

BUILDING VALUATION DATA

The International Code Council is pleased to provide the following Building Valuation Data (BVD) for its members. The BVD was last printed in the October 2003 *Building Safety Journal* and starting with the February 2005 issue will be updated and printed at six month intervals. ICC strongly recommends that all jurisdictions and other interested parties actively evaluate and assess the impact of this BVD table before utilizing it in their current code enforcement related activities.

The BVD table provides two main functions. In addition to providing the "average" construction costs per sq. ft., the data can be used in determining permit fees for a jurisdiction as well as calculating the anticipated plan review fee charges by the ICC plan review service. Permit fee schedules are addressed in Section 108.2 of the 2003 *International Building Code*® (IBC®) whereas Section 108.3 addresses building permit valuations. The permit fees can be established by using the BVD table and a Permit Fee Multiplier, which is based on the total construction value within the jurisdiction for the past year. The Square Foot Construction Cost table presents factors that reflect relative value of one construction classification/occupancy group to another so that more expensive construction is assessed greater permit fees than less expensive construction.

ICC has developed this data to aid jurisdictions in determining permit fees. It is important to note that while this BVD table does determine an estimated value of a building (i.e., Gross Area x Square Foot Construction Cost), this data is only intended to assist jurisdictions in determining their permit fees. This data table is not intended to be used as an estimating guide since the data only reflects average costs and is not representative of specific construction.

This degree of precision is sufficient for the intended purpose which is to help establish permit fees so as to fund code compliance activities. This BVD table provides jurisdictions with a simplified way to determine the estimated value of a building that does not rely on the permit applicant to determine the cost of construction. Therefore, the bidding process for a particular job and other associated factors do not affect the value of a building for determining the permit fee. Whether a specific project is bid at a cost above or below the computed value of construction does not affect the permit fee since the cost of related code enforcement activities is not directly affected by the bid process and results.

Building Valuation

The following building valuation data represents average valuations for most buildings. In conjunction with IBC Section 108.3, this data is offered as an aid for the building official to determine if the permit valuation is underestimated. Again it should be noted that, when using this data, these are "average" costs based on typical construction methods for each occupancy group and type of construction. The average costs include structural, electrical, plumbing, mechanical, interior finish, normal site preparation, architectural and design fees, overhead and profit. The data is a national average and does not take into account any regional cost differences. To this end, the table containing the regional cost modifiers that was printed in the October 2003 issue is being discontinued.

PERMIT FEE MULTIPLIER

Determine the Permit Fee Multiplier:

1. Based on historical records, determine the total annual construction value which has occurred within the jurisdiction for the past year.
2. Determine the percentage (%) of the building department budget expected to be provided by building permit revenue.

$$\text{Permit Fee Multiplier} = \frac{\text{Bldg. Dept. Budget x (\%)}}{\text{Total Annual Construction Value}}$$

Example

The building department operates on a \$300,000 budget, and it expects to cover 75 percent of that from building permit fees. The total annual construction value which occurred within the jurisdiction in the previous year is \$30,000,000.

$$\text{Permit Fee Multiplier} = \frac{\$300,000 \times 75\%}{\$30,000,000} = 0.0075$$

PERMIT FEE

The permit fee is determined using the building gross area, the Square Foot Construction Cost and the Permit Fee Multiplier.

$$\text{Permit Fee} = \text{Gross Area} \times \text{Square Foot Construction Cost} \times \text{Permit Fee Multiplier}$$

Example

Type of Construction: IIB Area: 1st story = 8,000 sq. ft.
Height: 2 stories 2nd story = 8,000 sq. ft.

Permit Fee Multiplier = 0.0075

Use Group: B

1. Gross area:
Business = 2 stories x 8,000 sq. ft. = 16,000 sq. ft.
2. Square Foot Construction Cost:
B/IIB = \$113.70/sq. ft.
3. Permit Fee:
Business = 16,000 sq. ft. x \$113.70/sq. ft x 0.0075 = \$13,644

Important points to know

- In most cases the BVD does not apply to additions, alterations or repairs to existing buildings. Because the scope of alterations or repairs to an existing building varies so greatly, the Square Foot Construction Cost does not reflect accurate values for that purpose. However, the Square Foot Construction Cost can be used to determine the cost of an addition which is basically a stand-alone building which happens to be attached to an existing building. In the case of such additions, the only alterations to the existing building would involve the attachment of the addition to the existing building and the openings between the addition and the existing building.
- For purposes of establishing the Permit Fee Multiplier, the estimated total annual construction value for a given time period (1 year) is the sum of each building's value (Gross Area x Square Foot Construction Cost) for that time period (e.g., 1 year).
- The Square Foot Construction Cost does not include the price of the land on which the building is built. The Square Foot Construction Cost takes into account everything from site and foundation work to the roof structure and coverings but does not include the price of the land. The

cost of the land does not affect the cost of related code enforcement activities and is not included in the Square Foot Construction Cost.

ICC PLAN REVIEW FEE SCHEDULE

The Plan Review fee is based on the estimated construction value calculated in accordance with the Square Foot Construction Costs in the Table (gross area x Square Foot Construction Costs). For buildings with an estimated construction value up to \$3,000,000, the Building Plan Review fee is 0.0013 of the estimated value (\$250 minimum). For buildings with an estimated construction value over \$3,000,000 up to \$6,000,000, the fee is \$3,900 plus 0.0005 of the estimated value over \$3,000,000. For buildings over \$6,000,000, the fee is \$5,400 plus 0.0004 of the valuation over \$6,000,000.

Special consideration may be given in computing Plan Review fees for buildings such as large warehouses or indoor recreational facilities due to their plan review simplicity. Such considerations may also be given to buildings with repetitive floor plans such as high-rise buildings.

Structural reviews in areas of high seismic or wind risk will have an additional surcharge. Please contact your local ICC regional office for more details.

The plan review fee for Mechanical, Plumbing and Electrical Reviews is computed at 25 percent of the Building Plan Review fee for each discipline (\$250 minimum).

The plan review fee for Accessibility and Energy Reviews is also computed at 25 percent of the Building Plan Review fee for each discipline (\$250 minimum).

The Sprinkler Review fee is simply based on the number of sprinkler heads: 1-100, \$275; 101-200, \$325; 201-300, \$350; 301-400, \$375; 401-500, \$425; over 500, \$500 plus \$0.33 per sprinkler over 500. For hydraulically-designed systems, multiply the fee by two.

SAMPLE PLAN REVIEW CALCULATION

Type of Construction: IIIB	Use Group : B
Height: 3 stories, 35 feet	Area/Floor: 15,000 sq. ft.
Solution:	
1. Gross square footage: 3 stories x 15,000 square feet	= 45,000 sq. ft.
2. Compute estimated construction value:	
Square Foot Construction Costs	= \$101.18/sq. ft.
Estimated Construction Value : 45,000 sq. ft. x \$101.18/sq. ft.	= \$4,553,100
3. Compute Plan Review fee:	
Building: \$3,000,000 x 0.0013	= \$3,900
\$4,553,100 - \$3,000,000	= \$1,553,100
\$1,553,100 x .0005	= \$777
Total Building Review Fee	= \$4,677
Mechanical, Plumbing, Electrical: (.25)(\$4,677)	= \$1,169 each
Accessibility and Energy: (.25)(\$4,677)	= \$1,169 each

Questions concerning the service should be directed to:

Christopher R. Reeves, P.E.
 Manager, Plan Review Services
 708-799-2300 Extension 309

Square Foot Construction Costs^{a, b, c}

Group	(2003 International Building Code)	Type of Construction								
		IA	IB	IIA	IIB	IIIA	IIIB	IV	VA	VB
A-1	Assembly, theaters, with stage	165.95	160.61	156.88	150.43	139.89	139.15	145.68	129.62	124.96
	Assembly, theaters, without stage	153.07	147.74	144.00	137.56	127.01	126.28	132.81	116.74	112.08
A-2	Assembly, nightclubs	125.18	121.67	118.62	114.17	106.80	105.50	110.00	97.28	94.06
A-2	Assembly, restaurants, bars, banquet halls	124.18	120.67	116.62	113.17	104.80	104.50	109.00	95.28	93.06
A-3	Assembly, churches	153.70	148.37	144.63	138.18	127.62	126.88	133.44	117.35	112.69
A-3	Assembly, general, community halls, libraries, museums	127.26	121.93	117.19	111.74	100.17	100.44	107.00	89.90	86.24
A-4	Assembly, arenas	124.18	120.67	116.62	113.17	104.80	104.50	109.00	95.28	93.06
B	Business	127.83	123.20	119.28	113.70	101.74	101.18	109.36	90.86	87.43
E	Educational	134.23	129.70	125.99	120.41	111.07	108.45	116.43	99.24	95.53
F-1	Factory and industrial, moderate hazard	77.52	73.96	69.54	67.44	58.27	59.27	64.69	49.69	47.21
F-2	Factory and industrial, low hazard	76.52	72.96	69.54	66.44	58.27	58.27	63.69	49.69	46.21
H-1	High Hazard, explosives	72.81	69.25	65.83	62.73	54.71	54.71	59.68	46.14	N.P.
H234	High Hazard	72.81	69.25	65.83	62.73	54.71	54.71	59.98	46.14	42.65
H-5	HPM	127.83	123.20	119.28	113.70	101.74	101.18	109.36	90.86	87.43
I-1	Institutional, supervised environment	126.22	121.89	118.61	113.80	104.41	104.35	110.35	95.96	92.16
I-2	Institutional, incapacitated	212.78	208.15	204.23	198.65	186.33	N.P.	194.31	175.45	N.P.
I-3	Institutional, restrained	145.21	140.58	136.66	131.08	120.34	118.78	126.74	109.46	104.03
I-4	Institutional, day care facilities	126.22	121.89	118.61	113.80	104.41	104.35	110.35	95.96	92.16
M	Mercantile	93.28	89.77	85.71	82.26	74.39	74.08	78.09	64.86	62.65
R-1	Residential, hotels	127.49	123.15	119.88	115.07	105.73	105.68	111.67	97.28	93.49
R-2	Residential, multiple family	106.23	101.89	98.62	93.81	84.63	84.57	90.57	76.18	72.38
R-3	Residential, one- and two-family	100.90	98.11	95.69	93.06	88.65	88.44	91.50	84.40	78.35
R-4	Residential, care/assisted living facilities	126.22	121.89	118.61	113.80	104.41	104.35	110.35	95.96	92.16
S-1	Storage, moderate hazard	71.81	68.25	63.83	61.73	52.71	53.71	58.98	44.14	41.65
S-2	Storage, low hazard	70.81	67.25	63.83	60.73	52.71	52.71	57.98	44.14	40.65
U	Utility, miscellaneous	54.84	51.85	48.77	46.33	40.19	40.19	43.73	33.04	31.46

a. Private Garages use Utility, miscellaneous
 b. Unfinished basements (all use group) = \$15.00 per sq. ft.
 c. N.P. = not permitted