

Department of Building Inspection COST SCHEDULE

2022

Prepared by:

TECHNICAL SERVICES

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 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 DBI Technical Services by phone: (628) 652-3720 or by email: techq@sfgov.org.

Sincerely yours,

Patrick O'Riordan, C.B.O.

Director

Date:

Office of the Director

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GENERAL NOTES

- 1. 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

4	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)				Amount
1.					\$218
	Ded	uct the foll	owing costs items if not included or deferred:		
	(i)	MEP (Me	echanical, Electrical and Plumbing)	per sq. ft.	\$72
		(a)	Mechanical	per sq. ft.	\$24
		(b)	Electrical	per sq. ft.	\$34
		(c)	Plumbing	per sq. ft.	\$15
	(ii)	Fire Prot	rection (Fire Sprinklers, Fire Alarm System)	per sq. ft.	\$4
2.			for T.I. Restrooms or Kitchens (new or remodeled): sq. ft. area of restrooms and kitchens only)	per sq. ft.	\$493
3.	Cost	t per sq. ft.	for T.I. Non-structural demolition of finishes:	per sq. ft.	\$9

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RESIDENTIAL REMODEL 1, 2

		Unit	Amount
1.	Residential Remodel without seismic retrofit:	per sq. ft.	\$191
2.	Residential Remodel with seismic retrofit:	per sq. ft.	\$225
3.	Additional cost for each new or remodeled Kitchen (note: apply in addition to sq. ft. cost from above #1. or #2.	each)	\$24,663
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
5.	Residential Remodel, non-structural demolition of finishes	per sq. ft.	\$9

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.



2022 SEISMIC RETROFIT 1, 2, 3, 4

		Unit	Amount
1.	For buildings originally constructed before 1917:	per sq. ft.	\$88
2.	For buildings originally constructed between 1917 and May 31,	1973 and:	
	(A) less than 1171 sq. ft. in total floor area:	per sq. ft.	\$73
	(B) 1171 sq. ft. or more in total floor area: Unreinforced Masonry	per sq. ft.	\$40
	Wood Light Frame	per sq. ft.	\$40
	Precast Concrete Tilt Up Walls or Reinforced Masonry with Metal or Wood Diaphragm	per sq. ft.	\$40
	Concrete Moment Frame or Concrete Frame with Infill Concrete Shear Walls	per sq. ft.	\$52
	Steel Moment Frame	per sq. ft.	\$40
	Steel Braced Frame or Steel Light Frame	per sq. ft.	\$25
	Steel Frame with Infill Concrete Shear Walls	per sq. ft.	\$64
	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
3.	For Bldg. originally constructed after May 31,1973 and:		
	(A) less than 1171 sq. ft. in total floor area:	per sq. ft.	\$73
	(B) 1171 sq. ft. or more in total floor area: Unreinforced Masonry	per sq. ft.	\$17

IV (Continued)

Seismic Retrofit, continued	Unit	Amount
Wood Light Frame	per sq. ft.	\$17
Precast Concrete Tilt Up Walls or Reinforced Masonry with Metal or Wood Diaphragm	per sq. ft.	\$17
Concrete Moment Frame or Concrete Frame with Infill Concrete Shear Walls	per sq. ft.	\$52
Steel Moment Frame	per sq. ft.	\$17
Steel Braced Frame or Steel Light Frame	per sq. ft.	\$17
Steel Frame with Infill Concrete Shear Walls	per sq. ft.	\$64
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.	\$17

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	
Cost per one new Call Box installation + programing	each	\$1,122	
Adding one Call Box to an existing backbone	each	\$6,004	
Temporary System with one Call Box	each	\$14,302	
Emergency Responder Radio Coverage System (ERRCS):			
BDA + Backbone +up to 32 antennas	each	\$120,082	
Bi-Directional Amplifier (BDA)	each	\$51,932	
Adding one Floor Antenna to an existing system	each	\$5,829	
Adding or changing Donor Antenna to existing system	each	\$8,929	
Emergency Evacuation Maps:			
One evacuation sign / map per SFFD AB# 2.11	each	\$479	
Fire Alarm Systems:			
Fire Alarm Systems (New)			
Addressable Fire Alarm System with Horn (New)	per sq. ft.	\$7	
Addressable Fire Alarm System with Speaker (New)	per sq. ft.	\$8	
Conventional (Zoned) Fire Alarm System (New)	per sq. ft.	\$6	
Fire Alarm System Components for new construction (including wiring and conduit):			
FACU Installation + Programing (Conventional)	each	\$3,395	
FACU Installation + Programing (Addressable up to 256 Points)	each	\$4,068	
FACU Installation + Programing (Addressable up to 512 Points)	each	\$10,856	

Fi	re Protection Systems, continued	Unit	Amount
	Addressable System Node or Transponder Installation + Programin	each	\$10,206
	Wireless FACU Installation + Programing	each	\$14,391
	Wireless FA system initiating device or notification appliance Installation + Programing	each	\$670
	Remote/Booster power supply Installation + Programing	each	\$6,178
	FA system Wireless Communicator (Cellular or RF) Installation + Programing	each	\$7,318
	Remote LCD Annunciator Installation + Programing	each	\$1,529
	Remote LED Annunciator Installation + Programing up to 50 LEDs	each	\$2,666
	Remote LED Annunciator Installation + Programing up to 100 LEDs	each	\$6,226
	Graphic Annunciator (Custom made) Installation + Programing	each	\$14,265
	Smoke/Heat Detector	each	\$720
	Combination Smoke / CO Detector	each	\$744
	Combination Smoke Detector with Low Frequency Sounder Base	each	\$1,019
	Duct Detector	each	\$2,679
	Monitor/Control Module	each	\$600
	Manual pull station	each	\$617
	Horn or Low Frequency Sounder	each	\$722
	Strobe	each	\$621
	Horn/Strobe	each	\$794
	Speaker	each	\$795
	Speaker/Strobe	each	\$961
	Remote test switch for duct detector	each	\$600
	Remote indicator for duct detector	each	\$600
	Door Holder	each	\$621
	Exterior low voltage sprinkler bell	each	\$636

▼ (Continued)

Fire Protection Systems, continued	Unit	Amount
Fire Alarm Retrofit (including wiring and conduit) :		
Initiating device	each	\$720
Notification appliance	each	\$897
Control unit or power supply (including programming)	each	\$7,730
Fire Extinguisher Systems:		
Clean Agent Suppression System - Installation + Programing	each	\$51,936
Preaction Sprinkler System (Add cost of sprinkler per Section II)	each	\$42,818
Fire Pump:		
500 gallons per minute	each	\$91,034
750 gallons per minute	each	\$97,182
1000 gallons per minute 1500 gallons per minute	each each	\$113,887 \$136,098
2000 gallons per minute	each	\$147,840
3000 gallons per minute	each	\$255,721
Fire Sprinkler Systems: Sprinkler System		
10,000 s.f. or less	per sq. ft. of floor area	\$8
20,000 s.f.	per sq. ft. of floor area	\$7
50,000 s.f. or more	per sq. ft. of floor area	\$5
New sprinkler system including installation and new pipes:		
New sprinkler system including new pipes	per head	\$621
Sprinkler head replacement only without new pipe	per head	\$240
New Standpipe System installation + components	per lin. ft.	\$1,441

f V (Continued)

Fire Protection Systems, continued	Unit	Amount
Underground Sprinkler System Service:		
2" diameter pipe	per lin. ft.	\$480
4" diameter pipe	per lin. ft.	\$600
6" diameter pipe	per lin. ft.	\$720
8" diameter pipe	per lin. ft.	\$961
Firefighter Air Replenishment System (FARS)		
Base cost for FARS	each	\$360,245
Add cost for each story	per floor	\$12,008
Smoke/Carbon Monoxide Alarm, hard wired		
in series with battery back up	each	\$447
Smoke/Carbon Monoxide Detector (battery only)	each	\$224
UL 300 Hood and Duct Suppression System:		
New system with one tank up to 12 Nozzles	each	\$5,670
Additional tank	each	
Additional tank Additional Nozzle	each each	\$3,904 \$667

Footnotes:

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

SECTION



GENERAL ITEMS

Site Work:	Unit	Amount
Asphalt Paving	per sq. ft.	\$7
Back Fill (Hand)	per c.y.	\$57
Demolition of buildings: (not including removal of foundations or basements)		
Concrete/Masonry Buildings:	per c.y. of building volume	\$21
Steel Frame Buildings:	per c.y. of building volume	\$22
Wood Frame Buildings:	per c.y. of building volume	\$15
Demolition, residential interior finishes	per sq. ft. floor area	\$9
Demolition, commercial TI interior finishes	per sq. ft. floor area	\$9
Excavation (Hand)	per c.y.	\$100
Grout, epoxy or urethane	per sq. ft. of surface	\$25
Landscaping	per sq. ft.	\$12
Moving Structures	per sq. ft.	\$32
Soil nails (each)	per lin. ft.	\$503
Soil stabilization	per lin. ft.	\$48
Tiebacks	each	\$5,123
Underground work for pipe	per lin. ft.	\$755
Wood lagging (including tiebacks)	per sq. ft. of wall	\$84
Wood lagging (not including tiebacks)	per sq. ft. of wall	\$28
6' Wood Fence (interpolate for > 6 foot height)	per lin. ft.	\$49

Piles and	d Caissons:		Unit	Amount
Barrette Pil		·····	74	
barrette Pi	12"		per lin. ft.	\$57
	24"		per lin. ft.	\$115
	48"		per lin. ft.	\$229
Caissons:				
	Setup cost for Cais	ssons	each	\$14,338
	12" dia.	Concrete	per lin. ft.	\$75
	16" dia.	Concrete	per lin. ft.	\$101
	24" dia.	Concrete	per lin. ft.	\$151
	36" dia.	Concrete	per lin. ft.	\$226
	12" dia.	w/ Steel Casing	per lin. ft.	\$88
	16" dia.	w/ Steel Casing	per lin. ft.	\$117
	24" dia.	w/ Steel Casing	per lin. ft.	\$175
	36" dia.	w/ Steel Casing	per lin. ft.	\$263
Concrete P	Dilos.			
OUTLIFICIE I	Setup cost for Con	crete precast	each	\$38,100
	12" square	Concrete precast	per lin. ft.	\$116
	14" square	Concrete precast	per lin. ft.	\$121
	24" square	Concrete precast	per lin. ft.	\$231
	Setup cost for Stee	el casings	each	\$25,400
	HP 8	w/ Steel Casing	per lin. ft.	\$114
	HP 10	w/ Steel Casing	per lin. ft.	\$153
	HP 12	w/ Steel Casing	per lin. ft.	\$176
	HP 14	w/ Steel Casing	per lin. ft.	\$171

Concrete:	Unit	Amount
Concrete Paving (incl. residential garage floors)	per sq. ft.	\$13
Concrete Retaining Wall	per c.y.	\$1,375
Concrete Foundation - Replacement or Underpinning (including excavation, concrete and shoring)	per c.y.	\$4,020
Concrete - Reinforced Concrete	per c.y.	\$1,220
Shotcrete with soil nails, up to 20 feet in length	per sq. ft. of wall	\$192
Shotcrete with soil nails, up to 50 feet in length (interpolate for intermediate values)	per sq. ft. of wall	\$334
Masonry:		
Concrete Block / CMU Walls	per sq. ft. of wall	\$21
Drilled dowels with epoxy in masonry	each	\$62
Metals:		
Steel spiral stairway or steel stairway	per story or flight	\$16,026
Structural steel (note: for soldier beam / pile, use cost for "H" pile)	per pound	\$4
Metal Guardrail	per lin. ft.	\$84

Wood:	Unit	Amount
Wood - Decks or Porches (incl. decking and railings)	per sq. ft.	\$53
Wood - Guardrail (for stairways, porch, decks, roof dec	k) per lin. ft.	\$48
Wood - Roof Deck (wood framing and decking over roo	fing per sq. ft.	\$42
Wood - Siding or Cladding (new or replace in-kind)	per sq. ft. of wall	\$13
Wood - Stairway / Staircase (new or replace in-kind)	per story or flight	\$7,467
Termite repair work Use estimate from	n termite inspection report or contracto	or's proposal
Thermal and Moisture Protection:		
Thermal insulation for Walls	per sq. ft. of wall area	\$2
Thermal insulation for Floors, Ceilings or Roof	per sq. ft. of floor, etc. area	\$2
Reroofing	per sq. ft. roof area	\$10
Waterproofing	per sq. ft. surface area	\$6
Doors and Windows:		
Entry door, fully accessible w/ power operator, 3/0 x 6/8	B each	\$6,304
Entry door, non-rated or 20 minute rated, 3/0 x 6/8	each	\$421
Entry door, wood or metal, 90 minute rated, 3/0 x 6/8	each	\$1,366
Entry gate, ornamental or security gate	each	\$2,019
Garage door, standard sectional residential	each	\$1,695
Power door operator (for existing entrance door)	each	\$3,500

Doors an	d Windows, continued	Unit	Amount
Replacem	nent Skylight	per sq. ft. of skylight area	\$108
Replacem	nent 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	\$85 \$55 \$341
Storefro	ont and Curtain Wall Systems:		
Curtain wa	all system	per sq. ft. of wall	\$102
Storefront	system	per sq. ft. of wall	\$74

Finishes:

Gypsum Drywall:

Gypsum drywall 1/2" or 5/8" over wall or ceiling framing per sq. ft. wall or ceiling \$5 (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	\$16
1 hour rated, metal framed partition wall (1 layer drywall applied on each side)	per sq. ft. of wall	\$24
2 hour rated, wood framed partition wall (2 layers drywall applied on each side)	per sq. ft. of wall	\$29
2 hour rated, metal framed partition wall (2 layers drywall applied on each side)	per sq. ft. of wall	\$33

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
	Laminated plastic	per sq. ft. of wall, per side	\$9
	Marble, granite or other stone veneer	per sq. ft. of wall, per side	\$80
	Plaster veneer	per sq. ft. of wall, per side	\$9
	Plywood veneer	per sq. ft. of wall, per side	\$8
	Stucco, exterior	per sq. ft. of wall, per side	\$10
	Tile veneer	per sq. ft. of wall, per side	\$31
	Vinyl wall covering	per sq. ft. of wall, per side	\$6
	Wood Siding		See Wood
Special	ties:		
Awnings		per sq. ft. area of awning	\$43
Equipm	ent:		
Automatic	Teller Machines (ATM's)	each	\$40,558

Conveyi	ng Equipment:		Unit	Amount
Vertical wh	eelchair access lift		each (up to 5 foot rise)	\$17,411
Residentia	l stairway chairlift		per story or flight of stairs	\$9,839
Cranes:				
Boom Crai	ne		Setup and rental per month	\$34,036
Tower Crane (including installation, removal, site preparation and foundation):				
Size of cra	ne in metric tons:			
	100 or less	metric tons	each	\$50,700
	200	metric tons	each	\$118,300
	300	metric tons	each	\$202,800
	400 or more	metric tons	each	\$304,200
	Note: Interpolate for	intermediate values		



BASE COSTS OF VARIOUS OCCUPANCIES IN NEW BUILDINGS 1,2

OCCUPANCY A	Type of Construction	Cost per SF
A-1 Assembly uses, usually with fixed seating,	_	* 40.4
intended for the production and viewing of the	I	\$481
performing arts or motion pictures including, but not	II	\$378
limited to: Motion picture and television production		
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
	1 / 11	φιοι
(Utilities, Storage, Dressing Rooms)		
A-2 Assembly uses intended for food and/or	I	\$477
drink consumption including, but not limited to:	II	\$407
Banquet halls; Casinos (gaming areas); Nightclubs;	III	\$335
Restaurants, cafeterias and similar dining facilities	IV	\$335
(including associated commercial kitchens); Taverns	V	\$322
and bars		*
Basement	I / II	\$181
(Incl. Utilities, Storage, Dressing Rooms)	III / IV / V	\$174
A-3 Assembly uses intended for worship, recreation or amusement and other assembly uses not		
classified elsewhere in Group A including, but not	I	\$418
limited to: Amusement arcades; Art galleries; Bowling	II	\$400
alleys; Community halls, Courtrooms; Dance halls (not	III	\$375
including food or drink consumption); Exhibition halls;	IV	\$375
Funeral parlors; Gymnasiums (without spectator	V	\$303
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	· /	* 404
Basement	I / II	\$181 \$126
(Incl. Utilities, Storage, Dressing Rooms)	III / IV / V	\$126

	Type of	
OCCUPANCY A	Construction	Cost per SF
A-4 Assembly uses intended for viewing of	I	\$409
indoor sporting events and activities with spectator	I	\$404
seating including, but not limited to: Arenas; Skating	III	\$359
rinks; Swimming pools; Tennis courts	IV	\$359
Time, orining posts, rolling source	V	\$254
A-5 Assembly uses intended for participation in	I	\$661
or viewing outdoor activities including, but not limited	I	\$661
to: Amusement park structures; Bleachers;	III	NA
Grandstands; Stadiums	III IV	NA NA
Grandstands, Stadiums	V	NA
	Type of	
OCCUPANCY B	Construction	Cost per SF
В	I	\$660
Banks	II	\$539
	III	\$479
	IV	\$479
	V	\$371
Basements	I	\$181
(Incl. Utilities, Storage)	II	\$181
(- ,)	III	\$126
	IV	\$126
	V	\$126
В		
Office buildings, barber and beauty shops,	I	\$369
car wash; dry cleaning and laundries,	II	\$369
pick-up and delivery stations and self-service,	III	\$272
food processing establishments and	IV	\$272
commercial kitchens not associated with	V	\$222
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
` '	II	\$181
	III	\$126
	IV	\$126
	V	\$126
	•	Ψ120

	Type of	
OCCUPANCY B	Type of Construction	Cost per SF
OCCOPANCIB	Construction	Cost per 3F
В	I	\$522
Ambulatory care facilities serving five or fewer patients;	II	\$522
Animal hospitals, kennels and pounds;	III	\$339
Clinic, outpatient [SFM] (not classified as Group I-2.1);	IV	\$339
Educational occupancies for students above the 12th	V	\$298
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
basements (mor. offittes and otorage)	II	\$181
	III	\$126
	IV	\$126
	V	\$126
	,	ψ120
В	I	\$462
Airport traffic control towers; Civic administration;	II	\$462
Electronic data processing; Post offices; Radio	III	\$446
and television stations; Telephone exchanges	IV	\$446
and tolevioleti statione, releptione exertaingee	V	\$263
(Note: for laboratories, use same cost as Occupancy L)	·	V =00
Basements (incl. Utilities and Storage)	I	\$181
basements (ind. offilities and offilage)	II	\$181
	III	\$126
	IV	\$126
	V	\$126
		Ψ120
COOUDANOVE	Type of	04
OCCUPANCY E	Construction	Cost per SF
Educational	I	\$502
Use of a building or structure, or a portion thereof, by	II	\$421
more than six persons at any one time for educational	III	\$317
purposes through the 12th grade.	IV	\$317
	V	\$299
Basements (incl. Utilities and Storage)	I	\$181
Bacomonia (moi. Junios and Otorage)	II	\$181
	III	\$126
		·
	IV V	\$126
	V	\$126

	Type of	
OCCUPANCY E	Construction	Cost per SF
Doy care facilities	I	¢270
Day care facilities Pulldings and attructures or portions thereof accounted	I II	\$379 \$370
Buildings and structures or portions thereof occupied by more than six children 2 years of age and older who	III	\$379 \$370
receive educational, supervision or personal care	III IV	\$379 \$379
·	V V	·
services for fewer than 24 hours per day.	V	\$274
Basements (incl. Utilities and Storage)	I	\$181
Bassinshis (mai. Santas and Storage)	II	\$181
	III	\$126
	IV	\$126
	V	\$126
	V	φιΖΟ
	Type of	
OCCUPANCY F	Construction	Cost per SF
		<u> </u>
F-1		
Moderate-hazard factory industrial	I	\$288
Aircraft (manufacturing, not to include repair);	II	\$197
Appliances; Athletic equipment; Automobiles and	III	\$180
other motor vehicles; Bakeries; Beverages: over	IV	\$180
16-percent alcohol content; Bicycles; Boats; Brooms	V	\$170
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	\$114
Beverages: up to and including 16-percent alcohol	II	\$114
content; Brick and masonry; Ceramic products;	III	\$96
Foundries; Glass products; Gypsum; Ice; Metal	IV	\$96
products (fabrication and assembly)	V	\$96
	•	***
	Type of	
OCCUPANCY H	Construction	Cost per SF
H-1		
Buildings and structures containing materials that pose	Ι	\$449
a detonation hazard shall include, but not limited to:	II	\$449
Detonable pyrophoric materials; Explosives (Divisions	III	\$331
1.1 thru 1.6); Organic peroxides, unclassified	IV	\$331
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	\$331
a deflagration hazard or a hazard from accelerated	II	\$331
burning shall include, but not limited to:	III	\$318
Class I, II or IIIA flammable or combustible liquids	IV	\$318
that are used or stored in normally open containers	V	\$280
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		

	Type of	
OCCUPANCY H	Construction	Cost per SF
H-3		
Buildings and structures containing materials that	I	\$331
readily support combustion or that pose a physical	II	\$331
hazard shall include, but not limited to:	III	\$318
Class I, II or IIIA flammable or combustible liquids that	IV	\$318
are used or stored in normally closed containers or	V	\$280
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		
H-4		
Buildings and structures containing materials	I	\$331
that are health hazards shall include, but not limited to:	II	\$331
Corrosives; Highly toxic materials; Toxic materials	III	\$318
	IV	\$318
	V	\$280
H-5	I	\$365
Semiconductor fabrication facilities and comparable	II	\$365
research and development areas in which hazardous	III	\$207
production materials (HPM) are used and the	IV	\$207
aggregate quantity of materials is in excess	V	\$203
	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
10		
I-2		
Buildings and structures used for medical care on a	I	\$357
24-hour basis for more than five persons who are incapable of self-preservation or classified as	I II	\$357 \$357
non-ambulatory or bedridden. Include, but not limited to:	II	\$324
Foster care facilities; Detoxification facilities;	III IV	\$324 \$324
Hospitals; Nursing homes; Psychiatric hospitals	V	\$324 \$324
Hospitals, Nursing Homes, Esychiatric Hospitals	V	Ψ324
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
I-3		
Buildings or portions of buildings and structures that are	I	\$438
inhabited by one or more persons who are under	II	NP
restraint or security. Persons who are generally incapable		
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		
Pagements (incl. Hillities and Storage)	T	¢106
Basements (incl. Utilities and Storage)	I	\$186
	II	NP
I-4, Day Care Facilities	T	42 57
Buildings and structures occupied by more than six	I	\$357 \$357
clients of any age who receive custodial care for fewer	II	\$357 \$334
than 24 hours per day by persons other than parents	III	\$324
or guardians, relatives by blood, marriage or adoption,	IV	\$324
and in a place other than the home of the clients cared	V	\$324
for. Include, but not limited to:		
Adult day care; Child day care		
Basements (incl. Utilities and Storage)	I	\$186
basements (mor. stillles and storage)	1	Ψ100

VII (Continued)

	Type of	
OCCUPANCY L	Construction	Cost per SF
	I	\$934
L Delition of the transfer of the transfer of		
Building or structure, or a portion thereof,	II	\$807
containing one or more laboratory suites as	III	\$423
defined in SFBC Section 453.	IV	\$423
	V	\$283
	Type of	
OCCUPANCY M	Construction	Cost per SF
M Drug eteres	Ţ	CO76
Drug stores;	I II	\$276
Markets; Retail or wholesale stores	II	\$276 \$191
Retail of wholesale stores	III IV	\$191 \$191
	V	\$191 \$192
	V	φ19Z
Basement	I	\$136
Bacoment	ĪĪ	\$136
	III	\$90
	IV	\$90
	V	\$90
М		
Department stores	I	\$276
Department stores	II	\$276
	III	\$191
	IV	\$191
	V	\$192
Basement	I	\$154
	П	\$154
	III	\$90
	IV	\$90
	V	
	V	\$90
	-	4000
M	I	\$289
Motor fuel-dispensing facilities;	II	\$289
Sales rooms	III	\$221

IV

V

\$221 \$158

	Type of	
OCCUPANCY R	Construction	Cost per SF
R-1		
Residential occupancies containing sleeping units	I	\$452
where the occupants are primarily transient in nature,	II	\$452
ncluding: Boarding houses (transient) with more than	III	\$255
10 occupants; Congregate residents (transient) with	IV	\$255
more than 10 occupants; Hotels (transient);	V	\$255
Motels (transient)		
Basement	I	\$154
(Unfinished, for utilities and storage.	II	\$154
For finished basement, use sq. ft.	III	\$110
cost for upper floors.)	IV	\$110
,	V	\$110
Residential occupancies containing sleeping units or more than two dwelling units where the occupants are primary permanent in nature, including: Apartment houses; Boarding houses (non-transient) with more than 16 occupants; Congregate residences (non-transient) with more than 16 occupants; Convents; Cormitories; Fraternities and sororities; Hotels	I II III IV V	\$302 \$302 \$268 \$268 \$244
non-transient); Live/work units; Monasteries; Motels non-transient); Vacation timeshare properties Basement (Unfinished, for utilities and storage. For finished basement, use sq. ft. cost for upper floors.)	I II III IV	\$154 \$154 \$110 \$110
, ,	V	\$110

	Type of	
OCCUPANCY R	Construction	Cost per SF
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 abuse recovery or treatment facilities.	I II III IV V	\$302 \$302 \$268 \$268 \$244
Basement	I	\$186
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	\$272

	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	\$272
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		
Basement	V	\$81
(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	\$385
six ambulatory clients, but not more than 16 persons,	II	\$346
excluding staff, who reside on a 24-hour basis in a	III	\$287
supervised residential environment and receive custodial care. The persons receiving care are capable	IV V	\$287 \$287
of self preservation. May include a maximum six	V	φ201
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	I	\$154
(Unfinished, for utilities and storage.	II	\$154 \$110
For finished basement, use sq. ft. cost for upper floors.)	III IV	\$110 \$110
oost for upper floors.	V	\$110
		•

	Type of	
OCCUPANCY S	Construction	Cost per SF
S-1		
Moderate-hazard storage	I	\$127
Aerosols, Levels 2 and 3; Aircraft hangar (storage and	II	\$127
repair); Bags: cloth, burlap and paper; Bamboos and	III	\$114
rattan; Baskets; Belting: canvas and leather; Books	IV	\$114
and paper in rolls or packs; Boots and shoes; Buttons,	V	\$96
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	I	\$168
Low-hazard storage Buildings used for the storage of noncombustible	I	\$100 \$131
materials such as products on wood pallets or in paper	III	\$111
cartons with or without single thickness divisions; or in	IV	\$111
paper wrappings. Such products are permitted to have	V	\$89
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
	II	\$131
	III	\$120
	IV	\$120
	V	\$112
S-2 Underground Parking Garages	I	\$131

		Type of	
OCCUPANCY U		Construction	Cost per SF
U			
Private Garages	At grade	I	\$131
	Free standing Only	V	\$69
U			
	Aircraft hangars, accessory to a	VB	\$71
•	lence; Barns; Carports; Fences ght; Grain silos, accessory		
to a residential occupar			

Footnotes:

Tanks; Towers

1. All types of construction listed are assumed to be A-fire rated unless noted otherwise.

Livestock shelters; Retaining walls; Sheds; Stables;

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	\$136,448 \$96,742 \$104,629 \$68,402
(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 \$16,499 \$16,499 \$9,370

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	on IX - Mechanical
Type-I Hood System grease duct		See Section	on IX - Mechanical
(5) Add for Fire Escape per story		each	\$7,379
(6) Add for each Fireplace (wood or gas burning)	Brick or Masonry Prefabricated	each each	\$8,059 \$4,573
(7) Add for additional Balconies or Deck (Ty	ype I or II construction)	per s.f.	\$153



2022 MECHANICAL EQUIPMENT 1

		Unit	Amount
Air Conditioner:	2 tons 3 tons 4 tons	each each each	\$5,431 \$7,478 \$9,395
	5 tons	each	\$11,587
Boiler:	100,000 BTU	each	\$6,674
	200,000 BTU 600,000 BTU	each	\$7,923 \$24,043
	3,000,000 BTU	each each	\$24,043 \$70,270
	22,500,000 BTU	each	\$279,173
Chiller, air-cooled:		per ton of capacity	\$1,623
Chiller, water-cooled:		per ton of capacity	\$1,398
Coil (Heating or Cooling):		each	\$1,362
Cooling Tower:		per ton of capacity	\$227
Ductwork:	4" dia.	per lin. ft.	\$17
	6" dia.	per lin. ft.	\$18
	12" dia.	per lin. ft.	\$38 ¢67
	20" dia.	per lin. ft.	\$67
Fan - Commercial Exhaust Fan:	24" dia. / 600 CFM	each	\$2,206
	36" dia. /1000 CFM	each	\$3,708
	48" dia. / 2000 CFM	each	\$4,841
Fan - Bathroom Exhaust Fan:	60 - 90 CFM	each	\$310
	130 - 200 CFM	each	\$462
Fire or Smoke Damper:		each	\$1,797
Furnace - Gas Floor Furnace:	32,000 BTU	each	\$4,168
	45,000 BTU	each	\$4,456
	65,000 BTU	each	\$5,344
Furnace - Gas Forced Air:	40,000 BTU	each	\$1,950
	60,000 BTU	each	\$2,046
	80,000 BTU	each	\$2,102
	100,000 BTU	each	\$2,983
	120,000 BTU	each	\$3,822

Mechanical Equipment, continued			Unit	Amount	
Emergency Backup Generator:		100	KW KW KW	per KW per KW per KW	\$2,026 \$1,064 \$717
Note: Add 10% to the cost	of a generator 30) KW or mo	ore to includ	de the costs for day tank	, pipe and flue.
Heat Pump (Split System):		2 3 4	ton tons tons tons	each each each	\$3,523 \$4,377 \$5,456 \$7,104
Hydronic Radiant Heating Syst	em:		tons of conditio	each ned space	\$8,176 \$16
Kitchen Hood (Commercial):					
Type - I Hood System incl. hood, fan, make-up air, and controls per lin. ft. \$2,310 (Fire suppression system not included)					\$2,310
Type - I Hood System greas	e duct			per lin. ft.	\$179
UL300 Hood and Duct Suppression System				See Section V	- Fire Protection
Solar Water Heating System:		per sq.	ft. of collec	ctor panels	\$135
Suspended Space Heater (gas): 35,000 BTU 100,000 BTU 400,000 BTU		BTU	each each each	\$2,163 \$2,716 \$6,453	
Water Heater (gas):	Residential Residential Commercial	tankless	gallons gallons	each each each	\$1,732 \$3,308 \$10,088
Water Heater (electric):	Residential Residential Commercial		gallons gallons gallons	each each each	\$1,559 \$2,511 \$10,268
Water Heater (electric):	Heat pump Heat pump		gallons gallons	each each	\$3,009 \$3,796



ABBREVIATIONS:

A, A-1, A-2, A-3, A-4, A-5

Assembly occupancies per San Francisco Building Code

Amt. Amount Avg. Average

B Business occupancies per San Francisco Building Code

Bldg. Building

BTU British Thermal Unit

c.y. cubic yard Constr. Construction

DBI Department of Building Inspection

dia. diameter

E Educational occupancies per San Francisco Building Code

ea. each

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

ft. foot 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

incl. including KW Kilowatts

Laboratory occupancies per San Francisco Building Code

LCD Liquid crystal display LED Light-emitting diode

lin. ft. lineal foot

M Mercantile occupancies per San Francisco Building Code

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

U 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