AMERICAN WOOD COUNCIL

September 2020

ERRATA
to the 2015 Edition of
the Wood Frame Construction Manual (WFCM) for One- and Two-Family Dwellings
(all versions)

Page	**Revision**
278	Replace tabular values in Table 3.24B1 with revised Table 3.24B1 as shown on the following page. NOTE: Footnotes to Table 3.24B1 remain unchanged.

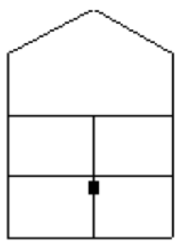
Table 3.24B1 **Laterally Unsupported (Dropped) Header Spans for Interior Loadbearing Walls**

(Supporting Two Center Bearing Floors)

Floor Live Load = 40 psf, L/Δ_{LL}=360, Floor Assembly Dead Load = 10 psf

Dropped Interior

		Building Width (ft)		
		12	24	36
Headers Supporting	Size	Maximum Header/Girder Spans (ft-in.) for Common Lumber Species[1,3,4,5]		
Two Floors Only (Center Bearing)	1-2x6	2 - 7	1 - 11	1 - 7
	1-2x8	3 - 4	2 - 5	2 - 0
	1-2x10	3 - 10	2 - 11	2 - 5
	1-2x12	4 - 6	3 - 4	2 - 10
	2-2x4	2 - 7	1 - 11	1 - 7
	2-2x6	3 - 10	2 - 10	2 - 5
	2-2x8	4 - 9	3 - 7	3 - 0
	2-2x10	5 - 6	4 - 2	3 - 6
	2-2x12	6 - 1	4 - 9	4 - 1
	3-2x8	5 - 10	4 - 5	3 - 9
	3-2x10	6 - 7	5 - 1	4 - 4
	3-2x12	7 - 2	5 - 8	4 - 11
	4-2x8	6 - 7	5 - 1	4 - 3
	4-2x10	7 - 5	5 - 9	4 - 11
	4-2x12	8 - 0	6 - 4	5 - 6
	Size	Maximum Header/Girder Spans (ft-in.) for Glued Laminated Timber Beams[2,3,4,5]		
	3.125x5.500	5 - 4	4 - 0	3 - 4
	3.125x6.875	6 - 8	5 - 0	4 - 1
	3.125x8.250	8 - 0	5 - 11	4 - 11
	3.125x9.625	9 - 3	6 - 11	5 - 9
	3.125x11.000	10 - 6	7 - 10	6 - 6
	3.125x12.375	11 - 7	8 - 9	7 - 3
	3.125x13.750	12 - 7	9 - 7	8 - 0
	3.125x15.125	13 - 4	10 - 4	8 - 8
	3.125x16.500	14 - 0	10 - 11	9 - 4
	3.125x17.875	14 - 6	11 - 5	9 - 10
	3.125x19.250	14 - 11	11 - 10	10 - 3
	3.125x20.625	15 - 4	12 - 3	10 - 8
	3.125x22.000	15 - 8	12 - 7	11 - 0
	3.125x23.375	16 - 0	12 - 10	11 - 3
	3.125x24.750	16 - 4	13 - 2	11 - 7
	5.125x5.500	6 - 11	5 - 1	4 - 3
	5.125x6.875	8 - 7	6 - 4	5 - 3
	5.125x8.250	10 - 4	7 - 8	6 - 4
	5.125x9.625	12 - 0	8 - 11	7 - 5
	5.125x11.000	13 - 8	10 - 2	8 - 5
	5.125x12.375	15 - 4	11 - 5	9 - 6
	5.125x13.750	17 - 0	12 - 7	10 - 6
	5.125x15.125	18 - 7	13 - 10	11 - 6
	5.125x16.5	20-0†	15 - 0	12 - 6
	5.125x17.875	20-0†	16 - 2	13 - 6
	5.125x19.250	20-0†	17 - 3	14 - 5
	5.125x20.625	20-0†	18 - 4	15 - 5
	5.125x22.000	20-0†	19 - 4	16 - 3
	5.125x23.375	20-0†	20-0†	17 - 1
	5.125x24.75	20-0†	20-0†	17 - 10



AMERICAN WOOD COUNCIL

April 2020

ERRATA
to the 2015 Edition of
the Wood Frame Construction Manual (WFCM) for One- and Two-Family Dwellings
(all web and print versions)

Page	**Revision**
123	Revise 3.4.4.2.1 and 3.4.4.2.3 as shown in strike-out and underline below:

3.4.4.2.1 Sheathing Type Adjustments When other sheathing material or nailing patterns are used, the length requirements in Tables 3.17A and 3.17C shall be multiplied by the appropriate ~~length~~ sheathing type adjustment factor in Table 3.17D.

3.4.4.2.3 Hold-downs Hold-downs with a capacity in accordance with Table 3.17F, divided by the appropriate ~~length~~ sheathing type adjustment factor in Table 3.17D, are required at the end of each shear wall segment or at each end of a perforated shear wall. Where full height shear wall segments meet at a corner, a single hold-down shall be permitted to be used to resist the overturning forces in both directions when the corner framing in the adjoining walls is fastened together to transfer the uplift load (see Figures 3.8a-b).

222 Catoctin Circle, SE, Suite 201 ▪ Leesburg, VA 20175 ▪ 202-463-2766 ▪ www.awc.org ▪ info@awc.org

AMERICAN WOOD COUNCIL

October 2016

ERRATA
to the 2015 Edition of
Commentary for the Wood Frame Construction Manual (WFCM) for One- and Two-Family Dwellings
(printed version dated 10-15)

Page **Revision**

3 Revise text on page 3 as follows:

Design wind pressures in *ASCE 7-10* are based on an ultimate 700-year return period. Since the *WFCM* uses allowable stress design, forces calculated from design wind pressures are multiplied by 0.60 in accordance with load combination factors per *ASCE 7-10*.

For example, the ASD velocity pressure, q, at 150 mph for Exposure B is calculated as follows:

$$q = 0.6(0.00256)(0.72)(1.0)(0.85)(150)^2 \text{ (lbs/ft}^2\text{)}$$
$$= 21.15 \text{ (lbs/ft}^2\text{)}$$

~~In order to use the *2015 WFCM* with basic wind speeds from the *2015 International Residential Code (IRC)*, see the wind speed conversion Table C1.2 based on the following calculations:~~

~~Equating wind pressures calculated using *ASCE 7-10* wind speeds with those from the *2015 IRC*.~~

~~Velocity pressure for the *ASCE 7-05* basic wind speed of 90 mph (Exposure B) is calculated as follows:~~

~~$q = 0.00256(0.72)(0.85)90^2 = 12.7$ psf~~

~~ASD velocity pressure using the *ASCE 7-10* wind speed of 116 mph (Exposure B) is calculated as follows:~~

~~$q = (0.60)[0.00256(0.72)(0.85)116^2] = 12.7$ psf~~

~~On the basis of equating wind pressures, the 90 mph *ASCE 7-05* basic wind speed is "equivalent" to the 116 mph *ASCE 7-10* basic wind speed.~~

~~**Table C1.2 Wind Speed Conversion Table**~~

~~ASCE 7-05 Basic Wind Speeds (mph)~~							
~~85~~	~~90~~	~~100~~	~~110~~	~~120~~	~~130~~	~~140~~	~~150~~
~~Equivalent ASCE 7-10 Basic Wind Speeds (mph)~~							
~~110~~	~~116~~	~~129~~	~~142~~	~~155~~	~~168~~	~~181~~	~~194~~

~~Wind speed contour maps in the *2015 IRC* show the 90 mph contour as covering approximately the same geographical area as that for the 115 mph wind speed contour in *ASCE 7-10*. The velocity pressure for the 115 mph (Exposure B) *ASCE 7-10* wind speed (12.4 psf) however, is slightly less than the velocity pressure corresponding to the 90 mph *2015 IRC* (Exposure B) wind speed (12.7 psf).~~

Note that the worst case of internal pressurization is used in design. Internal pressure and internal suction for MWFRS are outlined in *WFCM* Tables C1.3A and C1.3B, respectively. Pressure coefficients and loads for wind parallel and perpendicular to ridge are tabulated. Parallel to ridge coefficients are used to calculate wind loads acting perpendicular to end walls. Perpendicular-to-ridge coefficients are used to calculate wind loads acting perpendicular to side walls.

Pressures resulting in shear, uplift, and overturning forces are applied to the building as follows:

REASON:	Since the 2015 IRC has incorporated ultimate wind speed maps, the wind speed conversion table as shown in Table C1.2 is no longer necessary.

AMERICAN WOOD COUNCIL

December 2015

ERRATA
to the 2015 Edition of
the Wood Frame Construction Manual (WFCM) for One- and Two-Family Dwellings
(web version dated 11-14)

Page	**Revision**
258	Revise footnote “a” in Table 3.20B Footnotes as follows:

a. Maximum stud lengths in Table 3.20B are based on interior zone loads and assume that all studs are covered on the inside with a minimum of 1/2 inch gypsum wallboard, attached in accordance with minimum building code requirements and sheathed on the exterior side with a minimum of 3/8 inch wood structural panel sheathing with all panel joints occurring over studs or blocking and attached using a minimum 8d common nails spaced a maximum of 6" on center at panel edges and 12" on center at intermediate framing members. To address additional end zone loading requirements, end zone stud spacings shall be multiplied by 0.80 for framing located within 4 feet of corners. The additional bending capacity provided by the reduced stud spacing is assumed to be sufficient to resist the additional end zone loading requirements.

AMERICAN WOOD COUNCIL

September 2015

ERRATA
to the 2015 Edition of
the Wood Frame Construction Manual (WFCM) for One- and Two-Family Dwellings
(web version dated 11-14)

Page **Revision**

65 In Table 2.2C, revise footnote 4 and footnote 4 references to tabular values as follows:

Table 2.2C Rake Overhang Outlooker Uplift Connection Loads

700-yr. Wind Speed 3-second gust (mph)	110	115	120	130	140	150	160	170	180	195
Outlooker Spacing (in.)	Uplift Connection Loads (lbs)[1,2,3]									
12	187	205	223	262	304	349	397	448	502	589
16	250	273	298	349	405	465	529	597	669	786
24	375	410	446	524	607	697	793	896 [4]	1004 [4]	1178 [4]

1 Tabulated outlooker uplift connection loads assume a building located in Exposure B with a mean roof height of 33 feet. For buildings located in other exposures, or with mean roof heights less than 33 feet, the tabulated values shall be multiplied by the appropriate adjustment factor in Section 2.1.3.1.

2 Tabulated outlooker uplift connection loads are based on 2 foot overhangs. For overhangs less than 2 feet, tabulated values shall be permitted to be multiplied by $[(2' + OH) / 4']^2$ (OH measured in feet).

3 For overhangs located in Zone 2 per the figures of Table 2.4, tabulated uplift loads shall be permitted to be multiplied by 0.65.

4 Outlooker overhang length shall be limited to 20 inches. See footnote 2 to calculate reduced uplift connection load.

158 Replace Table 3.2C Exposure B with revised Table 3.2C Exposure B as shown below.

Table 3.2C Sill or Bottom Plate to Foundation Connections (Anchor Bolts) Resisting Uplift Loads from Wind **Exposure B**

(Prescriptive Alternative to Table 3.2)

700-yr. Wind Speed 3-second gust (mph)			110	115	120	130	140	150	160	170	180	195
Sill or Bottom Plate to Foundation Anchor Bolt Connection Resisting	Plate Size	Foundation Supporting	Maximum Anchor Bolt Spacing (in.)[1,2]									
Uplift Loads	2x4		8' End Zones									
		1-3 stories	72	71	57	43	35	30	27	24	22	20
			Interior Zones									
		1-3 stories	72	72	66	50	41	35	31	28	26	23
	2x6		8' End Zones									
		1-3 stories	72	72	68	51	42	36	32	29	26	23
			Interior Zones									
		1-3 stories	72	72	72	60	49	42	37	34	31	27

CONTINUED ON NEXT PAGE

Page **Revision**

158 Replace Table 3.2C Exposure C with revised Table 3.2C Exposure C as shown below.

Exposure C

700-yr. Wind Speed 3-second gust (mph)			110	115	120	130	140	150	160	170	180	195
Sill or Bottom Plate to Foundation Anchor Bolt Connection Resisting	Plate Size	Foundation Supporting	Maximum Anchor Bolt Spacing (in.)[1,2]									
Uplift Loads	2x4		8' End Zones									
		1-3 stories	43	38	34	29	25	23	20	19	17	16
			Interior Zones									
		1-3 stories	50	44	40	34	30	26	24	22	20	18
	2x6		8' End Zones									
		1-3 stories	51	45	41	35	30	27	25	22	21	19
			Interior Zones									
		1-3 stories	60	53	48	40	35	32	29	26	24	22

1 Prescriptive limits are based on assumptions in Table 3.2.

2 When anchor bolts are used to resist uplift, lateral, and shear loads, the maximum anchor bolt spacing shall not exceed the lesser of the tabulated values for uplift loads (Table 3.2C) or lateral and shear loads (Table 3.2B). For other anchor bolt limitations see Section 3.2.1.7 and 3.2.2.3.

178 In Table 3.4C, revise footnote and footnote references regarding maximum outlooker overhang length as follows:

Table 3.4C Rake Overhang Outlooker Uplift Connection Requirements — Exposure B

700-yr. Wind Speed 3-second gust (mph)	110	115	120	130	140	150	160	170	180	195
Outlooker Spacing (in.)	Uplift Connection Loads (lbs.)[1,2]									
12	187	205	223	262	304	349	397	448	502	589
16	250	273	298	349	405	465	529	597	669	786
24	375	410	446	524	607	697	793	896 [3]	1004 [3]	1178 [3]

1 Tabulated outlooker uplift connection loads are based on 2 foot overhangs. For overhangs less than 2 feet, tabulated values shall be permitted to be multiplied by $[(2' + OH)/4']^2$ (OH measured in ft.).

2 For overhangs located in Zone 2 per the figures of Table 2.4, tabulated uplift loads shall be permitted to be multiplied by 0.65.

3 Outlooker overhang length shall be limited to 20 inches. See footnote 1 to calculate reduced uplift connection load.

Table 3.4C Rake Overhang Outlooker Uplift Connection Requirements — Exposure C

700-yr. Wind Speed 3-second gust (mph)	110	115	120	130	140	150	160	170	180	195
Outlooker Spacing (in.)	Uplift Connection Loads (lbs.)[1,2]									
12	260	285	310	364	422	484	551	622	697	818
16	347	379	413	485	562	646	735	829	930 [3]	1091 [3]
24	521	569	620	727	844	968 [3]	1102 [3]	1244 [4]	1395 [4]	1637 ~~[3]~~ [4]

1 Tabulated outlooker uplift connection loads are based on 2 foot overhangs. For overhangs less than 2 feet, tabulated values shall be permitted to be multiplied by $[(2' + OH)/4']^2$ (OH measured in ft.).

2 For overhangs located in Zone 2 per the figures of Table 2.4, tabulated uplift loads shall be permitted to be multiplied by 0.65.

3 Outlooker overhang length shall be limited to 20 inches. See footnote 1 to calculate reduced uplift connection loads.

4 Outlooker overhang length shall be limited to 16 inches. See footnote 1 to calculate reduced uplift connection load.

CONTINUED ON NEXT PAGE

Page	Revision

<u>Page</u> **<u>Revision</u>**

268 In Table 3.22E1, revise header spans for 1-2x6 as follows:

Table 3.22E1 Laterally Unsupported (Dropped) Header Spans for Exterior Loadbearing Walls

Dropped Exterior

(Supporting a Roof, Ceiling, and Two Clear Span Floors) Dead Load Assumptions:
Roof/Ceiling Assembly = 20 psf, Floor Assembly = 10psf, Wall Assembly = 121plf, $L/\Delta_{LL}=360$

		Roof Live Load			Ground Snow Load								
		20 psf			30 psf			50 psf			70 psf		
		Building Width (ft)											
		12	24	36	12	24	36	12	24	36	12	24	36
Headers Supporting	Size	Maximum Header/Girder Spans (ft-in.) for Common Lumber Species[1,3,4]											
Roof, Ceiling, and Two Clear Span Floors	1-2x6	2 - 3	~~1 - 9~~ 1 - 8	~~1 - 6~~ 1 - 5	~~2 - 4~~ 2 - 3	~~1 - 9~~ 1 - 8	~~1 - 6~~ 1 - 5	~~2 - 4~~ 2 - 3	~~1 - 9~~ 1 - 8	~~1 - 6~~ 1 - 5	~~2 - 3~~ 2 - 2	~~1 - 9~~ 1 - 8	~~1 - 6~~ 1 - 5

271, 272, 273 Revise Footnote 3 in Tables 3.23A and 3.23B as follow:

"3. Tabulated spans are based on the lowest F_b, ~~F_v,~~ and E for #2 Grade Douglas Fir-Larch, Hem-Fir, Southern Pine, and Spruce-Pine-Fir."

AMERICAN WOOD COUNCIL

March 2015

ERRATA
to the 2015 Edition of
the Wood Frame Construction Manual (WFCM) for One- and Two-Family Dwellings
(web version dated 11-14)

Page Revision

158 Replace Table 3.2C with revised Table 3.2C as shown below.

Table 3.2C Sill or Bottom Plate to Foundation Connections (Anchor Bolts) Resisting Uplift Loads from Wind
(Prescriptive Alternative to Table 3.2)

Exposure B

700-yr. Wind Speed 3-second gust (mph)			110	115	120	130	140	150	160	170	180	195
Sill or Bottom Plate to Foundation Anchor Bolt Connection Resisting	Plate Size	Foundation Supporting	Maximum Anchor Bolt Spacing (in.)[1,2]									
Uplift Loads	2x4		8' End Zones									
		1-3 stories	72	71	57	43	35	30	27	24	22	20
			Interior Zones									
		1-3 stories	72	72	66	50	41	35	31	28	26	23
	2x6		8' End Zones									
		1-3 stories	72	72	68	51	42	36	32	29	26	23
			Interior Zones									
		1-3 stories	72	72	72	60	49	42	37	34	31	27

Exposure C

700-yr. Wind Speed 3-second gust (mph)			110	115	120	130	140	150	160	170	180	195
Sill or Bottom Plate to Foundation Anchor Bolt Connection Resisting	Plate Size	Foundation Supporting	Maximum Anchor Bolt Spacing (in.)[1,2]									
Uplift Loads	2x4		8' End Zones									
		1-3 stories	43	38	34	29	25	23	20	19	17	16
			Interior Zones									
		1-3 stories	50	44	40	34	30	26	24	22	20	18
	2x6		8' End Zones									
		1-3 stories	51	45	41	35	30	27	25	22	21	19
			Interior Zones									
		1-3 stories	60	53	48	40	35	32	29	26	24	22

1 Prescriptive limits are based on assumptions in Table 3.2.

2 When anchor bolts are used to resist uplift, lateral, and shear loads, the maximum anchor bolt spacing shall not exceed the lesser of the tabulated values for uplift loads (Table 3.2C) or lateral and shear loads (Table 3.2B). For other anchor bolt limitations see Section 3.2.1.7 and 3.2.2.3.

CONTINUED ON NEXT PAGE

<u>Page</u> **<u>Revision</u>**

268 In Table 3.22E1, revise header spans for 1-2x6 as follows:

Table 3.22E1 Laterally Unsupported (Dropped) Header Spans for Exterior Loadbearing Walls

(Supporting a Roof, Ceiling, and Two Clear Span Floors) Dead Load Assumptions:

Roof/Ceiling Assembly = 20 psf, Floor Assembly = 10psf, Wall Assembly = 121plf, L/Δ_{LL}=360

Dropped Exterior

		Roof Live Load			Ground Snow Load								
		20 psf			30 psf			50 psf			70 psf		
		Building Width (ft)											
		12	24	36	12	24	36	12	24	36	12	24	36
Headers Supporting	Size	Maximum Header/Girder Spans (ft-in.) for Common Lumber Species[1,3,4]											
Roof, Ceiling, and Two Clear Span Floors	1-2x6	2 - 3	~~1 - 9~~ 1 - 8	~~1 - 6~~ 1 - 5	~~2 - 4~~ 2 - 3	~~1 - 9~~ 1 - 8	~~1 - 6~~ 1 - 5	~~2 - 4~~ 2 - 3	~~1 - 9~~ 1 - 8	~~1 - 6~~ 1 - 5	~~2 - 3~~ 2 - 2	~~1 - 9~~ 1 - 8	~~1 - 6~~ 1 - 5

271, 272, 273 Revise Footnote 3 in Tables 3.23A and 3.23B as follow:

"3. Tabulated spans are based on the lowest F_b, ~~F_v,~~ and E for #2 Grade Douglas Fir-Larch, Hem-Fir, Southern Pine, and Spruce-Pine-Fir."