

FIRE-RESISTANCE DESIGN

Assembly Usage Disclaimer

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States

BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States Design Criteria and Allowable Variances

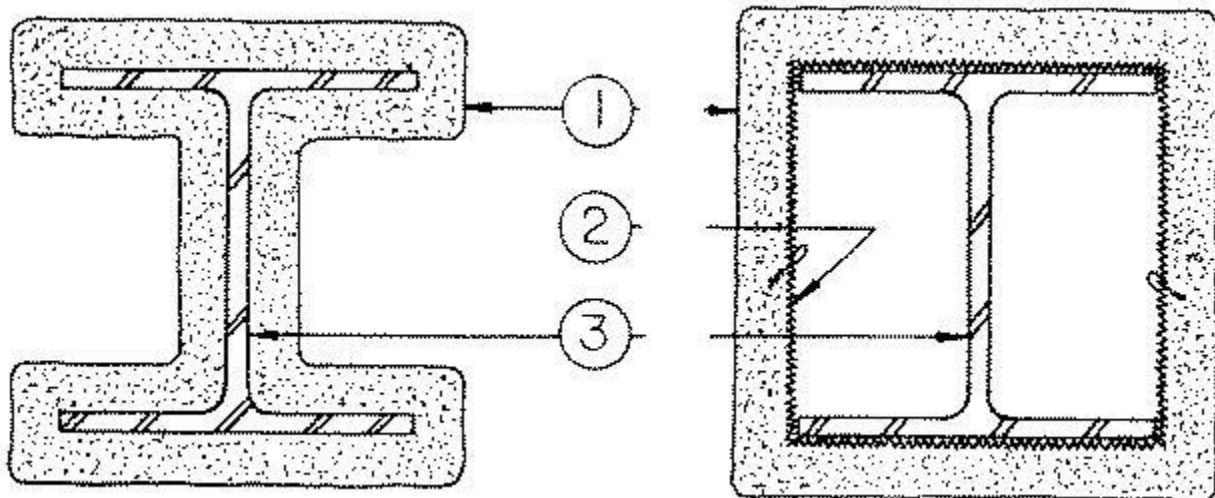
See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada Design Criteria and Allowable Variances

Design No. Y725

January 09, 2019

Ratings - 1, 1-1/2, 2, 3 and 4 h.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



1. Spray-Applied Fire Resistive Materials* — Applied by mixing with water and spraying in more than one coat to the thicknesses shown below, to steel surfaces which are clean and free of dirt, loose scale, and oil. Min avg and min ind density of 15/14 pcf respectively. Min avg and min ind density of 25/23 pcf respectively for Type Hi-5. Min avg and min ind density of 19/18 pcf respectively for Types 7GP and 7HD. For method of density determination, see Design Information Section, Sprayed Material.

The thickness of Spray-Applied Fire Resistive Materials for full flange and half flange thickness of the column (Item 1) required for rating periods of 1 h, 1-1/2 h, 2 h, 3 h, and 4 h

may be determined by the following equations:

Full flange thickness		
For 4, 5, 5GP, 5GP/AR, 5EF/AR, 5MD/AR, 5EF, 5MD, 5AR, 7GP, 7HD, 8GP, 8EF, 8MD, 9GP, 9EF, 9MD:	$h = \frac{R}{(0.9994(W/D) + 0.9438)}$	$0.338 \leq \frac{W}{D} \leq 6.76$
For Hi 5:	$h = \frac{R}{(0.9617(W/D) + 1.1939)}$	$0.338 \leq \frac{W}{D} \leq 6.76$

Half flange thickness			
For 4, 5, 5GP, 5GP/AR, 5EF/AR, 5MD/AR, 5EF, 5MD, 5AR, 7GP, 7HD, 8GP, 8EF, 8MD, 9GP, 9EF, 9MD:	For 1 hr rating	$h = -0.318 \ln(W/D) + 0.5465$	$0.338 \leq \frac{W}{D} \leq 2.55$
		$h = 1/4$	$2.55 < \frac{W}{D} \leq 6.76$
	For 1.5 hr rating	$h = -0.337 \ln(W/D) + 0.8817$	$0.338 \leq \frac{W}{D} \leq 6.76$
	For 2 hr rating	$h = -0.45 \ln(W/D) + 1.1549$	$0.338 \leq \frac{W}{D} \leq 6.76$
	For 3 hr rating	$h = -0.621 \ln(W/D) + 1.7575$	$0.338 \leq \frac{W}{D} \leq 6.76$
	For 4 hr rating	$h = -0.809 \ln(W/D) + 2.3099$	$0.338 \leq \frac{W}{D} \leq 6.76$
For Hi 5:	For 1 hr rating	$h = -0.25 \ln(W/D) + 0.5006$	$0.338 \leq \frac{W}{D} \leq 2.55$
		$h = 1/4$	$2.55 < \frac{W}{D} \leq 6.76$
	For 1.5 hr rating	$h = -0.274 \ln(W/D) + 0.7913$	$0.338 \leq \frac{W}{D} \leq 6.76$
	For 2 hr rating	$h = -0.36 \ln(W/D) + 1.0197$	$0.338 \leq \frac{W}{D} \leq 6.76$
	For 3 hr rating	$h = -0.5 \ln(W/D) + 1.5564$	$0.338 \leq \frac{W}{D} \leq 6.76$
	For 4 hr rating	$h =$	$0.338 \leq \frac{W}{D} \leq$

	hr rating	$-0.649\ln(W/D) + 2.0523$	0.688 and $2.55 \leq W/D \leq 6.76$
		$h = -0.4364W/D + 2.6127$	$0.688 < W/D < 2.55$

Where:

h = Spray-Applied Fire Resistive Materials thickness in the range 0.25 to 3.875 in.

R = Fire resistance rating in hours (1 to 4 h)

D = Heated perimeter of steel column in inches

W = Weight of steel column in lbs per foot

As an alternate to the equation, the minimum full flange and half flange thickness of Spray-Applied Fire Resistive Materials required for various fire resistance ratings may be determined from the tables below:

For 4, 5, 5GP, 5GP/AR, 5EF/AR, 5MD/AR, 5EF, 5MD, 5AR, 7GP, 7HD, 8GP, 8EF, 8MD, 9GP, 9EF, 9MD											
FULL FLANGE TIP THICKNESS (in.)					Member		HALF FLANGE TIP THICKNESS (in.)				
1 Hr	1-1/2 Hr	2 Hr	3 Hr	4 Hr	Size x Wt	W/D	1 Hr	1-1/2 Hr	2 Hr	3 Hr	4 Hr
11/16	1-1/16	1-3/8	2-1/16	2-11/16	W4x13	0.556	3/4	1-1/8	1-7/16	2-1/8	2-13/16
11/16	1-1/16	1-3/8	2-1/16	2-11/16	W5x16	0.55	3/4	1-1/8	1-7/16	2-3/16	2-13/16
11/16	1	1-5/16	1-15/16	2-9/16	W5x19	0.644	11/16	1-1/16	1-3/8	2-1/16	2-11/16
13/16	1-3/16	1-9/16	2-3/8	3-1/8	W6x9	0.338	7/8	1-1/4	1-5/8	2-7/16	3-3/16
3/4	1-1/8	1-1/2	2-3/16	2-15/16	W6x15	0.431	7/8	1-3/16	1-9/16	2-5/16	3
3/4	1-1/8	1-7/16	2-3/16	2-7/8	W6x12	0.448	13/16	1-3/16	1-9/16	2-5/16	3
11/16	1	1-3/8	2	2-11/16	W6x20	0.563	3/4	1-1/8	1-7/16	2-1/8	2-13/16
11/16	1	1-5/16	2	2-5/8	W6x16	0.584	3/4	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-1/2	W6x25	0.696	11/16	1-1/16	1-3/8	2	2-5/8
3/4	1-1/8	1-1/2	2-1/4	2-15/16	W8x13	0.421	7/8	1-3/16	1-9/16	2-5/16	3-1/16

3/4	1-1/16	1-7/16	2-1/8	2-13/16	W8x15	0.481	13/16	1-3/16	1-1/2	2-1/4	2-15/16
3/4	1-1/16	1-7/16	2-1/8	2-13/16	W8x18	0.499	13/16	1-1/8	1-1/2	2-1/4	2-7/8
11/16	1	1-3/8	2	2-11/16	W8x21	0.577	3/4	1-1/8	1-7/16	2-1/8	2-13/16
11/16	1	1-5/16	2	2-5/8	W8x24	0.591	3/4	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-1/2	W8x31	0.665	11/16	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-1/2	W8x28	0.688	11/16	1-1/16	1-3/8	2	2-5/8
5/8	15/16	1-3/16	1-13/16	2-3/8	W8x35	0.749	11/16	1	1-5/16	1-15/16	2-9/16
1/2	7/8	1-1/8	1-11/16	2-1/4	W8x40	0.849	9/16	15/16	1-1/4	1-7/8	2-1/2
1/2	13/16	1-1/16	1-9/16	2-1/16	W8x48	1	9/16	15/16	1-3/16	1-13/16	2-5/16
1/2	3/4	15/16	1-7/16	1-7/8	W8x58	1.2	1/2	7/8	1-1/8	1-11/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W8x67	1.37	1/2	13/16	1-1/16	1-9/16	2-1/16
13/16	1-3/16	1-9/16	2-3/8	3-1/8	W10x12	0.347	7/8	1-1/4	1-5/8	2-7/16	3-3/16
3/4	1-1/8	1-1/2	2-3/16	2-15/16	W10x15	0.429	7/8	1-3/16	1-9/16	2-5/16	3
3/4	1-1/16	1-7/16	2-1/8	2-13/16	W10x17	0.482	13/16	1-3/16	1-1/2	2-1/4	2-15/16
11/16	1-1/16	1-3/8	2-1/16	2-3/4	W10x22	0.523	13/16	1-1/8	1-1/2	2-3/16	2-7/8
11/16	1-1/16	1-3/8	2-1/16	2-3/4	W10x19	0.538	3/4	1-1/8	1-7/16	2-3/16	2-13/16
11/16	1	1-5/16	1-15/16	2-5/8	W10x26	0.612	3/4	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-1/2	W10x33	0.661		1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-7/16	W10x30	0.699	11/16	1-1/16	1-3/8	2	2-5/8
5/8	7/8	1-	1-3/4	2-3/8	W10x39	0.78	11/16	1	1-	1-	2-

		3/16							5/16	15/16	9/16
1/2	7/8	1-1/8	1-11/16	2-1/4	W10x49	0.84	9/16	15/16	1-1/4	1-7/8	2-1/2
1/2	7/8	1-1/8	1-11/16	2-3/16	W10x45	0.888	9/16	15/16	1-1/4	1-7/8	2-7/16
1/2	13/16	1-1/8	1-5/8	2-3/16	W10x54	0.922	9/16	15/16	1-1/4	1-13/16	2-7/16
1/2	13/16	1-1/16	1-9/16	2-1/16	W10x60	1.01	1-9/16	15/16	1-3/16	1-13/16	2-5/16
1/2	3/4	1	1-7/16	1-15/16	W10x68	1.15	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	11/16	15/16	1-3/8	1-13/16	W10x77	1.28	1/2	13/16	1-1/16	1-5/8	2-1/8
7/16	11/16	7/8	1-5/16	1-11/16	W10x88	1.45	7/16	13/16	1	1-9/16	2-1/16
7/16	5/8	13/16	1-3/16	1-9/16	W10x100	1.64	7/16	3/4	15/16	1-1/2	1-15/16
3/8	9/16	3/4	1-1/8	1-1/2	W10x112	1.81	3/8	11/16	15/16	1-7/16	1-7/8
13/16	1-3/16	1-9/16	2-5/16	3-1/16	W12x14	0.363	7/8	1-1/4	1-5/8	2-7/16	3-3/16
3/4	1-1/8	1-1/2	2-1/4	3	W12x16	0.41	7/8	1-3/16	1-9/16	2-5/16	3-1/16
3/4	1-1/16	1-7/16	2-1/8	2-13/16	W12x19	0.485	13/16	1-3/16	1-1/2	2-1/4	2-15/16
11/16	1-1/16	1-3/8	2-1/16	2-3/4	W12x26	0.531	3/4	1-1/8	1-1/2	2-3/16	2-7/8
11/16	1	1-3/8	2	2-11/16	W12x22	0.56	3/4	1-1/8	1-7/16	2-1/8	2-13/16
11/16	1	1-5/16	1-15/16	2-5/8	W12x30	0.607	3/4	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-7/16	W12x35	0.703	11/16	1-1/16	1-3/8	2	2-5/8
5/8	15/16	1-1/4	1-13/16	2-7/16	W12x40	0.734	11/16	1	1-5/16	2	2-9/16
5/8	7/8	1-3/16	1-3/4	2-5/16	W12x45	0.829	5/8	1	1-1/4	1-7/8	2-1/2
1/2	7/8	1-1/8	1-11/16	2-1/4	W12x53	0.855	9/16	15/16	1-1/4	1-7/8	2-7/16

1/2	13/16	1-1/8	1-5/8	2-3/16	W12x50	0.909	9/16	15/16	1-1/4	1-7/8	2-7/16
1/2	13/16	1-1/8	1-5/8	2-3/16	W12x58	0.925	9/16	15/16	1-1/4	1-13/16	2-3/8
1/2	13/16	1-1/8	1-5/8	2-3/16	W12x65	0.925	9/16	15/16	1-1/4	1-13/16	2-3/8
1/2	13/16	1-1/16	1-9/16	2-1/16	W12x72	1.02	9/16	15/16	1-3/16	1 3/4	2-5/16
1/2	3/4	1	1-1/2	2	W12x79	1.11	9/16	7/8	1-1/8	1 3/4	2-1/4
1/2	3/4	15/16	1-7/16	1-7/8	W12x87	1.22	1/2	7/8	1-1/8	1-11/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W12x96	1.34	1/2	13/16	1-1/16	1-5/8	2-1/8
7/16	5/8	7/8	1-1/4	1-11/16	W12x106	1.47	7/16	13/16	1	1-9/16	2
7/16	5/8	13/16	1-3/16	1-9/16	W12x120	1.65	7/16	3/4	15/16	1-1/2	1-15/16
3/8	9/16	3/4	1-1/8	1-7/16	W12x136	1.86	3/8	11/16	15/16	1-3/8	1-13/16
3/8	9/16	11/16	1-1/16	1-3/8	W12x152	2.04	3/8	11/16	7/8	1-3/8	1-3/4
5/16	1/2	5/8	15/16	1-1/4	W12x170	2.26	5/16	5/8	13/16	1-5/16	1-11/16
5/16	7/16	5/8	7/8	1-3/16	W12x190	2.5	5/16	5/8	3/4	1-1/4	1-5/8
1/4	7/16	9/16	7/8	1-1/8	W12x210	2.73	1/4	7/16	11/16	1-3/16	1-1/2
1/4	7/16	9/16	13/16	1-1/16	W12x230	2.96	1/4	7/16	11/16	1-1/8	1-7/16
1/4	3/8	1/2	3/4	1	W12x252	3.2	1/4	7/16	11/16	1-1/16	1-3/8
1/4	3/8	1/2	11/16	15/16	W12x279	3.5	1/4	7/16	5/8	1	1-5/16
1/4	3/8	7/16	11/16	7/8	W12x305	3.76	1/4	7/16	9/16	15/16	1-1/4
1/4	5/16	7/16	5/8	13/16	W12x336	4.06	1/4	7/16	9/16	15/16	1-3/16
3/4	1-1/16	1-7/16	2-1/8	2 7/8	W14x22	0.476	13/16	1-3/16	1-1/2	2-1/4	2-15/16

11/16	1	1-3/8	2	2-11/16	W14x26	0.559	3/4	1-1/8	1-7/16	2-1/8	2-13/16
11/16	1	1-3/8	2	2-11/16	W14x30	0.562	3/4	1-1/8	1-7/16	2-1/8	2-13/16
11/16	1	1-5/16	1-15/16	2-9/16	W14x34	0.633	3/4	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-7/16	W14x38	0.706	11/16	1	1-5/16	2	2-5/8
5/8	15/16	1-3/16	1-13/16	2-3/8	W14x43	0.752	11/16	1	1-5/16	1-15/16	2-9/16
9/16	7/8	1-1/8	1-11/16	2-1/4	W14x48	0.835	5/8	1	1-1/4	1-7/8	2-1/2
1/2	13/16	1-1/8	1-5/8	2-3/16	W14x53	0.915	9/16	15/16	1-1/4	1-7/8	2-7/16
1/2	13/16	1-1/8	1-5/8	2-3/16	W14x61	0.928	9/16	15/16	1-1/4	1-13/16	2-3/8
1/2	13/16	1-1/16	1-9/16	2-1/16	W14x68	1.04	9/16	7/8	1-3/16	1-3/4	2-5/16
1/2	3/4	1	1-1/2	2	W14x90	1.08	9/16	7/8	1-1/8	1 3/4	2-1/4
1/2	3/4	1	1-1/2	2	W14x74	1.12	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-7/16	1-15/16	W14x99	1.18	1/2	7/8	1-1/8	1-11/16	2-3/16
1/2	3/4	15/16	1-7/16	1-7/8	W14x82	1.23	1/2	13/16	1-1/16	1-11/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W14x109	1.29	1/2	13/16	1-1/16	1 5/8	2-1/8
7/16	11/16	7/8	1-5/16	1-3/4	W14x120	1.42	7/16	13/16	1	1-9/16	2-1/16
7/16	5/8	13/16	1-1/4	1-5/8	W14x132	1.56	7/16	3/4	1	1-1/2	2
7/16	5/8	13/16	1-3/16	1-9/16	W14x145	1.64	7/16	3/4	15/16	1-1/2	1-15/16
3/8	9/16	3/4	1-1/8	1-1/2	W14x159	1.78	3/8	11/16	15/16	1-7/16	1-7/8
3/8	9/16	3/4	1-1/16	1-7/16	W14x176	1.96	3/8	11/16	7/8	1-3/8	1-13/16
3/8	1/2	11/16	1	1-5/16	W14x193	2.14	3/8	11/16	7/8	1-5/16	1-3/4

5/16	1/2	5/8	15/16	1-1/4	W14x211	2.32	5/16	5/8	13/16	1-1/4	1-11/16
1/4	7/16	9/16	7/8	1-3/16	W14x233	2.55	1/4	7/16	11/16	1-3/16	1-9/16
1/4	7/16	9/16	13/16	1-1/8	W14x257	2.78	1/4	7/16	11/16	1-1/8	1-1/2
1/4	7/16	9/16	13/16	1-1/16	W14x283	3.03	1/4	7/16	11/16	1-1/8	1-7/16
1/4	3/8	1/2	3/4	1	W14x311	3.3	1/4	7/16	5/8	1-1/16	1-3/8
1/4	3/8	1/2	11/16	15/16	W14x342	3.58	1/4	7/16	5/8	1	1-5/16
1/4	3/8	7/16	11/16	7/8	W14x370	3.84	1/4	7/16	9/16	15/16	1-1/4
1/4	5/16	7/16	5/8	13/16	W14x398	4.09	1/4	7/16	9/16	15/16	1-3/16
1/4	5/16	7/16	5/8	13/16	W14x426	4.32	1/4	7/16	1/2	7/8	1-3/16
1/4	5/16	3/8	9/16	3/4	W14x455	4.59	1/4	3/8	1/2	13/16	1-1/8
1/4	5/16	3/8	9/16	11/16	W14x500	4.95	1/4	3/8	7/16	13/16	1-1/16
1/4	1/4	3/8	1/2	11/16	W14x550	5.34	1/4	3/8	7/16	3/4	1
1/4	1/4	5/16	1/2	5/8	W14x605	5.82	1/4	5/16	3/8	11/16	15/16
1/4	1/4	5/16	7/16	9/16	W14x665	6.21	1/4	5/16	3/8	5/8	7/8
1/4	1/4	1/4	3/8	1/2	W14x730	6.76	1/4	5/16	5/16	9/16	3/4
3/4	1-1/16	1-7/16	2-1/8	2-13/16	W16x26	0.499	13/16	1-1/8	1-1/2	2-1/4	2-7/8
11/16	1	1-5/16	2	2-5/8	W16x31	0.592	3/4	1-1/16	1-3/8	2-1/16	2-11/16
11/16	1	1-5/16	1-15/16	2-5/8	W16x36	0.617	3/4	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-1/2	W16x40	0.686	11/16	1-1/16	1-3/8	2	2-5/8
5/8	15/16	1-3/16	1-13/16	2-3/8	W16x45	0.767	11/16	1	1-5/16	1-15/16	2-9/16
1/2	7/8	1-1/8	1-11/16	2-1/4	W16x50	0.846	9/16	15/16	1-1/4	1-7/8	2-1/2
1/2	13/16	1-1/8	1 5/8	2-3/16	W16x67	0.936	9/16	15/16	1-3/16	1-13/16	2-3/8

1/2	13/16	1-1/16	1 5/8	2-1/8	W16x57	0.963	9/16	15/16	1-3/16	1-13/16	2-3/8
1/2	3/4	1	1-1/2	2	W16x77	1.07	9/16	7/8	1-1/8	1 3/4	2-5/16
1/2	3/4	15/16	1-7/16	1-7/8	W16x89	1.22	1/2	7/8	1-1/8	1-11/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W16x100	1.37	1/2	13/16	1-1/16	1-9/16	2-1/16
11/16	1	1-5/16	2	2-5/8	W18x35	0.602	3/4	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-1/2	W18x40	0.688	11/16	1-1/16	1-3/8	2	2-5/8
5/8	7/8	1-3/16	1-3/4	2-3/8	W18x50	0.778	11/16	1	1-5/16	1-15/16	2-9/16
5/8	7/8	1-3/16	1-3/4	2-3/8	W18x46	0.786	5/8	1	1-5/16	1-15/16	2-9/16
1/2	7/8	1-1/8	1-11/16	2-1/4	W18x55	0.85	9/16	15/16	1-1/4	1-7/8	2-1/2
1/2	13/16	1-1/8	1-5/8	2-3/16	W18x60	0.923	9/16	15/16	1-1/4	1-13/16	2-3/8
1/2	13/16	1-1/16	1-5/8	2-1/8	W18x76	0.971	9/16	15/16	1-3/16	1-13/16	2-3/8
1/2	13/16	1-1/16	1-9/16	2-1/16	W18x65	0.997	9/16	15/16	1-3/16	1-13/16	2-5/16
1/2	3/4	1	1-1/2	2	W18x71	1.08	9/16	7/8	1-1/8	1-3/4	2-1/4
1/2	3/4	1	1-1/2	2	W18x86	1.09	9/16	7/8	1-1/8	1-3/4	2-1/4
1/2	3/4	15/16	1-7/16	1-7/8	W18x97	1.22	1/2	7/8	1-1/8	1-11/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W18x106	1.33	1/2	13/16	1-1/16	1-5/8	2-1/8
7/16	5/8	7/8	1-1/4	1-11/16	W18x119	1.48	7/16	3/4	1	1-9/16	2
5/8	15/16	1-1/4	1-7/8	2-1/2	W21x44	0.672	11/16	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-3/16	1-13/16	2-3/8	W21x50	0.754	11/16	1	1-5/16	1-15/16	2-9/16
1/2	7/8	1-1/8	1-11/16	2-1/4	W21x62	0.846	9/16	15/16	1-1/4	1-7/8	2-1/2

1/2	7/8	1-1/8	1-11/16	2-1/4	W21x57	0.857	9/16	15/16	1-1/4	1-7/8	2-7/16
1/2	13/16	1-1/8	1 5/8	2 3/16	W21x68	0.926	9/16	15/16	1-1/4	1-13/16	2-3/8
1/2	13/16	1-1/16	1-9/16	2-1/8	W21x73	0.989	9/16	15/16	1-3/16	1-13/16	2-3/8
1/2	3/4	1	1-1/2	2	W21x83	1.12	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-1/2	1-15/16	W21x101	1.13	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	11/16	15/16	1-3/8	1-7/8	W21x93	1.24	1/2	13/16	1-1/16	1-5/8	2-3/16
1/2	11/16	15/16	1-3/8	1-7/8	W21x111	1.24	1/2	13/16	1-1/16	1-5/8	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W21x122	1.35	1/2	13/16	1-1/16	1-5/8	2-1/8
7/16	11/16	7/8	1-5/16	1-11/16	W21x132	1.45	7/16	13/16	1	1-9/16	2-1/16
7/16	5/8	13/16	1-3/16	1-5/8	W21x147	1.61	7/16	3/4	1	1-1/2	1-15/16
5/8	15/16	1-3/16	1-13/16	2-3/8	W24x55	0.749	11/16	1	1-5/16	1-15/16	2-9/16
9/16	7/8	1-1/8	1-11/16	2-1/4	W24x68	0.837	5/8	1	1-1/4	1-7/8	2-1/2
1/2	7/8	1-1/8	1-11/16	2-1/4	W24x62	0.844	9/16	15/16	1-1/4	1-7/8	2-1/2
1/2	13/16	1-1/8	1-5/8	2-3/16	W24x76	0.933	9/16	15/16	1-3/16	1-13/16	2-3/8
1/2	13/16	1-1/16	1-9/16	2-1/16	W24x84	1.02	9/16	15/16	1-3/16	1-3/4	2 5/16
1/2	3/4	1	1-1/2	2	W24x104	1.07	9/16	7/8	1-1/8	1-3/4	2-5/16
1/2	3/4	1	1-1/2	1-15/16	W24x94	1.14	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	15/16	1-7/16	1-7/8	W24x117	1.2	1/2	7/8	1-1/8	1-11/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W24x131	1.33	1/2	13/16	1-1/16	1-5/8	2-1/8
7/16	5/8	7/8	1-1/4	1-	W24x146	1.48	7/16	3/4	1	1-	2

				11/16						9/16	
7/16	5/8	13/16	1-3/16	1-9/16	W24x162	1.63	7/16	3/4	15/16	1-1/2	1-15/16
1/2	13/16	1-1/8	1-5/8	2-3/16	W27x84	0.921	9/16	15/16	1-1/4	1-13/16	2-7/16
1/2	13/16	1-1/16	1-9/16	2-1/16	W27x94	1.03	9/16	7/8	1-3/16	1-3/4	2-5/16
1/2	3/4	1	1-1/2	2	W27x102	1.11	9/16	7/8	1-1/8	1-3/4	2-1/4
1/2	3/4	15/16	1-7/16	1-7/8	W27x114	1.23	1/2	13/16	1-1/16	1-11/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W27x146	1.35	1/2	13/16	1-1/16	1-5/8	2-1/8
7/16	5/8	7/8	1-1/4	1-11/16	W27x161	1.48	7/16	3/4	1	1-9/16	2
7/16	5/8	13/16	1-3/16	1-9/16	W27x178	1.63	7/16	3/4	15/16	1-1/2	1-15/16
1/2	13/16	1-1/16	1-9/16	2-1/16	W30x99	1	9/16	15/16	1-3/16	1-13/16	2-5/16
1/2	3/4	1	1-1/2	2	W30x108	1.09	9/16	7/8	1-1/8	1-3/4	2-1/4
1/2	3/4	1	1-7/16	1-15/16	W30x116	1.16	1/2	7/8	1-1/8	1-11/16	2-1/4
1/2	11/16	15/16	1-3/8	1-7/8	W30x124	1.24	1/2	13/16	1-1/16	1 5/8	2 3/16
1/2	11/16	15/16	1-3/8	1-13/16	W30x132	1.32	1/2	13/16	1-1/16	1 5/8	2-1/8
7/16	5/8	7/8	1-1/4	1-11/16	W30x173	1.47	7/16	13/16	1	1-9/16	2
7/16	5/8	13/16	1-3/16	1-9/16	W30x191	1.62	7/16	3/4	1	1-1/2	1-15/16
3/8	9/16	3/4	1-1/8	1-1/2	W30x211	1.76	3/8	3/4	15/16	1-7/16	1-7/8
1/2	3/4	1	1-1/2	2	W33x118	1.08	9/16	7/8	1-1/8	1-3/4	2-1/4
1/2	3/4	1	1-7/16	1-15/16	W33x130	1.18	1/2	7/8	1-1/8	1-11/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W33x141	1.28	1/2	13/16	1-1/16	1-5/8	2-1/8
7/16	11/16	7/8	1-5/16	1-3/4	W33x152	1.37	1/2	13/16	1-1/16	1-9/16	2-1/16

7/16	5/8	13/16	1-1/4	1-5/8	W33x201	1.58	7/16	3/4	1	1-1/2	2
3/8	9/16	3/4	1-1/8	1-1/2	W33x221	1.73	3/8	3/4	15/16	1-7/16	1-7/8
3/8	9/16	3/4	1-1/8	1-7/16	W33x241	1.87	3/8	11/16	7/8	1-3/8	1-13/16
1/2	3/4	1	1-7/16	1-15/16	W36x135	1.15	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	11/16	15/16	1-3/8	1-13/16	W36x150	1.27	1/2	13/16	1-1/16	1-5/8	2-1/8
7/16	11/16	7/8	1-5/16	1-3/4	W36x160	1.35	1/2	13/16	1-1/16	1-5/8	2-1/8
7/16	11/16	7/8	1-5/16	1-11/16	W36x170	1.43	7/16	13/16	1	1-9/16	2-1/16
7/16	5/8	13/16	1-1/4	1 5/8	W36x182	1.52	7/16	3/4	1	1-1/2	2
7/16	5/8	13/16	1-3/16	1-9/16	W36x194	1.62	7/16	3/4	1	1-1/2	1-15/16
7/16	5/8	13/16	1-3/16	1-9/16	W36x230	1.69	7/16	3/4	15/16	1-7/16	1-15/16
3/8	9/16	3/4	1-1/8	1-1/2	W36x210	1.74	3/8	3/4	15/16	1-7/16	1-7/8
3/8	9/16	3/4	1-1/8	1-1/2	W36x245	1.79	3/8	11/16	15/16	1-7/16	1-7/8
3/8	9/16	3/4	1-1/16	1-7/16	W36x260	1.9	3/8	11/16	7/8	1-3/8	1-13/16
3/8	9/16	11/16	1-1/16	1-3/8	W36x280	2.03	3/8	11/16	7/8	1-3/8	1-3/4

SOUTHWEST FIREPROOFING PRODUCTS CO — Types 4, 5, 5GP, 5GP/AR, 5EF/AR, 5MD/AR, 5EF, 5MD, 5AR, 7GP, 7HD, 8GP, 8EF, 8MD, 9GP, 9EF, 9MD.

For Hi-5											
FULL FLANGE TIP THICKNESS (in.)					Member		HALF FLANGE TIP THICKNESS (in.)				
1 Hr	1-1/2 Hr	2 Hr	3 Hr	4 Hr	Size x Wt	W/D	1 Hr	1-1/2 Hr	2 Hr	3 Hr	4 Hr
5/8	7/8	1-3/16	1-3/4	2-3/8	W4x13	0.556	11/16	1	1-1/4	1-7/8	2-7/16
5/8	7/8	1-	1-3/4	2-3/8	W5x16	0.55	11/16	1	1-1/4	1-7/8	2-1/2

		3/16									
9/16	7/8	1-1/8	1-11/16	2-1/4	W5x19	0.644	5/8	15/16	1-3/16	1-13/16	2-3/8
11/16	1	1-5/16	2	2-5/8	W6x9	0.338	3/4	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-1/2	W6x15	0.431	3/4	1-1/16	1-3/8	2	2-5/8
5/8	15/16	1-1/4	1-7/8	2-1/2	W6x12	0.448	3/4	1-1/16	1-5/16	2	2-5/8
5/8	7/8	1-3/16	1-3/4	2-5/16	W6x20	0.563	11/16	1	1-1/4	1-7/8	2-7/16
9/16	7/8	1-18	1-3/4	2-5/16	W6x16	0.584	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	13/16	1-18	1-5/8	2-3/16	W6x25	0.696	5/8	15/16	1-3/16	1-3/4	2-5/16
11/16	1	1-5/16	1-15/16	2-9/16	W8x13	0.421	3/4	1-1/16	1-3/8	2	2-5/8
5/8	15/16	1-1/4	1-13/16	2-7/16	W8x15	0.481	11/16	1	1-5/16	1-15/16	2-9/16
5/8	15/16	1-1/4	1-13/16	2-7/16	W8x18	0.499	11/16	1	1-5/16	1-15/16	2-9/16
5/8	7/8	1-3/16	1-3/4	2-5/16	W8x21	0.577	11/16	1	1-1/4	1-7/8	2-7/16
9/16	7/8	1-1/8	1-3/4	2-5/16	W8x24	0.591	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	7/8	1-1/8	1-11/16	2-3/16	W8x31	0.665	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	13/16	1-1/16	1-5/8	2-3/16	W8x28	0.688	5/8	15/16	1-3/16	1-3/4	2-5/16
9/16	13/16	1-1/16	1-5/8	2-1/8	W8x35	0.749	5/8	7/8	1-1/8	1-3/4	2-5/16
1/2	3/4	1	1-1/2	2	W8x40	0.849	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	15/16	1-7/16	1-7/8	W8x48	1	9/16	13/16	1-1/16	1-9/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W8x58	1.2	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	13/16	1-1/4	1-5/8	W8x67	1.37	7/16	3/4	15/16	1-7/16	2-1/16

11/16	1	1-5/16	2	2-5/8	W10x12	0.347	3/4	1-1/16	1-3/8	2-1/16	2-11/16
5/8	15/16	1-1/4	1-7/8	2-1/2	W10x15	0.429	3/4	1-1/16	1-3/8	2	2-5/8
5/8	15/16	1-1/4	1-13/16	2-7/16	W10x17	0.482	11/16	1	1-5/16	1-15/16	2-9/16
5/8	15/16	1-3/16	1-13/16	2-3/8	W10x22	0.523	11/16	1	1-5/16	1-15/16	2-1/2
5/8	15/16	1-3/16	1-13/16	2-3/8	W10x19	0.538	11/16	1	1-1/4	1-7/8	2-1/2
9/16	7/8	1-1/8	1-11/16	2-1/4	W10x26	0.612	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	7/8	1-1/8	1-11/16	2-3/16	W10x33	0.661	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	13/16	1-1/8	1-5/8	2-3/16	W10x30	0.699	5/8	15/16	1-3/16	1-3/4	2-5/16
9/16	13/16	1-1/16	1-9/16	2-1/16	W10x39	0.78	5/8	7/8	1-1/8	1-11/16	2-5/16
1/2	3/4	1	1-1/2	2	W10x49	0.84	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-1/2	2	W10x45	0.888	9/16	7/8	1-1/16	1-5/8	2-1/4
1/2	3/4	1	1-1/2	1-15/16	W10x54	0.922	9/16	7/8	1-1/16	1-5/8	2-1/4
1/2	3/4	15/16	1-7/16	1-7/8	W10x60	1.01	1/2	13/16	1-1/16	1-9/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W10x68	1.15	1/2	13/16	1	1-1/2	2-1/8
7/16	5/8	7/8	1-1/4	1-11/16	W10x77	1.28	1/2	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-3/16	1-9/16	W10x88	1.45	7/16	3/4	15/16	1-3/8	2
3/8	9/16	3/4	1-1/8	1-1/2	W10x100	1.64	7/16	11/16	7/8	1-5/16	1-15/16
3/8	9/16	11/16	1-1/16	1-3/8	W10x112	1.81	3/8	11/16	13/16	1-5/16	1-7/8
11/16	1	1-5/16	2	2-5/8	W12x14	0.363	3/4	1-1/16	1-3/8	2-1/16	2-11/16
11/16	1	1-	1-	2-	W12x16	0.41	3/4	1-	1-3/8	2-	2-

		5/16	15/16	9/16				1/16		1/16	11/16
5/8	15/16	1-1/4	1-13/16	2-7/16	W12x19	0.485	11/16	1	1-5/16	1-15/16	2-9/16
5/8	15/16	1-3/16	1-13/16	2-3/8	W12x26	0.531	11/16	1	1-1/4	1-7/8	2-1/2
5/8	7/8	1-3/16	1-3/4	2-5/16	W12x22	0.56	11/16	1	1-1/4	1-7/8	2-7/16
9/16	7/8	1-1/8	1-3/4	2-5/16	W12x30	0.607	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	13/16	1-1/8	1-5/8	2-3/16	W12x35	0.703	5/8	15/16	1-3/16	1-3/4	2-5/16
9/16	13/16	1-1/16	1-5/8	2-1/8	W12x40	0.734	5/8	15/16	1-3/16	1-3/4	2-5/16
9/16	13/16	1-1/16	1-9/16	2-1/16	W12x45	0.829	9/16	7/8	1-1/8	1-11/16	2-5/16
1/2	3/4	1	1-1/2	2	W12x53	0.855	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-1/2	1-15/16	W12x50	0.909	9/16	7/8	1-1/16	1-5/8	2-1/4
1/2	3/4	1	1-1/2	1-15/16	W12x58	0.925	9/16	7/8	1-1/16	1-5/8	2-1/4
1/2	3/4	1	1-1/2	1-15/16	W12x65	0.925	9/16	7/8	1-1/16	1-5/8	2-1/4
1/2	3/4	15/16	1-7/16	1-7/8	W12x72	1.02	1/2	13/16	1-1/16	1-9/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W12x79	1.11	1/2	13/16	1	1-9/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W12x87	1.22	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	13/16	1-1/4	1-5/8	W12x96	1.34	7/16	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-3/16	1-9/16	W12x106	1.47	7/16	11/16	15/16	1-3/8	2
3/8	9/16	3/4	1-1/8	1-1/2	W12x120	1.65	7/16	11/16	7/8	1-5/16	1-15/16
3/8	9/16	11/16	1-1/16	1-3/8	W12x136	1.86	3/8	5/8	13/16	1-1/4	1-13/16
3/8	1/2	11/16	1	1-5/16	W12x152	2.04	3/8	5/8	13/16	1-1/4	1-3/4

5/16	1/2	5/8	15/16	1-1/4	W12x170	2.26	5/16	5/8	3/4	1-3/16	1-11/16
5/16	7/16	9/16	7/8	1-1/8	W12x190	2.5	5/16	9/16	3/4	1-1/8	1-9/16
1/4	7/16	9/16	13/16	1-1/16	W12x210	2.73	1/4	7/16	11/16	1-1/16	1-7/16
1/4	3/8	1/2	3/4	1	W12x230	2.96	1/4	7/16	11/16	1-1/16	1-3/8
1/4	3/8	1/2	3/4	15/16	W12x252	3.2	1/4	7/16	5/8	1	1-5/16
1/4	3/8	1/2	11/16	15/16	W12x279	3.5	1/4	7/16	5/8	15/16	1-1/4
1/4	5/16	7/16	5/8	7/8	W12x305	3.76	1/4	7/16	9/16	15/16	1-1/4
1/4	5/16	7/16	5/8	13/16	W12x336	4.06	1/4	7/16	9/16	7/8	1-3/16
5/8	15/16	1-1/4	1-7/8	2-7/16	W14x22	0.476	11/16	1	1-5/16	1-15/16	2-9/16
5/8	7/8	1-3/16	2-3/8	2-5/16	W14x26	0.559	11/16	1	1-1/4	1-7/8	2-7/16
5/8	7/8	1-3/16	2-3/8	2-5/16	W14x30	0.562	11/16	1	1-1/4	1-7/8	2-7/16
9/16	7/8	1-1/8	1-11/16	2-1/4	W14x34	0.633	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	13/16	1-1/8	1-5/8	2-3/16	W14x38	0.706	5/8	15/16	1-3/16	1-3/4	2-5/16
9/16	13/16	1-1/16	1-5/8	2-1/8	W14x43	0.752	5/8	7/8	1-1/8	1-3/4	2-5/16
9/16	13/16	1-1/16	1-9/16	2-1/16	W14x48	0.835	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-1/2	1-15/16	W14x53	0.915	9/16	7/8	1-1/16	1-5/8	2-1/4
1/2	3/4	1	1-1/2	1-15/16	W14x61	0.928	9/16	13/16	1-1/16	1-5/8	2-1/4
1/2	11/16	15/16	1-3/8	1-7/8	W14x68	1.04	1/2	13/16	1-1/16	1-9/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W14x90	1.08	1/2	13/16	1	1-9/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W14x74	1.12	1/2	13/16	1	1-1/2	2-1/8

7/16	11/16	7/8	1-5/16	1-3/4	W14x99	1.18	1/2	3/4	1	1-1/2	2-1/8
7/16	11/16	7/8	1-5/16	1-11/16	W14x82	1.23	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	7/8	1-1/4	1-11/16	W14x109	1.29	7/16	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-3/16	1-5/8	W14x120	1.42	7/16	3/4	15/16	1-7/16	2
3/8	9/16	3/4	1-1/8	1-1/2	W14x132	1.56	7/16	11/16	7/8	1-3/8	1-15/16
3/8	9/16	3/4	1-1/8	1-1/2	W14x145	1.64	7/16	11/16	7/8	1-5/16	1-15/16
3/8	9/16	3/4	1-1/16	1-7/16	W14x159	1.78	3/8	11/16	13/16	1-5/16	1-7/8
3/8	1/2	11/16	1	1-5/16	W14x176	1.96	3/8	5/8	13/16	1-1/4	1-13/16
5/16	1/2	5/8	15/16	1-1/4	W14x193	2.14	5/16	5/8	3/4	1-3/16	1-11/16
5/16	1/2	5/8	15/16	1-3/16	W14x211	2.32	5/16	9/16	3/4	1-3/16	1-5/8
1/4	7/16	9/16	13/16	1-1/8	W14x233	2.55	1/4	7/16	11/16	1-1/8	1-1/2
1/4	7/16	9/16	13/16	1-1/16	W14x257	2.78	1/4	7/16	11/16	1-1/16	1-7/16
1/4	3/8	1/2	3/4	1	W14x283	3.03	1/4	7/16	5/8	1-1/16	1-3/8
1/4	3/8	1/2	11/16	15/16	W14x311	3.3	1/4	7/16	5/8	1	1-5/16
1/4	3/8	7/16	11/16	7/8	W14x342	3.58	1/4	7/16	9/16	15/16	1-1/4
1/4	5/16	7/16	5/8	7/8	W14x370	3.84	1/4	7/16	9/16	15/16	1-3/16
1/4	5/16	7/16	5/8	13/16	W14x398	4.09	1/4	7/16	9/16	7/8	1-3/16
1/4	5/16	3/8	9/16	3/4	W14x426	4.32	1/4	7/16	1/2	7/8	1-1/8
1/4	5/16	3/8	9/16	3/4	W14x455	4.59	1/4	3/8	1/2	13/16	1-1/8
1/4	5/16	3/8	9/16	11/16	W14x500	4.95	1/4	3/8	1/2	13/16	1-1/16
1/4	1/4	3/8	1/2	11/16	W14x550	5.34	1/4	3/8	7/16	3/4	1
1/4	1/4	5/16	1/2	5/8	W14x605	5.82	1/4	5/16	7/16	11/16	15/16

1/4	1/4	5/16	7/16	9/16	W14x665	6.21	1/4	5/16	3/8	11/16	7/8
1/4	1/4	1/4	3/8	1/2	W14x730	6.76	1/4	5/16	5/16	9/16	3/4
5/8	15/16	1-1/4	1-13/16	2-7/16	W16x26	0.499	11/16	1	1-5/16	1-15/16	2-9/16
9/16	7/8	1-1/8	2-3/8	2-5/16	W16x31	0.592	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	7/8	1-1/8	1-11/16	2-1/4	W16x36	0.617	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	13/16	1-1/8	1-5/8	2-3/16	W16x40	0.686	5/8	15/16	1-3/16	1-3/4	2-5/16
9/16	13/16	1-1/16	1-9/16	2-1/8	W16x45	0.767	5/8	7/8	1-1/8	1-3/4	2-5/16
1/2	3/4	1	1-1/2	2	W16x50	0.846	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-7/16	1-15/16	W16x67	0.936	9/16	13/16	1-1/16	1-5/8	2-1/4
1/2	3/4	1	1-7/16	1-15/16	W16x57	0.963	9/16	13/16	1-1/16	1-5/8	2-1/4
1/2	11/16	15/16	1-3/8	1-13/16	W16x77	1.07	1/2	13/16	1	1-9/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W16x89	1.22	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	13/16	1-1/4	1-5/8	W16x100	1.37	7/16	3/4	15/16	1-7/16	2-1/16
9/16	7/8	1-1/8	2-3/8	2-5/16	W18x35	0.602	5/8	15/16	1-3/16	1-13/16	2-3/8
9/16	13/16	1-1/8	1-5/8	2-3/16	W18x40	0.688	5/8	15/16	1-3/16	1-3/4	2-5/16
9/16	13/16	1-1/16	1-9/16	2-1/16	W18x50	0.778	5/8	7/8	1-1/8	1-11/16	2-5/16
9/16	13/16	1-1/16	1-9/16	2-1/16	W18x46	0.786	9/16	7/8	1-1/8	1-11/16	2-5/16
1/2	3/4	1	1-1/2	2	W18x55	0.85	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-1/2	1-15/16	W18x60	0.923	9/16	7/8	1-1/16	1-5/8	2-1/4
1/2	3/4	1	1-7/16	1-15/16	W18x76	0.971	9/16	13/16	1-1/16	1-5/8	2-1/4

1/2	3/4	15/16	1-7/16	1-7/8	W18x65	0.997	9/16	13/16	1-1/16	1-9/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W18x71	1.08	1/2	13/16	1	1-9/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W18x86	1.09	1/2	13/16	1	1-9/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W18x97	1.22	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	13/16	1-1/4	1-5/8	W18x106	1.33	7/16	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-3/16	1-9/16	W18x119	1.48	7/16	11/16	15/16	1-3/8	2
9/16	7/8	1-1/8	1-11/16	2-3/16	W21x44	0.672	5/8	15/16	1-3/16	1-13/16	2-5/16
9/16	13/16	1-1/16	1-5/8	2-1/8	W21x50	0.754	5/8	7/8	1-1/8	1-3/4	2-5/16
1/2	3/4	1	1-1/2	2	W21x62	0.846	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-1/2	2	W21x57	0.857	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-1/2	1-15/16	W21x68	0.926	9/16	13/16	1-1/16	1-5/8	2-1/4
1/2	3/4	15/16	1-7/16	1-7/8	W21x73	0.989	9/16	13/16	1-1/16	1-9/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W21x83	1.12	1/2	13/16	1	1-1/2	2-1/8
1/2	11/16	15/16	1-3/8	1-13/16	W21x101	1.13	1/2	13/16	1	1-1/2	2-1/8
7/16	11/16	7/8	1-5/16	1-11/16	W21x93	1.24	1/2	3/4	1	1-1/2	2-1/8
7/16	11/16	7/8	1-5/16	1-11/16	W21x111	1.24	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	13/16	1-1/4	1-5/8	W21x122	1.35	7/16	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-3/16	1-9/16	W21x132	1.45	7/16	3/4	15/16	1-3/8	2
3/8	9/16	3/4	1-1/8	1-1/2	W21x147	1.61	7/16	11/16	7/8	1-3/8	1-15/16
9/16	13/16	1-	1-5/8	2-1/8	W24x55	0.749	5/8	7/8	1-1/8	1-3/4	2-

		1/16									5/16
9/16	13/16	1-1/16	1-9/16	2-1/16	W24x68	0.837	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-1/2	2	W24x62	0.844	9/16	7/8	1-1/8	1-11/16	2-1/4
1/2	3/4	1	1-7/16	1-15/16	W24x76	0.933	9/16	13/16	1-1/16	1-5/8	2-1/4
1/2	3/4	15/16	1-7/16	1-7/8	W24x84	1.02	1/2	13/16	1-1/16	1-9/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W24x104	1.07	1/2	13/16	1	1-9/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W24x94	1.14	1/2	13/16	1	1-1/2	2-1/8
7/16	11/16	7/8	1-5/16	1-3/4	W24x117	1.2	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	13/16	1-1/4	1-5/8	W24x131	1.33	7/16	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-3/16	1-9/16	W24x146	1.48	7/16	11/16	15/16	1-3/8	2
3/8	9/16	3/4	1-1/8	1-1/2	W24x162	1.63	7/16	11/16	7/8	1-5/16	1-15/16
1/2	3/4	1	1-1/2	1-15/16	W27x84	0.921	9/16	7/8	1-1/16	1-5/8	2-1/4
1/2	11/16	15/16	1-3/8	1-7/8	W27x94	1.03	1/2	13/16	1-1/16	1-9/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W27x102	1.11	1/2	13/16	1	1-9/16	2-3/16
7/16	11/16	7/8	1-5/16	1-11/16	W27x114	1.23	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	13/16	1-1/4	1-5/8	W27x146	1.35	7/16	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-3/16	1-9/16	W27x161	1.48	7/16	11/16	15/16	1-3/8	2
3/8	9/16	3/4	1-1/8	1-1/2	W27x178	1.63	7/16	11/16	7/8	1-5/16	1-15/16
1/2	3/4	15/16	1-7/16	1-7/8	W30x99	1	9/16	13/16	1-1/16	1-9/16	2-3/16
1/2	11/16	15/16	1-3/8	1-13/16	W30x108	1.09	1/2	13/16	1	1-9/16	2-3/16

7/16	11/16	7/8	1-5/16	1-3/4	W30x116	1.16	1/2	13/16	1	1-1/2	2-1/8
7/16	11/16	7/8	1-5/16	1-11/16	W30x124	1.24	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	13/16	1-1/4	1-5/8	W30x132	1.32	7/16	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-3/16	1-9/16	W30x173	1.47	7/16	11/16	15/16	1-3/8	2
3/8	9/16	3/4	1-1/8	1-1/2	W30x191	1.62	7/16	11/16	7/8	1-3/8	1-15/16
3/8	9/16	3/4	1-1/16	1-7/16	W30x211	1.76	3/8	11/16	7/8	1-5/16	1-7/8
1/2	11/16	15/16	1-3/8	1-13/16	W33x118	1.08	1/2	13/16	1	1-9/16	2-3/16
7/16	11/16	7/8	1-5/16	1-3/4	W33x130	1.18	1/2	3/4	1	1-1/2	2-1/8
7/16	5/8	7/8	1-1/4	1-11/16	W33x141	1.28	1/2	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-1/4	1-5/8	W33x152	1.37	7/16	3/4	15/16	1-7/16	2-1/16
3/8	9/16	3/4	1-1/8	1-1/2	W33x201	1.58	7/16	11/16	7/8	1-3/8	1-15/16
3/8	9/16	3/4	1-1/16	1-7/16	W33x221	1.73	3/8	11/16	7/8	1-5/16	1-7/8
3/8	9/16	11/16	1-1/16	1-3/8	W33x241	1.87	3/8	5/8	13/16	1-1/4	1-13/16
7/16	11/16	7/8	1-5/16	1-3/4	W36x135	1.15	1/2	13/16	1	1-1/2	2-1/8
7/16	5/8	7/8	1-1/4	1-11/16	W36x150	1.27	1/2	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-1/4	1-5/8	W36x160	1.35	7/16	3/4	15/16	1-7/16	2-1/16
7/16	5/8	13/16	1-3/16	1-9/16	W36x170	1.43	7/16	3/4	15/16	1-7/16	2
7/16	5/8	13/16	1-3/16	1-9/16	W36x182	1.52	7/16	11/16	7/8	1-3/8	2
3/8	9/16	3/4	1-1/8	1-1/2	W36x194	1.62	7/16	11/16	7/8	1-3/8	1-15/16
3/8	9/16	3/4	1-1/8	1-	W36x230	1.69	3/8	11/16	7/8	1-	1-

				7/16						5/16	15/16
3/8	9/16	3/4	1-1/16	1-7/16	W36x210	1.74	3/8	11/16	7/8	1-5/16	1-7/8
3/8	9/16	11/16	1-1/16	1-3/8	W36x245	1.79	3/8	11/16	13/16	1-5/16	1-7/8
3/8	1/2	11/16	1	1-3/8	W36x260	1.9	3/8	5/8	13/16	1-1/4	1-13/16
3/8	1/2	11/16	1	1-5/16	W36x280	2.03	3/8	5/8	13/16	1-1/4	1-3/4
5/16	1/2	5/8	15/16	1-1/4	W36x300	2.17	5/16	5/8	3/4	1-3/16	1-11/16

2. **Metal Lath** — (Optional for contour application)—3.4 lb/sq yd galvanized or painted expanded steel lath. Lath shall be lapped 1 in. and tied together with No. 18 SWG galvanized steel; wire spaced vertically 6 in. O.C.

3. **Steel Column** — Wide flange steel column, min sizes as shown in the tables above.

* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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