

N634

Restrained Beam

Floor Beams - All Fluted Deck

Normal Weight Concrete

CAFCO® SprayFilm® WB 5 & ISOLATEK® Type WB 5

ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour
W44 x 335	2.52	W1120 x 498	148.7	53.2	0.022	0.035	0.069
290	2.20	432	129.8	60.9	0.022	0.035	0.069
262	2.00	390	118.0	67.0	0.022	0.035	0.069
230	1.77	342	104.4	75.7	0.022	0.035	0.069
W40 x 593	4.56	W1000 x 883	269.0	29.4	0.022	0.035	0.069
503	3.93	748	231.9	34.1	0.022	0.035	0.069
431	3.42	641	201.8	39.2	0.022	0.035	0.069
397	3.15	591	185.9	42.5	0.022	0.035	0.069
392	3.38	583	199.4	39.6	0.022	0.035	0.069
372	2.98	554	175.8	45.0	0.022	0.035	0.069
362	2.90	539	171.1	46.2	0.022	0.035	0.069
331	2.90	493	171.1	46.2	0.022	0.035	0.069
327	2.89	487	170.5	46.4	0.022	0.035	0.069
324	2.61	482	154.0	51.3	0.022	0.035	0.069
297	2.41	442	142.2	55.6	0.022	0.035	0.069
278	2.48	414	146.3	54.0	0.022	0.035	0.069
277	2.25	412	132.8	59.5	0.022	0.035	0.069
264	2.36	393	139.2	56.8	0.022	0.035	0.069
249	2.02	371	119.2	66.3	0.022	0.035	0.069
235	2.10	350	123.9	63.8	0.022	0.035	0.069
215	1.76	321	103.8	76.1	0.022	0.035	0.069
211	1.90	314	112.1	70.5	0.022	0.035	0.069
199	1.64	296	96.8	81.7	0.022	0.035	0.069
183	1.66	272	97.9	80.7	0.022	0.035	0.069
167	1.53	249	90.3	87.6	0.022	0.035	0.069
149	1.37	222	80.8	97.8	0.022	0.035	0.069
W36 x 798	6.09	W920 x 1188	359.3	22.0	0.022	0.035	0.069
650	5.08	967	299.7	26.4	0.022	0.035	0.069
527	4.22	784	249.0	31.7	0.022	0.035	0.069
439	3.57	653	210.6	37.5	0.022	0.035	0.069
393	3.25	585	191.8	41.2	0.022	0.035	0.069
359	2.97	534	175.2	45.1	0.022	0.035	0.069
328	2.73	488	161.1	49.1	0.022	0.035	0.069
300	2.50	446	147.5	53.6	0.022	0.035	0.069
280	2.35	417	138.7	57.0	0.022	0.035	0.069
260	2.18	387	128.6	61.5	0.022	0.035	0.069
256	2.37	381	139.8	56.5	0.022	0.035	0.069
245	2.08	365	122.7	64.4	0.022	0.035	0.069
232	2.15	345	126.9	62.3	0.022	0.035	0.069
230	1.95	342	115.1	68.7	0.022	0.035	0.069

Note: All thicknesses are expressed in inches. To convert to Mils, multiply by 1000. To convert to mm, multiply by 25.4

N634

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Normal Weight Concrete

CAFCO® SprayFilm® WB 5 & ISOLATEK® Type WB 5

ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour
W36 x 210	1.96	W920 x 313	115.6	68.4	0.022	0.035	0.069
194	1.81	289	106.8	74.0	0.022	0.035	0.069
182	1.72	271	101.5	77.9	0.022	0.035	0.069
170	1.60	253	94.4	83.7	0.022	0.035	0.069
160	1.51	238	89.1	88.7	0.022	0.035	0.069
150	1.43	223	84.4	93.7	0.022	0.035	0.069
135	1.29	201	76.1	103.9	0.022	0.035	0.069
W33 x 387	3.31	W840 x 576	195.3	40.5	0.022	0.035	0.069
354	3.05	527	180.0	43.9	0.022	0.035	0.069
318	2.77	473	163.4	48.4	0.022	0.035	0.069
291	2.55	433	150.5	52.5	0.022	0.035	0.069
263	2.33	392	137.5	57.5	0.022	0.035	0.069
241	2.13	359	125.7	62.9	0.022	0.035	0.069
221	1.97	329	116.2	68.0	0.022	0.035	0.069
201	1.79	299	105.6	74.9	0.022	0.035	0.069
169	1.70	251	100.3	78.8	0.022	0.035	0.069
152	1.53	226	90.3	87.6	0.022	0.035	0.069
141	1.43	210	84.4	93.7	0.022	0.035	0.069
130	1.32	193	77.9	101.5	0.022	0.035	0.069
118	1.21	176	71.4	110.7	0.022	0.035	0.069
W30 x 391	3.59	W760 x 582	211.8	37.3	0.022	0.035	0.069
357	3.31	531	195.3	40.5	0.022	0.035	0.069
326	3.05	484	180.0	43.9	0.022	0.035	0.069
292	2.73	434	161.1	49.1	0.022	0.035	0.069
261	2.46	389	145.1	54.5	0.022	0.035	0.069
235	2.24	350	132.2	59.8	0.022	0.035	0.069
211	2.01	314	118.6	66.7	0.022	0.035	0.069
191	1.85	284	109.2	72.4	0.022	0.035	0.069
173	1.66	257	97.9	80.7	0.022	0.035	0.069
148	1.64	220	96.8	81.7	0.022	0.035	0.069
132	1.47	196	86.7	91.1	0.022	0.035	0.069
124	1.39	185	82.0	96.4	0.022	0.035	0.069
116	1.30	173	76.7	103.1	0.022	0.035	0.069
108	1.21	161	71.4	110.7	0.022	0.035	0.069
99	1.12	147	66.1	119.6	0.022	0.035	0.069
90	1.02	134	60.2	131.4	0.022	0.035	0.069
W27 x 539	5.08	W690 x 802	299.7	26.4	0.022	0.035	0.069
368	3.64	548	214.8	36.8	0.022	0.035	0.069

Note: All thicknesses are expressed in inches. To convert to Mills, multiply by 1000. To convert to mm, multiply by 25.4

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CAFCO® SprayFilm® WB 5 & ISOLATEK® Type WB 5

ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour
W27 x 336	3.36	W690 x 500	198.2	39.9	0.022	0.035	0.069
307	3.11	457	183.5	43.1	0.022	0.035	0.069
281	2.86	418	168.7	46.8	0.022	0.035	0.069
258	2.64	384	155.8	50.8	0.022	0.035	0.069
235	2.43	350	143.4	55.1	0.022	0.035	0.069
217	2.26	323	133.3	59.3	0.022	0.035	0.069
194	2.03	289	119.8	66.0	0.022	0.035	0.069
178	1.87	265	110.3	71.6	0.022	0.035	0.069
161	1.70	240	100.3	78.8	0.022	0.035	0.069
146	1.55	217	91.5	86.4	0.022	0.035	0.069
129	1.56	192	92.0	85.9	0.022	0.035	0.069
114	1.39	170	82.0	96.4	0.022	0.035	0.069
102	1.24	152	73.2	108.1	0.022	0.035	0.069
94	1.15	140	67.9	116.5	0.022	0.035	0.069
84	1.03	125	60.8	130.1	0.022	0.035	0.069
W24 x 370	3.98	W610 x 551	234.8	33.7	0.022	0.035	0.069
335	3.66	498	215.9	36.6	0.022	0.035	0.069
306	3.37	455	198.8	39.8	0.022	0.035	0.069
279	3.11	415	183.5	43.1	0.022	0.035	0.069
250	2.81	372	165.8	47.7	0.022	0.035	0.069
229	2.60	341	153.4	51.5	0.022	0.035	0.069
207	2.36	307	139.2	56.8	0.022	0.035	0.069
192	2.20	285	129.8	60.9	0.022	0.035	0.069
176	2.03	262	119.8	66.0	0.022	0.035	0.069
162	1.88	241	110.9	71.3	0.022	0.035	0.069
146	1.70	217	100.3	78.8	0.022	0.035	0.069
131	1.54	195	90.9	87.0	0.022	0.035	0.069
117	1.38	174	81.4	97.1	0.022	0.035	0.069
104	1.24	155	73.2	108.1	0.022	0.035	0.069
103	1.40	153	82.6	95.7	0.022	0.035	0.069
94	1.28	140	75.5	104.7	0.022	0.035	0.069
84	1.15	125	67.9	116.5	0.022	0.035	0.069
76	1.05	113	62.0	127.6	0.022	0.035	0.069
68	0.94	101	55.5	142.5	0.022	0.035	0.069
62	0.93	92	54.9	144.1	0.022	0.035	0.069
55	0.82	82	48.4	163.4	0.022	0.035	0.069
W21 x 201	2.50	W530 x 300	147.5	53.6	0.022	0.035	0.069
182	2.28	272	134.5	58.8	0.022	0.035	0.069

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ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour
W21 x 166	2.09	W530 x 248	123.3	64.1	0.022	0.035	0.069
147	1.87	219	110.3	71.6	0.022	0.035	0.069
132	1.68	196	99.1	79.8	0.022	0.035	0.069
122	1.57	182	92.6	85.3	0.022	0.035	0.069
111	1.43	165	84.4	93.7	0.022	0.035	0.069
101	1.30	150	76.7	103.1	0.022	0.035	0.069
93	1.40	138	82.6	95.7	0.022	0.035	0.069
83	1.26	123	74.3	106.3	0.022	0.035	0.069
73	1.11	109	65.5	120.7	0.022	0.035	0.069
68	1.04	101	61.4	128.8	0.022	0.035	0.069
62	0.95	92	56.1	141.0	0.022	0.035	0.069
57	0.95	85	56.1	141.0	0.022	0.035	0.069
55	0.85	82	50.2	157.6	0.022	0.035	0.069
50	0.83	74	49.0	161.4	0.022	0.035	0.069
48	0.75	72	44.3	178.6	0.035	0.035	0.069
44	0.74	66	43.7	181.1	0.035	0.035	0.069
W18 x 175	2.46	W460 x 260	145.1	54.5	0.022	0.035	0.069
158	2.24	235	132.2	59.8	0.022	0.035	0.069
143	2.05	213	121.0	65.4	0.022	0.035	0.069
130	1.88	193	110.9	71.3	0.022	0.035	0.069
119	1.72	177	101.5	77.9	0.022	0.035	0.069
106	1.55	158	91.5	86.4	0.022	0.035	0.069
97	1.42	144	83.8	94.4	0.022	0.035	0.069
86	1.27	128	74.9	105.5	0.022	0.035	0.069
76	1.13	113	66.7	118.6	0.022	0.035	0.069
71	1.22	106	72.0	109.8	0.022	0.035	0.069
65	1.13	97	66.7	118.6	0.022	0.035	0.069
60	1.04	89	61.4	128.8	0.022	0.035	0.069
55	0.96	82	56.6	139.6	0.022	0.035	0.069
50	0.88	74	51.9	152.3	0.022	0.035	0.069
46	0.87	68	51.3	154.0	0.022	0.035	0.069
40	0.76	60	44.8	176.3	0.035	0.035	0.069
35	0.67	52	39.5	200.0	NR	NR	NR
W16 x 100	1.59	W410 x 149	93.8	84.3	0.022	0.035	0.069
89	1.43	132	84.4	93.7	0.022	0.035	0.069
77	1.25	114	73.8	107.2	0.022	0.035	0.069
67	1.09	100	64.3	122.9	0.022	0.035	0.069
57	1.09	85	64.3	122.9	0.022	0.035	0.069
50	0.96	74	56.6	139.6	0.022	0.035	0.069
45	0.87	67	51.3	154.0	0.022	0.035	0.069

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CAFCO® SprayFilm® WB 5 & ISOLATEK® Type WB 5

ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour
W16 x 40	0.78	W410 x 60	46.0	171.8	0.035	0.035	0.069
36	0.70	53	41.3	191.4	0.035	0.035	0.069
31	0.66	46	38.9	203.0	NR	NR	NR
26	0.55	39	32.5	243.6	NR	NR	NR
W14 x 808	8.75	W360 x 1202	516.3	15.3	0.022	0.035	0.069
730	8.08	1086	476.7	16.6	0.022	0.035	0.069
665	7.49	990	441.9	17.9	0.022	0.035	0.069
605	6.96	900	410.6	19.3	0.022	0.035	0.069
550	6.43	818	379.4	20.8	0.022	0.035	0.069
500	5.95	744	351.1	22.5	0.022	0.035	0.069
455	5.53	677	326.3	24.2	0.022	0.035	0.069
426	5.21	634	307.4	25.7	0.022	0.035	0.069
398	4.93	592	290.9	27.2	0.022	0.035	0.069
370	4.63	551	273.2	28.9	0.022	0.035	0.069
342	4.32	509	254.9	31.0	0.022	0.035	0.069
311	3.98	463	234.8	33.7	0.022	0.035	0.069
283	3.66	421	215.9	36.6	0.022	0.035	0.069
257	3.36	382	198.2	39.9	0.022	0.035	0.069
233	3.08	347	181.7	43.5	0.022	0.035	0.069
211	2.81	314	165.8	47.7	0.022	0.035	0.069
193	2.60	287	153.4	51.5	0.022	0.035	0.069
176	2.38	262	140.4	56.3	0.022	0.035	0.069
159	2.16	237	127.4	62.0	0.022	0.035	0.069
145	1.99	216	117.4	67.3	0.022	0.035	0.069
132	1.89	196	111.5	70.9	0.022	0.035	0.069
120	1.71	179	100.9	78.4	0.022	0.035	0.069
109	1.57	162	92.6	85.3	0.022	0.035	0.069
99	1.43	147	84.4	93.7	0.022	0.035	0.069
90	1.31	134	77.3	102.3	0.022	0.035	0.069
82	1.45	122	85.6	92.4	0.022	0.035	0.069
74	1.32	110	77.9	101.5	0.022	0.035	0.069
68	1.22	101	72.0	109.8	0.022	0.035	0.069
61	1.10	91	64.9	121.8	0.022	0.035	0.069
53	1.06	79	62.5	126.4	0.022	0.035	0.069
48	0.97	72	57.2	138.1	0.022	0.035	0.069
43	0.87	64	51.3	154.0	0.022	0.035	0.069
38	0.80	57	47.2	167.5	0.035	0.035	0.069
34	0.72	51	42.5	186.1	0.035	0.035	0.069
30	0.64	45	37.8	209.3	NR	NR	NR
26	0.62	39	36.6	216.1	NR	NR	NR
22	0.53	33	31.3	252.8	NR	NR	NR

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ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour
W12 x 336	4.85	W310 x 500	286.2	27.6	0.022	0.035	0.069
305	4.49	454	264.9	29.8	0.022	0.035	0.069
279	4.19	415	247.2	32.0	0.022	0.035	0.069
252	3.84	375	226.6	34.9	0.022	0.035	0.069
230	3.55	342	209.5	37.7	0.022	0.035	0.069
210	3.27	313	192.9	41.0	0.022	0.035	0.069
190	3.00	283	177.0	44.7	0.022	0.035	0.069
170	2.72	253	160.5	49.3	0.022	0.035	0.069
152	2.45	225	144.6	54.7	0.022	0.035	0.069
136	2.23	202	131.6	60.1	0.022	0.035	0.069
120	1.99	179	117.4	67.3	0.022	0.035	0.069
106	1.77	158	104.4	75.7	0.022	0.035	0.069
96	1.61	143	95.0	83.2	0.022	0.035	0.069
87	1.47	129	86.7	91.1	0.022	0.035	0.069
79	1.34	117	79.1	100.0	0.022	0.035	0.069
72	1.23	107	72.6	108.9	0.022	0.035	0.069
65	1.11	97	65.5	120.7	0.022	0.035	0.069
58	1.10	86	64.9	121.8	0.022	0.035	0.069
53	1.02	79	60.2	131.4	0.022	0.035	0.069
50	1.06	74	62.5	126.4	0.022	0.035	0.069
45	0.97	67	57.2	138.1	0.022	0.035	0.069
40	0.86	60	50.7	155.8	0.022	0.035	0.069
35	0.81	52	47.8	165.4	0.022	0.035	0.069
30	0.69	45	40.7	194.2	NR	NR	NR
26	0.61	39	36.0	219.6	NR	NR	NR
22	0.62	33	36.6	216.1	NR	NR	NR
19	0.54	28	31.9	248.1	NR	NR	NR
16	0.45	24	26.6	297.7	NR	NR	NR
14	0.40	21	23.6	335.0	NR	NR	NR
W10 x 112	2.17	W250 x 167	128.0	61.7	0.022	0.035	0.069
100	1.97	149	116.2	68.0	0.022	0.035	0.069
88	1.74	131	102.7	77.0	0.022	0.035	0.069
77	1.54	115	90.9	87.0	0.022	0.035	0.069
68	1.38	101	81.4	97.1	0.022	0.035	0.069
60	1.22	89	72.0	109.8	0.022	0.035	0.069
54	1.11	80	65.5	120.7	0.022	0.035	0.069
49	1.01	73	59.6	132.7	0.022	0.035	0.069
45	1.06	67	62.5	126.4	0.022	0.035	0.069
39	0.92	58	54.3	145.6	0.022	0.035	0.069
33	0.78	49	46.0	171.8	0.035	0.035	0.069
30	0.80	45	47.2	167.5	0.035	0.035	0.069

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ASTM Desig.	W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour
W10 x 26	0.70	W10 x 39	41.3	191.4	0.035	0.035	0.069
22	0.60	33	35.4	223.3	NR	NR	NR
19	0.60	28	35.4	223.3	NR	NR	NR
17	0.54	25	31.9	248.1	NR	NR	NR
15	0.48	22	28.3	279.1	NR	NR	NR
12	0.39	18	23.0	343.5	NR	NR	NR
W8 x 67	1.65	W200 x 100	97.4	81.2	0.022	0.035	0.069
58	1.44	86	85.0	93.0	0.022	0.035	0.069
48	1.21	71	71.4	110.7	0.022	0.035	0.069
40	1.03	59	60.8	130.1	0.022	0.035	0.069
35	0.90	52	53.1	148.9	0.022	0.035	0.069
31	0.80	46	47.2	167.5	0.035	0.035	0.069
28	0.81	42	47.8	165.4	0.022	0.035	0.069
24	0.70	36	41.3	191.4	0.035	0.035	0.069
21	0.67	31	39.5	200.0	NR	NR	NR
18	0.58	27	34.2	231.0	NR	NR	NR
15	0.55	22	32.5	243.6	NR	NR	NR
13	0.48	19	28.3	279.1	NR	NR	NR
10	0.37	15	21.8	362.1	NR	NR	NR
W6 x 25	0.83	W150 x 37	49.0	161.4	0.022	0.035	0.069
20	0.67	30	39.5	200.0	NR	NR	NR
16	0.68	24	40.1	197.0	NR	NR	NR
15	0.52	22	30.7	257.7	NR	NR	NR
12	0.52	18	30.7	257.7	NR	NR	NR
9	0.39	14	23.0	343.5	NR	NR	NR
8.5	0.37	13	21.8	362.1	NR	NR	NR
W5 x 19	0.77	W130 x 28	45.4	174.0	0.035	0.035	0.069
16	0.66	24	38.9	203.0	NR	NR	NR
W4 x 13	0.67	W100 x 19	39.5	200.0	NR	NR	NR

Note: All thicknesses are expressed in inches. To convert to Mils, multiply by 1000. To convert to mm, multiply by 25.4