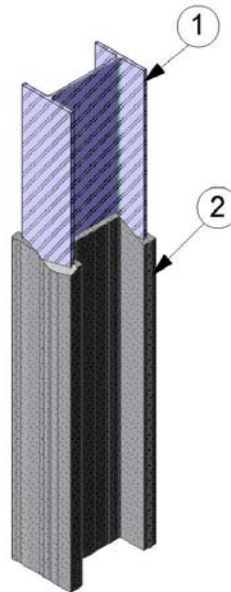

Carboline Company
Design No. CC/IF 180-02
Column
Thermo-Lag E100 and Thermo-Lag E100 S
ASTM E119
CAN/ULC S101-07
Rating: See Table CC/IF 180-02



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

CERTIFIED PRODUCT: Fire-Resistive Coating

CERTIFIED MODEL: Thermo-Lag E100 and Thermo-Lag E100 S

Intumescent Fireproofing: Spray or paint on one or more coats according to manufacturer's instructions to required final thickness



| Table CC/IF 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 | 1.0 | 0.04 | 2.2 | 0.09 | 3.0 | 0.12 | 3.0 | 0.12 | 3.3 | 0.13 |
| 40 | 3.34 | 1.1 | 0.04 | 2.4 | 0.10 | 3.0 | 0.12 | 3.5 | 0.14 | 4.2 | 0.17 |
| 50 | 2.67 | 1.3 | 0.05 | 2.7 | 0.10 | 3.3 | 0.13 | 4.2 | 0.17 | 5.0 | 0.20 |
| 60 | 2.23 | 1.5 | 0.06 | 2.9 | 0.11 | 3.8 | 0.15 | 4.8 | 0.19 | 5.8 | 0.23 |
| 70 | 1.91 | 1.7 | 0.07 | 3.1 | 0.12 | 4.3 | 0.17 | 5.4 | 0.21 | 6.5 | 0.26 |
| 75 | 1.78 | 1.9 | 0.07 | 3.2 | 0.13 | 4.5 | 0.18 | 5.7 | 0.22 | 6.8 | 0.27 |
| 80 | 1.67 | 2.0 | 0.08 | 3.4 | 0.13 | 4.7 | 0.19 | 5.9 | 0.23 | 7.2 | 0.28 |
| 85 | 1.57 | 2.1 | 0.08 | 3.5 | 0.14 | 4.9 | 0.19 | 6.2 | 0.24 | 7.5 | 0.30 |
| 90 | 1.49 | 2.2 | 0.08 | 3.6 | 0.14 | 5.1 | 0.20 | 6.5 | 0.26 | 7.8 | 0.31 |
| 95 | 1.41 | 2.2 | 0.09 | 3.7 | 0.15 | 5.3 | 0.21 | 6.7 | 0.26 | 8.1 | 0.32 |
| 100 | 1.34 | 2.3 | 0.09 | 3.8 | 0.15 | 5.5 | 0.22 | 6.9 | 0.27 | 8.4 | 0.33 |
| 110 | 1.22 | 2.5 | 0.10 | 4.1 | 0.16 | 5.9 | 0.23 | 7.4 | 0.29 | 8.9 | 0.35 |
| 120 | 1.11 | 2.7 | 0.11 | 4.3 | 0.17 | 6.2 | 0.24 | 7.8 | 0.31 | 9.4 | 0.37 |
| 130 | 1.03 | 2.9 | 0.11 | 4.6 | 0.18 | 6.5 | 0.26 | 8.2 | 0.32 | 9.9 | 0.39 |
| 140 | 0.95 | 3.0 | 0.12 | 4.8 | 0.19 | 6.8 | 0.27 | 8.6 | 0.34 | 10.3 | 0.41 |
| 150 | 0.89 | 3.2 | 0.13 | 5.0 | 0.20 | 7.1 | 0.28 | 8.9 | 0.35 | 10.7 | 0.42 |
| 160 | 0.84 | 3.4 | 0.13 | 5.3 | 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 |

Note: A/P = W/D x 144/490

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