, concrete or plank dock-height floor | Rigid conduit, sparkproof fixtures, no plumbing | None |
| S | Average | 30.77 | Steel frame, siding and sheathing, steel skirting | Unfinished, concrete or plank dock-height floor | Rigid conduit, sparkproof fixtures, no plumbing | None |

## BAG FERTILIZER STORAGE

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| D | Average | $33.45 | Heavy wood frame, composition roof, wood siding/skirting | Concrete or built-up wood dock-height floor, sealed, few partitions | Rigid conduit, sparkproof fixtures, no plumbing | None |
| D POLE | Average | 31.06 | Metal siding on poles, sheathing, metal skirting | Concrete or built-up wood dock-height floor, sealed, few partitions | Rigid conduit, sparkproof fixtures, no plumbing | None |
| S | Average | 33.86 | Pre-engineered frame, siding and sheathing, steel skirting | Concrete or built-up wood dock-height floor, sealed, few partitions | Rigid conduit, sparkproof fixtures, no plumbing | None |

## BULK FERTILIZER STORAGE

| CLASS | TYPE | COST/ SQ. FT. | EXTERIOR WALLS | INTERIOR FINISH | LIGHTING, PLUMBING AND MECHANICAL | HEAT |
|---|---|---|---|---|---|---|
| C | Average | $42.86 | Wall-bearing block/concrete, wood trusses, driveway | Heavy bins, concrete slab, small finished office, blend area | Rigid conduit, sparkproof fixtures, some plumbing | None |
| D | Average | 38.84 | Heavy wood frame, roof, wood siding, driveway | Heavy bins, concrete slab, small finished office, blend area | Rigid conduit, sparkproof fixtures, some plumbing | None |
| D POLE | Average | 35.70 | Metal siding on poles, wood sheathing, driveway | Heavy bins, concrete slab, small finished office, blend area | Rigid conduit, sparkproof fixtures, some plumbing | None |
| S | Average | 40.06 | Steel frame, siding and sheathing, driveway | Heavy bins, concrete slab, small finished office, blend area | Rigid conduit, sparkproof fixtures, some plumbing | None |

# WAREHOUSES – MISCELLANEOUS STORAGE BUILDING

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

## 1

Loading platforms cost $16.00 to $17.60 per square foot; add $355 for steps.

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

| Sq. Ft. | LOW | AVG. | GOOD | EXCL. |
|---|---|---|---|---|
| 1,000 | $3.54 | $4.61 | $6.00 | $7.81 |
| 2,500 | 3.06 | 3.95 | 5.09 | 6.56 |
| 5,000 | 2.74 | 3.51 | 4.49 | 5.75 |
| 7,500 | 2.57 | 3.28 | 4.18 | 5.32 |
| 10,000 | 2.46 | 3.12 | 3.97 | 5.04 |
| 15,000 | 2.30 | 2.92 | 3.69 | 4.67 |
| 20,000 | 2.20 | 2.78 | 3.50 | 4.42 |
| 40,000 | 1.97 | 2.47 | 3.09 | 3.87 |

**DOCK-HEIGHT FLOORS:** Add $1.64 to $6.20 per square foot to the base cost of the 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 . . | $4.31 | Package A.C. (short ductwork) . . . . | $9.58 | Central refrigeration (zoned) . . . . | $8.17 |
| Electric wall heaters . . . . . | 1.84 | | | package (short ductwork) . . . . | 6.28 |
| Forced air furnace . . . . . | 4.85 | | | Evaporative coolers . . . . . | 3.72 |
| Hot water, baseboard/convector | 8.63 | | | | |
| Space heaters, with fan . . . . . | 2.37 | | | | |
| radiant . . . . . | 2.79 | | | | |
| Steam (including boiler) . . . . . | 7.68 | | | | |
| without boiler . . . . . | 6.74 | | | **VENTILATION ONLY** | |
| Wall or floor furnace . . . . . | 2.19 | | | Vent. (blowers/ducts) . . . . . | $1.36 |

## 3

**HEIGHT REFINEMENTS**

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

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

| Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier | Average Wall Height | Square Foot Multiplier |
|---|---|---|---|---|---|
| 7 | .943 | 12 | 1.038 | 20 | 1.192 |
| 8 | .963 | 13 | 1.058 | 22 | 1.231 |
| 9 | .981 | 14 | 1.077 | 24 | 1.269 |
| 10 | 1.000 (base) | 16 | 1.115 | 28 | 1.346 |
| 11 | 1.019 | 18 | 1.154 | 32 | 1.423 |

## 4

| Average Floor Area Sq.Ft./Story | AVERAGE PERIMETER 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 500 | 600 | 700 | 800 | 900 | 1000 | Average Floor Area Sq. Ft./Story |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **1,000** | 1.044 | 1.110 | 1.178 | 1.311 | 1.444 | 1.577 | 1.711 | 1.844 | ----- | ----- | ----- | ----- | ----- | ----- | **1,000** |
| **2,000** | .911 | .945 | .977 | 1.044 | 1.110 | 1.178 | 1.245 | 1.311 | ----- | ----- | ----- | ----- | ----- | ----- | **2,000** |
| **3,000** | .865 | .889 | .911 | .955 | 1.000 | 1.044 | 1.088 | 1.133 | ----- | ----- | ----- | ----- | ----- | ----- | **3,000** |
| **4,000** | ----- | .860 | .878 | .911 | .945 | .977 | 1.010 | 1.044 | 1.110 | 1.178 | ----- | ----- | ----- | ----- | **4,000** |
| **5,000** | ----- | .844 | .857 | .884 | .911 | .938 | .960 | .991 | 1.044 | 1.097 | 1.150 | ----- | ----- | ----- | **5,000** |
| **8,000** | ----- | ----- | ----- | .844 | .860 | .877 | .894 | .911 | .945 | .977 | 1.010 | 1.044 | 1.076 | ----- | **8,000** |
| **10,000** | ----- | ----- | ----- | ----- | .844 | .858 | .871 | .884 | .911 | .938 | .960 | .991 | 1.018 | 1.044 | **10,000** |
| **14,000** | ----- | ----- | ----- | ----- | .825 | .835 | .844 | .854 | .873 | .892 | .911 | .931 | .949 | .967 | **14,000** |
| **16,000** | ----- | ----- | ----- | ----- | ----- | .827 | .836 | .844 | .861 | .877 | .894 | .911 | .928 | .945 | **16,000** |
| **18,000** | ----- | ----- | ----- | ----- | ----- | .822 | .828 | .836 | .852 | .867 | .881 | .896 | .911 | .926 | **18,000** |
| **20,000** | ----- | ----- | ----- | ----- | ----- | .818 | .824 | .831 | .844 | .858 | .871 | .884 | .898 | .911 | **20,000** |
| **25,000** | ----- | ----- | ----- | ----- | ----- | .810 | .815 | .820 | .831 | .841 | .852 | .863 | .873 | .884 | **25,000** |

## 5 USE COUNTY MULTIPLIERS IN MULTIPLIER SECTION.