

Southwest Fireproofing Type 5 GP, 5 MD, 7 GP and 7 HD

Design No. J718 - Concrete Floor / Beam Assembly

Minimum Thickness Required on Beam, in.

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Member	W/D	Unrestrained Beam Rating				
		1 Hr	1.5 Hr	2 Hr	3 Hr	4 Hr
W4x13	0.65	0.49	0.70	0.91	1.40	2.03
W5x16	0.65	0.49	0.70	0.91	1.40	2.03
W5x19	0.76	0.45	0.64	0.84	1.29	1.87
W6x9	0.39	0.62	0.88	1.15	1.77	2.56
W6x12	0.51	0.55	0.79	1.02	1.58	2.29
W6x16	0.66	0.49	0.69	0.90	1.39	2.01
W6x20	0.67	0.48	0.69	0.90	1.38	2.00
W6x26	0.82	0.43	0.62	0.80	1.23	1.79
W8x10	0.37	0.63	0.90	1.17	1.80	2.62
W8x13	0.47	0.57	0.82	1.06	1.64	2.37
W8x15	0.54	0.54	0.77	1.00	1.54	2.23
W8x18	0.57	0.52	0.75	0.97	1.50	2.17
W8x21	0.66	0.49	0.69	0.90	1.39	2.01
W8x24	0.69	0.47	0.68	0.88	1.36	1.97
W8x28	0.80	0.44	0.63	0.81	1.25	1.81
W8x31	0.79	0.44	0.63	0.82	1.26	1.83
W8x35	0.88	0.41	0.59	0.77	1.18	1.71
W8x40	1.00	0.38	0.55	0.71	1.09	1.59
W8x48	1.18	0.38	0.49	0.64	0.98	1.43
W8x58	1.41	0.38	0.44	0.57	0.87	1.26
W8x67	1.61	0.38	0.40	0.51	0.79	1.15
W10x12	0.38	0.63	0.89	1.16	1.79	2.59
W10x15	0.48	0.57	0.81	1.05	1.62	2.35
W10x17	0.54	0.54	0.77	1.00	1.54	2.23
W10x19	0.59	0.51	0.74	0.96	1.47	2.13
W10x22	0.59	0.51	0.74	0.96	1.47	2.13
W10x26	0.69	0.47	0.68	0.88	1.36	1.97
W10x30	0.79	0.44	0.63	0.82	1.26	1.83
W10x33	0.77	0.45	0.64	0.83	1.28	1.85
W10x39	0.90	0.41	0.58	0.76	1.17	1.69
W10x46	1.03	0.38	0.54	0.70	1.07	1.56
W10x49	0.99	0.39	0.55	0.72	1.10	1.60
W10x54	1.09	0.38	0.52	0.67	1.04	1.50
W10x60	1.20	0.38	0.49	0.63	0.97	1.41
W10x68	1.36	0.38	0.45	0.58	0.89	1.29
W10x77	1.52	0.38	0.41	0.54	0.83	1.20
W10x88	1.72	0.38	0.38	0.49	0.75	1.09
W10x100	1.93	0.38	0.38	0.45	0.69	1.00
W10x112	2.14	0.38	0.38	0.42	0.64	0.93
W12x14	0.40	0.61	0.88	1.14	1.75	2.54
W12x16	0.45	0.58	0.83	1.08	1.67	2.42
W12x19	0.53	0.54	0.77	1.01	1.55	2.25
W12x22	0.61	0.51	0.72	0.94	1.45	2.10
W12x26	0.60	0.51	0.73	0.95	1.46	2.11
W12x30	0.69	0.47	0.68	0.88	1.36	1.97

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Member	W/D	Unrestrained Beam Rating				
		1 Hr	1.5 Hr	2 Hr	3 Hr	4 Hr
W12x35	0.79	0.44	0.63	0.82	1.26	1.83
W12x40	0.85	0.42	0.60	0.78	1.21	1.75
W12x45	0.95	0.40	0.56	0.73	1.13	1.64
W12x50	1.04	0.38	0.53	0.69	1.07	1.55
W12x53	0.99	0.39	0.55	0.72	1.10	1.60
W12x54	1.04	0.38	0.53	0.69	1.07	1.55
W12x58	1.08	0.38	0.52	0.68	1.04	1.51
W12x65	1.09	0.38	0.52	0.67	1.04	1.50
W12x72	1.20	0.38	0.49	0.63	0.97	1.41
W12x79	1.32	0.38	0.46	0.59	0.91	1.32
W12x87	1.44	0.38	0.43	0.56	0.86	1.24
W12x96	1.57	0.38	0.40	0.52	0.81	1.17
W12x106	1.73	0.38	0.38	0.49	0.75	1.09
W12x120	1.94	0.38	0.38	0.45	0.69	1.00
W12x136	2.17	0.38	0.38	0.41	0.63	0.92
W12x152	2.40	0.38	0.38	0.38	0.58	0.85
W12x170	2.66	0.38	0.38	0.38	0.54	0.78
W12x190	2.93	0.38	0.38	0.38	0.50	0.72
W12x210	3.21	0.38	0.38	0.38	0.46	0.67
W12x230	3.47	0.38	0.38	0.38	0.43	0.62
W12x262	3.76	0.38	0.38	0.38	0.40	0.58
W12x279	4.10	0.38	0.38	0.38	0.38	0.54
W12x305	4.41	0.38	0.38	0.38	0.38	0.51
W12x336	4.78	0.38	0.38	0.38	0.38	0.47
W14x22	0.52	0.55	0.78	1.02	1.56	2.27
W14x26	0.61	0.51	0.72	0.94	1.45	2.10
W14x30	0.63	0.50	0.71	0.92	1.42	2.06
W14x34	0.71	0.47	0.67	0.87	1.34	1.94
W14x38	0.79	0.44	0.63	0.82	1.26	1.83
W14x43	0.85	0.42	0.60	0.78	1.21	1.75
W14x48	0.94	0.40	0.57	0.74	1.14	1.65
W14x53	1.03	0.38	0.54	0.70	1.07	1.56
W14x61	1.07	0.38	0.52	0.68	1.05	1.52
W14x68	1.19	0.38	0.49	0.64	0.98	1.42
W14x74	1.28	0.38	0.47	0.61	0.93	1.35
W14x82	1.41	0.38	0.44	0.57	0.87	1.26
W14x90	1.27	0.38	0.47	0.61	0.94	1.36
W14x99	1.39	0.38	0.44	0.57	0.88	1.28
W14x109	1.53	0.38	0.41	0.53	0.82	1.19
W14x120	1.67	0.38	0.39	0.50	0.77	1.12
W14x132	1.83	0.38	0.38	0.47	0.72	1.04
W14x145	1.94	0.38	0.38	0.45	0.69	1.00
W14x159	2.11	0.38	0.38	0.42	0.65	0.94
W14x176	2.25	0.38	0.38	0.40	0.61	0.89
W14x193	2.32	0.38	0.38	0.39	0.60	0.87

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Member	W/D	Unrestrained Beam Rating				
		1 Hr	1.5 Hr	2 Hr	3 Hr	4 Hr
W14x211	2.74	0.38	0.38	0.38	0.52	0.76
W14x233	3.00	0.38	0.38	0.38	0.49	0.70
W14x257	3.27	0.38	0.38	0.38	0.45	0.66
W14x283	3.57	0.38	0.38	0.38	0.42	0.61
W14x311	3.88	0.38	0.38	0.38	0.39	0.57
W14x342	4.21	0.38	0.38	0.38	0.38	0.53
W14x370	4.51	0.38	0.38	0.38	0.38	0.50
W14x398	4.80	0.38	0.38	0.38	0.38	0.47
W14x426	5.09	0.38	0.38	0.38	0.38	0.45
W14x455	5.38	0.38	0.38	0.38	0.38	0.42
W14x500	5.82	0.38	0.38	0.38	0.38	0.40
W14x550	6.30	0.38	0.38	0.38	0.38	0.38
W14x605	6.80	0.38	0.38	0.38	0.38	0.38
W16x26	0.55	0.53	0.76	0.99	1.52	2.21
W16x31	0.65	0.49	0.70	0.91	1.40	2.03
W16x36	0.69	0.47	0.68	0.88	1.36	1.97
W16x40	0.76	0.45	0.64	0.84	1.29	1.87
W16x45	0.85	0.42	0.60	0.78	1.21	1.75
W16x50	0.94	0.40	0.57	0.74	1.14	1.65
W16x67	1.07	0.38	0.52	0.68	1.05	1.52
W16x77	1.07	0.38	0.52	0.68	1.05	1.52
W16x89	1.22	0.38	0.48	0.63	0.96	1.39
W16x100	1.56	0.38	0.41	0.53	0.81	1.17
W18x35	0.66	0.49	0.69	0.90	1.39	2.01
W18x40	0.76	0.45	0.64	0.84	1.29	1.87
W18x46	0.86	0.42	0.60	0.78	1.20	1.74
W18x50	0.87	0.42	0.60	0.77	1.19	1.73
W18x55	0.95	0.40	0.56	0.73	1.13	1.64
W18x60	1.03	0.38	0.54	0.70	1.07	1.56
W18x65	1.11	0.38	0.51	0.67	1.02	1.48
W18x71	1.21	0.38	0.48	0.63	0.97	1.40
W18x76	1.11	0.38	0.51	0.67	1.02	1.48
W18x88	1.24	0.38	0.48	0.62	0.95	1.38
W18x97	1.39	0.38	0.44	0.57	0.88	1.28
W18x106	1.52	0.38	0.41	0.54	0.83	1.20
W18x119	1.68	0.38	0.38	0.50	0.77	1.11
W21x44	0.73	0.46	0.66	0.86	1.32	1.91
W21x50	0.83	0.43	0.61	0.80	1.22	1.77
W21x57	0.93	0.40	0.57	0.74	1.14	1.66
W21x62	0.94	0.40	0.57	0.74	1.14	1.65
W21x68	1.03	0.38	0.54	0.70	1.07	1.56
W21x83	1.24	0.38	0.48	0.62	0.95	1.38
W21x93	1.38	0.38	0.44	0.57	0.88	1.28
W21x101	1.29	0.38	0.46	0.60	0.93	1.34
W21x111	1.41	0.38	0.44	0.57	0.87	1.26

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Member	W/D	Unrestrained Beam Rating				
		1 Hr	1.5 Hr	2 Hr	3 Hr	4 Hr
W21x122	1.54	0.38	0.41	0.53	0.82	1.19
W21x132	1.66	0.38	0.39	0.50	0.77	1.12
W21x147	1.83	0.38	0.38	0.47	0.72	1.04
W24x55	0.82	0.43	0.62	0.80	1.23	1.79
W24x62	0.92	0.40	0.58	0.75	1.15	1.67
W24x68	0.93	0.40	0.57	0.74	1.14	1.66
W24x76	1.02	0.38	0.54	0.70	1.08	1.57
W24x84	1.13	0.38	0.51	0.66	1.01	1.47
W24x94	1.26	0.38	0.47	0.61	0.94	1.36
W24x104	1.22	0.38	0.48	0.63	0.96	1.39
W24x117	1.36	0.38	0.45	0.58	0.89	1.29
W24x131	1.52	0.38	0.41	0.54	0.83	1.20
W24x146	1.68	0.38	0.38	0.50	0.77	1.11
W24x162	1.85	0.38	0.38	0.46	0.71	1.04
W27x84	1.02	0.38	0.54	0.70	1.08	1.57
W27x94	1.13	0.38	0.51	0.66	1.01	1.47
W27x102	1.23	0.38	0.48	0.62	0.96	1.39
W27x114	1.36	0.38	0.45	0.58	0.89	1.29
W27x146	1.53	0.38	0.41	0.53	0.82	1.19
W27x161	1.68	0.38	0.38	0.50	0.77	1.11
W27x178	1.85	0.38	0.38	0.46	0.71	1.04
W30x99	1.10	0.38	0.51	0.67	1.03	1.49
W30x108	1.20	0.38	0.49	0.63	0.97	1.41
W30x116	1.28	0.38	0.47	0.61	0.93	1.35
W30x124	1.37	0.38	0.44	0.58	0.89	1.29
W30x132	1.46	0.38	0.42	0.55	0.85	1.23
W30x173	1.66	0.38	0.39	0.50	0.77	1.12
W30x191	1.82	0.38	0.38	0.47	0.72	1.05
W30x211	2.00	0.38	0.38	0.44	0.67	0.98
W33x118	1.19	0.38	0.49	0.64	0.98	1.42
W33x130	1.31	0.38	0.46	0.60	0.92	1.33
W33x141	1.41	0.38	0.44	0.57	0.87	1.26
W33x152	1.51	0.38	0.41	0.54	0.83	1.20
W33x201	1.78	0.38	0.38	0.48	0.74	1.07

These beam protection thicknesses have been calculated for the convenience of users, in accordance with "6. Adjustment of Thickness of Spray-applied Fire Resistive Materials for Restrained and Unrestrained Beams", as detailed in the UL FireResistance Directory - Volume 1, 2010, page 10. While we have taken care to be as accurate as possible, we will not be held responsible for errors or omissions. If any discrepancy is found between these tables and the UL Design information, the UL Design information shall govern.

September 22, 2010