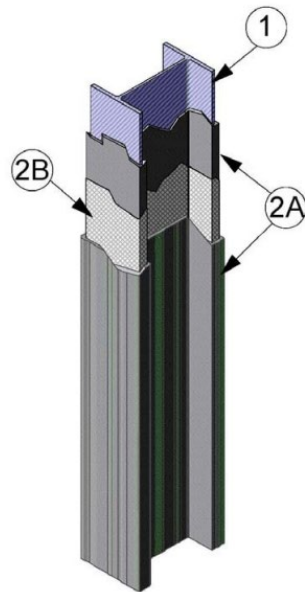
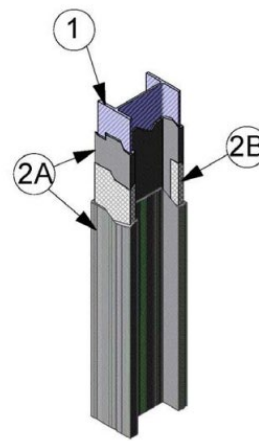


Carboline Global Inc.
Design No. CC/CA 180-02
Column
Thermo-Lag 3000
ASTM E119
CAN/ULC S101
Rating: See Table CC/CA 180-02



Installation Method 2Bi



Installation Method 2Bii

1. SOLID STRUCTURAL STEEL COLUMN: Use solid steel sections, I-shape or W-shape, having a nominal Hp/A, W/D, or A/P section factors based on four-sided exposure. Refer to Table CC/CA 180-02 for specific application thickness of intumescent fireproofing (Item 2A) based on nominal Hp/A, W/D, or A/P section factors.

2. INTUMESCENT FIREPROOFING: Refer to Table CC/CA 180-02 for specific application thickness of fire resistive coating.

A. CERTIFIED MANUFACTURER: Carboline Global Inc.

CERTIFIED PRODUCT: Fire-Resistive Coating

CERTIFIED MODEL: Thermo-Lag 3000

Spray or paint in one or more coats according to manufacturer’s instructions to a nominal 1/2 the required thickness specified in Table CC/CA 180-02 before applying the fiberglass mesh (Item 2B). After mesh installation, spray, or paint in one or more coats according to manufacturer’s instructions to required final thickness.

B. FIBERGLASS MESH: For final thickness of the intumescent fireproofing (Item 2A) of 0.24-in. (6 mm) or less, install mesh at



middle depth of the intumescent fireproofing (Item 2A). For final thickness of the intumescent fireproofing (Item 2A) greater than 0.24-in. (6 mm), install mesh at 0.12-in. from structural steel beam (Item 1). Overlap mesh at min. 1/2-in. at seams.

WRAPPING METHOD:

- i) For solid structural steel columns with a depth of 11-4/5-in. or greater, wrap

fiberglass mesh completely around steel structural column (Item 1).

- ii) For solid structural steel columns with a depth of less than 11-4/5-in., wrap fiberglass mesh completely around steel structural column (Item 1) flange faces allowing a nominal 2-in. of mesh to wrap around the inner flange of the solid structural steel column.



Table CC/CA 180-02											
HP/A	W/D	60 min.		90 min.		120 min.		150 min.		180 min.	
1/m	lb/ft/in	mm	in	mm	in	mm	in	mm	in	mm	in
30	4.46	3.0	0.12	3.0	0.12	3.0	0.12	3.0	0.12	3.3	0.13
40	3.34	3.0	0.12	3.0	0.12	3.0	0.12	3.5	0.14	4.2	0.17
50	2.67	3.0	0.12	3.0	0.12	3.3	0.13	4.2	0.17	5.0	0.20
60	2.23	3.0	0.12	3.0	0.12	3.8	0.15	4.8	0.19	5.8	0.23
70	1.91	3.0	0.12	3.2	0.13	4.3	0.17	5.4	0.21	6.5	0.26
75	1.78	3.0	0.12	3.3	0.13	4.5	0.18	5.7	0.22	6.8	0.27
80	1.67	3.0	0.12	3.5	0.14	4.7	0.19	5.9	0.23	7.2	0.28
85	1.57	3.0	0.12	3.7	0.15	4.9	0.19	6.2	0.24	7.5	0.30
90	1.49	3.0	0.12	3.8	0.15	5.1	0.20	6.5	0.26	7.8	0.31
95	1.41	3.0	0.12	3.9	0.15	5.3	0.21	6.7	0.26	8.1	0.32
100	1.34	3.0	0.12	4.1	0.16	5.5	0.22	6.9	0.27	8.4	0.33
110	1.22	3.0	0.12	4.3	0.17	5.9	0.23	7.4	0.29	8.9	0.35
120	1.11	3.0	0.12	4.6	0.18	6.2	0.24	7.8	0.31	9.4	0.37
130	1.03	3.1	0.12	4.8	0.19	6.5	0.26	8.2	0.32	9.9	0.39
140	0.95	3.3	0.13	5.0	0.20	6.8	0.27	8.6	0.34	10.3	0.41
150	0.89	3.4	0.13	5.2	0.20	7.1	0.28	8.9	0.35	10.7	0.42
160	0.84	3.6	0.14	5.4	0.21	7.3	0.29	9.2	0.36	11.2	0.44
170	0.79	3.7	0.15	5.6	0.22	7.4	0.29	9.5	0.37	11.6	0.46
180	0.74	3.9	0.15	5.8	0.23	7.7	0.30	9.8	0.39	12.0	0.47
190	0.7	4.0	0.16	6.0	0.24	8.0	0.31	10.1	0.40	12.3	0.48
200	0.67	4.1	0.16	6.2	0.24	8.2	0.32	10.4	0.41	12.7	0.50
210	0.64	4.2	0.17	6.3	0.25	8.5	0.33	10.6	0.42	13.0	0.51
220	0.61	4.3	0.17	6.5	0.26	8.7	0.34	10.9	0.43	13.4	0.53
230	0.58	4.5	0.18	6.7	0.26	8.9	0.35	11.1	0.44	13.7	0.54
240	0.56	4.6	0.18	6.9	0.27	9.1	0.36	11.4	0.45	14.0	0.55
250	0.53	4.7	0.19	7.0	0.28	9.3	0.37	11.7	0.46	14.3	0.56
260	0.51	4.8	0.19	7.2	0.28	9.5	0.37	11.9	0.47	14.6	0.57
270	0.5	4.9	0.19	7.3	0.29	9.7	0.38	12.2	0.48	14.9	0.59
280	0.48	5.0	0.20	7.4	0.29	9.9	0.39	12.4	0.49	15.1	0.59
290	0.46	5.0	0.20	7.6	0.30	10.1	0.40	12.6	0.50	15.1	0.59
300	0.45	5.1	0.20	7.7	0.30	10.3	0.41	12.8	0.50	15.4	0.61
302	0.44	5.2	0.20	7.7	0.30	10.3	0.41	12.9	0.51	15.5	0.61

Consult the listing report on the Directory of Building Products (<https://bpdirectory.intertek.com>) for the edition of the standard(s) evaluated.

Compliance of the assembly described in this Design Listing with the referenced standard relies on verification that the assembly constructed in the field is consistent with that described herein. Intertek certified products may be verified by the approved Intertek label; other products must be verified by the Authority Having Jurisdiction as meeting the specifications stated herein.