

COST SCHEDULE

2022

Prepared by:

TECHNICAL SERVICES DIVISION

City and County of San Francisco

Department of Building Inspection



London N. Breed, Mayor

Patrick O'Riordan, C.B.O., Director

2022 Cost Schedule

To All San Francisco Building Permit Applicants and Interested Parties:

Attached is the 2022 Cost Schedule of Building Valuation Data for use in calculating a building's valuation for Building Permits in the City and County of San Francisco. This schedule is effective when issued by the Director. A valuation based on this table represents the valuation at the completion of all construction work authorized by a building permit. Permit fees are based on a percentage of this valuation. These valuations are not to be used as accurate guides to the actual cost of construction. For actual construction cost estimates for any project please consult a contractor, a design professional or a cost estimator.

This schedule will be updated by DBI's Technical Services Division on an annual basis or as otherwise directed by the Building Inspection Commission in accordance with the San Francisco Building Code Section 107A.2. The valuation data is based on information provided by a variety of sources, including without limitation, local contractors, design professionals, cost estimators or nationally published construction cost data books or websites.

For additional information on this schedule, please contact the Technical Services Division by phone: (628) 652-3720 or by email: techq@sfgov.org.

Patrick O'Riordan, C.B.O. Director	
Date:	

Sincerely yours,

Office of the Director
49 South Van Ness Avenue – San Francisco, CA 94103 - 3786
Phone (628) 652-3500

TABLE OF CONTENTS

Letter from the Director i
Section I - General Notes1
Section II - Tenant Improvement
Section III - Residential Remodel
Section IV - Seismic Retrofit4
Section V - Fire Protection Systems6
Section VI - General Items10
Section VII - Base Costs of Various Occupancies (in New Buildings)17
Section VIII - Additional Costs Items:
Section IX - Mechanical Equipment31
Section X - Abbreviations33

GENERAL NOTES

- This cost schedule is to be used for calculating a building's valuation for building permits and related fees posted in the City and County of San Francisco. A valuation based on this table represents the valuation at the completion of all construction work authorized by a building permit. Permit fees are based on a percentage of this valuation. These valuations are not to be used as accurate guides to the actual cost of construction. For actual construction cost estimates for any project please consult with a contractor, a design professional or a cost estimator.
- 2. Building permit, building plan review fees and other related fees shall be based on the date of permit application, adjusted based on subsequent revisions. Building floor area shall be calculated in accordance with the definitions contained in Chapter 2 of the San Francisco Building Code.
- 3. This schedule is updated each year, or as otherwise directed by the Building Inspection Commission. The valuation data is based on information provided by a variety of sources, including without limitation, local contractors, design professionals, cost estimators or nationally published construction cost data books or websites.
- 4. The costs used in computing the permit issuance fees shall be based on the final valuation upon completion of all construction work for which the permit is issued, as well as all finish work, painting, roofing, mechanical, electrical, plumbing, heating, air conditioning, elevators, fire-extinguishing systems and all other permanently installed equipment and construction, even though other permits to perform such work may be required. (per SFBC 107A.2)
- **5.** All unit prices are based on the gross floor area, unless noted otherwise.
- **6.** All unit prices include all labor and materials required unless otherwise noted.
- **7.** Where applicable, interpolate for intermediate values.



TENANT IMPROVEMENT

The total actimated and of a Tanant Improvement shall be appointed by					Amount
1.	 The total estimated cost of a Tenant Improvement shall be calculated based on the total square foot area of work multiplied by cost per square foot of: (note: do not include sq. ft. area of kitchens and bathrooms) 				
	Ded	uct the foll	owing costs items if not included or deferred:		
	(i)	MEP (M	echanical, Electrical and Plumbing)	per sq. ft.	\$72.44
		(a)	Mechanical	per sq. ft.	\$23.69
	(b) Electrical			per sq. ft.	\$34.22
		(c)	Plumbing	per sq. ft.	\$14.53
	(ii)	Fire Prof	tection (Fire Sprinklers, Fire Alarm System)	per sq. ft.	\$3.98
2.			for T.I. Restrooms or Kitchens (new or remodeled): sq. ft. area of restrooms and kitchens only)	per sq. ft.	\$492.86
3.	Cost	per sq. ft.	for T.I. Non-structural demolition of finishes:	per sq. ft.	\$8.51



RESIDENTIAL REMODEL 1, 2

		Unit	Amount
1.	Residential Remodel without seismic retrofit: (note: do not include sq. ft. area of kitchen and bathrooms)	per sq. ft.	\$190.71
2.	Residential Remodel with seismic retrofit: (note: do not include sq. ft. area of kitchen and bathrooms)	per sq. ft.	\$225.04
3.	Additional cost for each new or remodeled Kitchen (note: apply in addition to sq. ft. cost from above #1. or #2.)	each)	\$24,662.75
4.	Additional cost for each new or remodeled Bathroom (note: apply in addition to sq. ft. cost from above #1. or #2.)	each	\$20,552.28
5.	Residential Remodel, non-structural demolition of finishes	per sq. ft.	\$9.37

Footnotes:

- 1. The amounts listed here are for the repair, alteration and remodeling of existing residential buildings.
- 2. For new vertical or horizontal additions apply Section VII cost per sq. ft. to the floor area of the new addition to an existing residential buildings.

SECTION



2022 SEISMIC RETROFIT 1, 2, 3, 4

	Unit	Amount
For buildings originally constructed before 1917:	per sq. ft.	\$88.18
For buildings originally constructed between 1917 and May 31,7	1973 and:	
(A) less than 1171 sq. ft. in total floor area:	per sq. ft.	\$72.95
(B) 1171 sq. ft. or more in total floor area: Unreinforced Masonry	per sq. ft.	\$40.11
Wood Light Frame	per sq. ft.	\$40.11
Precast Concrete Tilt Up Walls or Reinforced Masonry with Metal or Wood Diaphragm	per sq. ft.	\$40.11
Concrete Moment Frame or Concrete Frame with Infill Concrete Shear Walls	per sq. ft.	\$52.42
Steel Moment Frame	per sq. ft.	\$40.11
Steel Braced Frame or Steel Light Frame	per sq. ft.	\$25.14
Steel Frame with Infill Concrete Shear Walls	per sq. ft.	\$64.05
Concrete Shear Wall or Precast Concrete Frame with Concrete Shear Walls or Reinforced Masonry with Precast Concrete Diaphragm or Steel Frame with Concrete Shear Walls	per sq. ft.	\$40.11
For Bldg. originally constructed after May 31,1973 and:		
(A) less than 1171 sq. ft. in total floor area:	per sq. ft.	\$72.95
(B) 1171 sq. ft. or more in total floor area: Unreinforced Masonry	per sq. ft.	\$16.82
	For buildings originally constructed between 1917 and May 31,7 (A) less than 1171 sq. ft. in total floor area: (B) 1171 sq. ft. or more in total floor area: Unreinforced Masonry Wood Light Frame Precast Concrete Tilt Up Walls or Reinforced Masonry with Metal or Wood Diaphragm Concrete Moment Frame or Concrete Frame with Infill Concrete Shear Walls Steel Moment Frame Steel Braced Frame or Steel Light Frame Steel Frame with Infill Concrete Shear Walls Concrete Shear Wall or Precast Concrete Frame with Concrete Shear Walls or Reinforced Masonry with Precast Concrete Diaphragm or Steel Frame with Concrete Shear Walls For Bldg. originally constructed after May 31,1973 and: (A) less than 1171 sq. ft. in total floor area:	For buildings originally constructed before 1917: per sq. ft. For buildings originally constructed between 1917 and May 31,1973 and: (A) less than 1171 sq. ft. in total floor area: per sq. ft. (B) 1171 sq. ft. or more in total floor area: Unreinforced Masonry per sq. ft. Wood Light Frame per sq. ft. Precast Concrete Tilt Up Walls or Reinforced Masonry with Metal or Wood Diaphragm per sq. ft. Concrete Moment Frame per sq. ft. Steel Moment Frame per sq. ft. Steel Braced Frame or Steel Light Frame per sq. ft. Steel Frame with Infill Concrete Shear Walls per sq. ft. Concrete Shear Wall or Precast Concrete Frame with Concrete Shear Walls per sq. ft. Concrete Shear Wall or Precast Concrete Frame with Concrete Shear Walls per sq. ft. For Bldg. originally constructed after May 31,1973 and: (A) less than 1171 sq. ft. in total floor area: per sq. ft. (B) 1171 sq. ft. or more in total floor area:

IV (Continued)

Seismic Retrofit, continued	Unit	Amount
Wood Light Frame	per sq. ft.	\$16.82
Precast Concrete Tilt Up Walls or Reinforced Masonry with Metal or Wood Diaphragm	per sq. ft.	\$16.82
Concrete Moment Frame or Concrete Frame with Infill Concrete Shear Walls	per sq. ft.	\$51.75
Steel Moment Frame	per sq. ft.	\$16.82
Steel Braced Frame or Steel Light Frame	per sq. ft.	\$16.82
Steel Frame with Infill Concrete Shear Walls	per sq. ft.	\$64.05
Concrete Shear Wall or Precast Concrete Frame with Concrete Shear Walls or Reinforced Masonry with Precast Concrete Diaphragm or Steel Frame with Concrete Shear Walls	per sq. ft.	\$16.82

Footnotes:

- 1. Seismic retrofits in this section include both foundation and superstructure and do not include architectural remodeling, disabled access improvements, hazardous material disposal, or historical building factors.
- 2. Unit prices are based on the gross floor area unless otherwise noted.
- 3. Multiply the above unit cost by 1.5 for floor at the ground level.
- 4. For foundation retrofit only, use unit cost for excavation, reinforced concrete and drilled dowels with epoxy in Section VI.



FIRE PROTECTION SYSTEMS 1					
	Unit	Amount			
Two-Way Emergency Communication System (ECS):					
Control Unit + Installation + Programing	each	\$27,963.38			
Cost per one new Call Box installation + programing	each	\$1,122.22			
Adding one Call Box to an existing backbone	each	\$6,004.08			
Temporary System with one Call Box	each	\$14,301.85			
Emergency Responder Radio Coverage System (ERRCS):					
BDA + Backbone +up to 32 antennas	each	\$120,081.56			
Bi-Directional Amplifier (BDA)	each	\$51,932.48			
Adding one Floor Antenna to an existing system	each	\$5,829.40			
Adding or changing Donor Antenna to existing system	each	\$8,929.41			
Emergency Evacuation Maps:					
One evacuation sign / map per SFFD AB# 2.11	each	\$478.81			
Fire Alarm Systems:					
Fire Alarm Systems (New)					
Addressable Fire Alarm System with Horn (New)	per sq. ft.	\$7.21			
Addressable Fire Alarm System with Speaker (New)	per sq. ft.	\$8.40			
Conventional (Zoned) Fire Alarm System (New)	per sq. ft.	\$6.20			
Fire Alarm System Components for new construction (including wiring and conduit):					
FACU Installation + Programing (Conventional)	each	\$3,395.08			
FACU Installation + Programing (Addressable up to 256 Points) each \$4,068.19					
FACU Installation + Programing (Addressable up to 512 Points)	each	\$10,856.08			

▼ (Continued)

Fi	re Protection Systems, continued	Unit	Amount
	Addressable System Node or Transponder Installation + Programin	çeach	\$10,205.71
	Wireless FACU Installation + Programing	each	\$14,391.01
	Wireless FA system initiating device or notification appliance Installation + Programing	each	\$669.69
	Remote/Booster power supply Installation + Programing	each	\$6,178.46
	FA system Wireless Communicator (Cellular or RF) Installation + Programing	each	\$7,317.73
	Remote LCD Annunciator Installation + Programing	each	\$1,529.27
	Remote LED Annunciator Installation + Programing up to 50 LEDs	each	\$2,666.27
	Remote LED Annunciator Installation + Programing up to 100 LEDs	each	\$6,226.21
	Graphic Annunciator (Custom made) Installation + Programing	each	\$14,264.80
	Smoke/Heat Detector	each	\$720.49
	Combination Smoke / CO Detector	each	\$743.60
	Combination Smoke Detector with Low Frequency Sounder Base	each	\$1,018.75
	Duct Detector	each	\$2,678.77
	Monitor/Control Module	each	\$600.40
	Manual pull station	each	\$617.39
	Horn or Low Frequency Sounder	each	\$722.00
	Strobe	each	\$620.80
	Horn/Strobe	each	\$793.63
	Speaker	each	\$794.76
	Speaker/Strobe	each	\$960.77
	Remote test switch for duct detector	each	\$600.40
	Remote indicator for duct detector	each	\$600.40
	Door Holder	each	\$620.80
	Exterior low voltage sprinkler bell	each	\$635.58

▼ (Continued)

Fire Protection Systems, continued	Unit	Amount
Fire Alarm Retrofit (including wiring and conduit):		
Initiating device	each	\$720.49
Notification appliance	each	\$897.09
Control unit or power supply (including programming)	each	\$7,730.46
Fire Extinguisher Systems:		
Clean Agent Suppression System - Installation + Programing	each	\$51,935.89
Preaction Sprinkler System (Add cost of sprinkler per Section II)	each	\$42,818.28
Fire Pump:		
500 gallons per minute	each	\$91,034.43
750 gallons per minute	each	\$97,182.47
1000 gallons per minute	each	\$113,886.89
1500 gallons per minute	each	\$136,097.85
2000 gallons per minute	each	\$147,840.24
3000 gallons per minute	each	\$255,720.76
Fire Sprinkler Systems: Sprinkler System		
10,000 s.f. or less	per sq. ft. of floor area	\$8.21
20,000 s.f.	per sq. ft. of floor area	
50,000 s.f. or more	per sq. ft. of floor area	\$5.25
New sprinkler system including installation and new pipes:		
New sprinkler system including new pipes	per head	\$621.10
Sprinkler head replacement only without new pipe	per head	\$240.17
New Standpipe System installation + components	per lin. ft.	\$1,440.98

f V (Continued)

Fire Protection Systems, continued	Unit	Amount
Underground Sprinkler System Service:		
2" diameter pipe	per lin. ft.	\$480.33
4" diameter pipe	per lin. ft.	\$600.40
6" diameter pipe	per lin. ft.	\$720.49
8" diameter pipe	per lin. ft.	\$960.65
Firefighter Air Replenishment System (FARS)		
Base cost for FARS	each	\$360,244.67
Add cost for each story	per floor	\$12,008.15
Smoke/Carbon Monoxide Alarm, hard wired		
in series with battery back up	each	\$447.00
Smoke/Carbon Monoxide Detector (battery only)	each	\$223.50
UL 300 Hood and Duct Suppression System:		
New system with one tank up to 12 Nozzles	each	\$5,670.22
Additional tank	each	\$3,904.46
Additional Nozzle	each	\$667.42
		¥

Footnotes:

^{1.} Section V - Fire Protection Systems' cost schedule provided by San Francisco Fire Department.



GENERAL ITEMS

Site Work:	Unit	Amount
Asphalt Paving	per sq. ft.	\$7.06
Back Fill (Hand)	per c.y.	\$57.07
Demolition of buildings: (not including removal of foundations or basements)		
Concrete/Masonry Buildings:	per c.y. of building volume	\$21.03
Steel Frame Buildings:	per c.y. of building volume	\$22.37
Wood Frame Buildings:	per c.y. of building volume	\$15.08
Demolition, residential interior finishes	per sq. ft. floor area	\$9.37
Demolition, commercial TI interior finishes	per sq. ft. floor area	\$8.51
Excavation (Hand)	per c.y.	\$100.47
Grout, epoxy or urethane	per sq. ft. of surface	\$25.24
Landscaping	per sq. ft.	\$11.85
Moving Structures	per sq. ft.	\$32.41
Soil nails (each)	per lin. ft.	\$503.06
Soil stabilization	per lin. ft.	\$47.86
Tiebacks	each	\$5,122.50
Underground work for pipe	per lin. ft.	\$755.00
Wood lagging (including tiebacks)	per sq. ft. of wall	\$83.60
Wood lagging (not including tiebacks)	per sq. ft. of wall	\$28.10
6' Wood Fence (interpolate for > 6 foot height)	per lin. ft.	\$48.58

Piles and Caissons:			Unit	Amount
Barrette P	iles:			
	12"		per lin. ft.	\$57.37
	24"		per lin. ft.	\$114.73
	48"		per lin. ft.	\$229.47
Caissons:				
	Setup cost for Cai	ssons	each	\$14,338.44
	12" dia.	Concrete	per lin. ft.	\$75.49
	16" dia.	Concrete	per lin. ft.	\$100.66
	24" dia.	Concrete	per lin. ft.	\$150.98
	36" dia.	Concrete	per lin. ft.	\$226.48
	12" dia.	w/ Steel Casing	per lin. ft.	\$87.55
	16" dia.	w/ Steel Casing	per lin. ft.	\$116.74
	24" dia.	w/ Steel Casing	per lin. ft.	\$175.10
	36" dia.	w/ Steel Casing	per lin. ft.	\$262.66
Concrete I	Piles:			
	Setup cost for Cor	ncrete precast	each	\$38,100.00
	12" square	Concrete precast	per lin. ft.	\$115.55
	14" square	Concrete precast	per lin. ft.	\$120.85
	24" square	Concrete precast	per lin. ft.	\$231.10
	Setup cost for Ste	el casings	each	\$25,400.00
	HP 8	w/ Steel Casing	per lin. ft.	\$114.34
	HP 10	w/ Steel Casing	per lin. ft.	\$153.01
	HP 12	w/ Steel Casing	per lin. ft.	\$176.18
	HP 14	w/ Steel Casing	per lin. ft.	\$170.67

Concrete:	Unit	Amount
Concrete Paving (incl. residential garage floors)	per sq. ft.	\$12.69
Concrete Retaining Wall	per c.y.	\$1,374.82
Concrete Foundation - Replacement or Underpinning (including excavation, concrete and shoring)	per c.y.	\$4,020.48
Concrete - Reinforced Concrete	per c.y.	\$1,220.25
Shotcrete with soil nails, up to 20 feet in length	per sq. ft. of wall	\$192.00
Shotcrete with soil nails, up to 50 feet in length (interpolate for intermediate values)	per sq. ft. of wall	\$334.00
Masonry:		
Concrete Block / CMU Walls	per sq. ft. of wall	\$20.61
Drilled dowels with epoxy in masonry	each	\$62.30
Metals:		
Steel spiral stairway or steel stairway	per story or flight	\$16,026.39
Structural steel (note: for soldier beam / pile, use cost for "H" pile)	per pound	\$4.07
Metal Guardrail	per lin. ft.	\$83.89

Wood:	Unit	Amount
Wood - Decks or Porches (incl. decking and railing	gs) per sq. ft.	\$53.05
Wood - Guardrail (for stairways, porch, decks, roo	of deck) per lin. ft.	\$48.21
Wood - Roof Deck (wood framing and decking over	er roofing per sq. ft.	\$42.45
Wood - Siding or Cladding (new or replace in-kind	d) per sq. ft. of wall	\$13.05
Wood - Stairway / Staircase (new or replace in-kir	nd) per story or flight	\$7,466.55
Termite repair work Use estimate	e from termite inspection report or contra	actor's proposal
Thermal and Moisture Protection:		
Thermal insulation for Walls	per sq. ft. of wall area	\$2.24
Thermal insulation for Floors, Ceilings or Roof	per sq. ft. of floor, etc. area	\$2.31
Reroofing	per sq. ft. roof area	\$9.80
Waterproofing	per sq. ft. surface area	\$6.45
Doors and Windows:		
Entry door, fully accessible w/ power operator, 3/0) x 6/8 each	\$6,304.20
Entry door, non-rated or 20 minute rated, 3/0 x 6/8	B each	\$420.83
Entry door, wood or metal, 90 minute rated, 3/0 x	6/8 each	\$1,366.27
Entry gate, ornamental or security gate	each	\$2,018.90
Garage door, standard sectional residential	each	\$1,695.49
Power door operator (for existing entrance door)	each	\$3,500.00

Doors and	d Windows, continued	Unit	Amount
Replaceme	ent Skylight	per sq. ft. of skylight area	\$108.19
Replaceme	ent Windows (same size and location):		
	Wood, Clad, or Fiberglass Aluminum or Vinyl Fire-rated 45 minute for property line wall	per sq. ft. of window per sq. ft. of window per sq. ft. of window	\$84.78 \$54.68 \$340.97
Storefro	nt and Curtain Wall Systems:		
Curtain wa	ill system	per sq. ft. of wall	\$102.13
Storefront	system	per sq. ft. of wall	\$74.05

Finishes:

Gypsum Drywall:

Gypsum drywall 1/2" or 5/8" over wall or ceiling framing per sq. ft. wall or ceiling \$4.80 (Install 1 layer drywall including hanging, taping, finishing)

Interior Partition Walls:

1 hour rated, wood framed partition wall (1 layer drywall applied on each side)	per sq. ft. of wall	\$15.59
1 hour rated, metal framed partition wall (1 layer drywall applied on each side)	per sq. ft. of wall	\$24.49
2 hour rated, wood framed partition wall (2 layers drywall applied on each side)	per sq. ft. of wall	\$29.05
2 hour rated, metal framed partition wall (2 layers drywall applied on each side)	per sq. ft. of wall	\$32.65

Note: The above partition wall assemblies include framing, hanging, taping, finishing and painting.

Finishes,	continued	Unit	Amount
Wall finish	nes:		
	Fabric wall covering	per sq. ft. of wall, per side	\$5.49
	Laminated plastic	per sq. ft. of wall, per side	\$8.69
	Marble, granite or other stone veneer	per sq. ft. of wall, per side	\$80.33
	Plaster veneer	per sq. ft. of wall, per side	\$9.25
	Plywood veneer	per sq. ft. of wall, per side	\$8.17
	Stucco, exterior	per sq. ft. of wall, per side	\$9.94
	Tile veneer	per sq. ft. of wall, per side	\$31.03
	Vinyl wall covering	per sq. ft. of wall, per side	\$6.07
	Wood Siding		See Wood
Special	ties:		
Awnings		per sq. ft. area of awning	\$42.97
Equipm	ent:		
Automatic	Teller Machines (ATM's)	each	\$40,557.81

Conveyi	ng Equipment:		Unit	Amount
Vertical wh	neelchair access lift		each (up to 5 foot rise)	\$17,410.60
Residentia	l stairway chairlift		per story or flight of stairs	\$9,839.07
Cranes:				
Boom Crar	ne		Setup and rental per month	\$34,036.00
Tower Cra	ne (including installa	ation, removal, site preparati	ion and foundation):	
Size of cra	ne in metric tons:			
	100 or less	metric tons	each	\$50,700.00
	200	metric tons	each	\$118,300.00
	300	metric tons	each	\$202,800.00
	400 or more	metric tons	each	\$304,200.00
	Note: Interpolate for	intermediate values		



BASE COSTS OF VARIOUS OCCUPANCIES IN NEW BUILDINGS 1,2

	Type of	
OCCUPANCY A	Construction	Cost per SF
A-1 Assembly uses, usually with fixed seating,		
intended for the production and viewing of the	I	\$480.73
performing arts or motion pictures including, but not	II	\$378.24
limited to: Motion picture and television production	п	ψ07 0.2-
studio sound stages, approved production facilities and		
production locations. (with live audiences). Motion		
picture theaters; Symphony and concert halls;		
Television and radio studios admitting an audience;		
Theaters (for live performances)		
Basement	I / II	\$181.25
(Utilities, Storage, Dressing Rooms)		******
A-2 Assembly uses intended for food and/or	I	\$476.64
drink consumption including, but not limited to:	II	\$407.24
Banquet halls; Casinos (gaming areas); Nightclubs;	III	\$335.14
Restaurants, cafeterias and similar dining facilities	IV	\$335.14
(including associated commercial kitchens); Taverns	V	\$322.38
and bars		·
Basement	I / II	\$181.25
(Incl. Utilities, Storage, Dressing Rooms)	III / IV / V	\$173.69
A-3 Assembly uses intended for worship, recreation or amusement and other assembly uses not classified elsewhere in Group A including, but not limited to: Amusement arcades; Art galleries; Bowling alleys; Community halls, Courtrooms; Dance halls (not including food or drink consumption); Exhibition halls; Funeral parlors; Gymnasiums (without spectator	I II III IV V	\$417.70 \$400.22 \$375.37 \$375.37 \$303.32
seating); Indoor swimming pools (without spectator seating); Indoor tennis courts (without spectator seating); Lecture halls; Libraries; Museums; Places of religious worship; Pool and billiard parlors; Waiting areas in transportation terminals Basement (Incl. Utilities, Storage, Dressing Rooms)	I / II III / IV / V	\$181.25 \$125.64

	Type of	
OCCUPANCY A	Construction	Cost per SF
A-4 Assembly uses intended for viewing of	I	\$409.24
indoor sporting events and activities with spectator	II	\$404.31
seating including, but not limited to: Arenas; Skating	III	\$358.79
rinks; Swimming pools; Tennis courts	IV	\$358.79
g p ,	V	\$253.75
A-5 Assembly uses intended for participation in	I	\$660.79
or viewing outdoor activities including, but not limited	I	\$660.79
to: Amusement park structures; Bleachers;	III	νA
Grandstands; Stadiums	IV	NA
Grandstands, Stadiums	V	NA
	Type of	
OCCUPANCY B	Construction	Cost per SF
В	I	\$660.41
Banks	II	\$539.15
	III	\$479.40
	IV	\$479.40
	V	\$371.35
Basements	I	\$181.25
(Incl. Utilities, Storage)	II	\$181.25
, ,	III	\$125.64
	IV	\$125.64
	V	\$125.64
В		
Office buildings, barber and beauty shops,	I	\$368.52
car wash; dry cleaning and laundries,	II	\$368.52
pick-up and delivery stations and self-service,	III	\$271.89
food processing establishments and	IV	\$271.89
commercial kitchens not associated with	V	\$221.89
restaurants, cafeterias and similar dining facilities		
not more than 2,500 sf in area, print shops, professional services (architects, attorneys, engineers, etc.)		
Basements (incl. Utilities and Storage)	I	\$181.25
(3-1	II	\$181.25
	III	\$125.64
	IV	\$125.64
	V	\$125.64
	v	Ψ123.04

	Tuna af	
OCCUDANCY B	Type of Construction	Coot nor SE
OCCUPANCY B	Construction	Cost per SF
В	I	\$521.78
Ambulatory care facilities serving five or fewer patients;	II	\$521.78
Animal hospitals, kennels and pounds;	III	\$339.41
Clinic, outpatient [SFM] (not classified as Group I-2.1);	IV	\$339.41
Educational occupancies for students above the 12th	V	\$298.39
grade; Motor vehicle showrooms; Professional		
services of dentists or physicians; Training and		
skill development not within a school or academic		
program (shall include, but not be limited to, tutoring		
centers, martial arts studios, gymnastics, etc.)		
Basements (incl. Utilities and Storage)	I	\$181.25
(II	\$181.25
	III	\$125.64
	IV	\$125.64
	V	\$125.64
_		
B	I	\$462.35
Airport traffic control towers; Civic administration;	II	\$462.35
Electronic data processing; Post offices; Radio	III	\$445.67
and television stations; Telephone exchanges	IV	\$445.67
(Note: for laboratories, use same cost as Occupancy L)	V	\$263.45
(Note: 10) laborationios, app danto dost de dosapano, 2)		
Basements (incl. Utilities and Storage)	I	\$181.25
	II	\$181.25
	III	\$125.64
	IV	\$125.64
	V	\$125.64
	Type of	
OCCUPANCY E	Construction	Cost per SF
Educational	I	\$502.26
Use of a building or structure, or a portion thereof, by	II	\$421.42
more than six persons at any one time for educational	III	\$317.41
purposes through the 12th grade.	IV	\$317.41
purposes unough the 12th grade.	V	\$298.75
	v	Ψ230.13
Basements (incl. Utilities and Storage)	I	\$181.25
,	II	\$181.25
	III	\$125.64
	IV	\$125.64
	V	\$125.64
	•	T

	Type of	
OCCUPANCY E	Construction	Cost per SF
Day care facilities	I	\$379.15
Buildings and structures or portions thereof occupied	II	\$379.15
by more than six children 2 years of age and older who	III	\$379.15
receive educational, supervision or personal care	IV	\$379.15
services for fewer than 24 hours per day.	V	\$273.68
,		,
Basements (incl. Utilities and Storage)	I	\$181.25
· · · · · · · · · · · · · · · · · · ·	II	\$181.25
	III	\$125.64
	IV	\$125.64
	V	\$125.64
	Type of	
OCCUPANCY E	Construction	Coot nor SE
OCCUPANCY F	Construction	Cost per SF
F-1		
Moderate-hazard factory industrial	I	\$287.82
Aircraft (manufacturing, not to include repair);	II	\$196.64
Appliances; Athletic equipment; Automobiles and	III	\$180.19
other motor vehicles; Bakeries; Beverages: over	IV	\$180.19
16-percent alcohol content; Bicycles; Boats; Brooms	V	\$169.82
or brushes; Business machines; Cameras and photo		
equipment; Canvas or similar fabric; Carpets and rugs		
(including cleaning); Clothing; Construction and		
agricultural machinery; Disinfectants; Dry cleaning and		
dyeing; Electric generation plants; Electronics; Engines		
(including rebuilding); Food processing establishments and		
commercial kitchens not associated with restaurants,		
cafeterias and similar dining facilities not more than 2,500		
sf in area; Furniture; Hemp products; Jut products;		
Laundries; Leather products; Machinery; Metals;		
Millwork (sash and door); [SFM] Motion picture and		
television production studio Sound Stages, Approved		
Production Facilities and production locations (without		
live audiences); Musical instruments; Optical goods;		
Paper mills or products; Photographic film; Plastic products;		
Printing or publishing; Recreational vehicles; Refuse		
incineration; Shoes; Soaps and detergents; Textiles;		
Tobacco; Trailers; Upholstering; Wood: distillation;		
Woodworking (cabinet)		

	Type of	
OCCUPANCY F	Construction	Cost per SF
F-2		
Low-hazard factory industrial	I	\$113.82
Beverages: up to and including 16-percent alcohol	II	\$113.82
content; Brick and masonry; Ceramic products;	III	\$96.09
Foundries; Glass products; Gypsum; Ice; Metal	IV	\$96.09
products (fabrication and assembly)	V	\$96.09
	Type of	
OCCUPANCY H	Construction	Cost per SF
		_
H-1		
Buildings and structures containing materials that pose	I	\$448.77
a detonation hazard shall include, but not limited to:	II	\$448.77
Detonable pyrophoric materials; Explosives (Divisions	III	\$330.51
1.1 thru 1.6); Organic peroxides, unclassified	IV	\$330.51
detonable; Oxidizers, Class 4; Unstable (reactive)	V	NA
materials, Class 3 detonable and Class 4		
H-2		
Buildings and structures containing materials that pose	I	\$330.51
a deflagration hazard or a hazard from accelerated	II	\$330.51
burning shall include, but not limited to:	III	\$317.52
Class I, II or IIIA flammable or combustible liquids	IV	\$317.52
that are used or stored in normally open containers	V	\$279.66
or systems, or in closed containers or systems		
pressurized at more than 15 psi gauge (103.4 kPa);		
Combustible dusts where manufactured, generated or		
used in such a manner that the concentration and		
conditions create a fire or explosion hazard; Cryogenic		
fluids, flammable; Flammable gases; Organic peroxides,		
Class I; Oxidizers, Class 3, that are used or stored in		
normally open containers or systems, or in closed		
containers or system pressurized at more than 15 psi gauge (103 kPa); Pyrophoric liquids, solids and gases,		
non-detonable; Unstable (reactive) materials, Class 3,		
non-detonable; Water-reactive materials, Class 3		
Interior indicate indicates, order o		

OCCUPANCY H	Type of Construction	Cost per SF
H-3		
Buildings and structures containing materials that	I	\$330.51
readily support combustion or that pose a physical	II	\$330.51
hazard shall include, but not limited to:	III	\$317.52
Class I, II or IIIA flammable or combustible liquids that	IV	\$317.52
are used or stored in normally closed containers or systems pressurized at 15 psi gauge (103.4 kPa) or less; Combustible fibers, other than densely packed baled cotton, where manufactured, generated or used in such a manner that the concentration and conditions created a fire or explosion hazard; Consumer fireworks, 1.4G (Class C, Common); Cryogenic fluids oxidizing; Flammable solids; Organic peroxides, Class II and III; Oxidizers, Class 2; Oxidizers, Class 3, that are used or stored in normally closed containers or systems pressurized at 15 psi gauge (103 kPa) or less; Oxidizing gases; Unstable (reactive) materials, Class 2; Water-reactive materials, Class 2	V	\$279.66
H-4		
Buildings and structures containing materials	I	\$330.51
that are health hazards shall include, but not limited to:	II	\$330.51
Corrosives; Highly toxic materials; Toxic materials	III	\$317.52
	IV	\$317.52
	V	\$279.66
H-5	I	\$364.53
Semiconductor fabrication facilities and comparable	II	\$364.53
research and development areas in which hazardous	III	\$207.49
production materials (HPM) are used and the	IV	\$207.49
aggregate quantity of materials is in excess	V	\$202.64
	Type of	
OCCUPANCY I	Construction	Cost per SF

I-1 Not used. (See Group R-2.1)

OCCUPANCY I	Type of Construction	Cost per SF
I-2		
Buildings and structures used for medical care on a	_	
24-hour basis for more than five persons who are	I	\$357.42
incapable of self-preservation or classified as	II	\$357.42
non-ambulatory or bedridden. Include, but not limited to:	III	\$323.81
Foster care facilities; Detoxification facilities;	IV	\$323.81
Hospitals; Nursing homes; Psychiatric hospitals	V	\$323.81
I-2.1 Ambulatory health care facility		
A healthcare facility that receives persons for outpatient		
medical care that may render the patient incapable of		
unassisted self-preservation and where each tenant		
space accommodates more than five such patients.		
Basements (incl. Utilities and Storage)	I	\$186.25
· · · · · · · · · · · · · · · · · · ·		
1-3		
Buildings or portions of buildings and structures that are	I	\$437.82
inhabited by one or more persons who are under	II	NP
restraint or security. Persons who are generally incapable	11	IVI
of self-preservation due to security measures not under		
the occupants' control, which includes persons restrained.		
Include, but not be limited to:		
Correctional centers; Courthouse holding facility;		
Detention centers; Detention treatment room; Jails;		
Juvenile Halls; Prerelease centers; Prisons; Reformatories;		
Secure interview rooms; Temporary holding facility		
Basements (incl. Utilities and Storage)	I	\$186.25
basements (incl. Offittles and Storage)	I	\$166.25 NP
	11	141
I A Day Care Escilitics		
I-4, Day Care Facilities Buildings and structures occupied by more than six	I	\$357.42
clients of any age who receive custodial care for fewer	I	\$357.42 \$357.42
than 24 hours per day by persons other than parents	III	\$323.81
or guardians, relatives by blood, marriage or adoption,	IV	\$323.81
and in a place other than the home of the clients cared	V	\$323.81
for. Include, but not limited to:	*	Ψ020.01
Adult day care; Child day care		
	_	* 405.55
Basements (incl. Utilities and Storage)	I	\$186.25

VII (Continued)

	Type of	
OCCUPANCY L	Construction	Cost per SF
L	I	\$933.59
-	I	\$807.16
Building or structure, or a portion thereof,		
containing one or more laboratory suites as	III	\$423.31
defined in SFBC Section 453.	IV	\$423.31
	V	\$282.55
	Type of	
OCCUPANCY M	Construction	Cost per SF
М		
Drug stores;	I	\$275.72
Markets;	II	\$275.72
Retail or wholesale stores	III	\$190.79
	IV	\$190.79
	V	\$191.77
Basement	I	\$135.78
	II	\$135.78
	III	\$89.99
	IV	\$89.99
	V	\$89.99
M		
Department stores	I	\$275.72
Department stores	II	\$275.72
	III	\$190.79
	IV	\$190.79
	V	\$191.77
Basement	I	\$154.24
	II	\$154.24
	III	\$89.99
	IV	\$89.99
	V	\$89.99
M	I	\$288.75
Motor fuel-dispensing facilities;	II	\$288.75
Sales rooms	III	\$221.41
Calco (COTTIO		
	IV	\$221.41

V

\$158.43

	Type of	
OCCUPANCY R	Construction	Cost per SF
R-1		
Residential occupancies containing sleeping units	I	\$452.43
where the occupants are primarily transient in nature,	II	\$452.43
including: Boarding houses (transient) with more than	III	\$255.11
10 occupants; Congregate residents (transient) with	IV	\$255.11
more than 10 occupants; Hotels (transient);	V	\$255.11
Motels (transient)		
Basement	I	\$154.24
(Unfinished, for utilities and storage.	II	\$154.24
For finished basement, use sq. ft.	III	\$110.30
cost for upper floors.)	IV	\$110.30
	V	\$110.30
R-2		
Residential occupancies containing sleeping units		
or more than two dwelling units where the occupants	I	\$301.91
are primary permanent in nature, including:	II	\$301.91
Apartment houses; Boarding houses (non-transient)	III	\$267.70
with more than 16 occupants; Congregate residences	IV	\$267.70
(non-transient) with more than 16 occupants; Convents;	V	\$244.15
Dormitories; Fraternities and sororities; Hotels		
non-transient); Live/work units; Monasteries; Motels		
(non-transient); Vacation timeshare properties		
Basement	I	\$154.24
(Unfinished, for utilities and storage.	II	\$154.24
For finished basement, use sq. ft.	III	\$110.30
cost for upper floors.)	IV	\$110.30
	V	\$110.30

	Type of	
OCCUPANCY R	Construction	Cost per SF
P 2 4		
R-2.1 Buildings, structures or parts thereof housing clients, on a 24-hour basis, who because of age, mental disability or other reasons, live in a supervised residential environment that provides personal care services. May contain more than six non-ambulatory and/or bedridden clients, include, but not limited to: Assisted living facilities: Residential care facilities; Residential care facilities for the elderly (RCFEs); Adult residential facilities; Congregate living health facilities; Group homes; Residential care facilities for the chronically ill; Congregate living health facilities for the terminally ill. Social rehabilitation facilities: Halfway houses; Community correctional centers; Community correction reentry centers; Community treatment programs; Work furlough programs; Alcoholism or drug	I II III IV V	\$301.91 \$301.91 \$267.70 \$267.70 \$244.15
abuse recovery or treatment facilities.		
Basement	Ι	\$186.25
Residential occupancies where occupants are primary permanent in nature and not classified as Group R-1, R-2, R-2.1, R-3.1, R-4 or I, including: Buildings that do not contain more than two dwelling units; Boarding houses (non-transient) with 16 or fewer occupants; Boarding houses (transient) with 10 or fewer occupants; Congregate residences (non-transient) with 16 or fewer occupants; Congregate residences (transient) with 10 or fewer occupants; Adult care facilities that provide accommodations for six or fewer clients of any age for less than 24 hours; Licensing categories that may use this classification include Adult Day Programs. Alcoholism or drug abuse recovery homes (ambulatory only); Child care facilities that provide accommodations for six or fewer clients of any age for less than 24 hours. Licensing categories that may use this classification include, but not limited to: Day-Care Center for Mildly III Children; Infant Care Center; School Age Child Day-Care Center; Family Day-Care Homes that provide accommodations for 14 or fewer children, in the provider's own home for less than 24-hours; Foster family homes (ambulatory only); Adult care and child care facilities that are within a single family home are permitted to comply with the California Residential Code. Lodging houses with five or fewer guest rooms.	V	\$271.82

	Type of	
OCCUPANCY R	Construction	Cost per SF
R-3.1		
Facilities licensed by a governmental agency for a residentially based 24-hour care facility providing	V	\$271.82
accommodations for six or fewer clients of any age.		
Clients may be classified as ambulatory, non-ambulatory		
or bedridden, may include: Adult residential facilities;		
Congregated living health facilities; Foster family homes;		
Group homes; Intermediate care facilities for the developmentally disable habilitative; Intermediate care		
facilities for the developmentally disabled nursing;		
Nurseries for the full-time care of children under the age		
of six, but not including "infants"; Residential care		
facilities for the elderly; Small family homes and residential care facilities for the chronically ill		
residential care facilities for the chronically in		
Basement	V	\$81.47
(Unfinished, for utilities and storage. For finished basement, use sq. ft.		
cost for upper floors.)		
R-4		
Buildings, structures or portions thereof for more than	I	\$384.50
six ambulatory clients, but not more than 16 persons,	II	\$346.02
excluding staff, who reside on a 24-hour basis in a	III	\$286.81
supervised residential environment and receive custodial care. The persons receiving care are capable	IV V	\$286.81 \$286.81
of self preservation. May include a maximum six	V	φ200.01
non-ambulatory or bedridden clients. Include, but not		
limited to: Assisted living facilities: Residential care		
facilities; Residential care facilities for the elderly		
(RCFEs); Adult residential facilities; Congregate living		
health facilities; Group homes. Social rehabilitation		
facilities: Halfway houses; Community correctional		
centers; Community correction reentry centers;		
Community treatment programs; Work furlough		
programs; Alcoholism or drug abuse recovery or treatment facilities.		
treatment facilities.		
Basement (1) for the last of t	I	\$154.24
(Unfinished, for utilities and storage.	II	\$154.24 \$140.30
For finished basement, use sq. ft. cost for upper floors.)	III IV	\$110.30 \$110.30
oost for upper moors.	V	\$110.30
		•

	Type of	
OCCUPANCY S	Construction	Cost per SF
S-1		
Moderate-hazard storage	I	\$126.58
Aerosols, Levels 2 and 3; Aircraft hangar (storage and	II	\$126.58
repair); Bags: cloth, burlap and paper; Bamboos and	III	\$114.04
rattan; Baskets; Belting: canvas and leather; Books	IV	\$114.04
and paper in rolls or packs; Boots and shoes; Buttons,	V	\$96.46
including cloth covered, pearl or bone; Cardboard and		
cardboard boxes; Clothing, woolen wearing apparel;		
Cordage; Dry boat storage (indoor); Furniture; Furs;		
Glues, mucilage, pastes and size; Grains; Horns and		
combs, other than celluloid; Leather; Linoleum;		
Lumber; Motor vehicle repair garages; Photo		
engravings; Resilient flooring; Silks; Soaps; Sugar;		
Tires, bulk storage of; Tobacco, cigars, cigarettes		
and snuff; Upholstery and mattresses; Wax candles		
S-2		
Low-hazard storage	I	\$168.42
Buildings used for the storage of noncombustible	II	\$131.41
materials such as products on wood pallets or in paper	III	\$111.49
cartons with or without single thickness divisions; or in	IV	\$111.49
paper wrappings. Such products are permitted to have	V	\$88.82
a negligible amount of plastic trim, such as knobs,		
handles or film wrapping. Include, but not be limited to,		
storage of: Asbestos; Beverages up to and including		
16-percent alcohol in metal, glass, or ceramic containers;		
Cement in bags; Chalk and crayons; Dairy products in		
non-waxed coated paper containers; Dry cell batteries;		
Electrical coils; Electrical motors; Empty cans; Food		
products; Foods in noncombustible containers; Fresh		
fruits and vegetables in non-plastic trays or containers;		
Frozen foods; Glass; Glass bottles, empty or filled		
with noncombustible liquids; Gypsum board; Inert pigments; Ivory; Meats; Metal cabinets; Metal desks		
with plastic tops and trim; Metal parts; Metals; Mirrors;		
Oil-filled and other types of distribution transformers;		
Porcelain and pottery; Stoves; Talc and soapstones;		
Washers and dryers		
,		

	Type of	
OCCUPANCY S	Construction	Cost per SF
S-2		
Parking garages, open or enclosed	I	\$131.36
	II	\$131.36
	III	\$119.78
	IV	\$119.78
	V	\$111.93
S-2 Underground Parking Garages	I	\$131.36
ondorground running caragos		Ψ101.00
	Type of	
OCCUPANOV II	0	0 4 0 -

		Type of	
OCCUPANCY U		Construction	Cost per SF
U			
Private Garages	At grade	I	\$131.36
	Free standing Only	V	\$69.17

\$70.94

VB

U

Agricultural buildings; Aircraft hangars, accessory to a one- or two-family residence; Barns; Carports; Fences more than 6 feet in height; Grain silos, accessory to a residential occupancy; Greenhouses; Livestock shelters; Retaining walls; Sheds; Stables;

Tanks; Towers

Footnotes:

- 1. All types of construction listed are assumed to be A-fire rated unless noted otherwise.
- 2. For estimated cost of B-fire rated construction reduce the listed cost per SF by 2.5%.



ADDITIONAL COSTS ITEMS: APPLICABLE TO OCCUPANCIES A, B, E, F, H, I, L, M, R AND S

- (1) For floors above the fourth story, increase the base cost in Section VII by 0.5% for each story.
- (2) For added cost of fire sprinkler system, when required, see Section V Fire Protection Systems.

(3) Elevators:	Occupancy	Amount
(A) Cost for each elevator per shaft:	A, B, E & I H ,L ,M , F, & S R-1,R-2 & R-4 R-3	\$136,447.83 \$96,741.60 \$104,629.00 \$68,401.59
(B) Add for each elevator stop or floor opening:	A, B, E & I H ,L ,M , F, & S R-1,R-2 & R-4 R-3	\$16,499.20 \$16,499.20 \$16,499.20 \$9,369.60

Notes: (i) For Machine Room-less (MRL) elevator, increase all elevator costs by 25%.

- (ii) For Fire Service Access Elevators(FSAE), increase elevator stop cost by 40%.
- (iii) For Occupant Evacuation Elevator(OEE), increase elevator stop cost by 70%.
- (iv) For Destination-oriented Elevator, increase each elevator stop cost by \$1,000.00
- (4) Kitchen Hood (Commercial):

Type-I Hood System including hood, fan, make-up air and controls (note: fire suppression system not included)		See Section IX - Mechanical		
Type-I Hood System grease duct		See Section	on IX - Mechanical	
(5) Add for Fire Escape per story		each	\$7,379.30	
(6) Add for each Fireplace (wood or gas burning)	Brick or Masonry Prefabricated	each each	\$8,059.40 \$4,572.73	
(7) Add for additional Balcony or Dec	k:	per s.f.	\$153.14	



2022 MECHANICAL EQUIPMENT 1

	·		
		Unit	Amount
Air Conditioner:	2 tons	each	\$5,431.21
	3 tons	each	\$7,478.44
	4 tons	each	\$9,395.10
	5 tons	each	\$11,587.00
Boiler:	100,000 BTU	each	\$6,674.01
	200,000 BTU	each	\$7,923.23
	600,000 BTU	each	\$24,043.42
	3,000,000 BTU	each	\$70,269.78
	22,500,000 BTU	each	\$279,173.12
Chiller, air-cooled:		per ton of capacity	\$1,623.10
Chiller, water-cooled:		per ton of capacity	\$1,398.38
Coil (Heating or Cooling):		each	\$1,362.12
Cooling Tower:		per ton of capacity	\$227.22
Ductwork:	4" dia.	per lin. ft.	\$16.59
	6" dia.	per lin. ft.	\$17.86
	12" dia.	per lin. ft.	\$38.36
	20" dia.	per lin. ft.	\$67.06
Fan - Commercial Exhaust Fan:	24" dia. / 600 CFM	each	\$2,205.89
	36" dia. /1000 CFM	each	\$3,708.22
	48" dia. / 2000 CFM	each	\$4,840.77
Fan - Bathroom Exhaust Fan:	60 - 90 CFM	each	\$309.64
	130 - 200 CFM	each	\$462.44
Fire or Smoke Damper:		each	\$1,796.53
Furnace - Gas Floor Furnace:	32,000 BTU	each	\$4,167.59
	45,000 BTU	each	\$4,456.22
	65,000 BTU	each	\$5,343.59
Furnace - Gas Forced Air:	40,000 BTU	each	\$1,949.75
	60,000 BTU	each	\$2,045.51
	80,000 BTU	each	\$2,102.04
	100,000 BTU	each	\$2,983.04
	120,000 BTU	each	\$3,821.56

IX (Continued)

Mechanical Equipment, continued			Unit	Amount
Emergency Backup Generator	:	30 KW 100 KW	per KW per KW	\$2,025.66
		600 KW	per KW	\$1,063.63 \$716.85
Note: Add 10% to the cost	t of a generator 3		·	
Heat Pump (Split System):		1 ton	each	\$3,522.70
		2 tons	each	\$4,377.16
		3 tons	each	\$5,455.59
		4 tons	each	\$7,104.48
		5 tons	each	\$8,175.65
Hydronic Radiant Heating Syst	tem:	per sq. ft. of condition	oned space	\$16.43
Kitchen Hood (Commercial):				
Type - I Hood System incl. hood, fan, make-up air, and controls (Fire suppression system not included)			per lin. ft.	\$2,309.50
Type - I Hood System grease duct			per lin. ft.	\$178.80
UL300 Hood and Duct Suppression System			See Section V	- Fire Protection
Solar Water Heating System:		per sq. ft. of colle	ctor panels	\$135.13
Suspended Space Heater (gas	s):	35,000 BTU	each	\$2,162.51
1 1 (3	,	100,000 BTU	each	\$2,716.30
		400,000 BTU	each	\$6,453.26
Water Heater (gas):	Residential	50 gallons	each	\$1,732.19
Water Floater (gae).	Residential	tankless	each	\$3,308.12
	Commercial	100 gallons	each	\$10,087.77
	Commorcial	100 gallone	odon	ψ10,007.77
Water Heater (electric):	Residential	40 or 50 gallons	each	\$1,559.10
, ,	Residential	80 gallons	each	\$2,510.64
	Commercial	120 gallons	each	\$10,268.01
Water Heater (electric):	Heat pump	40 gallons	each	\$3,009.09
reactification (clocking).	Heat pump	50 gallons	each	\$3,796.03
	out pairip	oo ganono	25.011	Ţ5,1 00.00

Footnote: 1. Interpolate amounts for intermediate values.



ABBREVIATIONS:

A, A-1, A-2, A-3, A-4, A-5 Assembly occupancies per San Francisco Building Code

Amt. Amount Avg. Average

В Business occupancies per San Francisco Building Code

Bldg. Building

BTU **British Thermal Unit**

cubic yard c.y. Constr. Construction

DBI Department of Building Inspection

dia. diameter

Ε Educational occupancies per San Francisco Building Code

ea. each

F, F-1, F-2 Factory and Industrial occupancies per SFBC

foot ft. FA Fire Alarm

FACP Fire Alarm Control Panel

Gal. Gallon

GPH Gallon per Hour **GPM** Gallon per minute Gym Gymnasium

H, H-1, H-2, H-3, H-4, H-5 Hazardous occupancies per San Francisco Building Code

HT **Heavy Timber**

I, I-1, I-2, I-3, I-4 Institutional occupancies per San Francisco Building Code

including incl. KW Kilowatts

Laboratory occupancies per San Francisco Building Code L

LCD Liquid crystal display **LED** Light-emitting diode

lin. ft. lineal foot

Mercantile occupancies per San Francisco Building Code Μ

NA Not applicable

NP Not permitted / not allowed

NR Nonrated (not fire rated or unprotected construction)

PV Photovoltaic

R, R-1, R-2, R-3, R-4 Residential occupancies per San Francisco Building Code S, S-1, S-2 Storage occupancies per San Francisco Building Code

sq. ft. square foot

Utility occupancies per San Francisco Building Code

I, IA. IB, II, IIA, IIB, III, IIIA, IIIB, IV, Types of Construction per San Francisco Building Code IV(HT), V, VA, VB

Types of Construction per San Francisco Building Code