

OFFICES, BANKS AND HOSPITALS

SECTION SEG 5 (SEGREGATED COST METHOD)

Office buildings, medical buildings and public buildings comprise a wide range of buildings from the small neighborhood office to the multistory skyscraper. Within each group, certain segregated costs may vary greatly.

Interior construction in most of these buildings usually can be priced very well on the square foot basis; however, in buildings such as offices with large open areas, it may be advisable to check by the built-up cost method in Section UIP 2.

Miscellaneous interior additives include special items found in some buildings, which are not usually included in the general contract for the building, but are a necessary part of the occupancy.

Mixed occupancies should be appraised by separating the areas and pricing each occupancy on its individual basis.

Plumbing costs are given on the basis of floor area; however, it may be better in many cases to make an actual count of fixtures and to price them from Section UIP 3.

SEGREGATED COSTS

(For explanation of the rating numbers which head the columns, see Introduction to SEG Method.)

EXCAVATION AND SITE PREPARATION

	1	2	3	4
Excavation, bulk (per cu. ft.) . . .	\$.23	\$.31	\$.42	\$.58
Fill (per cu. ft. of compacted earth)	.24	.31	.39	.50
Site preparation (per sq. ft. of site)	.20	.26	.33	.42

FOUNDATION – Apply to total floor area including basements, but excluding mezzanines or balconies.

Class A	\$2.42	\$3.13	\$4.04	\$5.22
Class B	2.54	3.25	4.16	5.33
Class C, bearing wall	2.28	2.96	3.85	5.00
nonbearing wall	2.19	2.84	3.70	4.80
Class D, masonry veneer	2.08	2.71	3.54	4.61
siding or stucco	1.84	2.39	3.11	4.05
pole-frame construction	1.72	2.22	2.86	3.68
Class S	1.83	2.39	3.13	4.09
Classes C, D and S, light perimeter foundation for open shell-type structures . . . . .	.70	.91	1.19	1.55
Add for perimeter insulation, ground floor area only . . . . .	.07	.11	.18	.28
earth-sheltered structures . . . . .	.10	.17	.26	.40

FOUNDATION ADJUSTMENTS – Apply to base cost used.

Add 2% for each foot over 12' average story height.
Deduct 2% for each foot under 12' average story height.
Deduct .8% for each story over one, aboveground, for multistory buildings. For one-story buildings with foundations and footings formed and poured monolithically with floor slabs, use 70% of the above costs, for that floor only. Add for pilings from Section UIP 1. If foundations are brick or stone instead of concrete, increase costs by 20%. For concrete block, reduce costs by 8%.

FRAME – Apply to total floor area including basements, but excluding mezzanines or balconies.

Bearing walls, wood or steel floor supports only	\$ 1.09	\$ 1.28	\$ 1.51	\$ 1.78
masonry supports only	1.55	1.83	2.16	2.55
Steel, fireproofed, Class A	10.59	12.91	15.75	19.20
Composite, concrete-steel, Class B	10.05	11.95	14.24	16.95
Concrete, reinforced, Class B	9.83	11.90	14.40	17.43
precast, post-tensioned	9.38	11.17	13.30	15.84
Steel, Classes C and D	4.21	5.24	6.54	8.15
Class S	3.91	4.90	6.12	7.66
light pre-engineered frame	2.51	3.11	3.86	4.78
light tubular/pipe frame	1.55	2.02	2.63	3.42
add for fireproofing . . . . .	.61	.98	1.52	2.33
Steel columns, wood beams	2.65	3.46	4.53	5.92
Wood, A-frame construction	3.39	4.10	4.95	5.99
laminated bents and arches	3.83	4.62	5.56	6.69
light arch-rib construction	2.48	3.02	3.67	4.48
mill-type (heavy timber) construction	4.01	4.84	5.85	7.06
heavy timber/log construction, arch.	8.21	10.32	12.99	16.32
post and beam construction	2.79	3.36	4.07	4.92
light pole-type construction	1.67	2.10	2.64	3.32

FRAME ADJUSTMENTS – Apply to base cost used.

Add 3% for each foot of average story height over the 12' base height. Deduct 3% for each foot under the 12' base. For multistory buildings, add 2% for each story over one, aboveground, to apply against the total floor area, up to 30 stories; over 30, add 1% for each additional story. For partially framed structures, see Section UIP 1.

FLOOR STRUCTURE – Apply to area of described floor or mezzanine. For stepped balconies, see table below:

	1	2	3	4
Concrete, on ground (excluding vapor barrier)	\$ 2.84	\$ 3.39	\$ 4.03	\$ 4.81
stepped incline	3.73	4.40	5.18	6.12
lift slab	7.97	8.99	10.13	11.43
elevated flat slab and joists	9.02	10.21	11.54	13.06
pan or waffle slab and joists	8.25	9.29	10.47	11.80
precast joists and deck	7.87	8.87	9.99	11.26
precast joists, wood sheathing	6.11	6.87	7.74	8.70
cored plank on bearing walls	6.85	7.74	8.75	9.88
Steel joists: flat slab	9.92	11.38	13.05	14.96
corrugated deck and concrete	8.36	9.82	11.53	13.55
cellular deck and concrete	-----	11.51	13.72	16.34
open metal grating	14.45	19.60	26.65	36.20
precast deck	8.62	9.79	11.11	12.61
wood sheathing	4.84	6.08	7.66	9.63
light-gauge truss joints	4.26	5.41	6.86	8.70
Wood joists and sheathing	4.18	5.32	6.74	8.56
wood joists and bridging only	3.21	4.20	5.49	7.18

For treated wood, increase costs by 10% to 20%.

FLOOR EXTRAS – Add to floor structure costs.

Vapor barrier	\$.48	\$.68	\$.95	\$1.35
Each inch of slab on grade over 10", add . . . . .	.32	.38	.43	.51
Each inch of sheathing over 1", add . . . . .	.90	1.01	1.13	1.28
Foamed concrete surfacing, 1½" – 2" . . . . .	.70	.87	1.07	1.32
Floor insulation, add . . . . .	.63	.72	.83	.95

STEPPED BALCONY STRUCTURES – Apply to horizontal area of balcony. Add for soffit finish, floor covering and electrical for complete balcony cost.

Wood	\$12.25	\$14.50	\$17.25	\$20.50
Concrete	16.00	18.50	21.75	25.00
Structural steel and concrete	17.75	20.50	23.75	27.75
Structural steel and wood	14.25	16.25	19.25	22.25

OFFICES, BANKS AND HOSPITALS

SECTION SEG 5

(SEGREGATED COST METHOD)

FLOOR COVER – Apply to area of described floor.

	1	2	3	4
Access (computer) floor, on stanchions	\$14.00	\$16.00	\$18.75	\$22.00
full office floors	9.25	10.50	12.25	14.00
Asphalt tile	1.60	1.85	2.10	2.40
Bamboo, laminated plank	7.75	9.25	10.75	12.75
Brick pavers, in concrete	7.50	8.80	10.40	12.20
Carpet and pad	2.05	3.10	4.70	7.15
custom carpet and pad	7.25	11.50	17.75	27.75
indoor/outdoor	1.50	1.95	2.55	3.35
Color, concrete .....	.80	.95	1.15	1.40
Cork	4.15	4.70	5.35	6.00
Diatomaceous earth, etc.	5.40	6.15	7.10	8.15
Flagstone, random local stone, in concrete	10.00	11.75	13.50	16.00
Hardener and sealer, concrete .....	.62	.83	1.11	1.50
*Hardwood	6.40	8.20	10.55	13.60
sports-gym floors on resilient sleepers	7.05	8.50	10.25	12.40
Linoleum	2.65	3.15	3.70	4.45
Marble or granite	18.50	25.50	35.00	47.75
cast tile	11.00	13.00	15.00	17.50
Melamine-laminated tile or sheet deluxe	2.50	3.30	4.40	5.80
Plastic tile, interlocking	5.55	6.50	7.55	8.85
Rubber fabric tile	5.10	5.65	6.25	6.95
Rubber tile or sheet	7.05	8.15	9.45	10.95
Seamless plastic, epoxy, urethane, neoprene, 1/32" – 1/16" thincoat	3.15	4.25	5.70	7.65
1/8" – 3/8"	2.95	3.55	4.35	5.25
add for colored chips or glitter	4.60	5.65	7.00	8.60
add for colored chips or glitter	1.20	1.50	1.85	2.30
Slate, grouted	11.50	13.25	15.50	18.00
Softwood	4.85	5.70	6.75	8.00
Synthetic sports surfacing	5.65	6.90	8.45	10.25
Terrazzo (exclusive of base slab) tile	8.05	9.80	12.05	14.70
Tile, ceramic or quarry	14.75	16.75	19.25	21.75
custom tile	8.05	10.00	12.50	15.55
custom tile	18.00	21.25	25.50	30.50
*Wood over concrete, hardwood parquet block, prefini., in mastic	7.35	9.25	11.70	14.75
softwood	7.20	9.75	13.15	17.75
softwood	5.60	6.55	7.65	9.00
Vinyl composition tile or sheet	1.55	1.95	2.45	3.10
Vinyl sheet	2.55	3.45	4.65	6.25
Vinyl tile	2.80	3.95	5.60	8.00
*Add for custom wood floors ..	4.75	9.50	16.75	27.50
Add for pictorial artwork	7.50	10.25	14.25	19.75
Add 15% for conductive floor coverings.				

CEILING – Apply to area of described ceiling. To convert costs to floor area for high-pitched ceilings, use the roof slope multipliers on Page 9.

Acoustic ceilings, tile or panels: metal panels incl. pads & suspension system	\$ 5.27	\$ 6.49	\$ 7.94	\$ 9.77
clean room panels, incl. suspension system	8.15	9.05	10.00	11.10
mineral fiber, fiberglass, panels only	1.25	1.72	2.36	3.25
organic fiber, wood/cane, panels only	1.50	1.71	1.94	2.22
Embossed metal	4.45	5.90	7.75	10.30
Fiber sports court panel with suspension systems	4.20	5.05	6.10	7.35
Gypsum board, taped and painted spray-on texture	1.48	1.62	1.79	1.96
spray-on texture	1.42	1.53	1.67	1.80
Mirror-faced panels	14.25	15.50	17.25	18.75
Paint or stain, bottom of roof/floor .....	.51	.65	.83	1.05

CEILING (Continued)

	1	2	3	4
Plaster on lath, acoustical	\$ 2.95	\$ 3.31	\$ 3.71	\$ 4.16
spray-on, thincoat with texture on lath or drywall	2.10	2.31	2.54	2.80
standard, add 20% for Keene's add for metal lath	2.56	2.89	3.24	3.65
add for metal lath .....	.36	.42	.50	.59
Plaster on mas. soffit, acous. ..	2.51	2.82	3.15	3.54
spray-on, thincoat/texture ..	1.65	1.81	1.99	2.18
standard, add 23% for Keene's ..	2.12	2.39	2.69	3.03
Plaster panels, dec., panels only ..	9.80	10.80	11.90	13.05
Plastic panels, w/susp. syst., but excl. lighting, (in elec. cost) ...	4.95	5.85	6.95	8.20
Plywood (softwood) or hardboard panels	2.45	2.80	3.10	3.55
hardwood	3.50	4.15	4.95	5.85
coffered/vaulted panel with molding	7.50	10.00	13.45	18.05
custom woods, site-built ...	18.50	21.75	25.00	28.75
Poly laminated panels (FRP) ..	2.35	2.55	2.85	3.10
insulated panel	3.45	3.90	4.35	4.90
Wood, boards or T&G, softwood hardwood	2.35	2.65	3.10	3.55
hardwood	3.75	4.35	5.00	5.75
carved, decorative	7.00	10.00	14.25	20.00

CEILING EXTRAS – Add to ceiling costs. For special ornamentation see Section UIP 2.

Ceramic tile, add	\$10.00	\$12.50	\$15.70	\$19.70
custom tile, decorative	20.50	24.50	29.50	35.00
Cust. papers, stenciling, staff, add	9.75	13.00	17.50	23.50
border or coving only	2.45	3.10	3.90	4.95
Extensive decorating, cust. plaster, terra cotta, add	27.25	34.25	43.25	54.50
Wood furring .....	.72	.88	1.07	1.30
Metal furring	1.08	1.34	1.69	2.11
If ceiling structure is required which is not part of the roof or floor structure, add	1.12	1.39	1.73	2.14
Suspended ceiling, metal (suspension sys.), add	1.03	1.29	1.60	1.99
fiberglass, (FRP)	1.67	1.95	2.29	2.69
hardwood, decorative	2.90	3.90	5.25	7.15
Ceiling insulation, add .....	.64	.80	1.00	1.25
vinyl faced, exposed .....	.72	.83	.94	1.09
add for underdeck supporting bands .....	.23	.28	.32	.38
rigid board, faced	1.02	1.33	1.74	2.28

For ceiling domes, see stained glass, Page 7.

BANK VAULTS – Per square foot of vault area. Add or deduct 2% for each foot of height variation from the 12' standard. For more detailed costs see Section UIP 2.

Money	\$122.00	\$143.75	\$169.50	\$199.75
Record storage	49.00	54.75	60.75	67.75
Modular vault systems, security insulated/record storage ...	38.25	53.50	75.25	105.50
insulated/record storage ...	32.50	39.75	48.75	59.75

MEZZANINES – Apply to open mezzanine area. (Cost of miscellaneous items such as rails, stairs, etc.)

	\$2.30	\$2.65	\$3.10	\$3.60
--	--------	--------	--------	--------

OFFICES, BANKS AND HOSPITALS

SECTION SEG 5 (SEGREGATED COST METHOD)

INTERIOR CONSTRUCTION – Apply to total floor area. See Section UIP 2 if detailed costs are desired. General hospital interiors include Group I equipment.

Add or deduct 5% for each foot of variation from 12' average story height. Add for fixed seating from Section UIP 15.

MISCELLANEOUS – Apply to total square feet of building area, if required. These costs vary greatly, and the following typical cost ranges should be used with caution. Built-in equipment which is normally included under the general contract is included in the interior construction costs.

FRAME INTERIOR PARTITIONS

	1	2	3	4
Banks (excluding vaults), branch, Classes A and B	\$28.19	\$34.75	\$42.85	\$52.82
Classes C, D and S	25.64	32.23	40.52	50.94
central offices, Classes A/B Classes C, D and S	25.76	31.52	38.57	47.20
Classes C, D and S	22.94	28.95	36.53	46.10
Convalescent hospitals, Classes A and B	26.43	30.88	36.08	42.15
Classes C, D and S	18.66	23.31	29.12	36.36
Dispensaries	12.72	15.44	18.75	22.77
Emergency response garages	3.61	6.62	11.11	17.82
General hospitals, Classes A/B Classes C, D and S	46.13	58.93	75.28	96.16
Classes C, D and S	31.32	39.92	50.86	64.81
Medical office buildings, Classes A and B	25.92	30.26	35.32	41.23
Classes C, D and S	25.44	28.44	31.78	35.52
dental clinics	26.97	32.18	38.38	45.80
Office buildings, Classes A/B	19.97	24.32	29.64	36.10
Classes C, D and S	16.04	20.70	26.72	34.49
Outpatient (surgical) centers	40.87	51.05	63.76	79.63
Veterinary hospitals	23.21	28.27	34.45	41.97
kennels	11.61	15.50	20.68	27.61

	1	2	3	4
Bank equipment, counters, vault doors, etc.	\$19.50	\$26.75	\$37.00	\$50.75
Hospital equipment, Groups II and III	17.75	29.25	46.25	72.25
Hospital pneumatic conveyor system	2.20	2.60	3.10	3.65

MASONRY INTERIOR PARTITIONS

Banks (excl. vaults), branch, Classes A and B	\$30.50	\$37.37	\$45.79	\$56.10
Classes C, D and S	27.79	34.72	43.38	54.20
central offices, Classes A/B Classes C, D and S	27.93	33.99	41.35	50.32
Classes C, D and S	24.92	31.26	39.21	49.18
Convalescent hospitals, Classes A and B	28.65	33.33	38.79	45.14
Classes C, D and S	20.34	25.29	31.44	39.09
Dispensaries	14.03	16.95	20.47	24.72
Emergency response garages	4.24	7.45	12.25	19.44
General hospitals, Classes A/B Classes C, D and S	49.22	62.32	78.91	99.91
Classes C, D and S	33.80	42.76	54.10	68.44
Medical office buildings, Classes A and B	28.09	32.67	37.97	44.16
Classes C, D and S	27.58	30.75	34.28	38.22
dental clinics	29.22	34.68	41.16	48.86
Office buildings, Classes A and B Classes C, D and S	21.72	26.36	31.98	38.81
Classes C, D and S	17.56	22.53	28.92	37.11
Outpatient (surgical) centers	43.81	54.28	67.23	83.29
Veterinary hospitals	25.21	30.57	37.06	44.94
kennels	12.89	17.06	22.58	29.89

SPRINKLERS – Apply to sprinklered area. Costs include all piping and connections to main for light hazard occupancies, but do not include tanks. For double sprinkler systems with heads both above and below a ceiling, use sprinklered area and 1.6 times the listed cost.

1,500 square feet	\$2.78	\$3.57	\$4.61	\$5.95
2,000	2.65	3.41	4.38	5.64
3,000	2.49	3.19	4.07	5.22
5,000	2.30	2.93	3.72	4.74
10,000	2.06	2.61	3.29	4.15
15,000	1.93	2.43	3.05	3.84
20,000	1.85	2.32	2.90	3.64
30,000	1.74	2.16	2.70	3.37
50,000	1.61	1.99	2.46	3.06
75,000	1.51	1.86	2.29	2.83
100,000	1.44	1.78	2.18	2.69
125,000	1.39	1.71	2.09	2.58
150,000	1.35	1.65	2.02	2.49
200,000	1.29	1.58	1.92	2.35
250,000	1.25	1.52	1.84	2.25
300,000	1.21	1.48	1.79	2.18
400,000	1.17	1.41	1.70	2.06
500,000	1.12	1.35	1.63	1.98

OFFICES, BANKS AND HOSPITALS

SECTION SEG 5 (SEGREGATED COST METHOD)

PLUMBING – Apply to total floor area or use Section UIP 3 for cost per fixture. The following costs represent typical ranges only.

	1	2	3	4
Banks, branch and mini-banks	\$3.34	\$ 5.32	\$ 8.26	\$12.68
central office	3.03	5.00	7.93	12.29
Convalescent hospitals	7.02	9.57	13.04	17.78
Dispensaries	4.70	6.33	8.54	11.50
Emergency Response Garages	2.35	3.86	6.12	9.50
General hospitals	9.86	14.50	21.33	31.38
Medical office buildings	5.28	7.85	11.64	17.63
dental clinics	5.58	8.23	12.11	17.84
Office buildings	2.02	3.52	5.76	9.25
Outpatient (surgical) centers	8.88	11.89	15.93	21.33
Veterinary hospitals	5.65	7.68	10.43	14.19
kennels	3.21	4.57	6.52	9.29

HEATING, COOLING, AND VENTILATING – Apply to total floor area.

Add or deduct 3% for each foot of variation in average story height from 12' base.

Costs are given for gas-fired heating surfaces. Add or deduct as follows for other fuels.

Oil-fired + 7% Coal, stoker + 7% Coal, hand-fired - 2%

For General Hospitals and Outpatient (Surgical) Centers use costs in the Calculator Section.

Heating Only

Electric,				
cable or baseboard	\$3.70	\$5.00	\$ 6.75	\$ 9.15
radiant panels	3.10	3.85	4.80	5.95
Electric wall heaters				
(including FWA)	1.52	1.81	2.15	2.55
Forced air	4.15	5.60	7.60	10.25
Hot water, baseboard or radiators	6.55	8.75	11.75	15.70
radiant floor or ceiling	6.45	8.80	11.95	16.25
Radiant heat, gas, suspended	1.60	2.15	2.85	3.85
Space heaters, gas, with fan	1.30	1.80	2.45	3.40
Steam radiator, with boiler	6.10	8.20	11.00	14.80
without boiler	5.20	7.20	9.95	13.80
Wall or floor furnace	1.60	1.95	2.35	2.85

Heating and Cooling

Zoned A.C., hot and chilled water	\$15.40	\$19.30	\$24.15	\$30.25
warm and cooled air	9.80	12.90	17.00	22.35
Package heating and cooling,				
short ducts	5.80	7.75	10.35	13.85
Heat-pump system	7.65	10.30	13.90	18.70
add for ground-loop heat source	1.30	2.00	3.00	4.55
Individual thru-wall heat pumps	2.90	3.85	5.05	6.70

Cooling Only

Evaporative coolers	\$2.50	\$2.90	\$3.40	\$4.00
Refrigerated air conditioning				
only, zoned system	5.25	6.70	8.50	10.85
package unit, short ducts	3.70	4.70	6.00	7.60
Ventilation only,				
with ducts and blowers	1.20	1.55	2.05	2.65

ELECTRICAL AND LIGHTING – Apply to total floor area. General hospitals are not included in the general tables.

	1	2	3	4
Few Outlets:				
Nonmetallic	\$3.53	\$4.60	\$ 5.99	\$ 7.81
Armored cable (BX)	4.27	5.54	7.17	9.29
Flexible conduit	5.16	6.65	8.58	11.06
Rigid conduit	6.25	8.00	10.26	13.14

Average Number of Outlets:

Nonmetallic	\$4.92	\$ 6.32	\$ 8.13	\$10.45
Armored cable (BX)	6.02	7.76	10.01	12.92
Flexible conduit	7.37	9.55	12.35	16.00
Rigid conduit	9.02	11.72	15.23	19.79

Many Outlets:

Nonmetallic	\$ 6.84	\$ 8.68	\$11.01	\$13.96
Armored cable (BX)	8.48	10.90	14.00	17.98
Flexible conduit	10.51	13.68	17.79	23.14
Rigid conduit	13.04	17.18	22.62	29.80

For undercarpet cable systems; deduct 10% from base costs for that floor only.

Unfinished Areas:

Nonmetallic	\$1.39	\$1.65	\$1.98	\$2.35
Armored cable (BX)	1.64	1.95	2.33	2.78
Flexible conduit	1.95	2.32	2.75	3.26
Rigid conduit	2.32	2.74	3.25	3.85

Typical costs for selected occupancies.

Banks, branch,				
Classes A and B	\$11.37	\$15.81	\$21.97	\$30.55
Classes C, D and S	10.39	14.55	20.39	28.57
central office, Classes A/B	10.29	14.50	20.41	28.75
Classes C, D and S	9.50	13.40	18.89	26.65
mini-banks	13.36	18.28	25.01	34.20
Convalescent hospitals	8.44	11.91	16.81	23.72
Dispensaries	6.88	8.69	10.99	13.89
Emergency response garages	2.82	4.38	6.73	10.23
General hospitals, Classes A/B	17.53	23.81	32.35	43.93
Classes C, D and S	13.84	17.92	23.20	30.03
Medical office buildings,				
Classes A and B	7.08	10.42	15.34	22.58
Classes C, D and S	6.01	8.69	12.58	18.20
dental clinics	6.26	9.04	13.04	18.81
Office buildings, Classes A/B	5.48	10.69	18.49	30.18
Classes C, D and S	3.92	8.03	14.14	23.25
Outpatient (surgical) centers	10.27	14.71	21.07	30.17
Veterinary hospitals	7.08	9.36	12.35	16.32
kennels	4.67	6.64	9.44	13.40

OFFICES, BANKS AND HOSPITALS

SECTION SEG 5 (SEGREGATED COST METHOD)

EXTERIOR WALL – Apply to total wall area.

Concrete or Masonry Walls

	1	2	3	4
Adobe or hollow clay block, 6"	\$15.71	\$17.66	\$19.85	\$22.31
8"	16.93	19.11	21.58	24.36
12"	19.24	21.68	24.43	27.54
14"	21.27	23.99	27.06	30.53
Adobe block, grouted or cavity, 22" – 24"	24.54	27.73	31.34	35.41
30" – 32"	26.50	29.86	33.64	37.91
Block, concrete, 6"	13.74	15.43	17.32	19.45
8"	14.72	16.55	18.60	20.92
12"	16.74	18.80	21.13	23.74
16"	18.78	21.09	23.69	26.60
for each add'l 4" of block, add	2.05	2.30	2.55	2.85
Block, grouted or cavity, 10" – 12"	15.90	17.82	19.96	22.37
*Add for ornamented face block	1.00	1.50	2.30	3.40
Brick, block back-up, 8"	17.67	19.92	22.47	25.33
12"	19.71	22.21	25.03	28.21
16"	21.78	24.52	27.62	31.09
Brick, common, 8"	19.85	22.29	25.04	28.13
12"	23.84	26.72	29.94	33.54
16"	27.85	31.16	34.87	39.02
for each add'l 4" of brick, add	4.00	4.45	4.90	5.45
Brick, grouted or cavity, reinforced, 9" – 10"	21.73	24.39	27.36	30.69
block back-up, 9" – 10"	19.66	22.06	24.75	27.78
block back-up, 12" – 14"	21.68	24.32	27.28	30.61
Brick, SCR modular, 6"	15.14	17.14	19.41	21.98
8"	16.77	18.88	21.26	23.93
*Add for face brick	2.20	2.45	2.65	2.95
Concrete, reinforced, formed, 4"	15.43	17.38	19.58	22.07
6"	16.61	18.68	21.01	23.63
8"	17.79	19.97	22.40	25.13
12"	20.17	22.54	25.20	28.17
for each add'l 4" of concrete, add	2.35	2.55	2.80	3.05
precast panels, 2"	12.80	14.41	16.23	18.27
4"	13.61	15.31	17.23	19.38
6"	14.91	16.76	18.84	21.18
8"	16.48	18.45	20.66	23.12
12"	19.27	21.42	23.83	26.50
tilt-up panels, 4"	12.84	14.53	16.45	18.61
6"	13.78	15.63	17.73	20.11
8"	14.85	16.86	19.14	21.72
10"	16.04	18.22	20.68	23.49
12"	17.26	19.61	22.29	25.32
add for insulated sandwich	1.15	1.45	1.85	2.30
Glass block, white or aqua	34.50	36.75	39.25	42.00
colors or reflective	45.75	48.50	51.25	54.50
Local stone, block back-up, ashlar veneer, 12"	32.25	36.75	42.00	47.75
rubble or rustic, veneer, 12"	26.00	30.00	34.75	40.00
for each 4" variation in thickness	2.05	2.30	2.55	2.85
Local fieldstone, in mortar, 12"	23.25	26.25	29.75	33.25
for each 4" variation in thickness	1.95	2.30	2.60	3.05
Local stone, rough cut, solid, 12"	33.50	41.25	50.50	62.25
granite	35.50	45.25	57.75	73.75
limestone	38.00	46.25	56.25	68.75
for each 6" variation in thickness	15.25	18.25	21.75	25.75

*NOTE: The additional cost for face block or brick is the difference between the cost of face block or brick and standard block or common brick in place as part of a wall. For the cost of ornamented, face or synthetic masonry veneer, see wall ornamentation on next page.

EXTERIOR WALL (Continued)

Concrete or Masonry Walls

	1	2	3	4
Rammed earth, soil cement, 24"	\$17.50	\$20.00	\$23.00	\$26.25
pneumatic build-up, formed one side	26.75	30.00	33.75	38.25
for each 6" variation in thickness, add or deduct	1.00	1.15	1.35	1.55
Tile, structural clay, 6"	14.73	16.68	18.90	21.42
10"	17.24	19.48	22.02	24.90

Concrete or Masonry Walls Extras

Add for stay-in-place forming	\$.83	\$ 1.10	\$ 1.43	\$ 1.89
Add for glazed block or tile, each side	4.55	5.11	5.72	6.38
Add for pilasters . . . . .	.87	1.05	1.30	1.59
Add for bond beams . . . . .	.91	1.10	1.33	1.61
Add for synthetic plaster on rigid insulation (EIFS)	3.55	4.40	5.40	6.65
deluxe, textured or aggregate	5.85	7.00	8.35	10.00
Add for thin masonry on rigid insulation	9.15	10.20	11.45	12.75
Add for clay tile back-up in lieu of block	1.55	1.85	2.15	2.55
Add for earth-sheltered waterproofing . . . . .	.72	1.08	1.60	2.39
Add for insulation . . . . .	.57	.81	1.14	1.63
earth-sheltered structures . . . . .	.89	1.31	1.92	2.83
For special stonework, see Section UIP 6.				

Curtain Walls

Brick or tile panels	\$18.25	\$22.00	\$ 26.25	\$ 31.75
Concrete & glass panels, precast	22.50	26.00	30.00	34.75
glass fiber reinforced, molded	19.25	23.50	29.25	36.00
Metal and glass panels (ordinary)	25.00	29.50	35.00	41.25
Stainless steel or bronze and glass	36.00	42.00	48.25	56.00
Stone panels, local stone	32.25	35.50	39.50	43.50
granite	35.25	40.25	45.75	52.25
limestone or slate	32.75	36.25	40.25	44.75
marble	33.00	38.00	43.50	50.00
composite or aggregate panels	23.25	28.75	35.75	44.50
Structural glazed atrium (including supports)	56.50	76.25	103.00	138.75
Steel studs and stucco	13.05	15.35	18.15	21.35
synthetic plaster on rigid insulation (EIFS)	15.25	18.30	22.00	26.35
deluxe, textured or aggregate	17.75	21.15	25.20	29.95
wood or aggregate board siding	13.30	16.45	20.25	25.00
Add for insul., insulated area only . . . . .	.70	1.05	1.55	2.30

Pre-engineered Walls

Sand. pan., alum. or steel, 2 sides	\$14.70	\$16.85	\$19.35	\$22.20
cement fiber or shotcrete, two sides	11.40	13.60	16.25	19.45
fiberglass panels, two sides	14.70	17.25	20.30	23.85
glass exterior, metal interior	16.65	19.05	21.80	25.00
add for stainless steel or textured (Galbestos)	2.30	2.70	3.25	3.90
add for polylam. (FRP) interior . . . . .	.60	.80	.95	1.15
deduct for gypsum/hardboard inter.	1.00	1.10	1.15	1.30
Prefabricated building panels, alum. or steel and glass panels	20.25	22.00	23.75	26.00
add for porcelain enamel finish	2.00	2.40	2.85	3.40
add for block backup	4.10	4.60	5.20	5.90
stucco on steel panel	22.25	24.50	27.25	30.00
ven., block or brick, on stl. pan.	25.75	28.75	32.25	36.00
stone, rubble or rustic	32.25	35.00	38.25	41.75

OFFICES, BANKS AND HOSPITALS

SECTION SEG 5

(SEGREGATED COST METHOD)

EXTERIOR WALL (Continued)
Single-wall Construction

	1	2	3	4
Aluminum or steel, on steel frame	\$ 5.62	\$ 6.79	\$ 8.21	\$ 9.93
on wood frame	5.08	6.18	7.53	9.16
add for porcelain enamel finish	2.00	2.40	2.85	3.40
add for stainless steel or textured (Galbestos)	2.30	2.70	3.25	3.90
Cement fiber (Transite),				
on steel frame	6.32	7.68	9.34	11.34
sheet siding on wood frame	5.78	7.07	8.65	10.57
siding/shingles on wood frame	6.22	7.53	9.12	11.06
Fiberglass panels, on steel frame	5.61	6.92	8.51	10.50
on wood frame	5.07	6.30	7.83	9.72
Glass panels	16.75	21.00	26.75	33.75
projected greenhouse	34.50	38.50	43.00	48.25
Log, up to 10" diameter	13.90	17.95	23.20	29.95
deluxe, hand-hewn or oversized	20.25	25.00	31.00	38.25
Plywood, boards or siding,				
on steel frame	5.66	6.75	8.06	9.61
on wood frame	5.15	6.16	7.38	8.84
Stucco on baled straw	11.40	13.65	16.45	19.70
Stucco on wood frame	5.76	6.66	7.69	8.88
Syn. plaster on rigid insul., (EIFS) on steel frame	8.25	9.70	11.40	13.30
Wood shingles on wood frame	5.99	6.98	8.15	9.49
Add for exterior sheathing, /layer	.84	.97	1.10	1.25
Add for interior sheathing/liner, fin. poly laminated panel (FRP)	1.44	1.71	2.03	2.41
Add for stud wall backing	.54	.65	.78	.93
Add for insulation	.52	.62	.75	.90
vinyl faced, exposed	.68	.75	.84	.93
rigid board, faced	.88	1.14	1.49	1.94
Add for air infiltration wrap	.14	.19	.24	.31

Wood or Steel Stud Walls

Aluminum or steel siding, horiz.	\$11.93	\$13.91	\$16.21	\$18.88
sheet panels	10.81	12.72	14.97	17.62
Asphalt siding	10.39	12.03	13.94	16.15
Cement fiber siding or shingles, horizontal	11.41	13.20	15.25	17.64
sheet, embossed	10.87	12.55	14.50	16.74
Hardboard, siding/shingles, horiz.	11.30	13.04	15.06	17.38
sheet, embossed	10.76	12.40	14.29	16.46
Plywood, textured	10.62	12.25	14.15	16.33
deluxe, redwood, cedar, etc.	11.88	13.49	15.31	17.38
Shingles or shakes, wood	12.08	14.10	16.45	19.20
Stucco	11.83	13.80	16.11	18.78
Synthetic plaster on rigid insulation (EIFS)	13.91	16.28	19.05	22.30
deluxe, textured or aggregate	16.37	19.19	22.49	26.35
Vinyl siding or shingles	11.81	13.78	16.07	18.76
Wood siding	11.50	13.29	15.35	17.74
deluxe, redwood, cedar, etc.	12.67	14.80	17.29	20.20
log veneer siding	12.95	16.10	20.00	24.85
deluxe, half round, full corners	19.75	22.25	25.00	28.25
Ven., face block or concrete brick	14.70	17.00	19.65	22.70
common brick	15.00	17.35	20.15	23.35
face brick	17.05	19.65	22.70	26.20
mortarless brick	17.20	19.65	22.50	25.70
stone, ashlar veneer	26.25	30.50	35.50	41.00
rubble or rustic	21.00	24.75	28.75	33.50
synthetic veneer or panel	15.25	18.50	22.50	27.50
thin veneer on rigid insulation	18.00	20.75	24.25	27.75
Add for sheathing	.69	.84	1.02	1.24
Add for insulation	.51	.61	.73	.88
Add for air infiltration wrap	.17	.21	.27	.33
Add for double-stud walls	1.09	1.30	1.55	1.86
Add for wood stressskin sand. pan.	3.20	3.75	4.50	5.25
Add for air infiltration wrap	.15	.18	.24	.29
Add for double-stud walls	.95	1.13	1.36	1.61

EXTERIOR, BASEMENT AND TOWER STAIRS – Per riser.

	1	2	3	4
Concrete	\$135.50	\$185.25	\$255.25	\$349.75
Steel pans or prefab. concrete on steel	148.75	201.00	269.75	364.00
Steel or aluminum grating	172.00	226.50	296.25	389.50
Wood	51.00	78.75	122.00	187.50

For fire escapes, see Section UIP 5.

BASEMENT WALLS – Apply to basement wall area.

Basement Walls

Concrete block, reinforced, 6"	\$ 7.70	\$ 8.70	\$ 9.90	\$11.15
8"	8.70	9.90	11.15	12.60
12"	10.75	12.15	13.70	15.45
for each additional				
4" of block, add	2.05	2.30	2.55	2.85
Concrete, reinforced, 6"	9.25	10.50	11.90	13.45
8"	10.50	11.80	13.30	15.00
12"	12.80	14.35	16.05	18.00
16"	15.15	16.95	18.85	21.05
for each additional				
4" of concrete, add	2.35	2.55	2.80	3.05
Masonry, brick, 8"	13.05	14.65	16.50	18.55
stone, 12"	18.60	21.50	24.75	28.60
for each 4" variation				
in thickness, add or deduct	4.00	4.45	4.90	5.45
Wood, treated	7.50	9.20	11.25	13.80
Add for stay-in-place forming	.48	.70	1.02	1.49
Add for waterproofing	.73	.91	1.12	1.39
earth-sheltered structures	.90	1.32	1.95	2.89
Add for insulation	.56	.79	1.11	1.58
earth-sheltered structures	.88	1.29	1.89	2.78

For specific earth-sheltered waterproofing, see Section UIP 1.

OFFICES, BANKS AND HOSPITALS

SECTION SEG 5

(SEGREGATED COST METHOD)

WALL ORNAMENTATION – Apply to ornamented area.

	1	2	3	4
Brick, split face,				
Roman or Norman	\$ 7.90	\$ 9.10	\$ 10.55	\$ 12.15
face, standard size	8.60	10.00	11.65	13.55
mortarless brick	9.15	10.45	11.95	13.65
select common	7.70	8.95	10.30	11.95
used	8.40	9.65	11.10	12.80
simulated veneer or panel,				
1/4" – 3/8"	6.95	8.45	10.25	12.50
thin veneer on rigid insulation	9.15	10.20	11.45	12.75
add for pict. carved artwork	110.25	125.75	143.50	163.75
Cement fiber siding	2.45	2.90	3.40	4.00
Concrete, ornamental cast stone	17.75	21.00	25.25	30.25
Concrete block,				
imitation flagstone	7.00	8.15	9.55	11.15
solar screen	7.55	8.80	10.40	12.15
ornamental face, slump,				
fluted, split or ground	7.50	8.65	10.00	11.55
glazed one side, add	4.55	5.10	5.70	6.40
Cut stone, carved	71.50	105.25	154.75	227.50
Glass block, white or aqua	28.00	31.00	34.50	38.00
colors or solar reflective	38.50	42.25	46.25	50.75
Granite, ashlar or panel	36.00	42.00	48.25	56.00
Limestone, ashlar or panel	26.75	31.25	37.00	43.25
Local stone, ashlar ven./panel	23.25	27.25	32.00	37.50
rubble or rustic	17.25	20.50	24.75	29.50
imitation precast stone	8.05	10.50	13.65	17.75
Marble, panels	29.70	34.95	40.80	48.00
Metal panels, screens, louvers	13.05	17.05	22.30	29.15
preformed wall panels	2.55	4.60	7.65	12.20
add for curved panels . . . . .	.70	1.00	1.45	2.05
Ornamental doorways	50.00	96.25	165.75	269.25
Slate, panels	25.25	28.50	32.50	39.25
Stucco	2.85	3.15	3.55	4.00
on masonry	2.30	2.60	2.95	3.35
add for synthetic on rigid				
insulation, (EIFS)	1.85	2.35	2.95	3.75
*built-up (EIFS) panel relief	3.85	4.90	6.25	8.05
Terra Cotta	20.25	24.25	28.50	34.25
Tile, ceramic	10.00	11.45	13.10	15.00
*mosaics	15.00	18.00	22.00	26.25
hand-painted tiles	83.25	115.50	160.00	222.00
*For pictorial artwork, add	8.05	11.25	15.70	21.90
Vinyl siding	2.50	2.95	3.50	4.10
Vitrolite (structural glass)	16.65	19.45	22.65	26.35
Wood, plywood	1.95	2.45	3.10	3.95
shingles	2.70	3.20	3.85	4.55
siding	2.50	3.10	3.85	4.70
ornamented molding or trim	7.20	10.25	14.45	20.25
add for treated wood . . . . .	.37	.44	.56	.67

STAINED GLASS – Apply to art glass in window, dome or skylight area. These costs vary greatly, and the following typical cost ranges should be used with caution. See Section UIP 6 for complete description and detailed costs. For residential straight seams or simple bevel, deduct 50% from the Low Cost. For ceiling domes, use low-cost range for plastic, average for stock glass and high-cost for custom stained glass.

	1	2	3	4
Low cost, plain, min. work or				
detailed bevel-etched	\$ 50.25	\$ 68.25	\$ 92.75	\$125.75
Average, simple figures and				
scenes	128.50	180.50	253.00	355.50
High cost, highly detailed work				
(including domes)	325.00	460.25	652.50	924.25

MISCELLANEOUS – Apply to total square feet of lined area if required.

Metal shielding,				
radio frequency	\$17.00	\$23.00	\$31.25	\$42.75
radiation protection	9.50	12.00	15.25	19.50
Ballistic shielding,				
fiberglass panels	15.50	22.50	32.50	47.25
Cold storage	1.30	1.65	2.20	2.95
for each inch over 2", add . . . . .	.20	.30	.44	.65

EXTERIOR BALCONIES – Apply to balcony area.

Concrete	\$14.00	\$18.00	\$23.25	\$30.25
Steel	13.00	17.75	24.25	33.00
Wood	11.50	15.25	20.50	27.75
Add for ornate finishes,				
balustrades	12.25	15.00	18.25	22.25

OFFICES, BANKS AND HOSPITALS

SECTION SEG 5 (SEGREGATED COST METHOD)

ROOF STRUCTURE – Apply to roof area.

	1	2	3	4
Concrete joists, slab	\$ 8.13	\$ 9.28	\$10.61	\$12.12
lift slab	7.38	8.35	9.44	10.67
pan or waffle slab and joists	7.53	8.52	9.66	10.94
precast joists and deck	7.10	8.07	9.18	10.43
precast joists, wood deck	5.66	6.39	7.23	8.16
cored plank on bearing walls	6.33	7.16	8.10	9.17
thin shell	12.10	14.65	17.75	21.50
Concrete dome, cast-in-place	25.75	28.50	32.00	35.50
thin shell	17.25	19.75	22.50	25.50
Fabric roof, air supported	27.75	30.25	32.75	35.50
tension supported	31.00	35.00	39.25	43.75
add for thermal liner	2.65	3.25	4.00	4.90
Steel joists, concrete slab	9.16	10.49	12.02	13.76
gypsum on formboard	4.74	5.97	7.54	9.50
precast deck	7.95	9.04	10.29	11.70
steel deck	5.09	6.52	8.35	10.68
light-gauge truss joists	4.20	5.41	6.97	8.98
steel deck, gypsum or concrete	6.49	8.10	10.12	12.63
wood or composition deck	4.17	5.35	6.85	8.78
light-gauge truss joists	3.55	4.60	5.95	7.70
Open steel system				
for corrugated metal	2.08	3.05	4.48	6.59
light purlin supports only	.97	1.27	1.65	2.16
Steel space frame & sheathing (three dimensional)	15.50	20.00	25.50	32.50
architectural (exclusive of glazing)	23.25	35.25	53.50	81.25
Metal dome and cover	20.00	23.00	26.75	30.50
glazed or translucent panels	46.00	56.00	68.50	83.50
Wood joists,				
wood or composition deck	3.49	4.55	5.94	7.76
exposed rafters,				
2" T&G sheathing	5.04	6.33	7.95	9.99
prefab. panels (exclusive of girders)	1.38	1.70	2.09	2.58
stresskin sandwich panels (exclusive of purlins)	5.00	6.40	8.20	10.55
add for snow roof, furred sheathing layer	1.42	1.58	1.73	1.92
Open wood system for				
corrugated metal	1.24	2.23	3.72	5.93
light purlin supports only for metal, wood or fiberglass	.57	.75	1.00	1.32
Wood dome and deck	14.75	17.75	21.75	26.25
Add for monitor roof	60%	50%	40%	40%
Add for sawtooth roof	40%	35%	35%	25%
Add for complex roof, turrets, ornate trim	70%	55%	45%	35%

For treated wood, increase costs by 10% to 20%.

ROOF COVER – Apply to roof area.

	1	2	3	4
Aluminum or steel, corr., crimped or tile panels, preformed, light, to 26 gauge	\$ 1.48	\$ 1.86	\$ 2.36	\$ 3.00
heavy, under 26 gauge	3.00	3.40	3.85	4.35
formed seam, flat or standing	3.90	4.75	5.85	7.10
batten seam	4.55	5.50	6.60	8.00
sandwich panels, pre-eng.	6.15	7.65	9.55	11.90
shingles	2.95	3.50	4.15	5.00
aggregate finish	3.85	4.55	5.45	6.50
thatch	12.50	13.55	14.65	15.85
add for interior metal liner	1.35	1.50	1.70	1.95
plastic	1.20	1.40	1.60	1.85
add for porcelain enamel finish add for stainless steel or textured (Galbestos)	2.00	2.40	2.85	3.35
Asphalt, corrugated	1.19	1.35	1.55	1.78
Atrium skylight, frame and glazing	24.25	32.00	42.00	55.25
Built-up composition	1.41	1.74	2.15	2.66
Cement fiber, shingles	3.05	3.70	4.50	5.50
corrugated or sheet (Transite)	2.85	3.95	5.50	7.60
Composition, roll, mineral surface	.74	.88	1.03	1.22
Comp. shingles, light, to 235 lb.	1.24	1.39	1.54	1.72
heavy, over 235 lb.	1.64	2.05	2.58	3.22
Copper, flat or standing seam	7.95	9.20	10.70	12.45
batten seam	8.60	9.95	11.50	13.30
shingles	8.00	8.55	9.15	9.75
Elastomeric or modified bitumen, single ply	2.35	3.05	3.95	5.15
rein. sheet or spray-fluid coat	4.05	4.65	5.40	6.20
Fiberglass, corr. or sheet, light	1.47	1.70	1.96	2.28
sandwich panels	2.50	2.80	3.10	3.50
heavy, (FRP), over 8 oz.	2.85	3.50	4.40	5.45
Slate	5.65	6.65	7.85	9.15
red	10.75	12.75	15.15	18.00
composite, reinforced fiber	4.00	4.75	5.65	6.70
Terne, flat or standing seam	7.75	9.00	10.40	12.00
batten seam	8.45	9.70	11.15	12.90
Tile, clay	5.15	6.50	8.10	10.15
concrete	3.70	4.25	4.95	5.65
plastic or rubber	3.20	3.70	4.25	4.90
add for custom coloring/glazing	.90	1.10	1.45	1.85
Wood, shakes	2.65	3.05	3.45	3.95
shingles	2.50	2.85	3.25	3.70
fiber shingles	1.65	1.95	2.35	2.70
add for fire-resistant finish	.37	.44	.56	.67
Add for roof insulation	.65	1.01	1.55	2.40
earth-sheltered structures	1.08	1.63	2.49	3.77
Add for earth-sheltered waterproof.	.97	1.42	2.08	3.05

NOTE: For underroof insulation and supporting structures, see Ceiling Extras on Page 2. For specific earth-sheltered waterproofing, see Section UIP 1. For earthen roof cover, see Fill costs on Page 1. See Section UIP 16 for top dressing, sod and/or sprinklers.

OFFICES, BANKS AND HOSPITALS

SECTION SEG 5 (SEGREGATED COST METHOD)

ROOF MODIFIERS – Use the following multipliers for sloping roofs 6' : 12' or greater to convert the unit costs to cost per square foot of horizontal roofed area.

Rise	:	Run	Multiplier	Rise	:	Run	Multiplier
6'	:	12'	1.12	12'	:	12'	1.42
8'	:	12'	1.20	18'	:	12'	1.80

TRUSSES AND GIRDERS – Apply to area supported.

	1	2	3	4
Steel trusses or longspan girders	\$1.85	\$2.33	\$2.94	\$3.71
Timber trusses	2.03	2.58	3.25	4.12
Glued, laminated trusses or girders	1.89	2.35	2.94	3.66

CANOPIES OR MARQUEES – Apply to horizontal area. For light false-mansard structures, deduct 50% to 60%. For greater detail, see Section UIP 4 or 6.

Wood frame	\$17.25	\$21.25	\$26.75	\$33.00
Steel frame	21.00	26.75	33.75	42.75

CUPOLA STRUCTURES, CLOCKS, etc. – See Section UIP 4. For clock or bell towers, see notes in Section SEG 6.

ELEVATORS – Apply against area served if detailed costs from Section UIP 8 are not used.

Banks, branch,				
Classes A and B	\$2.54	\$3.69	\$5.34	----
Classes C, D and S	----	1.61	2.63	\$4.31
central office, Classes A/B	----	3.63	5.28	7.69
Classes C, D and S	----	1.45	2.38	3.89
Convalescent hospitals,				
Classes A and B	----	2.54	3.63	----
Governmental buildings,				
Classes A and B	----	3.73	5.35	7.68
Hospitals (incl. dumbwaiters),				
Classes A and B	2.54	3.73	5.47	8.04
Classes C, D and S	----	1.67	2.61	4.10
Medical office buildings,				
Classes A and B	2.49	3.62	5.27	7.68
Classes C, D and S	----	1.51	2.44	3.94
Office buildings,				
Classes A and B	2.44	3.57	5.22	7.63
Classes C, D and S	----	1.40	2.32	3.84
Public libraries,				
Classes A and B	----	1.45	2.49	----
Veterinary hospitals,				
Classes A and B	----	2.60	----	----

NUMBER OF STORIES MULTIPLIER

To allow for the cost of hoisting materials, increased labor costs, and miscellaneous costs due to high-rise construction, multiply the total Segregated Costs of aboveground portions of the building by 100% plus .25% for each story over three.

Example: Twenty-three story building: Multiplier = 1.050

ATRIUM HVAC

To price the heating and cooling of large atrium areas, simply refine the appropriate square foot system cost to be applied to the ground floor area by 100% plus 3% for each foot over the 12-foot average story height adjustment found on Page 4.

Example: Multistory building, atrium height of 52': Multiplier = 2.20

COMPLETION OF BUILDING VALUATION

Contractors' overhead and profit, sales taxes, permit fees, and insurance during construction are included in the above costs. Interest on interim construction financing is also included, but not financing costs, real estate taxes, or brokers' commissions.

Architects' fees are not included and should be added from Appendix C.

Depreciation suggestions are given in Appendix A.

County Multipliers which bring the basic costs up to date for each locality are found in Appendix D.

