



# THERMAFIBER® SAFING

## INSTALL INSTRUCTIONS FOR PERIMETER FIRE CONTAINMENT SYSTEMS

### Recommended Products

#### Thermafiber® Safing Mineral Wool Insulation

[See Owens Corning publication Thermafiber® Safing Mineral Wool Insulation Data Sheet for more information.](#)

#### Thermafiber® Safing Formaldehyde-Free (FF)

[See Owens Corning publication Thermafiber® Safing Formaldehyde-Free Mineral Wool Insulation Data Sheet for more information.](#)



### Basic Tools

- Tape measure
- Serrated knife
- Straightedge

### Protective Gear

- Cut-resistant gloves
- OSHA-approved safety glasses

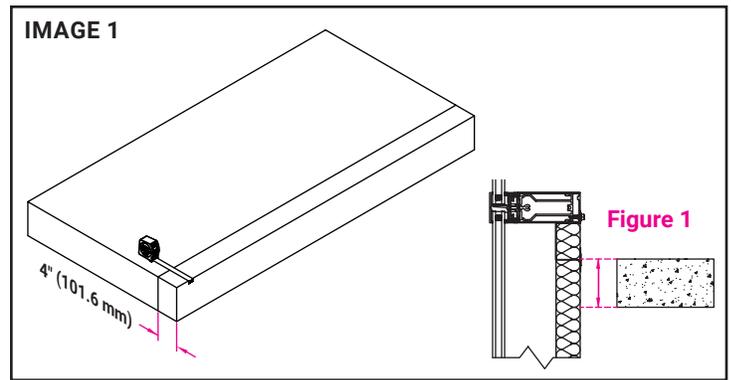
### Site Preparations

Clean obstructions and debris from working area. Make sure face edge of concrete is smooth from rugged edges that will interfere with consistent safing compression within the perimeter joint.

Note: Please note that this installation instruction only covers the install of the Safing Insulation into the perimeter joint. There are other critical components of the Perimeter Fire Containment System that must also be included to achieve an hourly rated interior joint. Those other components are not addressed in this guide. For more information on how to install a complete system, refer to Thermafiber Perimeter Fire Containment Guide at [www.owenscorning.com/pfc](http://www.owenscorning.com/pfc)

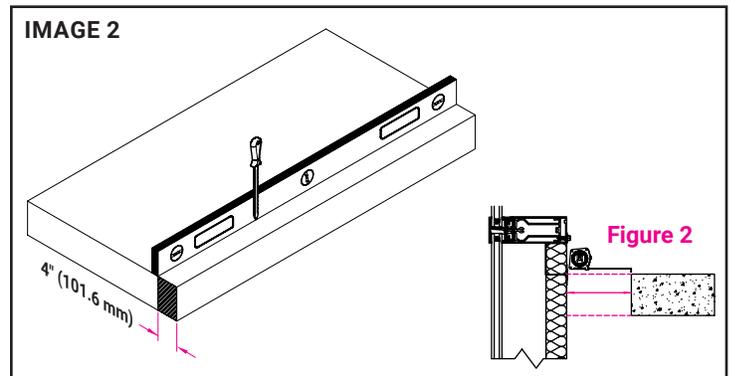
## Install Instructions

1. Measure for the depth of Safing dimension (see Figure 1) per design listing that is required in the joint. Example: UL design listing CW-D-1014 states insulation sections to be cut to a 4" (101.6 mm) width. This dimension is for the proper depth of Safing within the joint.

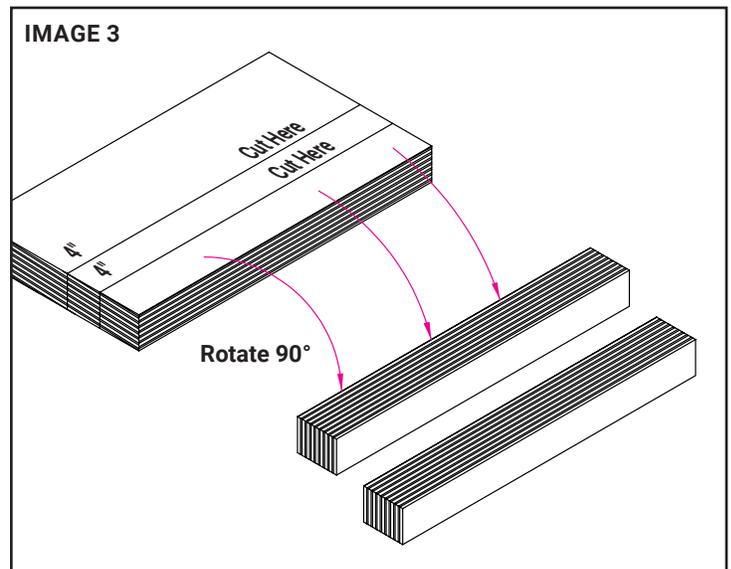


2. Cut the Safing insulation with a serrated knife using a straightedge for accurate cutting.

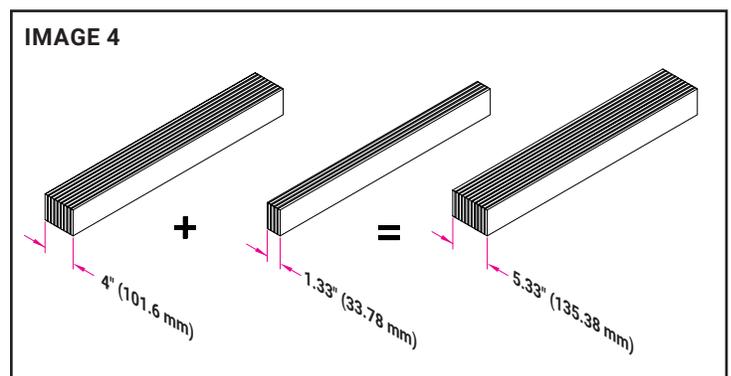
Determine the joint width (see Figure 2). Note, joint width should not exceed the maximum allowable width within the design listing being followed. Now determine what compression ratio is required to fill the void to meet the design listing compression requirements. Measure joint width as shown in Figure 2. Example: UL design listing CW-D-1014 states that the insulation is to be stacked to a thickness that is a minimum 25% compression and a maximum allowable joint width of 4" (101.6 mm).



3. Rotate the Safing insulation sections 90 degrees so the fibers are running vertically as shown in image 3 and ensure that the proper thickness of material meets the compression ratio requirements. See image 3. Using the CW-D-1014 design listing example with a 25% compression ratio requirement, the amount of Safing thickness needs to be 5.33" (135.38 mm) for a 4"-wide (101.6 mm) joint opening. For calculations, utilize the Thermafiber® Safing Compression Calculator on page 3 of this document.

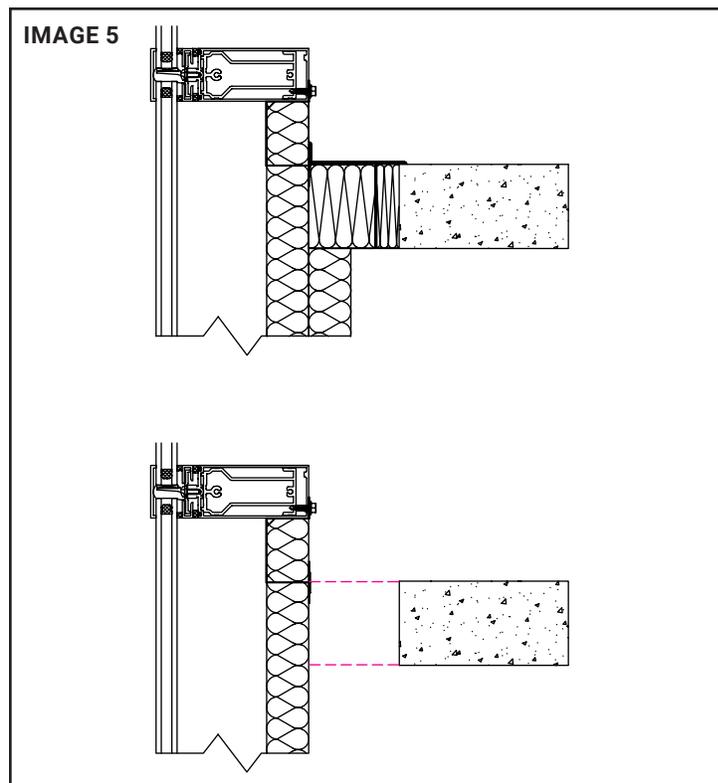


4. To get the 5.33" (135.38 mm) total thickness, one section of 4" (101.6 mm) is added to a section that is bisected to get 1.33 inches (33.78 mm). See image 4.



- Compression-fit the Safing insulation sections into the joint so that the top edge is flush with top surface of the floor. No more than one butt seam is allowed per spandrel opening and no butt joints are allowed under curtain wall anchors. Make sure the seams are tightly abutted together so there are no gaps. See image 5.

Note: For ease of handling, Safing layers can be of equal thickness or other dimensions as long as the total required thickness for meeting compression ratio is achieved.



## Perimeter Fire Containment System Joint Safing Compression Calculator

Enter your joint width and compression requirements below to calculate the required width of Safing Insulation to be installed at the perimeter joint. Based on UL's XHDG Guide for Compression.

	1 Enter maximum joint width	2 Enter compression requirement (per listing) Example: Enter 25 for 25% compression requirement.	3 Result: Safing width required in the joint opening
INCHES	<input type="text"/>	<input type="text"/>	<input type="text"/>
MILLIMETERS	<input type="text"/>	<input type="text"/>	<input type="text"/>

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