



Publication 126

January 2020

Instructions for Commercial and Industrial Cost Schedules

About this publication

Pub-126, Instructions for Commercial and Industrial Schedules, is issued according to Section 8-5 of the Property Tax Code which states, “The Department shall confer with, advise and assist local assessment officers relative to the performance of their duties.”

The cost schedules in this publication have been developed to help assessors estimate the replacement cost of commercial improvements using the structural shell and the current interior finish. The assessor’s professional judgement still greatly affects the outcome of this system.

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The information in this publication is current as of the date of the publication. The contents of this publication are informational only and do not take the place of statutes, rules, or court decisions. For many topics covered in this publication, we have provided a reference to the Illinois Property Tax Code for further clarification or more detail at 35 ILCS 200/1 *et seq.*

Other Publications for Assessors:

- Publication 122** Instructions for Farmland and Farm Building Schedules
- Publication 123** Instructions for Residential Schedules
- Publication 124** Construction Terms
- Publication 127** Component-in-Place Schedules

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Changes from previous editions:

This edition includes the redesign of the property record card (2019 PRC-4) to better fit the new methodology introduced in the 2019 edition. The costs in the schedules were not changed from the 2019 edition. Apartment and Condominium PRC examples have been added as well.

Changes included in the June 2019 edition:

Structures are now valued by first selecting the appropriate structural shell and then selecting the current interior finish according to use and adding the two values together.

There are 8 standard structural shell types and 41 interior finish schedules. Additional features can be added to the base costs as adjustments. These components can be valued from our schedules in IDOR's [Publication 127 Component-in-Place Schedules](#) or from [Publication 123, Instructions for Residential Schedules](#) in the case of apartment or condo valuation.

Instructions for valuing Grain Elevators and specific schedules are included in the back of this publication.

The shape adjustment factors that were commonly used in previous editions of Publication 126 have been incorporated into the base costs. The shape adjustment can be accounted for using Tables 1-3 within each structural shell type schedule. The tables differ by the relative proportion of the length of the structure as compared to the width of the structure. Table 1 is used for structures in which the length is less than 2x the width; Table 2 is used for structures in which the length is between 2x and 4x the width of the structure; and Table 3 is used when the structure's length is greater than 4x the width.

The schedules now offer values for structures of up to 200,000 SF per floor. Buildings that exceed the schedule size limitations should be valued by using the Component-in-Place (CIP) schedules in Publication 127. For actual square foot values that fall between the SF values given in the cost schedules, interpolation must be used to determine the correct value per square foot.

New party wall adjustment schedules are included in this publication. Previously, party walls were calculated using a flat 60% rate. Now, due to the large variance in structural shell rates, party wall adjustments take into account the size of the building, the floor level, and the shape of the building, and whether the party wall is the longer wall or the shorter wall.

Acronyms used in this publication

BPA	Base price adjustment	RCN	Replacement cost new
BPH	Bushels per hour	REL	Remaining economic life
Bu	Bushel	SF	Square foot
CF	Cubic foot	SFFA	Square foot floor or finish area
CIP	Component-in-place	SFGA	Square foot ground area
Dia	Diameter	SFSA	Square foot surface area
LB	Load bearing	VLF	Vertical linear foot
LF	Linear foot	WH	Wall height

Note: For definitions of common construction terms used in this Publication, see Publication 124, Construction Terminology.

Section A

The concept of valuing structural shell types and interior use finish separately

Buildings are constructed by first placing a foundation, then building the exterior load-bearing walls or the load-bearing frame with exterior cladding, the roof, and the floors. These components form the structural shell of the building. Once the structural shell is complete, the interior can be finished for numerous and varied uses as well as multiple uses. Thus, this cost approach method provides greater flexibility and precision by separately valuing the structural shell, which has a more predictable and longer life, and the wide range of uses for which interior finishes might be designed to accommodate, which may have shorter lives and be refurbished frequently to a like-new condition with different uses.

Overview of structural shell type descriptions and costs

Included in the base structural shell cost are site preparation, excavation, concrete footings and foundations, reinforced concrete slab floor for the ground floor level, roof structure and cover, and exterior walls and upper floors with cladding and wall height as provided for in each structural shell type. Not included in the base structural shell cost are site value, sprinkler systems, elevators, interior finish of any type, attached exterior improvements such as canopies, signs, etc., yard improvements such as paving, and any other outside improvements.

Each structural shell cost schedule contains three rate tables according to building shape: length less than twice building width; length greater than twice the building width and less than four times greater; and building length four times greater or more than building width. Each of these tables contain rates according to floor footprint size from 2,000 to 200,000 square feet and type of exterior wall cladding material.

Each structural shell cost schedule also contains basement rates and rate adjustment percentages per +/- 1-foot difference from the base wall height for the three building shapes.

The costs in this Section A reflect average quality construction, materials, and workmanship. Higher and lower quality construction must have appropriate quality factors applied.

- Type 2:** Light commercial with wood/ steel stud exterior walls
- Type 3:** Unreinforced concrete block walls, wood joists
- Type 4:** Reinforced masonry walls, metal joists/ decks with concrete
- Type 5:** Pre-cast concrete tilt-up walls, metal joists
- Type 6:** Engineered wood post frame buildings
- Type 7:** Pre-engineered steel frame buildings
- Type 8:** Structural steel frame with fire resistant coatings
- Type 9:** Steel reinforced concrete frame, nearly fireproof

Building Structural Shell Types 2-9

Type 2: Light Commercial

Wood or steel stud exterior load bearing walls, with wood joists & wood upper floors



These buildings are commercial having larger floor areas, with wood or steel stud exterior walls, and are one to three stories in height. There are few, if any, interior load bearing walls. The floor and roof framing consist of wood trusses, glulam beams, and wood posts or steel columns. The first-floor framing is supported directly on the foundation. The foundation consists of spread footings constructed with cast-in-place concrete or concrete masonry block. Exterior walls are wood or steel studs with plywood or oriented strand board (OSB) sheathing and a wide variety of exterior cover materials such as vinyl, wood, hardboard, fiberboard, metal, stucco, including masonry veneers such as brick and various types of stone. Exterior walls are not of concrete block, which is Type 3.

Type 3: Unreinforced concrete block walls, wood joists

Unreinforced concrete block load bearing walls, with wood joists & wood upper floors



These buildings have perimeter load-bearing walls that consist of unreinforced masonry, frequently concrete block. Interior bearing walls, when present, also consist of unreinforced masonry. The floor and roof framing consist of wood joists and trusses. Floors consist of structural panel or plywood sheathing. When they exist, ties between the walls and floors consist of bent steel plates or anchors embedded in the mortar joints and attached to framing. Foundations consist of heavier concrete-spread footings to support the added weight of the masonry load-bearing walls.

Type 4: Reinforced masonry walls, metal joists/ decks

Reinforced concrete block load bearing walls; upper floors with metal joists & decks having concrete fill



These buildings have reinforced masonry load-bearing walls and floors that consist of metal deck with concrete fill, precast concrete planks, tees, or double-tees, with or without a cast-in-place concrete topping slab and are stiff relative to the walls. There are no wood structural members. The floor and roof framing is supported on interior steel or concrete frames or interior reinforced masonry walls. Foundations consist of heavier concrete-spread footings to support the added weight of the masonry load-bearing walls.

Type 5: Pre-cast concrete tilt-up walls, metal joists

Precast concrete perimeter wall panels that are cast on site and tilted into place



These buildings are one or more stories in height and have precast concrete perimeter wall panels that are cast on site and tilted into place. Floor and roof framing consists of precast elements, cast-in-place concrete, or metal deck with concrete fill, and are stiff relative to the walls. Framing is supported on interior steel columns and perimeter concrete bearing walls. Lateral forces are resisted by the precast concrete perimeter wall panels. Wall panels may be solid or have large window and door openings which cause the panels to behave more as frames than as shear walls. Foundations consist of concrete-spread footings or deep pile foundations.

Type 6: Engineered wood post frame buildings

Engineered wood post frame buildings that were called pole buildings 40 years ago



These buildings feature large, solid sawn posts or laminated columns instead of wood studs, steel framing, or concrete masonry. They were called pole buildings 40 years ago, but now post-frame construction is an engineered wood-frame building system that meets UBC and IBC standards. Post-frame structures are more quickly erected than other kinds of buildings. Because the larger posts and the interlocking frame can handle greater loads than stud-wall construction, fewer structural materials are needed, which saves time and other costs. Also, because posts are spaced farther apart than studs, post-frame buildings feature an exceptionally large wall cavity and provide ample room for insulation, lowering heating and cooling costs through the life of the building. Almost any type of exterior façade may be installed on post-frame buildings, which can be designed to meet the highest standards for quality and aesthetics. Post-frame construction is an efficient and economical option for low-rise applications and is now the construction method of choice for any number of commercial, industrial, municipal, residential, religious, and agricultural projects.

Type 7: Pre-engineered steel frame buildings

Pre-engineered and prefabricated with transverse rigid steel or light steel beam/ column frames



These buildings are mainly pre-engineered and prefabricated with transverse rigid steel frames. They are typically one story in height. However, they may be multi-story and built of pre-engineered, prefabricated steel columns and beams. The roof and walls consist of lightweight metal, fiberglass or similar panels. The frames are designed for maximum efficiency and the beams and columns consist of tapered, built-up sections with thin plates. The frames are built in segments and assembled in the field with bolted or welded joints but are lighter-weight steel without fire-resistant coatings found in Type 8 Structure buildings. Lateral forces in the transverse direction are resisted by the rigid frames. Lateral forces in the longitudinal direction are resisted by wall panel shear elements or rod bracing. Diaphragm forces are resisted by un-topped metal deck, roof panel shear elements, or a system of tension rod bracing. Pre-engineered construction is an efficient and economical option for low-rise applications and is now the construction method of choice for any number of commercial, industrial, municipal, and agricultural projects.

Type 8: Structural steel frame with fire resistant coatings

Frame assembly of heavy steel beams and steel columns coated with fire-resistant materials



These buildings consist of a frame assembly of steel beams and steel columns capable of supporting high-rise construction. Foundations consist of concrete-spread footings or deep pile foundations. Floor and roof framing consists of cast-in-place concrete slabs or metal deck with concrete fill supported on steel beams, open web joists, or steel trusses. Lateral forces are resisted by steel moment frames that develop their stiffness through rigid or semi-rigid beam-column connections. When all connections are moment-resisting connections, the entire frame participates in lateral force resistance.

Diaphragms consist of concrete or metal deck with concrete fill and are stiff relative to the frames. A steel building's structural members are expected to have fire resistance to prevent structural failure for a determined period of time to give the building occupants more time to escape and allow the fire service to control it. The required fire resistance periods for the different steel building types are found in local building codes. The structural steel needs to be protected against fire using the proper insulating materials and methods to protect the structural steel members and allow them to resist weakening for longer periods. Recent research has been conducted resulting in several fire-resistant steels with better strength levels developed. These steels represent a notable improvement over conventional steels in terms of elevated temperature yield strength.

Exterior walls consist of metal panel curtain walls, glazing, brick masonry, or precast concrete panels. When the interior of the structure is finished, frames are concealed by ceilings, partition walls, and architectural column furring.

Type 9: Steel reinforced concrete frame, nearly fireproof

Frame assembly of highly fire-resistant cast-in-place concrete beams and columns



These buildings consist of a frame assembly of steel reinforced cast-in-place concrete beams and columns capable of supporting very high-rise construction. Floor and roof framing consists of cast-in-place concrete slabs, concrete beams, one-way joists, two-way waffle joists, or flat slabs. Lateral forces are resisted by concrete moment frames that develop their stiffness through monolithic beam-column connections. Modern frames in regions of high seismicity have joint reinforcing, closely spaced ties, and special detailing to provide ductile performance. This detailing is not present in older construction. Exterior walls consist of metal panel curtain walls, glazing, brick masonry, or precast concrete panels. Foundations consist of concrete-spread footings or deep pile foundations.

Building Structural Shell Type 2:

Light commercial wood/ steel stud exterior walls--PAGE 1

Structure type 2 is light commercial with wood or steel stud exterior load bearing walls, wood joists and wood upper floors



- | | |
|------------------------|-------------------------|
| Included: | Excluded: |
| Site Prep | Site Value |
| Excavation | Sprinklers |
| Concrete Footings | Elevators |
| Foundation | Interior Finish |
| Reinf. Conc. Slab Flr. | Att. Ext. Improvements |
| Roof Structure | Yard Improvements |
| Roof Cover | Other Ext. Improvements |
| Ext. Walls w/ Cladding | |

Basement Floor Size	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Length < 2x width	41.50	33.71	30.45	28.41	26.99	24.98	22.79	21.25	19.57	18.84	18.38	18.09
Length > 2 < 4x width	44.91	36.41	32.55	30.21	28.65	26.29	23.85	22.11	20.16	19.29	18.79	18.45
Length > 4x width	50.32	40.03	35.56	32.91	31.07	28.22	25.32	23.29	20.99	19.98	19.38	18.98
Ground Floor Size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Vinyl/ wood/ metal	37.53	30.93	28.16	26.44	25.24	23.53	21.68	20.37	18.95	18.33	17.94	17.70
Stucco/ alum siding	39.37	32.22	29.22	27.36	26.05	24.20	22.20	20.78	19.24	18.57	18.15	17.88
Cedar/ redwood/ resin	42.15	34.17	30.82	28.74	27.28	25.22	22.97	21.39	19.68	18.92	18.45	18.15
EIFS	45.74	36.69	32.89	30.52	28.87	26.53	23.98	22.19	20.24	19.38	18.85	18.51
Brick veneer	46.13	36.96	33.11	30.71	29.04	26.67	24.09	22.27	20.30	19.43	18.89	18.55
Exterior type	Table 2 Length from 2 to less than 4x width											
Vinyl/ wood/ metal	40.42	33.22	29.94	27.97	26.64	24.64	22.57	21.10	19.45	18.71	18.29	18.00
Stucco/ alum siding	42.51	34.71	31.15	29.01	27.58	25.40	23.16	21.57	19.78	18.98	18.52	18.21
Cedar/ redwood/ resin	45.65	36.94	32.97	30.58	28.98	26.56	24.05	22.28	20.28	19.39	18.87	18.52
EIFS	49.72	39.83	35.33	32.61	30.80	28.05	25.21	23.19	20.92	19.91	19.32	18.93
Brick veneer	50.15	40.14	35.58	32.83	30.99	28.21	25.33	23.29	20.99	19.97	19.37	18.97
Exterior type	Table 3 Length more than 4x width											
Vinyl/ wood/ metal	45.00	36.28	32.50	30.25	28.69	26.28	23.82	22.10	20.15	19.30	18.79	18.45
Stucco/ alum siding	47.47	38.02	33.92	31.48	29.80	27.18	24.52	22.65	20.54	19.62	19.07	18.69
Cedar/ redwood/ resin	51.19	40.64	36.06	33.34	31.46	28.54	25.57	23.48	21.12	20.10	19.48	19.06
EIFS	56.00	44.03	38.84	35.75	33.61	30.30	26.92	24.56	21.88	20.72	20.02	19.54
Brick veneer	56.52	44.40	39.13	36.01	33.84	30.49	27.07	24.68	21.96	20.78	20.07	19.59

Building Structural Shell Type 2:

Light commercial wood/ steel stud exterior walls--PAGE 2

Structure type 2 is light commercial with wood or steel stud exterior load bearing walls, wood joists and wood upper floors



- | | |
|------------------------|-------------------------|
| Included: | Excluded: |
| Site Prep | Site Value |
| Excavation | Sprinklers |
| Concrete Footings | Elevators |
| Foundation | Interior Finish |
| Reinf. Conc. Slab Flr. | Att. Ext. Improvements |
| Roof Structure | Yard Improvements |
| Roof Cover | Other Ext. Improvements |
| Ext. Walls w/ Cladding | |

Upper floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Vinyl/ wood/ metal	22.96	20.26	19.12	18.41	17.92	17.22	16.46	15.93	15.34	15.09	14.93	14.83
Stucco/ alum siding	24.56	21.38	20.04	19.21	18.63	17.80	16.91	16.28	15.59	15.29	15.10	14.99
Cedar/ redwood/ resin	26.97	23.06	21.42	20.40	19.69	18.68	17.58	16.81	15.97	15.60	15.37	15.22
EIFS	30.09	25.25	23.22	21.95	21.07	19.82	18.46	17.50	16.46	16.00	15.71	15.53
Brick veneer	29.88	25.10	23.10	21.85	20.98	19.74	18.40	17.45	16.42	15.97	15.69	15.51
Exterior type	Table 2 Length from 2 to less than 4x width											
Vinyl/ wood/ metal	24.15	21.20	19.85	19.04	18.50	17.67	16.83	16.22	15.55	15.24	15.07	14.95
Stucco/ alum siding	25.96	22.48	20.90	19.94	19.31	18.34	17.34	16.63	15.83	15.48	15.27	15.13
Cedar/ redwood/ resin	28.68	24.42	22.48	21.31	20.52	19.34	18.11	17.24	16.26	15.83	15.57	15.41
EIFS	32.21	26.93	24.52	23.07	22.10	20.63	19.11	18.03	16.82	16.28	15.97	15.76
Brick veneer	31.98	26.76	24.39	22.95	22.00	20.54	19.05	17.98	16.78	16.25	15.94	15.73
Exterior type	Table 3 Length more than 4x width											
Vinyl/ wood/ metal	26.03	22.45	20.90	19.98	19.34	18.35	17.34	16.63	15.83	15.49	15.28	15.13
Stucco/ alum siding	28.17	23.96	22.13	21.05	20.30	19.13	17.94	17.11	16.17	15.76	15.51	15.35
Cedar/ redwood/ resin	31.40	26.23	23.99	22.66	21.74	20.31	18.85	17.83	16.68	16.18	15.87	15.67
EIFS	35.57	29.17	26.40	24.75	23.60	21.84	20.03	18.77	17.33	16.71	16.34	16.09
Brick veneer	35.30	28.98	26.24	24.61	23.48	21.73	19.95	18.71	17.29	16.68	16.31	16.06
Wall ht adj +/- per 1 ft	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Ground level WH = 14'	2.8%	2.4%	2.2%	2.0%	1.9%	1.7%	1.4%	1.2%	0.9%	0.8%	0.7%	0.6%
Upper levels WH = 12'	4.0%	3.2%	2.9%	2.6%	2.4%	2.0%	1.7%	1.4%	1.0%	0.9%	0.7%	0.7%
Basement level WH = 9'	6.9%	6.0%	5.4%	5.1%	4.7%	4.2%	3.6%	3.0%	2.4%	2.0%	1.7%	1.6%

NOTE: Ground floor and upper floors must be of the same structure type, but may have different exterior types

Building Structural Shell Type 3:

Unreinforced concrete block walls, wood joists--PAGE 1

Structure type 3 has unreinforced concrete block load bearing walls, with wood joists & wood upper floors



Included:

- Site Prep
- Excavation
- Concrete Footings
- Foundation
- Reinf. Conc. Slab Flr.
- Roof Structure
- Roof Cover
- Ext. Walls w/ Cladding

Excluded:

- Site Value
- Sprinklers
- Elevators
- Interior Finish
- Att. Ext. Improvements
- Yard Improvements
- Other Ext. Improvements

Basement floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Length < 2x width	54.96	46.60	43.12	40.97	39.44	37.29	34.97	33.33	31.54	30.76	30.27	29.96
Length > 2 < 4x width	58.54	49.51	45.36	42.87	41.20	38.69	36.09	34.24	32.17	31.24	30.70	30.34
Length > 4x width	64.30	53.33	48.57	45.75	43.79	40.76	37.66	35.50	33.04	31.98	31.34	30.90
Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Paint only	38.52	31.63	28.74	26.94	25.68	23.90	21.96	20.59	19.11	18.46	18.05	17.80
Stucco	44.07	35.51	31.92	29.69	28.13	25.91	23.51	21.82	19.98	19.17	18.66	18.35
EIFS	50.43	39.97	35.58	32.85	30.94	28.24	25.29	23.22	20.97	19.98	19.37	18.98
Brick veneer	50.82	40.24	35.80	33.04	31.11	28.38	25.40	23.31	21.03	20.03	19.41	19.02
Stone veneer	87.43	65.88	56.84	51.22	47.28	41.72	35.66	31.40	26.76	24.72	23.45	22.65
Exterior type	Table 2 Length from 2 to less than 4x width											
Paint only	41.55	34.02	30.60	28.53	27.15	25.05	22.89	21.36	19.63	18.86	18.41	18.11
Stucco	47.82	38.48	34.23	31.66	29.95	27.35	24.67	22.76	20.62	19.67	19.11	18.74
EIFS	55.03	43.60	38.40	35.27	33.17	29.99	26.71	24.38	21.76	20.59	19.91	19.46
Brick veneer	55.46	43.91	38.66	35.49	33.36	30.15	26.84	24.48	21.83	20.65	19.96	19.51
Stone veneer	96.88	73.36	62.66	56.20	51.87	45.33	38.58	33.78	28.38	25.98	24.58	23.65
Exterior type	Table 3 Length more than 4x width											
Paint only	46.34	37.22	33.27	30.92	29.29	26.77	24.20	22.40	20.36	19.47	18.94	18.58
Stucco	53.76	42.45	37.54	34.63	32.61	29.48	26.29	24.06	21.53	20.43	19.77	19.32
EIFS	62.29	48.46	42.46	38.89	36.42	32.60	28.69	25.96	22.87	21.52	20.72	20.17
Brick veneer	62.81	48.82	42.75	39.15	36.65	32.78	28.84	26.08	22.95	21.59	20.77	20.22
Stone veneer	111.84	83.36	71.00	63.66	58.57	50.69	42.66	37.04	30.66	27.89	26.23	25.11

Building Structural Shell Type 3:

Unreinforced concrete block walls, wood joists--PAGE 2

Structure type 3 has unreinforced concrete block load bearing walls, with wood joists & wood upper floors



Included:

- Site Prep
- Excavation
- Concrete Footings
- Foundation
- Reinf. Conc. Slab Flr.
- Roof Structure
- Roof Cover
- Ext. Walls w/ Cladding

Excluded:

- Site Value
- Sprinklers
- Elevators
- Interior Finish
- Att. Ext. Improvements
- Yard Improvements
- Other Ext. Improvements

Upper floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Paint only	25.05	21.72	20.32	19.45	18.84	17.98	17.05	16.39	15.67	15.35	15.16	15.03
Stucco	29.76	25.02	23.03	21.79	20.92	19.70	18.36	17.43	16.41	15.96	15.68	15.50
EIFS	35.28	28.89	26.20	24.53	23.36	21.71	19.91	18.65	17.27	16.67	16.29	16.05
Brick veneer	35.62	29.12	26.39	24.70	23.51	21.83	20.01	18.72	17.32	16.71	16.33	16.08
Stone veneer	67.38	51.37	44.65	40.47	37.55	33.41	28.91	25.74	22.29	20.78	19.83	19.24
Exterior type	Table 2 Length from 2 to less than 4x width											
Paint only	26.51	22.88	21.22	20.22	19.55	18.54	17.50	16.75	15.92	15.55	15.33	15.19
Stucco	31.84	26.66	24.31	22.88	21.93	20.49	19.01	17.95	16.76	16.23	15.93	15.72
EIFS	38.09	31.11	27.93	26.01	24.73	22.78	20.78	19.35	17.75	17.04	16.62	16.35
Brick veneer	38.47	31.38	28.15	26.20	24.89	22.92	20.89	19.44	17.81	17.09	16.66	16.38
Stone veneer	74.41	56.93	48.97	44.17	40.96	36.09	31.08	27.51	23.50	21.71	20.67	19.98
Exterior type	Table 3 Length more than 4x width											
Paint only	28.83	24.42	22.51	21.38	20.59	19.37	18.13	17.26	16.27	15.85	15.59	15.41
Stucco	35.13	28.86	26.14	24.53	23.41	21.67	19.91	18.67	17.27	16.66	16.29	16.04
EIFS	42.53	34.07	30.40	28.22	26.71	24.38	21.99	20.32	18.43	17.61	17.11	16.78
Brick veneer	42.98	34.39	30.66	28.45	26.91	24.54	22.12	20.42	18.50	17.66	17.16	16.82
Stone veneer	85.53	64.36	55.17	49.71	45.93	40.08	34.11	29.93	25.19	23.13	21.90	21.06
Wall ht adj +/- per 1 ft	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Ground level WH = 14'	3.1%	2.7%	2.5%	2.3%	2.2%	1.9%	1.6%	1.4%	1.1%	0.9%	0.8%	0.8%
Upper levels WH = 12'	4.6%	3.8%	3.4%	3.1%	2.8%	2.5%	2.1%	1.7%	1.3%	1.1%	1.0%	0.9%
Basement level WH = 9'	5.5%	4.6%	4.1%	3.7%	3.5%	3.0%	2.5%	2.0%	1.5%	1.3%	1.1%	1.0%

NOTE: Ground floor and upper floors must be of the same structure type, but may have different exterior types

Building Structural Shell Type 4:

Reinforced masonry walls, metal joists/ decks--PAGE 1

Structure type 4 has reinforced concrete block load bearing walls; upper floors with metal joists & decks having concrete fill



Included:
 Site Prep
 Excavation
 Concrete Footings
 Foundation
 Reinf. Conc. Slab Flr.
 Roof Structure
 Roof Cover
 Ext. Walls w/ Cladding

Excluded:
 Site Value
 Sprinklers
 Elevators
 Interior Finish
 Att. Ext. Improvements
 Yard Improvements
 Other Ext. Improvements

Basement floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Length < 2x width	54.96	46.60	43.12	40.97	39.44	37.29	34.97	33.33	31.54	30.76	30.27	29.96
Length > 2 < 4x width	58.54	49.51	45.36	42.87	41.20	38.69	36.09	34.24	32.17	31.24	30.70	30.34
Length > 4x width	64.30	53.33	48.57	45.75	43.79	40.76	37.66	35.50	33.04	31.98	31.34	30.90
Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Paint only	63.91	52.92	48.30	45.43	43.43	40.58	37.49	35.32	32.95	31.91	31.26	30.85
Stucco	69.46	56.80	51.49	48.19	45.87	42.60	39.05	36.54	33.82	32.62	31.88	31.40
EIFS	75.82	61.26	55.15	51.35	48.69	44.92	40.83	37.95	34.81	33.44	32.58	32.04
Brick veneer	76.21	61.53	55.37	51.54	48.86	45.06	40.94	38.03	34.87	33.49	32.62	32.08
Stone veneer	112.82	87.17	76.41	69.71	65.03	58.40	51.20	46.12	40.60	38.18	36.67	35.71
Exterior type	Table 2 Length from 2 to less than 4x width											
Paint only	68.74	56.73	51.27	47.97	45.77	42.43	38.98	36.53	33.78	32.55	31.84	31.36
Stucco	75.01	61.19	54.90	51.11	48.57	44.73	40.76	37.94	34.77	33.36	32.54	31.99
EIFS	82.22	66.32	59.08	54.71	51.79	47.37	42.80	39.56	35.91	34.29	33.34	32.71
Brick veneer	82.65	66.63	59.33	54.93	51.98	47.53	42.93	39.66	35.98	34.34	33.39	32.75
Stone veneer	124.07	96.08	83.33	75.64	70.49	62.71	54.67	48.95	42.53	39.67	38.00	36.90
Exterior type	Table 3 Length more than 4x width											
Paint only	76.37	61.84	55.53	51.78	49.18	45.17	41.07	38.20	34.94	33.53	32.68	32.11
Stucco	83.80	67.07	59.81	55.49	52.50	47.88	43.16	39.86	36.11	34.48	33.51	32.85
EIFS	92.33	73.07	64.72	59.75	56.32	50.99	45.56	41.76	37.45	35.58	34.46	33.70
Brick veneer	92.84	73.44	65.02	60.01	56.55	51.18	45.71	41.88	37.54	35.65	34.51	33.75
Stone veneer	141.88	107.98	93.26	84.52	78.46	69.09	59.53	52.84	45.25	41.95	39.97	38.63

Building Structural Shell Type 4:

Reinforced masonry walls, metal joists/ decks--PAGE 2

Structure type 4 has reinforced concrete block load bearing walls; upper floors with metal joists & decks having concrete fill



Included:

- Site Prep
- Excavation
- Concrete Footings
- Foundation
- Reinf. Conc. Slab Flr.
- Roof Structure
- Roof Cover
- Ext. Walls w/ Cladding

Excluded:

- Site Value
- Sprinklers
- Elevators
- Interior Finish
- Att. Ext. Improvements
- Yard Improvements
- Other Ext. Improvements

Upper floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Paint only	37.48	30.43	27.47	25.62	24.34	22.51	20.53	19.13	17.61	16.95	16.53	16.27
Stucco	42.19	33.73	30.17	27.96	26.42	24.23	21.85	20.17	18.35	17.55	17.05	16.74
EIFS	47.72	37.60	33.35	30.71	28.86	26.24	23.40	21.39	19.22	18.26	17.66	17.28
Brick veneer	48.05	37.83	33.54	30.87	29.01	26.36	23.49	21.47	19.27	18.30	17.70	17.32
Stone veneer	79.82	60.08	51.80	46.64	43.04	37.94	32.39	28.49	24.24	22.37	21.21	20.47
Exterior type	Table 2 Length from 2 to less than 4x width											
Paint only	40.58	32.88	29.37	27.25	25.84	23.70	21.49	19.91	18.14	17.36	16.90	16.59
Stucco	45.91	36.66	32.46	29.92	28.22	25.65	23.00	21.11	18.99	18.04	17.49	17.13
EIFS	52.16	41.11	36.08	33.05	31.01	27.94	24.77	22.51	19.98	18.85	18.19	17.75
Brick veneer	52.54	41.38	36.30	33.23	31.18	28.08	24.88	22.60	20.04	18.90	18.23	17.79
Stone veneer	88.48	66.93	57.12	51.21	47.24	41.25	35.07	30.66	25.72	23.52	22.24	21.39
Exterior type	Table 3 Length more than 4x width											
Paint only	45.48	36.15	32.10	29.70	28.03	25.45	22.82	20.98	18.89	17.99	17.44	17.07
Stucco	51.79	40.59	35.74	32.85	30.85	27.76	24.60	22.39	19.89	18.80	18.14	17.70
EIFS	59.19	45.81	40.00	36.55	34.16	30.46	26.69	24.04	21.05	19.75	18.97	18.44
Brick veneer	59.64	46.12	40.26	36.77	34.36	30.62	26.81	24.14	21.12	19.81	19.02	18.48
Stone veneer	102.18	76.09	64.77	58.04	53.38	46.16	38.80	33.65	27.81	25.28	23.75	22.72
Wall ht adj +/- per 1 ft	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Ground level WH = 14'	3.6%	3.0%	2.7%	2.5%	2.4%	2.1%	1.8%	1.5%	1.1%	1.0%	0.8%	0.8%
Upper levels WH = 12'	6.0%	5.2%	4.8%	4.4%	4.2%	3.7%	3.2%	2.7%	2.1%	1.8%	1.6%	1.5%
Basement level WH = 9'	5.5%	4.6%	4.1%	3.7%	3.5%	3.0%	2.5%	2.0%	1.5%	1.3%	1.1%	1.0%

NOTE: Ground floor and upper floors must be of the same structure type, but may have different exterior types

Building Structural Shell Type 5:

Pre-cast concrete tilt-up walls, metal joists--PAGE 1

Structure type 5 has precast concrete perimeter wall panels that are cast on site and tilted into place



Included:
 Site Prep
 Excavation
 Concrete Footings
 Foundation
 Reinf. Conc. Slab Flr.
 Roof Structure
 Roof Cover
 Ext. Walls w/ Cladding

Excluded:
 Site Value
 Sprinklers
 Elevators
 Interior Finish
 Att. Ext. Improvements
 Yard Improvements
 Other Ext. Improvements

Basement floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Length < 2x width	59.23	50.93	47.45	45.29	43.77	41.63	39.30	37.66	35.87	35.09	34.60	34.29
Length > 2 < 4x width	62.87	53.81	49.69	47.20	45.54	43.02	40.42	38.57	36.49	35.57	35.03	34.67
Length > 4x width	68.63	57.66	52.90	50.08	48.12	45.09	41.99	39.83	37.37	36.31	35.67	35.23

Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
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Exterior type	Table 1 Length less than 2x width											
Building Eave Ht = 24'												
Paint only	85.53	69.35	62.57	58.34	55.39	51.21	46.67	43.47	39.98	38.45	37.50	36.90
EIFS or other	100.73	80.00	71.31	65.89	62.11	56.75	50.93	46.83	42.36	40.40	39.18	38.41

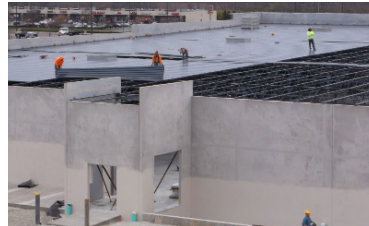
Exterior type	Table 2 Length from 2 to less than 4x width											
Building Eave Ht = 24'												
Paint only	92.62	74.97	66.93	62.08	58.84	53.93	48.86	45.25	41.20	39.40	38.35	37.65
EIFS or other	109.83	87.20	76.90	70.68	66.52	60.23	53.74	49.11	43.92	41.61	40.26	39.37

Exterior type	Table 3 Length more than 4x width											
Building Eave Ht = 24'												
Paint only	103.85	82.47	73.19	67.68	63.86	57.95	51.92	47.70	42.92	40.84	39.59	38.74
EIFS or other	124.22	96.82	84.93	77.86	72.97	65.39	57.66	52.25	46.12	43.45	41.85	40.77

Building Structural Shell Type 5:

Pre-cast concrete tilt-up walls, metal joists--PAGE 2

Structure type 5 has precast concrete perimeter wall panels that are cast on site and tilted into place



Included:

- Site Prep
- Excavation
- Concrete Footings
- Foundation
- Reinf. Conc. Slab Flr.
- Roof Structure
- Roof Cover
- Ext. Walls w/ Cladding

Excluded:

- Site Value
- Sprinklers
- Elevators
- Interior Finish
- Att. Ext. Improvements
- Yard Improvements
- Other Ext. Improvements

Upper floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
No Upper Wall Height												
Paint only	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87
EIFS or other	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87
Exterior type	Table 2 Length from 2 to less than 4x width											
No Upper Wall Height												
Paint only	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87
EIFS or other	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87
Exterior type	Table 3 Length more than 4x width											
No Upper Wall Height												
Paint only	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87
EIFS or other	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87	11.87
Wall ht adj +/- per 1 ft	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Ground level WH = 24'	2.3%	2.0%	1.8%	1.7%	1.6%	1.4%	1.2%	1.0%	0.8%	0.7%	0.6%	0.5%
Upper levels N/A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Basement level WH = 9'	5.5%	4.6%	4.1%	3.7%	3.5%	3.0%	2.5%	2.0%	1.5%	1.3%	1.1%	1.0%

NOTE: Ground floor and upper floors must be of the same structure type, but may have different exterior types

Building Structural Shell Type 6:

Engineered wood post frame buildings--PAGE 1

Structure type 6 buildings are engineered wood post frame buildings that were previously called pole buildings



- | | |
|------------------------|-------------------------|
| Included: | Excluded: |
| Site Prep | Site Value |
| Excavation | Sprinklers |
| Concrete Footings | Elevators |
| Foundation | Interior Finish |
| Reinf. Conc. Slab Flr. | Att. Ext. Improvements |
| Roof Structure | Yard Improvements |
| Roof Cover | Other Ext. Improvements |
| Ext. Walls w/ Cladding | |

Basement floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Length < 2x width	41.50	33.71	30.45	28.41	26.99	24.98	22.79	21.25	19.57	18.84	18.38	18.09
Length > 2 < 4x width	44.91	36.41	32.55	30.21	28.65	26.29	23.85	22.11	20.16	19.29	18.79	18.45
Length > 4x width	50.32	40.03	35.56	32.91	31.07	28.22	25.32	23.29	20.99	19.98	19.38	18.98
Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Vinyl/ T-1-11/ metal	28.24	24.51	22.95	21.97	21.29	20.33	19.28	18.54	17.74	17.39	17.17	17.03
Aluminum/ pine	30.45	26.06	24.21	23.07	22.27	21.13	19.90	19.03	18.08	17.67	17.41	17.25
Cedar/ EIFS < 2"/ resin	34.46	28.87	26.52	25.06	24.04	22.59	21.02	19.91	18.71	18.18	17.85	17.64
EIFS > 2" thick	39.66	32.51	29.51	27.64	26.33	24.49	22.48	21.06	19.52	18.85	18.43	18.16
Exterior type	Table 2 Length from 2 to less than 4x width											
Vinyl/ T-1-11/ metal	29.88	25.81	23.95	22.84	22.09	20.95	19.78	18.95	18.02	17.60	17.36	17.20
Aluminum/ pine	32.38	27.58	25.40	24.08	23.20	21.87	20.49	19.51	18.41	17.92	17.64	17.45
Cedar/ EIFS < 2"/ resin	36.92	30.81	28.03	26.35	25.23	23.53	21.78	20.53	19.13	18.51	18.14	17.90
EIFS > 2" thick	42.80	34.99	31.44	29.29	27.86	25.69	23.45	21.85	20.06	19.26	18.80	18.49
Exterior type	Table 3 Length more than 4x width											
Vinyl/ T-1-11/ metal	32.47	27.54	25.40	24.13	23.25	21.88	20.49	19.52	18.41	17.93	17.65	17.45
Aluminum/ pine	35.42	29.62	27.10	25.60	24.57	22.96	21.32	20.18	18.88	18.31	17.98	17.75
Cedar/ EIFS < 2"/ resin	40.80	33.40	30.20	28.29	26.97	24.92	22.84	21.38	19.72	19.01	18.57	18.28
EIFS > 2" thick	47.76	38.31	34.20	31.77	30.08	27.47	24.80	22.93	20.82	19.90	19.35	18.97

Building Structural Shell Type 6:

Engineered wood post frame buildings--PAGE 2

Structure type 6 buildings are engineered wood post frame buildings that were previously called pole buildings



- Included:**
- Site Prep
 - Excavation
 - Concrete Footings
 - Foundation
 - Reinf. Conc. Slab Flr.
 - Roof Structure
 - Roof Cover
 - Ext. Walls w/ Cladding

- Excluded:**
- Site Value
 - Sprinklers
 - Elevators
 - Interior Finish
 - Att. Ext. Improvements
 - Yard Improvements
 - Other Ext. Improvements

Upper floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Vinyl/ T-1-11/ metal	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
Aluminum/ pine	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
Cedar/ EIFS < 2"/ resin	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
EIFS > 2" thick	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
Exterior type	Table 2 Length from 2 to less than 4x width											
Vinyl/ T-1-11/ metal	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
Aluminum/ pine	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
Cedar/ EIFS < 2"/ resin	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
EIFS > 2" thick	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
Exterior type	Table 3 Length more than 4x width											
Vinyl/ T-1-11/ metal	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
Aluminum/ pine	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
Cedar/ EIFS < 2"/ resin	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
EIFS > 2" thick	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26	9.26
Wall ht adj +/- per 1 ft	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Ground to Eave Ht = 20'	2.4%	2.0%	1.7%	1.6%	1.5%	1.3%	1.1%	0.9%	0.7%	0.6%	0.5%	0.4%
Upper floor levels N/A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Basement level WH = 9'	6.9%	6.0%	5.4%	5.1%	4.7%	4.2%	3.6%	3.0%	2.4%	2.0%	1.7%	1.6%

NOTE: Ground floor and upper floors must be of the same structure type, but may have different exterior types

Building Structural Shell Type 7:

Pre-engineered steel frame buildings--PAGE 1

Structure type 7 buildings are pre-engineered and prefabricated with transverse rigid steel or light steel beam/column frames



Included:
 Site Prep
 Excavation
 Concrete Footings
 Foundation
 Reinf. Conc. Slab Flr.
 Roof Structure
 Roof Cover
 Ext. Walls w/ Cladding

Excluded:
 Site Value
 Sprinklers
 Elevators
 Interior Finish
 Att. Ext. Improvements
 Yard Improvements
 Other Ext. Improvements

Basement floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Length < 2x width	41.50	33.71	30.45	28.41	26.99	24.98	22.79	21.25	19.57	18.84	18.38	18.09
Length > 2 < 4x width	44.91	36.41	32.55	30.21	28.65	26.29	23.85	22.11	20.16	19.29	18.79	18.45
Length > 4x width	50.32	40.03	35.56	32.91	31.07	28.22	25.32	23.29	20.99	19.98	19.38	18.98
Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Vinyl/ T-1-11/ metal	38.64	31.60	28.65	26.81	25.53	23.71	21.73	20.34	18.82	18.16	17.74	17.48
Aluminum/ pine	40.83	33.14	29.91	27.90	26.50	24.51	22.35	20.82	19.17	18.44	17.99	17.70
Cedar/ EIFS < 2" resin	44.81	35.92	32.19	29.87	28.25	25.96	23.46	21.70	19.79	18.95	18.43	18.09
EIFS > 2" thick	49.96	39.53	35.15	32.43	30.53	27.83	24.90	22.84	20.59	19.61	18.99	18.61
Exterior type	Table 2 Length from 2 to less than 4x width											
Vinyl/ T-1-11/ metal	41.73	34.05	30.55	28.44	27.03	24.89	22.69	21.12	19.35	18.57	18.11	17.81
Aluminum/ pine	44.21	35.81	31.99	29.68	28.13	25.80	23.39	21.67	19.75	18.89	18.39	18.06
Cedar/ EIFS < 2" resin	48.71	39.01	34.59	31.93	30.14	27.45	24.66	22.68	20.46	19.47	18.89	18.51
EIFS > 2" thick	54.53	43.15	37.97	34.84	32.75	29.58	26.32	23.99	21.38	20.22	19.54	19.09
Exterior type	Table 3 Length more than 4x width											
Vinyl/ T-1-11/ metal	46.62	37.31	33.27	30.88	29.21	26.64	24.02	22.18	20.10	19.20	18.65	18.28
Aluminum/ pine	49.55	39.38	34.96	32.34	30.53	27.71	24.84	22.84	20.56	19.57	18.98	18.58
Cedar/ EIFS < 2" resin	54.87	43.13	38.03	35.00	32.91	29.66	26.35	24.03	21.40	20.26	19.57	19.11
EIFS > 2" thick	61.77	47.99	42.01	38.45	35.99	32.18	28.29	25.57	22.48	21.14	20.34	19.79

Building Structural Shell Type 7:

Pre-engineered steel frame buildings--PAGE 2

Structure type 7 buildings are pre-engineered and prefabricated with transverse rigid steel or light steel beam/column frames



Included:

- Site Prep
- Excavation
- Concrete Footings
- Foundation
- Reinf. Conc. Slab Flr.
- Roof Structure
- Roof Cover
- Ext. Walls w/ Cladding

Excluded:

- Site Value
- Sprinklers
- Elevators
- Interior Finish
- Att. Ext. Improvements
- Yard Improvements
- Other Ext. Improvements

Upper floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Vinyl/ T-1-11/ metal	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
Aluminum/ pine	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
Cedar/ EIFS < 2"/ resin	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
EIFS > 2" thick	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
Exterior type	Table 2 Length from 2 to less than 4x width											
Vinyl/ T-1-11/ metal	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
Aluminum/ pine	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
Cedar/ EIFS < 2"/ resin	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
EIFS > 2" thick	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
Exterior type	Table 3 Length more than 4x width											
Vinyl/ T-1-11/ metal	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
Aluminum/ pine	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
Cedar/ EIFS < 2"/ resin	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
EIFS > 2" thick	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90	21.90
Floor ht adj +/- per 1 ft	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Ground to Eave Ht = 20'	2.5%	2.2%	2.0%	1.8%	1.7%	1.5%	1.3%	1.1%	0.8%	0.7%	0.6%	0.6%
Upper floor levels N/A	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
Basement level WH = 9'	6.9%	6.0%	5.4%	5.1%	4.7%	4.2%	3.6%	3.0%	2.4%	2.0%	1.7%	1.6%

NOTE: Ground floor and upper floors must be of the same structure type, but may have different exterior types

Building Structural Shell Type 8:

Structural steel frame with fire resistant coatings--PAGE 1

Structure type 8 buildings have a frame assembly of heavy steel beams and steel columns coated with fire-resistant materials



Included:
 Site Prep
 Excavation
 Concrete Footings
 Foundation
 Reinf. Conc. Slab Flr.
 Roof Structure
 Roof Cover
 Ext. Walls w/ Cladding

Excluded:
 Site Value
 Sprinklers
 Elevators
 Interior Finish
 Att. Ext. Improvements
 Yard Improvements
 Other Ext. Improvements

Basement floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Length < 2x width	92.73	83.52	79.65	77.24	75.56	73.18	70.59	68.77	66.78	65.91	65.37	65.02
Length > 2 < 4x width	96.78	86.72	82.14	79.37	77.52	74.73	71.84	69.78	67.48	66.45	65.85	65.45
Length > 4x width	103.18	90.99	85.71	82.56	80.39	77.02	73.58	71.18	68.45	67.27	66.56	66.07
Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Steel/ Alum	84.85	77.99	75.12	73.33	72.08	70.31	68.38	67.02	65.55	64.90	64.50	64.24
EIFS	91.22	82.45	78.78	76.49	74.89	72.63	70.16	68.43	66.54	65.72	65.20	64.87
Brick veneer	91.60	82.72	79.00	76.68	75.06	72.77	70.27	68.52	66.60	65.77	65.24	64.91
Glass curtain wall	128.21	108.37	100.04	94.86	91.24	86.11	80.53	76.60	72.33	70.45	69.29	68.55
Stone veneer	170.81	138.20	124.52	116.01	110.05	101.63	92.46	86.01	78.99	75.91	73.99	72.78
Exterior type	Table 2 Length from 2 to less than 4x width											
Steel/ Alum	87.86	80.37	76.97	74.91	73.54	71.46	69.31	67.78	66.06	65.30	64.85	64.56
EIFS	95.06	85.50	81.14	78.52	76.76	74.10	71.35	69.40	67.20	66.23	65.66	65.28
Brick veneer	95.50	85.81	81.39	78.73	76.95	74.26	71.47	69.50	67.27	66.28	65.71	65.32
Glass curtain wall	136.92	115.26	105.39	99.44	95.46	89.44	83.22	78.79	73.82	71.61	70.32	69.46
Stone veneer	185.11	149.52	133.31	123.54	117.00	107.10	96.88	89.61	81.45	77.81	75.69	74.28
Exterior type	Table 3 Length more than 4x width											
Steel/ Alum	92.61	83.55	79.62	77.29	75.67	73.16	70.61	68.82	66.79	65.91	65.38	65.02
EIFS	101.14	89.56	84.53	81.55	79.48	76.28	73.01	70.72	68.13	67.01	66.33	65.87
Brick veneer	101.66	89.92	84.83	81.81	79.71	76.47	73.16	70.84	68.21	67.07	66.39	65.92
Glass curtain wall	150.70	124.46	113.08	106.31	101.63	94.38	86.98	81.80	75.93	73.38	71.84	70.81
Stone veneer	207.75	164.65	145.94	134.83	127.13	115.21	103.06	94.55	84.90	80.71	78.19	76.49

Building Structural Shell Type 8:

Structural steel frame with fire resistant coatings--PAGE 2

Structure type 8 buildings have a frame assembly of heavy steel beams and steel columns coated with fire-resistant materials



Included:

- Site Prep
- Excavation
- Concrete Footings
- Foundation
- Reinf. Conc. Slab Flr.
- Roof Structure
- Roof Cover
- Ext. Walls w/ Cladding

Excluded:

- Site Value
- Sprinklers
- Elevators
- Interior Finish
- Att. Ext. Improvements
- Yard Improvements
- Other Ext. Improvements

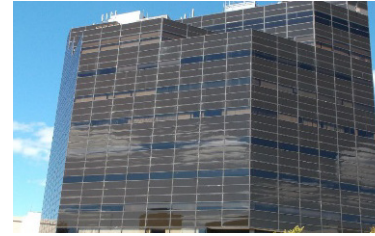
Upper floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Steel/ Alum	60.91	57.80	56.50	55.69	55.13	54.32	53.45	52.84	52.17	51.88	51.69	51.58
EIFS	66.43	61.68	59.68	58.44	57.57	56.34	55.00	54.06	53.03	52.58	52.30	52.13
Brick veneer	66.77	61.91	59.87	58.60	57.72	56.46	55.09	54.13	53.09	52.63	52.34	52.16
Glass curtain wall	98.53	84.16	78.13	74.37	71.75	68.03	63.99	61.15	58.05	56.70	55.85	55.31
Stone veneer	135.49	110.04	99.37	92.72	88.08	81.50	74.35	69.31	63.84	61.43	59.93	58.98
Exterior type	Table 2 Length from 2 to less than 4x width											
Steel/ Alum	62.27	58.88	57.34	56.41	55.79	54.84	53.87	53.18	52.40	52.06	51.86	51.72
EIFS	68.52	63.33	60.96	59.54	58.58	57.14	55.65	54.58	53.39	52.86	52.55	52.35
Brick veneer	68.90	63.60	61.18	59.72	58.75	57.27	55.75	54.67	53.45	52.91	52.59	52.38
Glass curtain wall	104.84	89.15	82.00	77.70	74.81	70.45	65.94	62.74	59.14	57.53	56.60	55.98
Stone veneer	146.66	118.88	106.23	98.60	93.50	85.77	77.80	72.12	65.75	62.91	61.26	60.16
Exterior type	Table 3 Length more than 4x width											
Steel/ Alum	64.42	60.32	58.54	57.48	56.75	55.62	54.46	53.65	52.73	52.33	52.09	51.93
EIFS	71.83	65.54	62.81	61.18	60.06	58.32	56.55	55.30	53.90	53.29	52.92	52.67
Brick veneer	72.27	65.85	63.06	61.41	60.26	58.48	56.67	55.40	53.97	53.34	52.97	52.71
Glass curtain wall	114.82	95.82	87.57	82.67	79.28	74.02	68.66	64.91	60.66	58.81	57.70	56.95
Stone veneer	164.32	130.68	116.08	107.41	101.40	92.10	82.61	75.98	68.45	65.18	63.21	61.88
Wall ht adj +/- per 1 ft	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Ground level WH = 14'	2.3%	1.9%	1.6%	1.5%	1.4%	1.2%	1.0%	0.8%	0.6%	0.5%	0.4%	0.4%
Upper levels WH = 12'	3.3%	2.6%	2.2%	2.0%	1.8%	1.6%	1.3%	1.0%	0.8%	0.6%	0.5%	0.5%
Basement level WH = 9'	3.3%	2.6%	2.2%	2.0%	1.8%	1.5%	1.2%	1.0%	0.7%	0.6%	0.5%	0.5%

NOTE: Ground floor and upper floors must be of the same structure type, but may have different exterior types

Building Structural Shell Type 9:

Steel reinforced concrete frame, nearly fireproof--PAGE 1

Structure type 9 buildings consist of a frame assembly of highly fire resistant cast-in-place concrete beams and columns



Included:

- Site Prep
- Excavation
- Concrete Footings
- Foundation
- Reinf. Conc. Slab Flr.
- Roof Structure
- Roof Cover
- Ext. Walls w/ Cladding

Excluded:

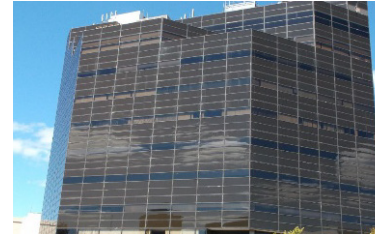
- Site Value
- Sprinklers
- Elevators
- Interior Finish
- Att. Ext. Improvements
- Yard Improvements
- Other Ext. Improvements

Basement floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Length < 2x width	92.73	83.52	79.65	77.24	75.56	73.18	70.59	68.77	66.78	65.91	65.37	65.02
Length > 2 < 4x width	96.78	86.72	82.14	79.37	77.52	74.73	71.84	69.78	67.48	66.45	65.85	65.45
Length > 4x width	103.18	90.99	85.71	82.56	80.39	77.02	73.58	71.18	68.45	67.27	66.56	66.07
Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Steel/ Alum	106.63	99.77	96.90	95.11	93.86	92.09	90.16	88.80	87.33	86.68	86.28	86.02
EIFS	113.00	104.23	100.56	98.27	96.67	94.41	91.94	90.21	88.32	87.50	86.98	86.65
Brick veneer	113.38	104.50	100.78	98.46	96.84	94.55	92.05	90.30	88.38	87.55	87.02	86.69
Glass curtain wall	149.99	130.15	121.82	116.64	113.02	107.89	102.31	98.38	94.11	92.23	91.07	90.33
Stone veneer	192.59	159.98	146.30	137.79	131.83	123.41	114.24	107.79	100.77	97.69	95.77	94.56
Exterior type	Table 2 Length from 2 to less than 4x width											
Steel/ Alum	109.64	102.15	98.75	96.69	95.32	93.24	91.09	89.56	87.84	87.08	86.63	86.34
EIFS	116.84	107.28	102.92	100.30	98.54	95.88	93.13	91.18	88.98	88.01	87.44	87.06
Brick veneer	117.28	107.59	103.17	100.51	98.73	96.04	93.25	91.28	89.05	88.06	87.49	87.10
Glass curtain wall	158.70	137.04	127.17	121.22	117.24	111.22	105.00	100.57	95.60	93.39	92.10	91.24
Stone veneer	206.89	171.30	155.09	145.32	138.78	128.88	118.66	111.39	103.23	99.59	97.47	96.06
Exterior type	Table 3 Length more than 4x width											
Steel/ Alum	114.39	105.33	101.40	99.07	97.45	94.94	92.39	90.60	88.57	87.69	87.16	86.80
EIFS	122.92	111.34	106.31	103.33	101.26	98.06	94.79	92.50	89.91	88.79	88.11	87.65
Brick veneer	123.44	111.70	106.61	103.59	101.49	98.25	94.94	92.62	89.99	88.85	88.17	87.70
Glass curtain wall	172.48	146.24	134.86	128.09	123.41	116.16	108.76	103.58	97.71	95.16	93.62	92.59
Stone veneer	229.53	186.43	167.72	156.61	148.91	136.99	124.84	116.33	106.68	102.49	99.97	98.27

Building Structural Shell Type 9:

Steel reinforced concrete frame, nearly fireproof--PAGE 2

Structure type 9 buildings consist of a frame assembly of highly fire resistant cast-in-place concrete beams and columns



Included:

- Site Prep
- Excavation
- Concrete Footings
- Foundation
- Reinf. Conc. Slab Flr.
- Roof Structure
- Roof Cover
- Ext. Walls w/ Cladding

Excluded:

- Site Value
- Sprinklers
- Elevators
- Interior Finish
- Att. Ext. Improvements
- Yard Improvements
- Other Ext. Improvements

Upper floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Exterior type	Table 1 Length less than 2x width											
Steel/ Alum	80.05	76.94	75.64	74.83	74.27	73.46	72.59	71.98	71.31	71.02	70.83	70.72
EIFS	85.57	80.82	78.82	77.58	76.71	75.48	74.14	73.20	72.17	71.72	71.44	71.27
Brick veneer	85.91	81.05	79.01	77.74	76.86	75.60	74.23	73.27	72.23	71.77	71.48	71.30
Glass curtain wall	117.67	103.30	97.27	93.51	90.89	87.17	83.13	80.29	77.19	75.84	74.99	74.45
Stone veneer	154.63	129.18	118.51	111.86	107.22	100.64	93.49	88.45	82.98	80.57	79.07	78.12
Exterior type	Table 2 Length from 2 to less than 4x width											
Steel/ Alum	81.41	78.02	76.48	75.55	74.93	73.98	73.01	72.32	71.54	71.20	71.00	70.86
EIFS	87.66	82.47	80.10	78.68	77.72	76.28	74.79	73.72	72.53	72.00	71.69	71.49
Brick veneer	88.04	82.74	80.32	78.86	77.89	76.41	74.89	73.81	72.59	72.05	71.73	71.52
Glass curtain wall	123.98	108.29	101.14	96.84	93.95	89.59	85.08	81.88	78.28	76.67	75.74	75.12
Stone veneer	165.80	138.02	125.37	117.74	112.64	104.91	96.94	91.26	84.89	82.05	80.40	79.30
Exterior type	Table 3 Length more than 4x width											
Steel/ Alum	83.56	79.46	77.68	76.62	75.89	74.76	73.60	72.79	71.87	71.47	71.23	71.07
EIFS	90.97	84.68	81.95	80.32	79.20	77.46	75.69	74.44	73.04	72.43	72.06	71.81
Brick veneer	91.41	84.99	82.20	80.55	79.40	77.62	75.81	74.54	73.11	72.48	72.11	71.85
Glass curtain wall	133.96	114.96	106.71	101.81	98.42	93.16	87.80	84.05	79.80	77.95	76.84	76.09
Stone veneer	183.46	149.82	135.22	126.55	120.54	111.24	101.75	95.12	87.59	84.32	82.35	81.02
Floor ht adj +/- per 1 ft	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Ground level WH = 14'	2.3%	1.9%	1.6%	1.5%	1.4%	1.2%	1.0%	0.8%	0.6%	0.5%	0.4%	0.4%
Upper levels WH = 12'	3.3%	2.6%	2.2%	2.0%	1.8%	1.6%	1.3%	1.0%	0.8%	0.6%	0.5%	0.5%
Basement level WH = 9'	3.3%	2.6%	2.2%	2.0%	1.8%	1.5%	1.2%	1.0%	0.7%	0.6%	0.5%	0.5%

NOTE: Ground floor and upper floors must be of the same structure type, but may have different exterior types

Party wall adjustments

A party wall is a building exterior perimeter wall that is a common wall between two buildings. Because the cost of the wall is shared between the two buildings, an adjustment is needed to recognize the lower cost for each building that shares the party wall.

Because the building structural shell cost schedule square foot rates vary depending upon the shape of the building relative to its length and width, the party wall adjustment factors will also vary depending on the building shape. Hence, the party wall adjustment schedule takes into account the size of the building, the floor level (ground, upper, or basement), and the shape of the building (length less than 2x width, length from 2x to 4x width, and length more than 4x width), as well as whether the party wall is the longer wall (length) or the shorter wall (width). Remember that the ground floor perimeter wall includes the cost of the foundation and is therefore more costly, which explains the difference in factor rates between the floors even when the shape is the same.

There is one schedule for all basement party wall adjustments and two schedules for ground floor and upper floor party wall adjustments, depending on building structure type. Because of their similarity, structure types 2, 6, and 7 are in one schedule, and structure types 3, 4, 5, 8, and 9 are in a separate schedule. Apply the indicated adjustment factor to the computed building shell structure cost before adding the finish cost.

For All Building Structural Shell Types - Party Wall Basement Factors

Basement floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Party wall on one long side of building												
Length less than 2x width	0.847	0.867	0.876	0.884	0.891	0.899	0.914	0.926	0.941	0.949	0.954	0.958
Length from 2 to 4x width	0.856	0.875	0.884	0.891	0.896	0.894	0.918	0.929	0.943	0.951	0.956	0.959
Length more than 4x width	0.874	0.886	0.893	0.899	0.904	0.912	0.923	0.933	0.946	0.953	0.958	0.961
Party walls on both long sides of building												
Length less than 2x width	0.764	0.797	0.810	0.822	0.834	0.845	0.869	0.887	0.911	0.922	0.931	0.936
Length from 2 to 4x width	0.648	0.673	0.700	0.719	0.731	0.756	0.784	0.811	0.850	0.873	0.885	0.894
Length more than 4x width	0.558	0.598	0.625	0.644	0.658	0.692	0.729	0.761	0.811	0.836	0.852	0.865
Party wall on one shorter side of building												
Length less than 2x width	0.881	0.893	0.902	0.908	0.912	0.921	0.931	0.940	0.952	0.959	0.963	0.966
Length from 2 to 4x width	0.896	0.906	0.913	0.917	0.921	0.928	0.937	0.945	0.956	0.962	0.965	0.968
Length more than 4x width	0.976	0.979	0.981	0.982	0.983	0.984	0.986	0.988	0.990	0.992	0.992	0.993
Party walls on both shorter sides of building												
Length less than 2x width	0.833	0.850	0.863	0.870	0.875	0.889	0.903	0.915	0.933	0.942	0.948	0.953
Length from 2 to 4x width	0.787	0.801	0.819	0.828	0.835	0.852	0.868	0.884	0.908	0.922	0.929	0.935
Length more than 4x width	0.762	0.783	0.801	0.810	0.816	0.835	0.855	0.871	0.899	0.912	0.921	0.928

Building Structural Shell Types 2, 6, and 7 - Party Wall Ground Floor and Upper Floors Factors

Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Party wall on one long side of building												
Length less than 2x width	0.923	0.937	0.942	0.947	0.951	0.955	0.964	0.970	0.977	0.980	0.983	0.984
Length from 2 to 4x width	0.904	0.916	0.924	0.930	0.935	0.942	0.950	0.958	0.968	0.973	0.976	0.978
Length more than 4x width	0.888	0.902	0.909	0.916	0.920	0.929	0.939	0.948	0.959	0.965	0.969	0.972
Party walls on both long sides of building												
Length less than 2x width	0.845	0.874	0.885	0.894	0.903	0.911	0.927	0.939	0.953	0.960	0.965	0.968
Length from 2 to 4x width	0.736	0.762	0.787	0.804	0.815	0.837	0.859	0.880	0.908	0.924	0.932	0.938
Length more than 4x width	0.607	0.653	0.682	0.702	0.717	0.749	0.785	0.814	0.857	0.878	0.890	0.900
Party wall on one shorter side of building												
Length less than 2x width	0.955	0.961	0.965	0.968	0.969	0.974	0.977	0.981	0.985	0.988	0.989	0.990
Length from 2 to 4x width	0.970	0.974	0.977	0.978	0.980	0.982	0.985	0.987	0.990	0.991	0.992	0.993
Length more than 4x width	0.979	0.982	0.984	0.985	0.986	0.987	0.989	0.991	0.993	0.994	0.994	0.995
Party walls on both shorter sides of building												
Length less than 2x width	0.910	0.921	0.931	0.935	0.938	0.947	0.954	0.961	0.970	0.975	0.978	0.980
Length from 2 to 4x width	0.867	0.878	0.893	0.900	0.905	0.918	0.928	0.938	0.953	0.961	0.965	0.968
Length more than 4x width	0.789	0.813	0.831	0.841	0.847	0.866	0.885	0.900	0.923	0.935	0.941	0.947
Upper floor size:												
Party wall on one long side of building												
Length less than 2x width	0.947	0.960	0.964	0.968	0.971	0.974	0.980	0.984	0.988	0.990	0.991	0.992
Length from 2 to 4x width	0.934	0.945	0.952	0.957	0.961	0.966	0.972	0.977	0.983	0.986	0.988	0.989
Length more than 4x width	0.920	0.934	0.941	0.947	0.950	0.957	0.965	0.971	0.978	0.982	0.984	0.985
Party walls on both long sides of building												
Length less than 2x width	0.895	0.920	0.929	0.936	0.943	0.949	0.959	0.967	0.976	0.979	0.982	0.984
Length from 2 to 4x width	0.817	0.844	0.866	0.880	0.888	0.904	0.920	0.934	0.951	0.960	0.965	0.968
Length more than 4x width	0.718	0.767	0.793	0.811	0.824	0.849	0.875	0.896	0.923	0.935	0.943	0.949
Party wall on one shorter side of building												
Length less than 2x width	0.969	0.975	0.979	0.980	0.982	0.985	0.987	0.989	0.992	0.994	0.994	0.995
Length from 2 to 4x width	0.979	0.983	0.985	0.987	0.988	0.989	0.991	0.993	0.995	0.995	0.996	0.996
Length more than 4x width	0.985	0.988	0.989	0.990	0.991	0.992	0.994	0.995	0.996	0.997	0.997	0.997
Party walls on both shorter sides of building												
Length less than 2x width	0.939	0.950	0.957	0.961	0.963	0.970	0.975	0.979	0.985	0.987	0.989	0.990
Length from 2 to 4x width	0.908	0.921	0.932	0.939	0.943	0.952	0.959	0.966	0.975	0.980	0.982	0.984
Length more than 4x width	0.849	0.874	0.890	0.899	0.905	0.919	0.933	0.944	0.959	0.965	0.969	0.973

Building Structural Shell Types 3, 4, 5, 8 and 9 - Party Wall Ground Floor and Upper Floors Factors

Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000	40,000	80,000	120,000	160,000	200,000
Party wall on one long side of building												
Length less than 2x width	0.852	0.875	0.885	0.893	0.901	0.910	0.925	0.937	0.951	0.958	0.963	0.966
Length from 2 to 4x width	0.832	0.851	0.864	0.874	0.881	0.893	0.908	0.922	0.939	0.948	0.954	0.958
Length more than 4x width	0.812	0.833	0.845	0.855	0.862	0.876	0.893	0.907	0.927	0.938	0.944	0.949
Party walls on both long sides of building												
Length less than 2x width	0.779	0.814	0.829	0.842	0.854	0.866	0.889	0.906	0.927	0.938	0.945	0.949
Length from 2 to 4x width	0.673	0.704	0.732	0.752	0.765	0.790	0.818	0.844	0.880	0.899	0.909	0.917
Length more than 4x width	0.550	0.597	0.628	0.650	0.666	0.702	0.741	0.775	0.825	0.849	0.865	0.877
Party wall on one shorter side of building												
Length less than 2x width	0.808	0.833	0.848	0.859	0.867	0.882	0.900	0.915	0.934	0.944	0.950	0.955
Length from 2 to 4x width	0.813	0.836	0.850	0.860	0.868	0.882	0.899	0.913	0.933	0.942	0.949	0.953
Length more than 4x width	0.812	0.833	0.846	0.855	0.863	0.876	0.893	0.907	0.927	0.937	0.944	0.949
Party walls on both shorter sides of building												
Length less than 2x width	0.771	0.800	0.820	0.832	0.841	0.860	0.880	0.898	0.921	0.933	0.941	0.946
Length from 2 to 4x width	0.731	0.757	0.781	0.795	0.806	0.828	0.851	0.872	0.901	0.916	0.925	0.932
Length more than 4x width	0.659	0.696	0.721	0.737	0.748	0.775	0.805	0.830	0.868	0.886	0.898	0.907
Upper floor size:												
Party wall on one long side of building												
Length less than 2x width	0.818	0.842	0.853	0.863	0.872	0.882	0.900	0.914	0.933	0.942	0.948	0.952
Length from 2 to 4x width	0.797	0.818	0.832	0.842	0.851	0.864	0.882	0.897	0.919	0.931	0.938	0.943
Length more than 4x width	0.778	0.800	0.812	0.823	0.831	0.846	0.865	0.881	0.905	0.918	0.926	0.932
Party walls on both long sides of building												
Length less than 2x width	0.745	0.782	0.797	0.811	0.824	0.838	0.863	0.883	0.908	0.921	0.930	0.935
Length from 2 to 4x width	0.641	0.671	0.700	0.720	0.734	0.760	0.790	0.817	0.857	0.879	0.891	0.900
Length more than 4x width	0.520	0.566	0.596	0.618	0.634	0.670	0.711	0.746	0.799	0.826	0.843	0.857
Party wall on one shorter side of building												
Length less than 2x width	0.848	0.865	0.876	0.883	0.889	0.900	0.914	0.926	0.942	0.950	0.955	0.959
Length from 2 to 4x width	0.856	0.872	0.881	0.887	0.893	0.903	0.916	0.926	0.941	0.950	0.955	0.958
Length more than 4x width	0.862	0.875	0.883	0.889	0.894	0.903	0.914	0.925	0.940	0.947	0.953	0.956
Party walls on both shorter sides of building												
Length less than 2x width	0.806	0.827	0.842	0.852	0.858	0.874	0.891	0.905	0.926	0.937	0.943	0.949
Length from 2 to 4x width	0.763	0.782	0.802	0.813	0.822	0.840	0.860	0.877	0.904	0.918	0.926	0.933
Length more than 4x width	0.687	0.716	0.738	0.751	0.760	0.784	0.810	0.833	0.868	0.886	0.897	0.906

Section B: Interior Finish Schedules

Building Use Types, Finish Descriptions, and Costs

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Section B: Interior Finish Schedules

Building Use Types, Finish Descriptions, and Costs

Add the interior finish rates per SF from below for the use(s) inside the building

The cost of the structural shell of the building is determined from the schedules in Section A. Once the structural shell is complete, the interior finish cost can be added from the finish rates in this section for numerous and varied uses as well as multiple uses that might exist. Hence, this cost approach method provides greater flexibility and precision by separately valuing the structural shell, which has a more predictable and longer life, and the interior finishes, which may have shorter lives, be refurbished frequently to a like-new condition, and accommodate a wide range of uses. The finish costs in this Section B reflect average quality construction, materials, and workmanship. Higher and lower quality construction must have appropriate quality factors applied.

Office Interior Finish

\$65.90

General Office Interior Finish

General office finish cost per square foot includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in offices and similar uses. Typical plumbing includes water heater and one fixture for every 1,300 square feet of floor space. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish cost are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and storage buildings.

\$60.94

Industrial Office Interior Finish

Industrial office finish cost per square foot includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in manufacturing facilities. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish cost are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving, canopies, and storage buildings.

\$71.67

Medical Office Interior Finish

Medical office finish cost per square foot includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in medical, dental, and veterinary offices. Typical plumbing includes one fixture every 400 square feet. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish cost are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and canopies.

Retail Interior Finish

- \$26.29 Automotive Car Wash Interior Finish**
Base interior finish cost per square foot includes typical minimum interior construction and finish, insulation, heating, adequate lighting and plumbing. Not included in the base cost is air conditioning and sprinkler systems. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and storage buildings.
- \$11.34 Automotive Parking Garage Interior Finish**
The shape and size adjustments for a parking structure have already been accounted for in the Section A shell structure type cost, which must be either structure type 8 or 9. The base square foot interior finish cost of parking garages is minimal and only includes adequate lighting and electrical, parking stripes, ramps, signage, and ventilation.
- \$41.31 Automotive Service Center Interior Finish**
Auto service center interior finish cost per square foot includes typical minimum interior construction and finish, insulation, heating, adequate lighting and minimal plumbing as normally found for auto service. Not included in the base cost is air conditioning and sprinkler systems. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and storage buildings.
- \$61.48 Automotive Show Room Interior Finish**
The base square foot interior finish cost includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in showrooms. Typical lighting would include one fixture per 800 square feet of floor area. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Other features are to be priced from the subsidiary schedules or the CIP schedules. Not included are sprinkler systems and exterior improvements such as paving, canopies, and signs.
- \$106.85 Branch Bank Interior Finish**
Small branch banks have become commonplace as commercial retail centers have moved from traditional downtown districts to suburban areas. Branch bank finish cost per square foot includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in branch bank use. Typical plumbing would include one fixture for every 800 square feet of floor area. Additional items included in branch bank interior finish include a 2-hour test, 32" vault door and frame, 24-hour automatic teller, and a drive-up window. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and canopies.

\$32.42

Discount Store Interior Finish

Discount store use cost per square foot includes typical minimum interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in discount stores. Typical plumbing includes a water heater and one fixture for every 4,000 square feet. Not included in the costs are check-out counters or equipment such as scanners. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish cost are sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and storage buildings.

\$77.51

Funeral Home Interior Finish

Funeral home finish cost per square foot includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing for the use. Typical plumbing includes about one fixture per 600 square feet of floor area. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and storage buildings.

\$44.46

General Retail Store Interior Finish

Retail use cost per square foot includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in retail uses. Typical plumbing consists of a water heater and one fixture for every 800 square feet. The shape and size adjustments have already be accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and exterior lighting.

\$49.32

Mini-Mart Convenience Store Interior Finish

These are convenience stores with gasoline sales. The base square foot interior finish cost includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in convenience stores. Typical plumbing includes two rest rooms with three fixtures each, a utility sink, and a water heater. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Other features are to be priced from the subsidiary schedules or the CIP schedules. Not included are sprinkler systems, alarm systems, drive-up windows, walk-in refrigerators/ freezers, and exterior improvements such as paving and signs.

\$54.84

Regional Shopping Centers Interior Finish

Retail use cost per square foot includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in regional shopping center uses. Typical plumbing consists of a water heater and one fixture for every 1,000 square feet. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving, canopies, parking lot lighting, and storage buildings.

\$47.73

Supermarket Interior Finish

Supermarket use cost per square foot includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in supermarkets. Typical plumbing consists of a water heater, two public restrooms and one employee restroom, each with three fixtures. Not included in the costs are refrigerated food cases, walk-in coolers or freezers, or check-out counters or equipment such as scanners. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and canopies.

Restaurants Interior Finish

\$86.60

Fast Food Restaurant Interior Finish

The base square foot interior finish cost includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in fast food restaurants. Typical plumbing includes two rest rooms with three fixtures each, a utility sink, and a water heater. Also included is a sprinkler system including an extra protection grease system over deep fryers. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Other features are to be priced from the subsidiary schedules or the CIP schedules. Not included are drive-up windows, walk-in refrigerators/ freezers, and exterior improvements such as paving and canopies.

\$81.41

Table Service Restaurant Interior Finish

The base square foot interior finish cost includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in most restaurants. Typical plumbing includes two rest rooms with four fixtures each, a utility sink, food preparation sink, and a water heater. Also included is a sprinkler system including an extra protection grease and ventilation system in the cooking area. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Other features are to be priced from the subsidiary schedules or the CIP schedules. Not included are drive-up windows, walk-in refrigerators/ freezers, and exterior improvements such as paving, canopies, and signs.

\$60.68 Tavern/ Cocktail Lounge Interior Finish
The base square foot interior finish cost includes typical interior construction and finish, insulation, heating, air conditioning, and typical lighting and plumbing normally found in cocktail lounges and taverns that do not serve meals. Typical plumbing would include two rest rooms with four fixtures each, a utility sink, a bar sink and a water heater. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Other features are to be priced from the subsidiary schedules or the CIP schedules. Not included are sprinkler systems and exterior improvements such as paving and signs.

Recreation Interior Finish

\$54.62 Bowling Alley Interior Finish

\$67.32 Country Club and Other Clubhouses Interior Finish
Country club and other clubhouse finish cost per square foot includes typical interior construction and finish, insulation, heating, ventilation, air conditioning, and typical lighting and plumbing that meets code. Typical plumbing would include one fixture per 500 square feet of floor area. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and storage buildings.

\$48.28 Fitness, Health, Tennis, Handball Club Interior Finish

\$69.86 Indoor Swimming Facility Interior Finish

\$63.00 Skating Rink Interior Finish
Interior finish cost per square foot for the above recreational building types includes typical interior construction and finish, insulation, heating, ventilation, air conditioning, and typical lighting and plumbing that meets code. Typical plumbing would include one fixture per 1,000 square feet of floor area. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and canopies.

\$62.43 Theater - Live & Cinema Interior Finish
Live and cinema theater interior finish cost per square foot includes typical interior construction and finish, insulation, heating, ventilation, air conditioning, and typical lighting and plumbing that meets code. Typical plumbing would include one fixture per 600 square feet of floor area. The shape and size adjustments have already be accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and canopies.

Manufacturing and Industrial Interior Finish

\$61.20

Heavy Manufacturing Interior Finish

Interior finish cost per square foot for heavy manufacturing includes interior construction that is more substantial than typical, with floor slab thickness at least 50% greater than normal, minimal finish, insulation, heating, and ventilation capable of handling large spaces, no air conditioning, heavy duty electrical, adequate lighting and plumbing (with one standard plumbing fixture per 1,000 square feet of floor area) that meets code that is typical for heavy manufacturing use. Specialty plumbing must be priced from the plumbing subsidiary schedule. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish cost are air conditioning, elevators, and sprinkler systems. An allowance for office space is not included in the manufacturing interior finish cost and should be priced using the separate industrial office finish use cost. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving, exterior lighting, and utility buildings.

\$108.60

Industrial Research & Development Interior Finish

Industrial research & development interior finish cost per square foot includes specialized interior construction and finish, insulation, heating, ventilation, air conditioning, specialized lighting and electrical, plumbing, and sprinkler systems required for such facilities. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish cost are elevators. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving, canopies, and storage buildings.

\$31.93

Light Manufacturing Interior Finish

Interior finish cost per square foot for light manufacturing includes interior construction that is typical, with normal floor slab thickness, minimal finish, insulation, heating, ventilation, with substantial electrical and adequate lighting and plumbing. Typical plumbing would include one standard fixture per 1,000 square feet of floor area that meets code for typical light manufacturing use. Specialty plumbing must be priced from the plumbing subsidiary schedule. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are air conditioning, elevators and sprinkler systems. An allowance for office space is not included in the manufacturing interior finish costs and should be priced using the separate industrial office finish use cost. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving, exterior lighting, and utility buildings.

Warehouse and Storage Interior Finish

\$48.14

Cold Storage Warehouse Interior Finish

The cold storage warehouse use finish has heavily insulated partitions for refrigeration and a concrete slab floor that can carry heavy loads. It has heavy duty electrical service for handling the refrigeration load, adequate lighting, and good insulation with minimal heating and two plumbing fixtures per 6,000 square feet of floor space. It typically has at least one overhead door and loading dock for each 2,500 SF and adequate personnel doors. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. An allowance for office space is not included in the warehouse interior finish cost and should be priced using the separate industrial office finish use cost. Not included in the interior finish costs are air conditioning or sprinkler systems. These features, if present, are to be priced from the subsidiary schedules or the CIP schedules.

\$32.05

Distribution Warehouse Interior Finish

The distribution warehouse use finish is adequate with partitions and a concrete slab floor that can carry very heavy loads. It has adequate electric, lighting, and insulation, heating and two plumbing fixtures per 10,000 square feet of floor space. It typically has at least one overhead door and loading dock for each 1,800 SF of floor space and adequate personnel doors. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. An allowance for office space is not included in the warehouse interior finish cost and should be priced using the separate industrial office finish use cost. Not included in the interior finish costs are air conditioning or sprinkler systems. These features, if present, are to be priced from the subsidiary schedules or the CIP schedules.

\$8.96

Light Utility Storage Interior Finish

Light utility storage interior finish is nearly non-existent with only minimal electric and lighting. It does not have the cost of partitions separating small individual rental units or the overhead garage door that provides access to rental units. It has one personnel door and one overhead door for each 4,000 SF of area, and has the typical interior finish of smaller utility storage buildings having lower eave heights. The shape and size have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are partitions, wall finish, insulation, any HVAC, plumbing, or sprinkler systems. These features, if present, are to be priced from the subsidiary schedules or the CIP schedules.

\$18.52

Light Warehouse Interior Finish

The light warehouse use finish is minimum with a concrete slab floor that cannot carry very heavy loads, and has only minimal electric and lighting. It typically has no more than one overhead door and loading dock for each 3,000 SF and minimal personnel doors. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are partitions, wall finish, insulation, any HVAC, plumbing, or sprinkler systems. These features, if present, are to be priced from the subsidiary schedules or the CIP schedules.

\$16.00

Mini-Warehouse Storage Interior Finish

Mini-warehouse buildings contain rental units for the purpose of self-storage by the renters. The finish is minimum with the main cost being the secure partitions separating the small individual rental units and the overhead garage door that provides access to each unit. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are any HVAC, insulation, plumbing, electrical, lighting, or sprinkler systems. These features, if present, are to be priced from the subsidiary schedules or the CIP schedules.

\$25.43

Storage Warehouse Interior Finish

The storage warehouse use finish is adequate with some partitions and a concrete slab floor that can carry very heavy loads. It has adequate electric, lighting, and insulation with minimal heating and two plumbing fixtures per 10,000 square feet of floor space. It typically has at least one overhead door and loading dock for each 2,500 SF of floor space and adequate personnel doors. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. An allowance for office space is not included in the warehouse interior finish cost and should be priced using the separate industrial office finish use cost. Not included in the interior finish costs are enhanced heating, air conditioning or sprinkler systems. These and other features, if present, are to be priced from the subsidiary schedules or the CIP schedules.

\$43.47

Truck Terminal/ Transit Warehouse Interior Finish

The truck terminal/ transit warehouse use finish is adequate with partitions and a concrete slab floor that can carry very heavy loads. It has good electric, lighting, insulation, heating and two plumbing fixtures per 8,000 square feet of floor space. It typically has at least one large, powered overhead door and an adjustable loading dock for each 1,000 SF of floor area and adequate personnel doors. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. An allowance for office space is not included in the warehouse interior finish costs and should be priced using the separate industrial office finish use costs. Not included in the interior finish costs are air conditioning or sprinkler systems. These features, if present, are to be priced from the subsidiary schedules or the CIP schedules.

Multi-Unit and Human Care Interior Finish

\$49.73

Apartments/ Condos/ Multiple Residential Living Unit Interior Finish

The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Included in the finish cost per square foot of multiple residential living units are average quality wall, ceiling, and floor finishes, a typical amount for partitioning, heating, central air conditioning, electrical and lighting, kitchen cabinets, and five plumbing fixtures per living unit. The absence of any of these amenities requires a minus adjustment to the RCN estimate. Likewise, additional features such as fireplaces, elevators, extra plumbing fixtures, security systems, fire protection systems, etc. require a plus adjustment to the RCN estimate. Costs do not include site improvements such as paving, carports and storage buildings. Because smaller living units result in more plumbing fixtures and kitchen cabinets for any building of a given size, a unit size cost adjustment factor must be applied to the base finish rate per square foot:

Unit Size	500	600	700	800	900	1,000	1,100	1,200	1,300	1,400	1,500
Factor	1.15	1.13	1.11	1.09	1.07	1.06	1.04	1.03	1.02	1.01	1.00

\$19.78

Apartment/ Condo Garage Interior Finish

New construction often includes built-in finished garages. The finish cost per square foot includes typical interior construction and finish, painting of drywall, scant electrical service, a single garage door and an electric garage door opener. Any other detached garages should be valued from the residential garage schedule in Publication 123, Instructions for Residential Schedules.

\$71.44

Day Care Facility Interior Finish

Day care facility finish cost per square foot includes typical interior construction and finish, insulation, heating, ventilation, air conditioning, and typical lighting and plumbing that meets code. Typical plumbing includes about 300 square feet per fixture. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and storage buildings.

\$134.40

General Hospital Interior Finish

General hospital finish cost per square foot includes typical interior specialized construction and finish, insulation, heating, ventilation, air conditioning, and typical lighting and plumbing that meets code. Typical plumbing includes 200 square feet per plumbing fixture. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as canopies and paving.

- \$81.84 Motel – Hotel Interior Finish, All Story Heights - Full Service**
- \$55.07 Motel – Hotel Interior Finish, All Story Heights - Limited Service**
 It is important that the appropriate shell structure type be selected from Section A. For 1-3 story height motel-hotels, the structure type is usually 2, 3 or 4. For 4-7 story height motel-hotels, the structure type can be 4, 8 or 9. For more than 7 stories, the shell structure type should be 8 or 9. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Base costs include typical room finish with average quality wall, ceiling, and floor finishes, a typical amount for partitioning, heating and air conditioning, adequate electrical and lighting, and three plumbing fixtures per motel-hotel unit. Costs do not include elevators, sprinkler systems, unit kitchens, motel-hotel pool, or site improvements such as paving and canopies.
- \$94.66 Nursing Home/ Convalescent Hospital (Skilled Care) Interior Finish**
 Skilled care nursing home/ convalescent hospital finish cost per square foot includes typical interior construction and finish, insulation, heating, ventilation, air conditioning, and typical lighting and plumbing that meets code. Typical plumbing includes about one fixture per 200 square feet of floor area. The shape and size adjustments have already been accounted for in the Section A shell structure type cost. Not included in the interior finish costs are elevators and sprinkler systems. Other features are to be priced from the subsidiary schedules or the CIP schedules. Costs do not include site improvements such as paving and storage buildings.
- \$60.14 Senior Housing – Assisted Living Interior Finish**
 Assisted living facilities consist of one and two-bedroom suites with limited kitchen facilities. There is a large commercial style kitchen and a common dining area, reception area, lounges, beauty parlor, gift shop, craft or recreation room, and therapy rooms. Base costs include typical room finish with average quality wall, ceiling, and floor finishes, a typical amount of partitioning, adequate electrical and lighting, and alarm systems. Typical plumbing would include one fixture for every 200 square feet of floor area. Heating and air- conditioning are supplied through individual heat pump systems in suites and a central system in service areas. Additional features such as fireplaces, elevators, extra plumbing fixtures, security systems, fire protection systems, etc., require a plus adjustment to the RCN estimate. Costs do not include site improvements such as paving and storage buildings. The shape and size adjustments have already been accounted for in the Section A shell structure type cost.

Appendix A: Use Finish Costs Supplement

The 41 primary interior use type descriptions and costs outlined above cover the interior use finish cost for most buildings. Some are blends of several similar interior use finish types and the cost is the average for the group. Please refer to the uses and costs in Appendix A if the interior finish use cost for any of the more than 200 specific interior use types is required.

Appendix A: Use Finish Costs Supplement

	Use Description (in Alphabetical Order)	Interior Finish \$ for SFFA
A	Apartment/ Condo	\$46.69
	Apartment/ Condo built-in garage	\$19.78
	Apartment, Multi-Res	\$46.77
	Apartment, MultiRes Senior-Low Rise	\$53.33
	Apartment, MultiRes-Assisted Living	\$61.52
	Automotive Car Wash, Automatic	\$29.58
	Automotive Car Wash, Drive-Thru	\$22.99
	Automotive Car Wash, Self-Serve	\$22.61
	Automotive Center w/ Bays	\$38.91
	Automotive Complete Dealership	\$53.93
	Automotive Municipal Service Garage	\$51.07
	Automotive Repair Service Garage	\$34.55
	Automotive Service Garage Shed	\$8.36
	Automotive Service Station	\$47.53
	Automotive Service, Mini-Lube Garage	\$40.72
	Automotive Showroom	\$61.48
	B	Bank
Bank, Central		\$102.27
Bank, Mini Bank		\$113.67
C	Care Facility, Convalescent Hospital	\$94.66
	Care Facility, Day Care	\$71.44
	Care Facility, Group Care	\$59.40
	Church	\$76.00
	Church Educational Wing	\$54.59
	Church Fellowship Hall	\$70.19
	Church Foyer/ Narthex	\$65.74
	Church with Sunday School	\$73.54
	Club, City Club	\$69.56
	Club, Clubhouse	\$57.84
	Club, Country Club	\$69.03
	Club, Fraternal	\$71.71
	Club, Lodge	\$68.97
	Club, Senior Center	\$66.81
F	Food Booth, Prefab	\$101.43
	Food Service, Banquet Hall	\$79.28
	Food Service, Cafeteria	\$77.95
	Food Service, Cocktail Lounge	\$61.99
	Food Service, Dining Atrium	\$12.78
	Food Service, Modular Diner	\$99.03
	Food Service, Restaurant, Fast Food	\$86.60
	Food Service, Restaurant, Table Service	\$80.11
	Food Service, Restaurant, Truck Stop	\$88.30
	Food Service, Snack Bar	\$42.07
	Food Service, Tavern/ Bar	\$59.36
G	Gov Community Serv Building	\$81.91
	Gov Correctional Facility (Prison)	\$152.60
	Gov Fire Station, Staffed	\$67.13
	Gov Fire Station, Volunteer	\$36.68

Appendix A: Use Finish Costs Supplement, cont.

Use Description (in Alphabetical Order)	Interior Finish \$ for SFFA
Gov Jail at Sheriff/ Police Station	\$86.89
Gov Library, Public	\$87.11
Government Building	\$85.39
Group Living, Fraternity Housing	\$58.78
Group Living, Home For The Elderly	\$59.50
Group Living, Rooming House	\$44.47
Guest House	\$46.55
H Hangar, Maintenance, motorized hangar door	\$34.93
Hangar, Storage, motorized hangar door	\$24.98
Hangar, T-Hangar, motorized hangar door	\$20.12
High-Rise Row (Town) House	\$51.05
I Industrial Flex Mall Bldg	\$31.91
Industrial Office Space	\$60.94
Industrial, Heavy Manufacture	\$61.20
Industrial, Light Mfg	\$31.93
Industrial, Loft Manufacturing	\$34.60
Industrial, Mill-Manufacturing	\$38.00
L Lodging, Bed & Breakfast Inn	\$63.81
Lodging, Guest cottage	\$50.20
Lodging, Hotel, Full Service	\$81.84
Lodging, Hotel, Limited Service	\$54.54
Lodging, Hotel/ Motel Service	\$57.03
Lodging, Motel Guest Room	\$54.21
Lodging, Motel Room 1 Story-Dble	\$53.34
Lodging, Motel Room 1 Story-Single	\$54.53
Lodging, Motel Room 2 Story-Single	\$54.53
Lodging, Motel Room 2 Sty-Dble Row	\$53.62
Lodging, Motel Unit	\$53.93
Lodging, Motel, Extended Stay	\$57.21
Lodging, Motel, Office-Apartment	\$63.29
Lodging, Truck Terminal Bunk Room	\$40.75
M Medical, Dental Clinic	\$69.69
Medical, Dispensary	\$66.09
Medical, Hospital	\$136.25
Medical, Massage Therapy	\$65.74
Medical, Office	\$75.14
Medical, Physical Therapy	\$59.43
Medical, Surgical Center	\$132.55
Medical, Veterinary Hospital	\$89.76
Medical, Veterinary Office	\$69.85
Mortuary	\$76.52
O Office, General	\$65.90
Other, Arena	\$53.41
Other, Armory	\$58.06
Other, Broadcast Facility	\$77.65
Other, Casino	\$84.58
Other, Computer Center	\$76.43
Other, Convention Center	\$64.53

Appendix A: Use Finish Costs Supplement, cont.

Use Description (in Alphabetical Order)	Interior Finish \$ for SFFA
Other, Firing Range Building	\$40.93
Other, Funeral Home	\$77.51
Other, Kennel Animal Care	\$36.24
Other, Laundromat	\$42.34
Other, Mall Concourse	\$49.55
Other, Mechanical Penthouse	\$16.14
Other, Museum	\$86.81
Other, Passenger Terminal	\$79.83
Other, Power Generating Plant	\$36.32
Other, Restroom Bldg	\$89.31
Other, Telephone Bldg	\$89.10
Other, Truck Stop	\$36.96
Other, Visitor Center	\$83.55
P Parking Garage	\$11.34
Parking Levels	\$11.34
Parking Roof	\$9.97
Parking Structure, Underground	\$10.33
Post Office, Branch	\$87.52
Post Office, Mail Processing Facility	\$60.45
Post Office, Main	\$75.88
R Recreation, Arcade	\$56.97
Recreation, Bowling Alley	\$52.26
Recreation, Commercial Gym	\$44.89
Recreation, Community Center	\$66.23
Recreation, Fitness Center	\$56.75
Recreation, Handball/ Racquetball Club	\$56.42
Recreation, Health Club	\$49.73
Recreation, Indoor Tennis Club	\$33.61
Recreation, Indoor Swim Facility	\$69.86
Rectory	\$63.37
Research/ Development	\$84.28
Research/ Development Laboratory	\$132.92
S Salon, Barber Shop	\$35.04
Salon, Beauty	\$35.04
Salon, Eye Care	\$40.10
Salon, Hair Care	\$40.10
School - Admin/ Office Bldg	\$75.34
School - Arts & Crafts Bldg	\$76.39
School - Auditorium	\$66.41
School - Book Store	\$50.44
School - Classroom	\$72.89
School - College Classroom	\$76.95
School - College Lecture Hall	\$78.26
School - Commons - Student Activity	\$81.78
School - Dormitory	\$61.23
School - Elementary	\$78.57
School - Fieldhouse	\$68.25
School - Fine Arts Bldg	\$74.64

Appendix A: Use Finish Costs Supplement, cont.

Use Description (in Alphabetical Order)	Interior Finish \$ for SFFA
School - Gymnasium	\$80.30
School - High School	\$78.14
School - Laboratory Classroom	\$87.30
School - Lecture Classroom	\$75.01
School - Libraries, College	\$78.01
School - Media Center	\$73.40
School - Middle School	\$77.32
School - Multipurpose Use	\$74.84
School - Phys Ed Bldg	\$74.27
School - Relocatable Classroom	\$57.74
School - Science Building	\$131.83
School - Shop Classroom	\$71.72
School - Shower Room	\$63.49
School - Technical Trades Use	\$61.16
School - Typical College Building	\$80.51
School - Vocational	\$74.66
Skating Rink, Ice	\$64.01
Skating Rink, Roller	\$61.98
Storage - Mini Warehouse	\$16.00
Storage - Mini Warehouse, Climate Controlled	\$25.45
Storage - Mini Warehouse, Hi-Rise	\$18.51
Storage Garage	\$26.22
Storage, Cold Storage Facility	\$48.14
Storage, Heavy Utility/ Storage	\$9.56
Storage, Light Utility Storage	\$8.96
Storage-Maintenance Bldg	\$20.37
Stores, Big Box Superstore	\$33.73
Stores, Category Killers	\$33.73
Stores, Community Shopping Ctr	\$45.15
Stores, Convenience Market	\$44.41
Stores, Creameries, Dairy Processing & Sales	\$47.19
Stores, Dairy sales	\$50.51
Stores, Department Store	\$44.71
Stores, Discount Dept Store	\$32.12
Stores, Discount Warehouse Store	\$31.68
Stores, Drugstore	\$48.59
Stores, Dry Cleaners/ Laundry	\$38.70
Stores, Florist Shop	\$40.48
Stores, General Retail	\$35.92
Stores, Jewelry Store	\$46.91
Stores, Mall Anchor Dept Store	\$43.82
Stores, Market	\$50.85
Stores, Mega Warehouse Club Store	\$30.46
Stores, Men's Apparel	\$46.51
Stores, Mini-Mart Conv Store	\$54.23
Stores, Neighborhood Shopping Ctr	\$40.78
Stores, Outlet Store	\$37.11
Stores, Regional Discount Shop Ctr	\$52.88

Appendix A: Use Finish Costs Supplement, cont.

	Use Description (in Alphabetical Order)	Interior Finish \$ for SFFA
	Stores, Regional Shopping Center	\$56.80
	Stores, Small Mall Shop	\$47.78
	Stores, Supermarket	\$48.92
	Stores, Warehouse Food Store	\$43.43
	Stores, Warehouse Showroom Store	\$33.93
	Stores, Winery Shop	\$61.51
	Stores, Women's Apparel	\$47.67
T	Theater - Cinema	\$60.45
	Theater - Live	\$64.41
U	Utility/ Storage	\$12.39
W	Warehouse - Distribution	\$32.05
	Warehouse - Light	\$18.52
	Warehouse - Loft	\$17.65
	Warehouse - Mega	\$18.67
	Warehouse - Storage	\$25.43
	Warehouse - Truck Terminal/ Transit	\$43.47

Section C: Commercial Appraisal Method

Use the commercial cost schedules to develop a replacement cost new (RCN) of a structure. When using the commercial cost schedules, determine the following before making any calculations for the cost estimate.

- 1) Type of Structural Shell.
- 2) Type of Interior Finish based on use.

Use the structural shell type schedule to estimate the shell cost per SF of each level of the structure. The SF schedules range from 2,000-200,000 SF. If the square footage of the structure falls between two values in the table, the use of interpolation is needed to determine the correct dollar value per square foot.

Interpolation Method

Use the known information to determine the SF cost for a structure whose square footage falls between the known values on the structural shell schedule. For instance, if the subject property is a 7,500 SF Steel-frame structure that measures 75' x 100', select the Building Structural Shell Type 7 schedule. The subject property has metal exterior walls. Based on the building dimensions, the length is less than 2x the width, so values would be chosen from Table 1.

Ground floor size:	2,000	4,000	6,000	8,000	10,000	15,000	25,000
Exterior type	Table 1 Length less than 2x width						
Vinyl/ T-1-11/ metal	38.64	31.60	28.65	26.81	25.53	23.71	21.73

The subject has 7,500 SF and the table has values for 6,000 and 8,000 SF. To interpolate,

6,000 SF	\$28.65 SF	
8,000 SF	\$26.81 SF	
Difference	\$ 1.84 SF	
Divided by	2,000 SF	(8,000 - 6,000)
Equals per SF difference of	\$.00092	
Multiply by 1500 SF	\$ 1.38 SF	
Subtract from 6,000 SF Rate		
\$28.65 -\$1.38 =	\$ 27.27 = Interpolated base rate	
Multiply by 7,500 SF =	\$ 204,525 = Base cost for structural shell	

Next, read the description at the top of each Building Structural Shell type schedule to determine what features are included and excluded. Adjust for features not included in the base cost. Other improvements can be found in Publication 127, IDOR Component-in-Place schedules. Determine the RCN of the shell after the quality grade has been applied. The quality grade table follows on page 46.

Next, determine the typical interior finish based on the use of the structure. Carefully read the interior finish schedules in Section B to see what features are and are not included in the base cost. Several frequently used schedules are included in this publication on pages 67-70. Additional adjustments may need to be made for such items as air conditioning, sprinkler systems, etc.

There are 41 “blended” rates of interior finish costs per SF in Section B. In addition, Appendix A on page 40 lists more than 200 detailed SF interior finish costs. Because the interior finish could be much newer than the structural shell, the interior could have a separate quality grade as well as a separate REL. Use these details in conjunction with the Commercial Property Record Card to calculate the building structural shell cost and the interior costs, then total them to determine a full value for the structure.

Quality Grade

The accuracy of an RCN obtained from the IDOR cost schedules is greatly affected by proper quality grading.

Quality grade represents the quality of construction, the workmanship, and the type of materials used. The quality of workmanship and materials can greatly affect the cost of construction and the value of the improvement.

Most improvements fall within a definite class of construction involving average quality of workmanship and materials. This type of construction is designated as grade “C” or average which carries a factor of 100 percent or 1.00. Some localities will never have an excellent quality building, while in some localities it will be difficult to build a low-cost or low-quality building because of code requirements.

An assessor may use a different quality grade factor if he or she determines that the subject property was not built using average quality materials and workmanship. A quality grade must be assigned to each improvement and should be established during construction if possible.

Since quality grade is originally established at the time of construction based upon current “normal or typical” materials, workmanship, and construction standards that were current at the time, the quality grade should be reviewed at least every few years.

Quality grade may change based on the materials and construction standards used in cost schedule descriptions to establish base cost for the RCN. It is not uncommon for the quality grade to change several times during the life of the improvement as materials, technology, and construction standards improve or evolve.

Quality Grade		
Grade	Quality	Factor
AA	Superior	225%
A	Excellent	150%
B	Good	122%
C	Average	100%
D	Inferior	82%
E	Poor	50%

Quality Grades Discussion

For the building shell structure, the differentiating features would be the architectural treatment and complexity as well as the specific quality of materials and workmanship. For example, there are different types and costs of brick and different bricklaying quality. The overall architectural complexity, quality of materials, and quality of workmanship would contribute to the estimate of building shell structure grade. A building structural shell might have moderate architectural treatment and perhaps above average materials and workmanship and be graded “B”. However, its interior finish could be of the highest quality for the particular use and be graded “AA”. The ability to separately grade the building shell structure and the interior use finish provides significant flexibility for the assessor, especially when the building contains multiple uses, some of which may have been refurbished since the building was first constructed.

The grade is always relative to the particular shell structure type or specified use. For example, the grade assignment for a Type 8 Structure might be “C” relative to other type 8 structures because the architectural treatment is plain and the materials and workmanship are average or typical for type 8 structures. However, if the structure contains elegant office space that is far above the typical office space, the use interior finish might be graded “AA” or “A”.

Building Structure Quality Grades

- AA** Grade Building Structures have an outstanding, unique, or exceptional architectural style and custom design, constructed with the finest quality materials and workmanship.
- A** Grade Building Structures have an excellent architectural style and custom design, are very attractive, and are constructed with excellent quality materials and workmanship throughout.
- B** Grade Building Structures have moderate architectural treatment and are constructed with good quality materials and above average workmanship throughout.
- C** Grade Building Structures have minimal architectural treatment and are constructed with average quality materials and workmanship throughout. These buildings conform to the base specifications used to develop the pricing schedule.
- D** Grade Building Structures are void of architectural treatment. They are constructed with economy quality materials and fair or marginal workmanship throughout.
- E** Grade Building Structures are architecturally undesirable. They are constructed with a very cheap grade of materials, usually “culls” and “seconds” and very poor-quality workmanship resulting from unskilled, inexperienced, “do-it-yourself” type labor.

Interior Finish Quality Grades

- AA** Grade Use Interior Finish is of superior quality and design with exceptional materials and outstanding workmanship, built-in features, and the best available heating system, plumbing and lighting fixtures.
- A** Grade Use Interior Finish is of excellent quality and design with high quality materials and excellent workmanship throughout and built-in features. The interior typically has a deluxe heating system and excellent grade plumbing and lighting fixtures.
- B** Grade Use Interior Finish is of good quality and design with above average quality materials and good workmanship throughout and some built-in features. The interior typically has a very good heating system and good grade plumbing and lighting fixtures.
- C** Grade Use Interior Finish has average quality and design with contractor grade materials and average workmanship throughout with limited built-in features. The interior finish has standard grade heating, plumbing and lighting fixtures. The interior finish conforms to the base specifications used to develop the pricing schedule.
- D** Grade Use Interior Finish has below average quality and design, materials, and workmanship throughout with minimal built-in features. The interior finish has minimum, below standard grade heating, plumbing and lighting fixtures.
- E** Grade Use Interior Finish has very poor quality and design, a very cheap grade of materials, usually “culls” and “seconds” and very poor-quality workmanship resulting from unskilled, inexperienced, “do-it-yourself” type labor.

Quality Grade vs. Condition

The assessor must use extreme caution not to confuse quality and condition. Condition refers to the physical condition of the improvement. Condition changes due to depreciation, such as wear and tear, use, and abuse. Condition is accounted for by using the following Remaining Economic Life (REL) Table.

Commercial REL Table Instructions

The Commercial Remaining Economic Life (REL) table is designed as a guide to determine the loss in value due to physical, functional, and economic depreciation. The remaining economic life (REL) factor is dependent upon the assessor's judgement of condition, desirability, and utility of the subject's improvements. Please note:

- The table is used only when local supportive data is non-existent. It cannot substitute for actual market data.
- Age is a relative thing. A building with an actual age of 15 years may have an effective age of 3 years or 25 years based on physical condition alone. Considering desirability or utility may further reduce or increase the effective age estimate.
- Actual age and effective age are the same when physical condition of the improvement is average.

The table attempts to relate loss in value due to:

Condition (C) = physical deterioration

Desirability (D) = economic obsolescence

Utility (U) = functional obsolescence

To use the Commercial REL table, separate these basic depreciation components into two categories for consideration in Schedule A.

- Condition (C) = age considering physical condition
- Desirability and Utility (D and U) = effective age

Analyze the two categories, then estimate the effective age that is correlated to an REL factor. This process uses the age/ life method of depreciation with an assumed economic life of 45 years.

Using the REL table

Condition-Inspect the physical condition and compare it to similar improvements of the same age. By making this comparison, the effective age can be estimated according to the improvement's condition. Actual age and effective age are the same when the physical condition of the improvement is average. Conditions that substantially differ from the average result in an effective age less than or greater than the actual age.

Locate this age (actual age considering condition) in the far left-hand column of Schedule A and then correlate it with the effective age number in the appropriate desirability and utility column.

Desirability-Focus on any loss of value due to economic obsolescence. Economic obsolescence is usually caused by factors outside of the property. Some typical areas to consider are general location, highway access, railroad access, market for products, labor markets, utility sources, community relations, police and fire protection, competition, financing, taxes, educational and recreational facilities.

Utility-Focus on loss of value caused by functional obsolescence. This obsolescence may be in the form of inadequacy or super-adequacy. For instance, a commercial building with a 30' ceiling height may suffer a loss of value due to functional obsolescence if the market reflects a need for 15' ceilings. The value loss is caused by over-adequacy.

Consider the following: number of stories, expansion space, transportation access and egress, parking facilities, ceiling height, adequacy of building fixtures (e.g., lighting, heating, ventilation, plumbing), existing utilities or availability, office area, traffic patterns, and building size.

Average desirability and utility requires that the improvement have the features that are typical for a mercantile business to operate in the building. Lack of economic or functional features result in a less than average rating (i.e., poor or unsound). Additional features that contribute economically or functionally to the improvement result in an above-average rating (i.e., excellent or good) for desirability or utility.

After the desirability and utility rating has been assigned, correlate the effective age from Schedule A in Column One with the appropriate column (e.g., average, good) to reach an effective age that reflects the improvement's CDU. Locate this final estimate of effective age in Schedule B and correlate it with an estimate of REL of the improvement.

Commercial REL Table

(Use for all Exterior Shell Types and all Interior finishes EXCEPT Apartment/ Condo/ Built-in Garage Interior Finishes. For those, use the Residential REL Table on page 64.)

Schedule A						Schedule B	
Age* considering Physical Condition	Effective Age considering Desirability and Utility					2 nd Effective Age	Remaining Economic Life Factor
Age	E	G	A	P	U	Age	REL
1	1	1	1	6	11	1	98
2	1	1	2	7	12	2	96
3	1	1	3	8	13	3	94
4	1	1	4	9	14	4	92
5	1	1	5	10	15	5	90
6	1	1	6	11	16	6	88
7	1	2	7	12	17	7	86
8	1	3	8	13	18	8	84
9	1	4	9	14	19	9	82
10	1	5	10	15	20	10	80
11	1	6	11	16	21	11	78
12	2	7	12	17	22	12	76
13	3	8	13	18	23	13	74
14	4	9	14	19	24	14	72
15	5	10	15	20	25	15	70
16	6	11	16	21	26	16	68
17	7	12	17	22	27	17	66
18	8	13	18	23	28	18	64
19	9	17	19	24	29	19	62
20	10	15	20	25	30	20	60
21	11	16	21	26	31	21	58
22	12	17	22	27	32	22	56
23	13	18	23	28	33	23	54
24	14	19	24	29	34	24	52
25	15	20	25	30	35	25	50
26	16	21	26	31	36	26	48
27	17	22	27	32	37	27	46
28	18	23	28	33	38	28	44
29	19	24	29	34	39	29	42
30	20	25	30	35	40	30	40
31	21	26	31	36	41	31	38
32	22	27	32	37	42	32	36
33	23	28	33	38	43	33	34
34	24	29	34	39	44	34	32
35	25	30	35	40	45	35	30
36	26	31	36	41	-	36	28
37	27	32	37	42	-	37	26
38	28	33	38	43	-	38	24
39	29	34	39	44	-	39	22
40	30	35	40	45	-	40	20
41	31	36	41	-	-	41	18
42	32	37	42	-	-	42	16
43	33	38	43	-	-	43	14
44	34	39	44	-	-	44	12
45	35	40	45	-	-	45	10
46	36	41	-	-	-	Over 45	10
47	37	42	-	-	-	* Actual age and effective age are the same when physical condition of the improvement is average.	
48	38	43	-	-	-		
49	39	44	-	-	-		
50	40	45	-	-	-		

Using the New Commercial/ Industrial Property Record Card (2019 version)

The new 2019 PRC-4 has been designed to allow separate calculations and adjustments to both the structural shell and the interior finish. There are distinct areas on the card to do those calculations separately. The age, CDU and REL factors applied to the interior finish type may differ from the structural shell due to remodeling, change of use or updating. The application of the new methodology and use of the revised PRC is totally voluntary.

In addition, several interior use types use an accelerated depreciation table-it functions the same way using the existing Commercial REL table, but it advances the effective age to reflect differing rates of depreciation. The interior finish types this affects are: Fast Food, Convenience Store, Branch Bank and Hotel/ Motel. For these finish types, use the applicable section of the Adjusted Age Table below to correlate the Age Considering Physical Condition (column 1) to find the Adjusted 1st Effective Age (column 2). Carry this Adjusted 1st Effective Age to the first column of Schedule A in the Commercial REL Table. Determine the 2nd Effective Age by correlating this adjusted age with the applicable Desirability and Utility rating in Schedule A. Use this 2nd Effective Age in Schedule B to determine the corresponding REL Factor.

For example, consider a convenience store that was built 10 years ago and has not been remodeled or well maintained. Compared to similar properties, its Age Considering Physical Condition is 15. Because convenience stores have a shorter economic life than most commercial properties, use the Adjusted Age Table to determine an adjusted age for this property. Correlate 15 in Column 1 of the “Fast Food/ Convenience/ Branch Bank” section of the table to determine an Adjusted 1st Effective Age of 24. Because of other economic and functional depreciation, the CDU of this convenience store is Poor. In Schedule A of the Commercial REL Table, correlate the adjusted age of 24 with the “P” column to determine the 2nd Effective Age of 29. In Schedule B of the Commercial REL Table, look up the 2nd Effective Age of 29 to determine an REL of .42 or 58% depreciation.

Adjusted Age Table			
Fast Food/ Convenience/ Branch Bank		Hotel/ Motel	
Age Considering Physical Condition	Adjusted 1st Effective Age	Age Considering Physical Condition	Adjusted 1st Effective Age
Column 1	Column 2	Column 1	Column 2
1-2	3	1-2	3
3-4	6	3-4	6
5-6	9	5-6	9
7-8	12	7-8	12
9-10	15	9-10	15
11-12	18	11-12	18
13-14	21	13-14	21
15-16	24	15-16	24
17-18	27	17-18	27
19-20	30	19-20	30
21-22	33	21-22	33
23-24	36	23-24	36
25-26	39	25-26	39
Over 26	40	27-28	42
		29-30	45

Commercial 2019 PRC-4

Commercial 2019 PRC-4 Instructions

Structural Shell

- Step 1** Determine the Building's Age, Structural Shell Type, Dimensions, Eave Height, Foundation, Exterior Wall Cover and Square Footage per floor level. Use the "Structural Shell Type" and Exterior Type to determine the cost per SF for each floor level. The ratio of the Length of the structure to the Width of the structure will determine which Table will be used. If the $L \div W$ equals less than 2, use Table 1 figures. If $L \div W$ is greater than 2 but less than 4, use Table 2. If $L \div W$ is greater than 4, use Table 3.
- Step 2** Sketch a diagram of the building and identify Structural Shell Type, Foundation, Exterior Cover Material and Interior Finish and label all dimensions.
- Step 3** Select the appropriate SF cost reflecting the exterior cover material and interpolate for any costs for square footages that fall between listed SF costs.
- Step 4** Note adjustments for wall height differences per floor level if needed.
- Step 5** Note adjustments for party walls per floor level if needed.
- Step 6** Multiply the SF cost per floor level by the number of square feet by any adjustment factors and enter this total on the computation ladder.
- Step 7** Assign the appropriate quality grade factor, cost, design, neighborhood and appraiser factors (if applicable) and chain multiply to arrive at a single factor.
- Step 8** Multiply the Total Base Price Structure by the combined factor to determine the Replacement Cost New (RCN)
- Step 9** Determine the appropriate REL factor based on the Effective Age and CDU rating. Multiply the RCN by the REL factor to determine the Full Value of the Structural Shell.

Interior Finish

- Step 1** Determine the Interior's Age and Finish Type, Dimensions and Square Footage for each floor. Some finish types will vary between and within floors.
- Step 2** Select the appropriate SF cost and interpolate if necessary.
- Step 3** Multiply the Finished area per Floor by the SF cost. Apply an apartment factor if the interior finish is apartment/ condo. This results in the Base Price of the Interior.
- Step 4** Note the necessary adjustments for items like a/c, heating, sprinklers, plumbing fixtures, etc. Refer to each Interior Finish Type to confirm which items are included in the Base Price and adjust accordingly. Other features can be found in the component-in-place schedules in IDOR's Publication 127.

- Step 5** Multiply the SF cost per floor level by the number of square feet by any adjustment factors and enter this total on the computation ladder. Subtotal all adjustments.
- Step 6** Add the interior adjustments subtotal to the base price interior to determine the Total Base Price Interior.
- Step 7** Assign the appropriate quality grade factor, cost, design, neighborhood and appraiser factors (if applicable) and chain multiply to arrive at a single factor.
- Step 8** Multiply the Total Base Price Interior by the combined factor to determine the Replacement Cost New (RCN).
- Step 9** Determine the appropriate REL factor based on the Effective Age and CDU rating. Note that this may be substantially different than the age and CDU for the Structural Shell due to remodeling. Multiply the RCN by the REL factor to determine the Full Value of the Interior Finish.
- Step 10** Add the Full Value Structural Shell and the Full Value Interior Finish to determine the Total Full Value for both.

Summary of Other Exterior Improvements

- Step 1** Note the Type of Exterior Improvement, number, construction type, and size in the designated area of the PRC.
- Step 2** Find the Cost in the Publication 127 CIP schedules.
- Step 3** Follow Steps 7, 8, and 9 from above to determine a Full Value for each improvement listed.
- Step 4** Total the Full Value of the Other Improvements. Add to the Total Value of the Structural Shell and the Full Value Interior Finish to determine the Full Value Exterior, Interior and Other for the property.

PRC Valuation Sample 1- Type 2 with General Retail interior finish

The subject property is a 15-year old, two-story building with a basement. It is currently being used for general retail purposes.

The structure is constructed of brick veneer on a wood frame (Type 2) and measures 250' x 40'. It has an eave height of 26'. The basement is constructed of concrete block and used for storage.

The Quality Grade is C, or average.

It has typical finishes for a general retail use and average heating and air conditioning on the first and second floors. The first and second floors also have a sprinkler system.

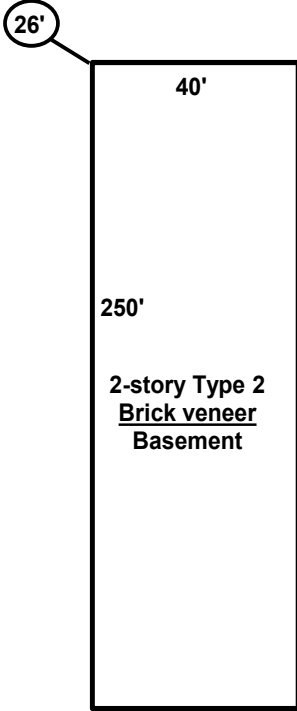
Refer to the 2019 PRC-4 on the following page.



PRC 4-2019

Property Record Card - Commercial - Industrial

Construction Specifications				Interior Finish and Floor Level				Data Bank		Exterior Description				Computation				
Foundation				Retail 1, 2	X Restaurant		Multi-unit other	SFGA	10,000	WH SFFA x \$/SF Floor Cost x WH Adj. x Party Wall								
X	Basement/Crawl		Slab	Office		Warehouse		Length	250	9	Basement 10,000 x 31.07 =			310,700				
Exterior Shell Type				Manufacturing		Recreation		Vacant		14	1st Floor 10,000 x 33.84 =			338,400				
2	Lt. Com. wood/ steel	6	Wood Post Fr.	Grocery		Convenience		Abandoned		12	2nd Floor 10,000 x 23.48 =			234,800				
3	Conc. Blk. unreinf.	7	Steel Pre-eng.	Apartments		No. of Units		No. Rooms/ Unit			3rd Floor							
4	Conc. Blk. reinf.	8	Steel Struc FR	Avg. Unit Size SF		Apt. Unit Factor		No. Stories 2	Table 1 2 3		Additional							
5	Conc. Tilt-up	9	Steel Struc FP								Total Base Price Structure			883,900				
Exterior Wall Cover Material											Quality Grade C Year Built 2004							
	B	1	2	3	A					C	D	G	NH	A	Multiply by Comb. Fac.	x	1.00	
	Vinyl/ Wood/ Metal									Age	1st Eff Age	2nd Eff Age	CDU	Structure RCN =			883,900	
	Stucco/ Aluminum Siding									15	15	15	A	REL .70	x	.70		
	Cedar/ Redwood/ Resin									Full Value Structural Shell				618,730				
	EIFS <2" thick									Interior Finish Description				Computation				
	Brick Veneer		X	X						Interior Base Cost Computation			if appl.					
	Stone Veneer									Finish & Area	SFFA	\$/SF Cost	Apt. Factor					
	Painted Concrete Block									1st/Main	Retail	10,000	44.46		444,600			
	T-1-11 Plywood									2nd	Retail	10,000	44.46		444,600			
	Aluminum/ Pine									Base Price Interior				889,200				
	EIFS >2" thick									Interior Adjustments								
	Glass Curtain Wall									A/C	included in base			N/A				
	Struc. Steel/ Aluminum									Heat	included in base			N/A				
Heat				B	1	2	3	A					Sprinkler	10,000 SF x 2 x \$ 4.20 =			84,000	
	Central Warm Air		X	X						Plumbing	10,000 SF x 21800 = 25 fix. expected + 1 H20 = 26			N/A				
	Hot Water/ Steam									Other								
	Heat Pump									Subtotal Interior Adjustments				84,000				
	Unit Heaters									Total Base Price Interior				973,200				
	Other									Quality Grade C Year Remodeled N/A								
	None		X							C	D	G	NH	A	Multiply by Comb. Fac.	x	1.00	
Air Conditioning				B	1	2	3	A					Age	1st Eff Age	2nd Eff Age	CDU	Interior RCN	973,200
	Central		X	X						15	15	15	A	REL .70	x	.70		
	Heat Pump									Full Value Interior Finish				681,240				
	Unit									Total Full Value Interior and Exterior Shell				1,299,970				
	None		X							Memo								
Roofing																		
	Shingle		X	Metal/Other														
	Composite			Slate														
	Frame - Wood			Steel		Other												
Sprinklers																		
	None																	
	Present		X	X														
Plumbing Type and No. Fixtures																		
	1 Residential	26	2 Commercial															
	3 Industrial		4 Specialty															
				Listed by:									Total Full Value Other Improvements					
				Date:									Total Full Value Exterior, Interior & Other					
														1,299,970				



PRC Valuation Sample 1 Procedure

1. Record the construction specifications in the appropriate section of the PRC-4.
2. Determine the Structural Shell Type. In this example, the Structural Shell Type is Type 2 Light Commercial. See the specifications recorded on the PRC.
3. Complete the Data Bank. In the area previously used for the Wall Ratio, compute the value for the length of the building divided by the width of the building. This number will determine which table will be used for the base costs. If the $L \div W$ equals less than 2, use Table 1 figures. If $L \div W$ is greater than 2 but less than 4, use Table 2. If $L \div W$ is greater than 4, use Table 3.

4. Basement-unfinished	9'	Table 3	31.07 x 10,000 SF =	310,700
First floor	14'	Table 3	33.84 x 10,000 SF =	338,400
Second Floor	12'	Table 3	23.48 x 10,000 SF =	234,800
Total Base Price Structure				883,900

There are no other adjustments to the Structural Shell.

5. Calculate the RCN based on any factors present. If no adjustments are needed, the combined factor will be 1.00. $\times 1.00$ 883,900
6. Use the Commercial REL table to determine the 1st and 2nd Effective ages and CDU factor used to determine the correct REL. The REL is .70
7. Multiply the Structural Shell RCN by the REL factor to determine
The Full Value Structural Shell. $\times .70$ **618,730**
8. Determine the **Interior Finish Type**. In this example, select **General Retail** Finish for a cost of \$44.46/SF. There are 2 floors finished for this use, so they may be listed together or separately if the finishes were different.

Basement-unfinished	no additional cost	
First Floor	44.46 x 10,000 SF =	444,600
Second floor	44.46 x 10,000 SF =	444,600
Base Price Interior Finish		889,200

9. Determine the adjustments.
A/C and Heat are included in the base cost of the General Retail Finish, so make no adjustments.

However, sprinklers are present on the first and second floors, and are not included in the base cost. Refer to the Fire Sprinkler Schedule #36 on page 68 of this publication. (All CIP schedules are published in Publication 127 but there are a few frequently used schedules in Pub 126 for ease of use). Fire sprinkler costs are \$4.20/ Square Foot Service Area for areas over 10,000 SF.

First Floor and Second Floor 4.20 x 20,000 SF = 84,000

10. Next calculate typical or expected plumbing. Typical General Retail Finish plumbing includes 1 fixture per 800 SF plus 1 water heater. Divide the total building above-ground SF by 800 to determine the number of fixtures that are “typical” or “expected”. Then add an additional fixture for the water heater.

20,000 SF ÷ 800 = 25 plus 1 water heater = 26 total fixtures expected.

The PRC example indicates there are 26 fixtures present, so no adjustment for plumbing is necessary.

11. Subtotal the adjustments and add them to the Base Price interior to determine the Total Base Price Interior. **84,000 + 889,200 = 973,200**

12. Apply the appropriate factors as needed for the Interior only to determine the Interior RCN. None are indicated so no adjustment factor is needed.

13. Now determine the correct Effective ages and CDU to determine the REL factor for the interior.

Note: the age of the interior can be substantially different than the age of the shell due to remodeling. The type of finish may change as well according to what the intended use is of the interior. Therefore, the Quality Grade, effective ages, CDU and REL factors can all be different from the factors determined for the Structural Shell of the building.

In this example, the age of the interior is the same as the age of the structure and the CDU is Average, so the REL factor remains the same as the REL for the Structural Shell. **(.70)**

14. Multiply by the factors and the correct REL to determine the Full Value Interior Finish. **973,200 x .70 = 681,240**

15. Add the Full Value Structural Shell and the Full Value Interior finish to determine the Total Full Value Interior and Exterior Shell.

618,730 + 681,240 = 1,299,970

16. There are no Other Exterior Improvements indicated, so there are no further Adjustments. The Total Full Value Exterior, Interior & Other is **\$1,299,970**

Apartment/ Multi-family Valuation

To estimate the RCN of apartment buildings and condos (which are simply a form of ownership, not construction style) that were built for apartment/ multi-family use (not converted from a private residence), use the methods and schedules from this publication with one exception: The REL of the interior finish only for an apartment/ condo garage should be calculated from the Residential Remaining Economic Life (REL) Table instead of the Commercial REL table which is used for all other commercial interior finishes. A Residential REL table is included in this publication following the PRC Valuation Sample 2.

A separate unit size adjustment factor is also applied for an average unit size less than 1500 SF. Add the full values for both the structural shell and interior finish together to get the full value of the structure.

There is also an interior finish rate for a built-in garage that includes the cost for a finished garage with drywall, scant electrical service, a single garage door and an electric garage door opener. Detached garages should be priced from the residential garage schedules in Publication 123.

The cost of sprinklers, elevators, paving, etc. is not included in the base cost and should be calculated from the subsidiary schedules in Section D of this publication or the CIP schedules in Publication 127. An adjustment for no heat and/or no air conditioning can be made from the appropriate "No Heat, No A/C" schedule in Section D.

Rowhouse style apartments of 3 stories or less should be valued using the Residential Row House Schedules contained in IDOR's Publication 123. Follow the same rules for condominium occupancy.

The income approach and sales comparison approach to value should always be considered foremost when valuing previously-built apartments and other income-producing properties.

PRC Valuation Sample 2 Type 3 with Apartment interior finish

The subject property is a 10-year-old, 2-story brick on block structure on a slab. It has been built as an apartment building (not converted).

The structure measures 80' x 44' with an eave height of 20'. The Quality Grade is C for the structure, but the interior has a higher quality finish of B resulting in a quality grade factor of 1.22. There are 8 separate units. The PRC-4 has been completed as follows:



PRC 4-2019

Property Record Card - Commercial - Industrial

Construction Specifications				Interior Finish and Floor Level				Data Bank				Exterior Description				Computation				
Foundation				Retail		Restaurant		Multi-unit other		SFGA	3,520		WH	SFFA x \$/SF Floor Cost x WH Adj. x Party Wall						
Basement/Crawl <input checked="" type="checkbox"/> Slab				Office		Warehouse		Other		Length	80		Basement							
Exterior Shell Type				Manufacturing		Recreation		Vacant		Width	44		10	1st Floor 3,520 x 42.78 x .89 =		134,021				
2	Lt. Com. wood/ steel		6	Wood Post Fr.		Grocery		Convenience		Abandoned		Ratio L ÷ W	1.8		10	2nd Floor 3,520 x 30.68 x .92 =		99,354		
3	Conc. Blk. unreinf.		7	Steel Pre-eng.		Apartments	<input checked="" type="checkbox"/>	No. of Units	8	No. Rooms/ Unit	4	Perimeter	248		3rd Floor					
4	Conc. Blk. reinf.		8	Steel Struc FR		Avg. Unit Size SF 880		Apt. Unit Factor 1.074		No. Stories	2	Table	1 2 3		Additional					
5	Conc. Tilt-up		9	Steel Struc FP																
Exterior Wall Cover Material																				
	B	1	2	3	A															
Vinyl/ Wood/ Metal																				
Stucco/ Aluminum Siding																				
Cedar/ Redwood/ Resin																				
EIFS <2" thick																				
Brick Veneer				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>															
Stone Veneer																				
Painted Concrete Block																				
T-1-11 Plywood																				
Aluminum/ Pine																				
EIFS >2" thick																				
Glass Curtain Wall																				
Struc. Steel/ Aluminum																				
Heat				B	1	2	3	A												
Central Warm Air				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>															
Hot Water/ Steam																				
Heat Pump																				
Unit Heaters																				
Other																				
None				<input checked="" type="checkbox"/>																
Air Conditioning				B	1	2	3	A												
Central				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>															
Heat Pump																				
Unit																				
None				<input checked="" type="checkbox"/>																
Roofing																				
Shingle		Metal <input checked="" type="checkbox"/> Other																		
Composite		Slate <input checked="" type="checkbox"/>																		
Frame - Wood		Steel Other																		
Sprinklers																				
None				B	1	2	3	A												
Present																				
Plumbing Type and No. Fixtures																				
56	1 Residential	2 Commercial																		
	3 Industrial	4 Specialty																		
Listed by:																				
Date:																				
Summary of Other Exterior Improvements (i.e. paving, signs, parking lot lighting, canopies, docks, store fronts, etc.)																				
Type	Number	Construction	Size	Rate	Subtotal	Grade	Factor	Replacment Cost New	Age	CDU	REL	Full Value								
Parking Lot	1	Asphalt	1,320	2.97	3,920	C	1.00	3,920	10	A	0.80	3,136								
Total Full Value Other Improvements														3,136						
Total Full Value Exterior, Interior & Other														614,260						

Interior Finish Description				Computation	
Interior Base Cost Computation				if appl.	
Finish & Area	SFFA	\$/SF Cost	Apt. Factor		
1st/Main Apartment	3,520	49.73	1.074	188,003	
2nd Apartment	3,520	49.73	1.074	188,003	
Base Price Interior				376,006	
Interior Adjustments					
A/C included in base					
Heat included in base					
Sprinkler None					
Plumbing 8 Units x 5 fixtures = 40 expected/56 Actual = 16				14,880	
Other 16 x \$930 =					
Subtotal Interior Adjustments				14,880	
Total Base Price Interior				390,886	
Quality Grade B Year Remodeled N/A					
C	D	G 1.22	NH	A	Multiply by Comb. Fac. x 1.22
Age	1st Eff Age	2nd Eff Age	CDU	Interior RCN	476,881
10	10	10	A	REL .89	x .89
Full Value Interior Finish				424,424	
Total Full Value Interior and Exterior Shell				611,124	

20' 30' Parking Lot

44' 80' 2-story Type 3 Brick veneer

10' Apartment

10' Apartment

Land Value = \$82,300

Memo

Sample 2 Apartment Building Valuation

- Record the construction specifications in the appropriate section of the PRC-4.
- Determine the Structural Shell Type. In this example, the Structural Shell Type is Type 3 Unreinforced Concrete Block Walls. See the description on page 12.
- Complete the Data Bank. In the area previously used for the Wall Ratio, compute the value for the length of the building divided by the width of the building. This number will determine which table will be used for the base costs. If the $L \div W$ equals less than 2, use Table 1 figures. If $L \div W$ is greater than 2 but less than 4, use Table 2. If $L \div W$ is greater than 4, use Table 3. 80 feet (L) divided by 44 feet (W) is less than 2, so select numbers from Table 1.
- The Square Footage for each level is 3,520 SF. Therefore, interpolation is needed since our given SF costs in the publication are for 3,000 SF and 4,000 SF. Our interpolated numbers will give us the following:

First floor	10'	Table 1	\$ 42.78/SF
Second Floor	10'	Table 1	\$ 30.68/SF

- In addition, an adjustment for wall height is needed. Both the 1st and 2nd floors are 10' high, and the standard costs per each story are based on 14' (1st floor) and 12' (2nd floor) wall heights. Again, due to the SFFA being 3,520, interpolation will again be needed. Our interpolated wall height adjustment factors will be computed as:

First floor	10' actual height vs. 14' expected height = - 4' variance Interpolated % adjustment = -11% (rounded) or a factor of .89
Second floor	10' actual height vs. 12' expected height = - 2' variance Interpolated % adjustment = - 8% (rounded) or a factor of .92

The calculated Base Price would be as follows:

First floor	10'	Table 1	\$ 42.78 x 3,520 x .89 =	\$ 134,021
Second Floor	10'	Table 1	\$ 30.68 x 3,520 x .92 =	\$ 99,354

Total Base Price Structure **\$ 233,375**

There are no other adjustments to the Structural Shell.

- Calculate the RCN based on any factors present. If no adjustments are needed, the combined factor will be 1.00 x 1.00 **\$ 233,375**

- Use the Commercial REL table to determine the 1st and 2nd Effective ages and CDU factor used to determine the correct REL. The REL is .80

Multiply the Structural Shell RCN by the REL factor to determine the
Full Value Structural Shell. **x .80** **\$ 186,700**

- Determine the **Interior Finish Type**. In this example, select **Apartment Finish** for a cost of \$49.73/SF. There are 2 floors finished for this use, so they may be listed together or separately if the finishes were different.

In addition, there is an apartment factor used to account for the higher number of fixtures and partitions in a building with apartment units smaller than 1500 SF (See Page 38 under Apartment Interior finish costs).

The Average Unit Size is found by dividing the total square footage by the number of units (3,520 SF x 2 floors = 7,040 SF divided by 8 units = 880 SF Avg unit size). The interpolated factor is 1.074.

First Floor	49.73 x 3,520 x 1.074 =	\$ 188,003
Second floor	49.73 x 3,520 x 1.074 =	\$ 188,003
Base Price Interior Finish		\$ 376,006

- Determine the adjustments.
 A/C and Heat are included in the base cost of the Apartment Finish, so make no adjustments. Sprinklers are not present and not included in the base cost, so make no adjustments.

- Next calculate typical or expected plumbing. Typical Apartment Finish plumbing includes 5 fixtures per unit. 8 units x 5 fixtures = 40 expected fixtures. The actual number of fixtures recorded on the PRC is 56, so there is a difference of +16 plumbing fixtures. Apartment fixtures will be calculated using the Residential fixture cost of \$930/ fixture. 16 x \$930 = \$ 14,880

- Subtotal the adjustments and add them to the Base Price interior to determine the
Total Base Price Interior. **14,880 + 376,006 =** **\$ 390,886**

- The PRC indicates a Quality Grade of B. The corresponding factor is 1.22. No other adjustment factors are indicated. The calculation will be the product of the Total Base Price Interior and the Quality Grade Factor.
390,886 x 1.22 = \$ 476,881

13. Now determine the correct Effective ages and CDU to determine the REL factor for the interior.

Note: the age of the interior can be substantially different than the age of the shell due to remodeling. The type of finish may change as well according to what the intended use is of the interior. Therefore, the Quality Grade, effective ages, CDU and REL factors can all be different from the factors determined for the Structural Shell of the building.

In this example, the age of the interior is the same as the age of the structure (10 yrs.) and the CDU is Average. However, the REL will be calculated for the Apartment Interior Finish using the **Residential** REL Table. This table indicates a REL of **.89**.

14. Multiply the Interior RCN by the correct REL to determine the Full Value Interior Finish. **476,881 x .89 = \$ 424,424**

15. Add the Full Value Structural Shell and the Full Value Interior finish to determine the Total Full value Interior and Exterior Shell. **186,700 + 424,424 = \$ 611,124**

16. There is one parking lot indicated on the PRC in the Other Exterior Improvements. Refer to the Paving Schedule # 62 on Page 70 of this schedule. It indicates a cost of \$ 2.97/SF for the 30' x 44' (1,320 SF) Asphalt parking lot. **1,320 x 2.97 = \$ 3,920**

17. Finally, determine the REL factor for the parking lot using the **Commercial** REL table. For a Grade C, 10-yr old improvement with an average CDU, the REL factor is .80. **3,920 x .80 = \$ 3,136**

18. Add the **Total Full Values** for the Shell, Interior and Other. **611,124 + 3,136 = \$ 614,260**

***Residential REL Table- Use only with apartment/ condo interior finish type schedule**

Residential REL Table															
Schedule A - Effective Age						Schedule B - REL %									
Age	CDU Rating					Age	CDU Rating					Eff. Age	REL Percent	Eff. Age	REL Percent
	E	G	A	P	U		E	G	A	P	U				
1	1	1	1	14	27	36	19	30	36	48	62	1	99	52	50
2	1	1	2	15	28	37	20	31	37	50	64	2	97	53	49
3	1	2	3	16	29	38	21	31	38	51	64	3	96	54	48
4	1	2	4	16	30	39	22	32	39	53	65	4	95	55	47
5	1	3	5	17	31	40	23	33	40	54	66	5	94	56	47
6	2	4	6	17	32	41	24	34	41	55	67	6	93	57	47
7	2	5	7	18	33	42	25	35	42	56	67	7	92	58	46
8	2	6	8	19	34	43	25	36	43	57	68	8	91	59	46
9	2	6	9	20	35	44	26	38	44	59	69	9	90	60	46
10	2	7	10	21	38	45	27	39	45	60	70	10	89	61	45
11	3	7	11	22	39	46	28	39	46	60	70	11	88	62	45
12	3	8	12	23	39	47	29	40	47	61	70	12	87	63	44
13	3	9	13	24	40	48	30	40	48	62	71	13	86	64	43
14	4	10	14	24	40	49	31	41	49	64	73	14	85	65	43
15	4	11	15	25	40	50	32	41	50	65	75	15	84	66	42
16	4	12	16	26	43	51	32	42	51	66	76	16	82	67	42
17	4	13	17	30	45	52	32	43	52	67	77	17	81	68	42
18	5	14	18	31	46	53	33	44	53	68	78	18	80	69	41
19	5	15	19	31	46	54	33	44	54	68	78	19	79	70	41
20	6	16	20	32	47	55	33	45	55	69	80	20	77	71	41
21	8	16	21	33	48	56	34	46	56	70	81	21	76	72	41
22	10	17	22	33	48	57	34	47	57	71	82	22	75	73	40
23	10	18	23	34	49	58	35	48	58	72	83	23	74	74	40
24	11	19	24	35	50	59	35	48	59	72	83	24	73	75	40
25	11	20	25	35	50	60	36	49	60	73	83	25	72	76	39
26	12	21	26	36	51	61	37	50	61	73	85	26	71	77	39
27	12	22	27	38	52	62	38	50	62	74	86	27	70	78	39
28	13	23	28	38	52	63	39	51	63	74	86	28	69	79	38
29	13	24	29	39	53	64	40	52	64	76	88	29	68	80	38
30	13	25	30	40	54	65	42	53	65	78	90	30	67	81	38
31	14	25	31	40	54	66	42	53	66	78	91	31	66	82	37
32	15	26	32	42	56	67	43	55	67	80	93	32	65	83	37
33	16	27	33	44	59	68	44	58	68	84	97	33	65	84	37
34	17	28	34	46	60	69	45	59	69	86	100	34	63	85	36
35	18	29	35	47	61	70	46	60	70	88	102	35	62	86	36
<p>To adjust a dwelling's replacement cost new (RCN) for depreciation, the remaining economic life (REL) percentage of the dwelling must be determined.</p> <p>First use Schedule A - Effective Age to determine the dwelling's Effective Age by correlating the dwelling's actual age with its condition, desirability, and utility (CDU) rating.</p> <p>Then, in Schedule B - REL%, use this Effective Age to correlate to the corresponding REL percentage.</p> <p>Finally, multiply the RCN of the dwelling by this REL percentage.</p>												36	62	87	36
												37	61	88	35
												38	59	89	35
												39	59	90	35
												40	58	91	34
												41	57	92	34
												42	57	93	33
												43	56	94	33
												44	56	95	33
												45	56	96	32
												46	55	97	32
												47	54	98	32
												48	54	99	31
												49	52	100	31
												50	51	101	30
												51	51	102	30

Condominium Valuation

The term “condominium” is a system of ownership in one or more multi-unit buildings. The unit owner owns an “air lot” unit and a share of the undivided interest in the common elements of the land and the building.

An air lot is defined as the space enclosed by the three-dimensional measurement of the unit. The measurement is from the inner faces of the walls, ceiling and floor. Common elements of the buildings consist of the remaining area, including exterior and interior walls, hall, stairways, etc. All the designated land (as recorded) upon which the buildings are situated, are the common elements of land.

The amount of ownership of common elements is declared by a percentage figure applicable to each individual unit. This schedule of ownership is found in a declaration that must be recorded by the developer in accordance with the Illinois Condominium Property Act.

The information supplied in the declaration (and plat) is important in the assessment process. The assessor must become familiar with the declaration in order to extract the needed information. For further information reference the Condominium Property Act (765 ILCS 605), Sections 3-6, 8 and 10.

To determine an average SF Unit Size, divide the SFFA of all finished areas by the number of condominium units.

Note that the sales comparison approach to value is the most reliable for already constructed buildings when there is adequate current sales data available.

For this example, use the building we just valued in the Sample 2 Apartment Valuation PRC. A value will be placed on individual building units.



Condominium Procedure

Step 1- Review the recorded condominium declaration to understand the real property rights owned by each unit owner. Attached to the declaration are exhibits that detail the percentage of ownership in common elements, the description of the condominium tract, and drawings showing precise dimensions of the condominium buildings and each unit.

Step 2- Value the total condominium tract, as if vacant land. The tract is owned in common, therefore, allocate the land value according to the ownership percentage as recorded in the declaration. List the individual units on the “Condominium Summary, PRC-7” form.

Step 3- Determine the total RCN. List and compute the RCN of the building and common elements using the Commercial PRC-4. List common elements (driveways, swimming pools, tennis courts, etc.) in the “Summary of Other Exterior Improvements’ section of the PRC-4. This step has already been completed in the Sample 2 Apartment Building Valuation on previous pages. Remember, the condominium designation does not make the structure any different- it is just a form of ownership, so the value would be the same for the structure using the cost approach to value. The income or market approaches may determine a different reflection of market price.

Step 4- Using the ownership percentage listed on the declaration form, value the unit or units proportionally. All single units totaled should equal 100% value for the entire tract and buildings. The value for the land should also total 100% for all units.

Card No. <u>1</u> of <u>1</u>		Condominium Summary Publication 126-2019 Valuation Example						Area	Sect.	Block	Parcel		
Depreciated Replacement Cost Condominium		Bldgs. & Common Ele.	Other Common Impr.		Total Land Value			Assessment Level					
		611,124	3,136		82,300			33.33	%	_____	%	33.33	%
Unit ID	% of Common Ele.	Unit Market Value	Bldg. & Common Ele.	Other Common Impr.	Total Common Ele.	Land Value	Unit Residual Value	Assessed Value					
								Land	Common	Unit			
No. 1	10.75 %		65,696	337	66,033	8,847		2,949		22,009			
No. 2	16.41 %		100,285	515	100,800	13,505		4,501		33,597			
No. 3	16.58 %		101,324	520	101,844	13,645		13,645		33,945			
No. 4	10.93 %		66,796	343	67,139	8,995		8,995		22,377			
No. 5	10.76 %		65,757	337	66,094	8,855		8,855		22,029			
No. 6	11.69 %		71,440	367	71,807	9,621		9,621		23,933			
No. 7	11.85 %		72,418	372	72,790	9,753		9,753		24,261			
No. 8	11.03 %		67,407	346	67,753	9,078		9,078		32,581			
No.	%												
No.	%												
No.	%												
No.	%												
No.	%												
No.	%												
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No.	%												
No.	%												
No.	%												
No.	%												
No.	%												

Section D: Subsidiary Schedules Frequently Used

The following are a few component-in-place schedules that are frequently used in making cost adjustments for commercial improvements. The entire list of commercial subsidiary cost schedules can be found in IDOR's Publication 127.

HVAC No Heat - No A/C Plumbing Sprinklers Paving Store Fronts and Signage

33 Heating-Ventilation-Air Conditioning (HVAC) Per SFFA			
Prices for HVAC are provided below according to finish or use of the building (or area within the building). The prices were developed on the basis of heating, ventilation or air conditioning cubic area and then converted to SF costs for the convenience of the assessor. Because of this, it may be necessary to adjust the costs for height. The base height is 14' and 3% of the cost indicated should be added or deducted for each foot of height variation in the subject building.			
Type	Comm.	Ind.	Office
Electric Baseboard	\$3.85	\$3.65	\$5.50
Electric Wall/ Floor Heaters	\$2.33	\$2.33	\$3.10
Heat Pump, Heat & Cool	\$7.38	\$5.82	\$11.36
Forced Warm Air, Central System	\$5.48	\$4.12	\$8.22
Ventilation only w/ Ducts	\$1.25	\$0.90	\$1.92
Hot Water Baseboard	\$8.94	\$6.29	\$13.38
Radiant Floor	\$4.50	\$3.26	\$6.75
Steam Radiators			
w/ Boiler	\$6.44	\$5.12	\$12.31
w/o Boiler	\$5.24	\$4.22	\$10.09
Suspended unit heaters			
Gas Fired	\$2.10	\$1.60	\$2.55
w/ Steam or Hot Water Coil	\$3.50	\$1.85	
Zoned Hot & Cold Water	\$18.50	\$14.00	\$28.00
Zoned Hot & Cold Air	\$10.50	\$8.00	\$16.50
A/C Central Forced Air	\$6.50	\$4.50	\$9.50

No Heat - No A/C Schedule (-)*		
Subtract per SF cost for any subject property with no heat or no central air conditioning if included in the interior use base cost.		
Use Type	No Heat Deduct per SF	No A/C Deduct per SF
Apartment	3.20	2.10
Office	6.90	4.60
Commercial	5.55	3.70
Industrial	4.00	2.65
* No Heat - No A/C Schedule is not included in Publication 127.		

32 Plumbing			
The typical fixture cost is for sinks, water closets, tubs, water heaters, urinals, etc. The cost includes amounts for fixture water supply, waste, and vent lines. Exterior piping to the building is not included.			
Typical Fixtures			
Residential Type 1 \$930	Commercial Type 2 \$1,500	Industrial Type 3 \$2,000	Specialty Type 4 See Below
Specialty Fixtures		Each	
Drinking Fountain,	Floor		\$2,100
	Wall		\$1,700
Electric Water Cooler			\$1,700
Laundry Tub,	Single		\$1,500
	Double		\$1,650
Sump Pump			\$380
Janitor's Sink			\$1,110
Emergency Shower or Face Wash			\$1,540
Cast Iron Trough Sinks,	4 Faucet 48"		\$2,100
	8 Faucet 96"		\$3,500
Add for Stainless Steel			20%

36 Fire Sprinkler System		
Sprinkler costs include all interior heads, supply lines, and accessories. Wet system piping contains water at all times; dry pipe system contains air under pressure and is used in unheated areas where freezing might be encountered. For dry pipe systems, add 10% to the wet system prices. Pumps should be added to the costs below.		
Area Serviced	Cost per SFSA	
	Ordinary Hazard*	Extra Hazard**
Through 1,000 SF	\$8.75	\$13.10
1,001 - 2,000	\$8.50	\$12.75
2,001-5,000	\$5.60	\$8.40
5,001-10,000	\$4.68	\$7.00
Over	\$4.20	\$6.30
*Ordinary hazard occupancies include stores, commercial, offices, garages, factories, warehouses, etc.		
** Extra hazard occupancies include aircraft hangers, chemical works, linoleum manufacturing, paint shops and varnish works, solvent extracting. etc.		

14 Store Fronts	
Type	*Per SF Display Area
Wood Framed Glass & Trim with	
Wood Siding	\$31.50
Brick	\$41.50
Ceramic	\$37.50
Marble or Granite	\$81.50
Steel Framed Glass & Aluminum Trim with	
Brick	\$51.75
Ceramic	\$47.75
Marble or Granite	\$92.50
Steel Framed Glass & Stainless Steel or Bronze Trim with	
Brick	\$74.50
Ceramic	\$68.75
Marble or Granite	\$112.50
*In calculating the total display area, include surface area of all glass, sign, and bulkhead areas; including entrance way, islands, etc.	
Additions to Basic Store Fronts	
Display Platforms (Per SF)	\$9.80
Display Ceiling (Per SF)	\$4.50
Display Back (Per SF)	\$7.80
Entrance Doors	
Revolving Door, each	\$42,000.00
Hinged Aluminum & Glass, Each	\$1,800.00
Hinged Bronze or Stainless, Each	\$3,700.00
Add for Automatic Door Opener (per door)	\$6,200.00
Sliding Automatic Glass & Stainless Steel	\$17,500.00
Security Gates (Per SF of Gate Area)	
Scissor type Folding Gate Painted Steel	\$22.25
14 Roll-up Grille, Alum Manual, Each	\$39.50
Add for Motorized Operation, Each	\$1,780.00
Signs (Marquees) Per SF	
Plain, Steel Framed	\$36.00
Ornamental, Steel Framed	\$45.00
Plain, Wood Framed	\$31.50
Wood or Stucco, Wood Framed	\$26.30
Illuminated Plastic, Single Face	\$95.00

62		Paving	
Paving Type		Paving Type	
Asphalt	Per SFGA	Curbs	Per LF
Binder Course		Asphalt	
2" Thick	\$1.59	6" x 8"	\$5.56
3" Thick	\$2.33	8" x 8"	\$6.30
4" Thick	\$3.07	Concrete	
Wearing Course		6" x 18" Cast in Place, Straight	\$16.80
1 1/2" Thick	\$1.38	6" x 18" Cast in Place, Curved	\$20.54
2" Thick	\$1.76	6" x 18" Precast, Straight	\$22.80
2 1/2" Thick	\$2.14	6" x 18" Precast, Curved	\$28.50
Light Traffic (Drive-ins, Parking Lots, etc.)	\$2.97	Granite	
		5" x 16"	\$24.50
Heavy Traffic (Truck Stops, Service Stations, etc.)	\$5.21	6" x 18"	\$29.90
Concrete	Per SFGA	Sidewalks	Per SFGA
6"	\$3.65	Asphalt on Ground	
8"	\$4.73	2"	\$3.50
9"	\$5.75	2 1/2"	\$4.10
Crushed Stone (includes Grading)	Per SFGA	Concrete on Ground	
3"	\$0.70	4"	\$5.16
6"	\$1.22	5"	\$5.89
9"	\$1.88	6"	\$6.63
Steps	Per LF Tread	Add for Exposed Aggregate	\$1.30
Concrete	\$36.84	Prepared Base (for Above Walks)	
Brick	\$63.58	4"	\$0.79
Railroad Ties	\$44.50	6"	\$1.56

Section E: Grain Elevators

Valuation procedure and schedules

Elevator types A & B

To use schedules A and B, select a per bushel price according to the nearest bushel capacity to the subject facility. Apply this price to the exact bushel capacity of the subject elevator to derive a base cost. The base cost price includes the items listed in the bottom note of each schedule. Also listed in the bottom note are items typically found with each type of elevator that must be priced separately, using other manual schedules. Elevator types A and B often have “added-on” storage and handling equipment similar to that described in type D grain elevator schedules. In this case, separate prices should be added from the D schedules.

Example:

An old wood-frame country elevator with 82,000 bushel capacity.
The subject property also has:

- Two 48,000 bushel steel storage tanks
- One 250 bushel dump pit
- One 80' leg with 1,000 BPH capacity
- One 6 duct distributor head, 6"
- 300 LF of round 6" spouting
- Two 2,900 BPH grain dryers

Base Price

82,000 Bu x \$7.29	\$597,780
2 -- 48,000 Bu. Steel Storage Tanks @ \$114,200 Each	\$228,400
1 -- 80' leg w/ 1,000 BPH Capacity @ \$465 x 80 LF	\$37,200
1 -- 6 , 6" Duct Distributor Head	\$2,250
1 -- Yard Dump Pit @ 250 Bu. X \$3.65"	\$913
300 LF 6" Round Spouting @ \$41.34 x 300 LF	\$12,402
2 -- 2,900 BPH Grain Dryers @ \$350,000 Each	\$700,000

Total Cost Estimate Grain Handling Facilities	\$1,578,945
--	--------------------

Add the cost of other yard and outside improvements, scale house, railroad spurs, scales, etc. to determine the total RCN estimate.

Type A -- Wood Framed	
Bushel Capacity	Elevator Cost per BU
20,000	\$12.80
25,000	\$11.70
30,000	\$10.80
40,000	\$9.70
50,000	\$8.80
75,000	\$7.50
100,000	\$6.75
150,000	\$5.70
200,000	\$5.15
250,000	\$4.70
300,000	\$4.40

Note: Costs do not include any separate office building, scale house, drying equipment, dump pits, railroad scales or spurs or yard improvements. These items must be described and priced separately from the appropriate schedules. See Type B or grain tank steel schedules for annex.



Type B -- Concrete Country		
BU Capacity	Elevator Cost per BU	Annex Cost per BU*
75,000	\$10.60	\$6.85
100,000	\$9.90	\$6.35
150,000	\$8.90	\$5.75
200,000	\$8.30	\$5.35
250,000	\$7.85	\$5.05
300,000	\$7.50	\$4.85
400,000	\$7.00	\$4.50
500,000	\$6.60	\$4.26
750,000	\$5.95	\$3.86
1,000,000	\$5.55	\$3.57
2,000,000	\$4.65	\$3.00
2,000,000+	\$4.25	\$2.72

*Costs are for an annex with a basement.
For an annex with a tunnel only, deduct 9%

Note: Costs do not include any separate office building, scale house, supplemental storage buildings, drying equipment, railroad spurs, truck or railroad scales or yard improvements. These items must be described and priced separately from the appropriate schedule.



Elevator Type D



Type D facilities are custom-assembled according to the owner's judgment for the particular location. They usually consist of a battery of steel grain tanks with related grain handling equipment and subsidiary buildings. However, the storage facilities may be concrete tanks or a combination of steel and concrete grain storage tanks. To calculate the total cost estimate, price each storage tank, each piece of grain handling equipment, and each yard and outside item of construction separately.

Example:		
6 -- 38,000 Bu. Steel Tanks Approximately 56' Height @ \$91,950 Each		\$551,700
6 -- 48,000 Bu. Steel Tanks Approximately 72' Height @ \$114,200 Each		\$685,200
12 -- 58,000 Bu. Steel Tanks Approximately 88' Height @ \$134,300 Each		\$1,611,600
1 -- 76,000 Bu. Steel Building Flat Grain Storage @ \$1.75 per Bushel		
	1 Building x 76,000 Bu. x \$1.75=	\$133,000
3 -- Dump Pits, 900 Bu. @ \$3.65 per Bushel		
	3 Pits x 900 Bu. x \$3.65=	\$9,855
2 -- 60' legs/ 1,500 BPH @ \$565 per Linear Feet		
	2 Legs x 60 LF x \$565=	\$67,800
1 -- 80' leg/ 2,000 BPH @ \$515 per Linear Feet		
	1 Leg x 80 LF x \$515=	\$41,200
2 -- 6" 12 Duct Distributor Heads @ \$4,825 Each		\$9,650
2 -- 6" 6 Duct Distributor Heads @ \$2,250 Each		\$4,500
1,800 LF of 6" Round Spouting @ \$41.34 per Linear Feet		
	1,800 LF x \$41.34=	\$74,412
2 -- 2,900 BPH Grain Dryers @ \$350,000 Each		\$700,000
1 -- 120' x 12" Elevated Belt Conveyer @ \$27,500 Each		\$27,500
Total Cost of Grain Storage/ Handling Facilities		\$3,916,417

Supplemental Grain Elevator Schedules

Grain Conversion Tables		
1 Bushel Corn =	1.2445 CF	or 56 lbs.
1 Bushel Wheat =	1.2445 CF	or 60 lbs.
1 Bushel Soybeans =	1.2445 CF	or 60 lbs.
1 Bushel Oats =	1.2445 CF	or 32 lbs.
1 Bushel Barley =	1.2445 CF	or 45 lbs.
1 Cubic Foot (CF) = .8036 Bushel		
1 Gallon = .1337 CF or .1074 Bushell		
To compute the Volume of a Circular Bin with a Flat Top:		
1. Multiply the square of the diameter of the bin floor x .63135 to get the bushel storage per foot of bin. ($D^2 \times .63135$)		
2. Multiply the bushel storage per foot by the eave height of the bin. ($D^2 \times .63135 \times EH$)		
Example:		
Bin is 21' dia. X 40' high		
1. $21' \times 21' \times .63135 = 278.43$ (Base Area or Bushel Storage per Foot)		
2. 278.43 (Bushel Storage per Foot) x 40' = 11,137 Bushels		
To compute the volume of same bin with an estimated 6' high cone top, multiply the area of the base by 1/3 the altitude, then add this additional volume to the already calculated volume of the flat top bin.		
278.43 (Bushel Storage per Foot) x 2' (or 1/3 x 6') = 557 additional bushels		

Supplemental Equipment	
Truck Lifts, Hydraulic, 70'—36 degree Tilt in Concrete Cell (without scale)	\$140,500.00
Receiving Dump Pits (in yard) per Bushel	\$3.65
Manlifts -- per Linear Ft. Travel	
Electric Operated—LF	\$320.00
Manual Operation—LF	\$130.00
Aeration Tubes, 12 Diameter per LF	\$19.00
Grain Truck Probe	\$14,000.00

Feed Mill Equipment

Because of the vast variety of types and sizes of feed mills, some of which are combined with a country-type elevator, it is recommended that the building be priced from the appropriate CIP schedules.

Equipment - the cost of the machinery is very flexible and the costs in the table represent a range based on the cubic feet of building volume which can be used as a guideline.

Normal machinery and equipment consist of a dump pit and screw conveyor, temporary storage bins, molasses tank and mixer, hammer mill, roller mill, and an elevator or conveyor system.

Building Volume (CF)	Per CF of Building
20,000	\$4.30
30,000	\$3.80
40,000	\$3.70
50,000	\$3.40
75,000	\$3.00
100,000	\$2.90
125,000	\$2.75
150,000 and more	\$2.60

Grain Dryers

Continuous Flow Grain Dryers

Farm		Commercial	
Bu Per Hour	Base Cost	Bu Per Hr.	Base Cost
790	\$144,000	1400-1999	\$266,000
1115	\$186,000	2000-2925	\$350,000
1350	\$206,000	2926-3500	\$433,000
1650	\$256,000	over 3500	\$127.50 /Bu.
Add for Heat Recovery 10%			

Centrifugal Bin Fans	
Type	Cost
Fans without Motor	\$2,120
Fans with 5 hp. Single phase	\$3,580
Fans with 7.5 hp. Single phase	\$4,200
Fans with 10 hp. Single phase	\$4,800
Fans with 5 hp. 3 Phase	\$2,830
Fans with 7.5 hp. 3 Phase	\$2,950
Fans with 10 hp. 3 Phase	\$3,720

Elevator Legs (Bucket Conveyors)							
Cap. Bu. Per Hr.	Discharge Height (per VLF) (Multiply cost per foot times height to determine cost of equipment)						
	30'	40'	50'	60'	80'	100'	120'
500	\$710	\$590	\$520	\$475			
750	\$760	\$630	\$555	\$505			
1,000	\$800	\$665	\$580	\$530	\$465	\$420	\$395
1,500	\$860	\$710	\$625	\$565	\$495	\$450	\$420
2,000	\$905	\$750	\$655	\$595	\$515	\$460	\$435
3,000	\$970	\$800	\$700	\$635	\$550	\$500	\$470
5,000	\$1,065	\$880	\$765	\$690	\$600	\$540	\$505
7,500		\$925	\$820	\$745	\$640	\$570	\$540
10,000			\$865	\$775	\$670	\$605	\$560

Conveyors -- Elevated*				
Length	8"	12"	16"	24"
15'	\$4,800	\$5,200	\$7,000	\$7,200
30'	\$6,850	\$9,200	\$11,000	\$13,600
45'	\$9,600	\$12,000	\$14,500	\$19,300
60'	\$11,750	\$16,000	\$18,500	\$22,400
75'	\$13,500	\$18,000	\$22,000	\$28,400
90'	\$16,000	\$22,500	\$23,750	\$33,900
120'	\$22,000	\$27,500	\$29,500	\$45,200
150'	\$25,000	\$33,000	\$35,000	\$54,700
200'	\$30,000	\$39,000	\$49,500	\$69,000
*For tunnel conveyors, deduct 25%				
Belt Capacities				
8" = 5,500 BPH		16" = 12,000 BPH		
12" = 8,000 BPH		24" = 17,000 BPH		

LP Tanks -- Horizontal		
Gallons Capacity	Size	Cost
5,000	5' x 36'	\$26,900
7,500	6' x 37'	\$30,500
10,000	6' x 50'	\$34,300
12,500	6' x 61'	\$41,000
15,000	7 1/2' x 50'	\$47,600
20,000	7 1/2' x 65'	\$58,600
25,000	9 1/2' x 51'	\$65,600

Distributors (Each) Manual 45°			
Number of Ducts	6"- 8" Diameter		9"-12" Diameter
3	\$1,210		\$1,510
6	\$2,250		\$3,010
12	\$4,825		\$6,020
18	\$7,250		\$9,030
Spouting (Per LF)			
Size	Flexible	Round	Square
6	\$25.38	\$41.34	\$57.30
8	\$29.74	\$47.95	\$65.57
10	\$51.79	\$73.32	\$95.52
12	\$80.50	\$103.22	\$126.78
14	\$89.28	\$112.06	\$141.13
Spouting (Per LF) costs include installation on legs or saddle pads (including fittings on tank) but not pipe, valves, or foundations.			

Steel Building Flat Grain Storage			
<p>Costs include concrete foundation and floor, steel panel walls, gable steel roof with rigid steel frame, doors and explosion-proof lighting.</p> <p>The SFGA costs do not include heat, loading or leveling systems, aeration devices, or any other features, and are only for those buildings specially designed and built for the storage of grain.</p> <p>For other types of construction, price from the appropriate schedules.</p>			
Bushel Capacity	Cost per Bushel	Bushel Capacity	Cost per Bushel
50,000	\$2.00	300,000	\$1.45
75,000	\$1.75	400,000	\$1.40
100,000	\$1.70	500,000	\$1.35
150,000	\$1.60	750,000	\$1.30
200,000	\$1.55	1,000,000	\$1.25
250,000	\$1.45	2,000,000 +	\$1.20

Grain Tanks -- Steel

Costs are for bolted steel tanks, including concrete foundation only.

Diameter	Eave Height	Bu. Capacity	Cost
9'	24'	1,297	\$7,900
	32'	1,729	\$10,000
	40'	2,162	\$11,800
	56'	3,035	\$15,000
	72'	3,892	\$19,300
12'	24'	2,309	\$12,100
	32'	3,078	\$14,625
	40'	3,818	\$19,575
	56'	5,385	\$23,900
	72'	6,929	\$30,750
15'	24'	3,605	\$16,500
	32'	4,807	\$20,650
	48'	7,210	\$28,200
	64'	9,614	\$35,400
	80'	12,030	\$44,275
18'	24'	5,189	\$21,000
	40'	8,649	\$31,750
	56'	12,109	\$41,575
	72'	15,586	\$44,850
	88'	19,064	\$52,400
21'	32'	9,425	\$34,680
	40'	11,791	\$40,775
	56'	16,504	\$47,475
	72'	21,241	\$58,400
	88'	25,976	\$68,940
26'	32'	13,893	\$40,260
	48'	20,858	\$57,330
	64'	27,624	\$74,750
	72'	34,824	\$87,200
	88'	41,807	\$102,950

Grain Tanks -- Steel, continued

Costs are for bolted steel tanks, including concrete foundation only.

Diameter	Eave Height	Bu. Capacity	Cost
32'	32'	21,204	\$58,275
	40'	26,532	\$70,400
	56'	37,189	\$91,950
	72'	47,846	\$114,200
	88'	58,503	\$134,300
42'	32'	41,720	\$102,230
	40'	51,670	\$122,250
	48'	60,320	\$138,350
	58'	72,050	\$161,300
48'	32'	55,250	\$128,950
	40'	68,250	\$152,800
	60'	98,120	\$207,100
60'	40'	110,000	\$227,500
	50'	132,010	\$264,650
	60'	155,460	\$305,100
72'	40'	168,960	\$328,000
	48'	197,750	\$369,200
	64'	255,360	\$460,500
75'	59'	243,455	\$434,600
	70'	282,966	\$500,000
	88'	352,460	\$616,500
	107'	422,325	\$731,500
90'	70'	357,717	\$613,500
	88'	514,882	\$874,300
	107'	615,248	\$1,034,200
105'	70'	575,842	\$958,200
	88'	710,440	\$1,170,100
	107'	847,104	\$1,381,600
135'	59'	852,676	\$1,377,100
	70'	981,556	\$1,569,500
	88'	1,206,204	\$1,909,400

For corrugated galvanized tanks, see Publication 122, Instructions for Farmland Assessments.

Quonset Buildings				
Costs include standard building with concrete footings and doors at each end.				
Cost do not include floors, heating, lighting, or plumbing. Heating and plumbing should be added from CIP schedules.				
Length	30'	40'	60'	70'
30'	\$23.50	--	--	--
36'	\$22.45	--	--	--
48'	\$21.10	\$18.75	--	--
60'	\$20.20	\$18.05	\$17.20	--
72'	\$19.15	\$17.35	\$16.50	\$15.20
84'	\$18.30	\$16.75	\$15.95	\$14.75
96'	\$17.60	\$16.10	\$15.45	\$14.30
108'	\$17.05	\$15.60	\$15.05	\$14.00
120'	\$16.50	\$14.15	\$14.10	\$13.60
160'	\$15.35	\$13.80	\$13.80	\$13.35
200'	--	\$13.50	\$13.40	\$13.10
Additions		Cost		
Floors				
Asphalt		\$1.59		
Concrete		\$3.65		
Crushed Stone		\$1.22		
Lighting		\$0.95		

Auger and Drive	
This is used for the unloading of grain bins directly into hoppers.	
Tank Diameter	Base Price
15'	\$1,080
18'	\$1,215
21'	\$1,350
26'	\$1,570
30'	\$1,750
34'	\$1,925
40'	\$2,195

Steel Hopper Bottom Feed Bins			
Overall			
Diameter	Height	Bushels	COST
6'	10'	120	\$1,800
	16'	240	\$2,600
	21'	360	\$2,900
	25'	480	\$3,300
	28'	600	\$3,700
7'	11'	157	\$2,500
	14'	239	\$2,700
	16'	321	\$2,900
	19'	403	\$3,150
9'	14'	300	\$3,700
	17'	458	\$4,450
	20'	594	\$4,850
	22'	730	\$5,200
	25'	866	\$5,650
	28'	1000	\$5,900
	31'	1130	\$6,200
12'	20'	870	\$6,200
	25'	1345	\$9,400
	31'	1825	\$10,750
	36'	2300	\$12,000
	42'	2780	\$13,500

Steel Temporary Grain Storage Rings			
Overall			
Diameter	Height	Bushels	COST
40'	2'	5,390	\$4,120
	4'	7,580	\$8,240
	6'	9,590	\$12,360
51'	2'	10,150	\$6,430
	4'	13,630	\$12,860
	6'	17,150	\$19,290
62'	2'	17,110	\$8,288
	4'	22,200	\$16,576
	6'	27,330	\$24,864
70'	2'	23,450	\$10,258
	4'	29,940	\$20,516
	6'	36,440	\$30,774
77'	2'	30,290	\$12,416
	4'	38,120	\$24,832
	6'	45,950	\$37,248
	8'	53,780	\$49,664
90'	2'	47,020	\$16,962
	4'	57,810	\$33,924
	6'	68,570	\$50,886
	8'	79,350	\$67,848
105'	2'	71,840	\$23,084
	4'	86,450	\$46,168
	6'	101,060	\$69,252
	8'	115,680	\$92,336

Floor slab cost is not included.