

**D301**  
**Fluted and/or Cellular Units**  
**Normal Weight Concrete**  
**CAFCO-BOARD™**

ASTM Desig.	Min. W/D	Metric Desig.	M/D	Hp/A	4-Hour
W6 x 12	0.52	W150 x 18	30.7	253.8	3

Note: Refer to Design N308 for 1, 1-1/2 and 2-Hour thickness and N309 for 3-Hour thickness.  
Refer to Design for deck thickness.

**N308**  
**All-Fluted Deck**  
**Normal Weight or Lightweight Concrete**  
**CAFCO-BOARD™**

ASTM Desig.	Min. W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour
W8 x 24	0.70	W200 x 36	41.3	188.6	1	1	1-1/2

**N309**  
**Fluted and/or Cellular Units**  
**Normal Weight or Lightweight Concrete**  
**CAFCO-BOARD™**

ASTM Desig.	Min. W/D	Metric Desig.	M/D	Hp/A	3-Hour	3-Hour
W8 x 24	0.70	W200 x 36	41.3	188.6	3*	4**

\* Fluted Deck    \*\* Cellular Deck

**P301**  
**Protected Roof Deck**  
**Polyisocyanurate or Mineral Fiber Boards**  
**CAFCO-BOARD™**

ASTM Desig.	Min. W/D	Metric Desig.	M/D	Hp/A	1-Hour	1-1/2 Hour	2-Hour
W6 x 16	0.67	W150 x 24	39.5	197.0	1**	1*	2
Min 10K1 Joist					4	4	4-1/2
Min 12K5 Joist					4	4	4

\* 2 in. CAFCO-BOARD shall be applied to bottom of beam flange for 1-1/2 Hour for Restrained and Unrestrained Assemblies.  
\*\* 2 in. CAFCO-BOARD shall be applied to bottom of beam flange for 2 Hour Restrained Assembly with 1 Hr.Unrestrained Beam Only.  
Note: Refer to Design for deck thickness.

**P922**  
**All-Fluted Deck**  
**Unprotected Roof Deck**  
**Lightweight Insulating Concrete**  
**CAFCO-BOARD™**

ASTM Desig.	Min. W/D	Metric Desig.	M/D	Hp/A	1-Hour**	1-1/2 Hour	2-Hour
W6 x 16	0.67	W150 x 24	39.5	197.0	1	1-1/2	2-1/2

\*\* For 1-Hour rating only, the fluted area above beam need not be filled when thickness on beam is increased to 1-1/2 in.

**X314**  
**Wide Flange Structural Steel Columns**  
**CAFCO-BOARD™**

ASTM Desig.	W/D Range	Metric Desig.	M/D Range	Hp/A Range	1-Hour	2-Hour	3-Hour	4-Hour
W6 x 16	0.57 to 0.66	W150 x 24	33.6 to 38.9	232 to 200	2	4	-	-
W8 x 28	0.67 to 0.82	W200 x 42	39.5 to 48.4	199 to 161	1-1/2	3-1/2	-	-
W10 x 49	0.83 to 1.43	W250 x 73	49.0 to 84.4	160 to 92	1-1/2	2-1/2	4	-
W12 x 106	1.44 to 2.43	W310 x 158	85.0 to 143.4	91 to 54	1	1-1/2	2-1/2	3
W14 x 228	2.44 & Greater	W360 x 339	144.0 & Greater	53 & Less	1	1	1-1/2	2