

**CAFECO-BOARD® / ISOLATEK® Type CB is a rigid mineral wool board that provides fire resistance to floor and roof assemblies and structural steel members. It can be installed in a box configuration by using friction fit patented CAFCLIPS™ or weld pins. It is usually fastened to the underside of metal decking by using weld pins, powder actuated fasteners or self tapping screws.**

**TOOL REQUIREMENTS:**

Basic carpentry hand tools (i.e. handsaw, boning knife, steel cutters, etc.).

**TEMPERATURE REQUIREMENTS:**

Installation can occur regardless of temperature.

**SURFACE PREPARATION:**

Installation can occur over all painted, primed or encapsulated surfaces as well as substrates where rust, oil or loose mill scale conditions exist.

**FASTENING REQUIREMENTS:**

The recommended methods of fastening CAFECO-BOARD / ISOLATEK Type CB (UL Designation is Type CB) to steel substrates include either CAFCLIPS, No. 12 standard self-tapping insulation screws or equivalent or weld pins as listed within the specific UL design. **Type E, Type F and Type G clips/studs listed within these designs are no longer commercially available.**

CAFECO-BOARD / ISOLATEK Type CB shall be impaled over CAFCLIPS or weld pins in accordance with the specifications listed in each specific UL design. These requirements have been summarized below.

UL DESIGN NO.	D301	D915	N308	N309	P301	P922	X314
DESIGN TYPE	Floor	Unprotected Floor	Floor	Floor	Roof Assembly	Roof	Wide-Flange Column
HOURLY RATING	3-4	1½ - 2	1, 1½ - 2	3	1, 1½ - 2	1, 1½ - 2	1-4
BOARD THICKNESS	1" (25mm) deck 3" (76 mm) beam	4" (102 mm)	1" (25 mm) 1½" (38 mm)	3" (76 mm) 4" (102 mm)	2 ½" (64mm) to 4 ½" (114mm) deck 1" (25mm) to 2" (51 mm) beam 4" (102mm) joist	1" (25 mm) to 2½" (64 mm) beam	1" (25mm) column to 4" (102mm) column
APPROVED FASTENING METHOD	CAFCLIP or Weld Pins	CAFCLIP or Weld Pins	CAFCLIP or Weld Pins	CAFCLIP or Weld pins	CAFCLIP and Screws	CAFCLIP or Weld Pins	CAFCLIP or Weld Pins
SPACING ON CENTER MAXIMUM	14" (356mm) Deck 12" (305mm) Beam	16" (406 mm) Beam	14" (356 mm) Beam	14" (356 mm) Beam	14" (356 mm) Along Flute 12" (305mm) Across Flute 14" (356mm) Beam	24" (610 mm) Beam	24" (610 mm) Column
SPACING FROM EDGES MAXIMUM	3" (76 mm)	3" (76 mm)	3" (76 mm)	3" (76 mm)	---	3" (76 mm)	¾" (95 mm)

**This table is used as a guide only. Please refer to the actual UL design for complete fastening requirements.**

## **FASTENING REQUIREMENTS:**

**Steel CAFCLIPS** shall be standard fastener/clips with impaling spikes that are at least 1/4 inch (6 mm) greater in length than the board thickness. Boards are held into place by standard 1-1/2 inch (38 mm) diameter, 26 MSG (0.5 mm) galvanized steel clinch shields (speed washers).

CAFCLIPS are utilized when fastening CAFCO-BOARD / ISOLATEK Type CB to structural steel beams and columns in accordance with the UL designs. The CAFCLIP steel clip can be utilized on CAFCO-BOARD / ISOLATEK Type CB up to 4" (102 mm) thick. If a lesser thickness of board is used, the clip can be cut or bent over after installation is complete.

When installing the CAFCLIPS on beams, the unused spike of the clip on the top flange can be removed or positioned so that the spike is pointing inside of the web.

*CAFCLIPS with clinch shields can only be purchased through Isolatek International.*

**Weld pins** shall be standard 10 gauge (3.4 mm) Type B or C copper coated steel stud pins that are at least 1/2 inch (13 mm) greater in length than the board thickness. Type B or C weld pins are utilized when fastening CAFCO-BOARD / ISOLATEK Type CB to structural steel beams, columns and decking (topped with concrete) in accordance with UL designs.

**NOTE:** An alternate method of attaching the CAFCO-BOARD / ISOLATEK Type CB to the underside of steel decking (topped with concrete) is by using powder actuated fasteners fabricated from an equivalent or heavier gauge steel than that of the steel weld pin mentioned above (10 SWG or 3.4 mm).

*Pins can be obtained through insulation suppliers/distributors.*

## **INSTALLATION RECOMMENDATIONS:**

Boards are typically cut to size by using a table saw or boning knife.

A 1/4 inch (6 mm) spike length, bent or cut, beyond the board thickness must still be maintained.

**Note:** For additional information associated with the application or installation of CAFCO-BOARD / ISOLATEK Type CB, please contact the Technical Service Department.



Isolatek International provides passive fireproofing materials under the CAFCO® and FENDOLITE® trademarks throughout the Americas and under the ISOLATEK® trademark throughout the world.

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