# **SBI** VENTING DIVISION DIVISION PRODUITS D'ÉVENTS



#### ANGLED WALL INSULATED RADIATION SHIELD

### All-fuel Chimney System Installation Instructions



A major cause of chimney-related fires is failure to maintain required clearances (airspaces) to combustible materials. It is of the utmost importance that this angled wall insulation shield is installed only in accordance with these instructions.

This angled wall insulation shield meets the requirements of the NFPA 211, CSA B365 and UL 103 HT Standards listed to 2100 degrees up to 10" (25.4 cm) diameter.

PLEASE READ THE INSTRUCTIONS IN THE PACKAGING OF THE FOLLOWING COMPONENTS BEFORE BEGINING THE INSTALLATION. FAILURE TO COMPLY WITH THESE INSTRUCTIONS MAY RESULT IN A FIRE, CARBON MONOXYDE POISONING OR EVEN DEATH.

Ceiling Support

Insulated Masonry Thimble

- Wall Pass-Thru
- Attic Insulation Shield

- Attic Insulation Shield Kit
- Firestop Radiation Shield

#### **GENERAL INFORMATION**

When installing a fireplace, an angled wall insulated radiation shield must be installed when the chimney passes through a 2"x 4" or a 2"x 6" exterior combustible wall.

### This part is approved for the installation of a fireplace and must not be used for the installation of a stove.

#### In the US, only the 30° radiation shield is approved.

These instructions are a complement to the detailed installation instructions that are included with your chimney system. You must have both manuals to complete the installation properly.

#### Kit contents







Steel screw #8 x 1 1/4" (4x)

## Radiation shield (1x)

Cover plate (1x)

#### Not included component



Appropriate hardware for the house siding.

#### INSTALLATION

1. Determine where the chimney will go through the wall. In order to do so either :

Temporarily install an elbow and a chimney length on the fireplace and measure the distance from the floor to the base of the chimney (letter «Z», Figure 1). Subtrack 2 9/16" to the distance to find the position of the bottom of the opening.

or

Use the appropriate formula for your installation :

Opening position	
Ø	30°
10"	Y = H + (1.73 * X) - 115/16"



Using the "Opening Position" table above, make sure you have sufficient ceiling height. If the ceiling height is insufficient, you might have to consider an outside chimney installation.

Add the opening position «Y» to the height of the opening and add 2 1/4". If the total is greater than the height of the ceiling, you will need to install the chimney outside.

2. Cut an opening, matching the measurements from the «Opening dimensions» table.



3. Carefully make an x-shaped cut in the vapour barrier (A) in a way that allows it to be folded and fastened into the opening, as demonstrated in Figure 3.



4. Build an enclosure around the chimney to prevent the insulation from coming into contact with the chimney. The enclosure can be straight (figure 4) or it can follow the slope of the chimney (figure 5) but must at all time respect the 2" clearance around the chimney.



5. Insert the radiation shield **(C)** in the opening. Using the 4 supplied screws **(B)**, fasten the radiation shield in the framing while making sure not to flatten the 1/2" flange. (See letter «F», Figure 2)



- 6. Install the fireplace in its final position.
- 7. Fasten a 30° elbow to the fireplace chimney connection, using the three metal screws provided with the elbow.

- 8. To determine the correct offset lengths, please consult the Offset Table in the chimney's installation manual. Ensure that your calculations include a 2" offset with the exterior wall. You might find it useful to install an adjustable length between the elbows. They will allow you to offset the precise distance necessary.
- 9. Starting from the exterior, fasten the lengths together and push them through the heat shield until they rest on the elbow. Affix them to the elbow using the supplied metal screws.
- 10. From the outside, install the finishing plate with fasteners appropriate for the substrate (not included). Use silicone caulking to seal the gaps between the finishing plate and the wall.
- 11. Use another elbow to direct the chimney vertically. Secure the elbow to the chimney lengths using the three supplied metal screws.
- 12. Install the rest of the chimney as described in the chimney's installation instructions. A wall support should be installed on the first chimney length above the return elbow.

There must be a clearance, of not less than 2 inches (5 cm), between the exterior wall of the chimney and any combustible materials.

Ensure that the building's insulation, structure, electrical wiring or any other inflammable material, does not interfere with the 2-inch minimum clearance requirement.



Figure 7

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