



# EWRSI30 / EWRSI45

## Installation Instructions

An angled wall insulated radiation shield (EWRSI30 or 45) must be installed wherever the chimney passes through a 2"x4" or a 2"x6" exterior wall in a fireplace installation.

This part is listed for fireplace installation only (not to be used in a stove installation).

The 45° radiation shield is listed in Canada only. In United States, only the use of 30° radiation shield is listed.

These instructions are supplementary to the detailed installation instructions which come with the Excel chimney system. To complete the installation correctly you must have both sets of instructions.

1. Determine where the chimney will pass through the wall using one of the following methods:

- Method 1: Temporarily install an elbow and a length of chimney on top of the fireplace and measure the distance from the floor to the bottom of the chimney (see Figure 1).
- Method 2: Use the appropriate formula with Figure 1 :

$$6\text{EWRSI30 } Y = Y' + 1.73 X' - 8 \frac{11}{16}''$$

$$7\text{EWRSI30 } Y = Y' + 1.73 X' - 9 \frac{9}{16}''$$

$$8\text{EWRSI30 } Y = Y' + 1.73 X' - 10 \frac{3}{8}''$$

$$6\text{EWRSI45 } Y = Y' + X' - 5 \frac{11}{16}''$$

$$7\text{EWRSI45 } Y = Y' + X' - 6 \frac{1}{4}''$$

$$8\text{EWRSI45 } Y = Y' + X' - 6 \frac{3}{4}''$$

Using the rough opening dimensions (see Table 1) make sure you have enough ceiling height for your installation. If the ceiling height is too low for the planned installation you may want to consider installing the fire- place in an outside chase.

Table 1: Rough Opening Required		
	EWRSI 30	EWRSI 45
6"	12 1/4" x 38 1/2"	12 1/4" x 28"
7"	13 1/4" x 40 1/2"	13 1/4" x 29 3/8"
8"	14 1/4" x 42 1/2"	14 1/4" x 30 3/4"

2. Cut and frame an opening corresponding to the rough opening required (see Table 1).

3. Carefully cut an X in the vapor barrier so it can be folded into the framed opening and fasten it as shown in Figure 3.

4. The insulated portion of the radiation shield has a 1/4" bend on the outside edge. Apply enough acoustic sealant to the insulated portion of the radiation shield that it surpasses the 1/4" bend as shown in Figure 3. Place the sealant so that the screw holes in the radiation shield will be sealed.

5. Push the insulated portion of the radiation shield into the framed opening so that the sealant is compressed against the vapor barrier. Fasten in place with four drywall nails or screws, taking care not to crush the 1/4" bend.

6. For walls thicker than 2x4 framing, install the heat shield provided (Figure 2) across the exposed portion of wood at the top of the framed opening. The heat shield is adjustable for wall depth. Remove sections or cut the heat shield to fit the remaining wall depth (e.g. 2x6 walls use one small section of the shield). Screw the heat shield to the exposed section of wood framing at the top of the framed opening using wood screws. Ensure the 1/2" air gap remains between the metal shield and the wood itself (Figure 4).

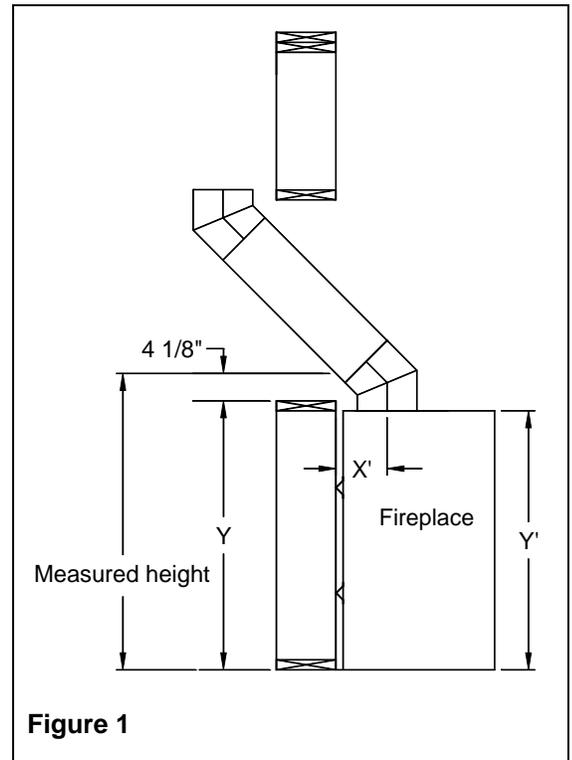
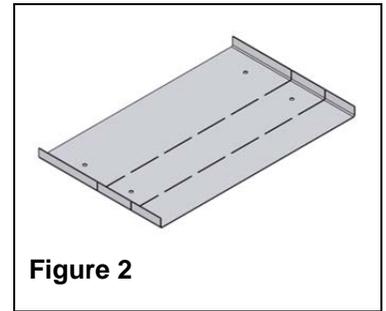


Figure 1

7. Install the fireplace in its final position. Make sure the chimney connection is aligned with the hole in the insulated wall radiation shield.
8. Fasten a 30° or 45° Excel elbow to the fireplace chimney connection using the 3 metal screws provided.
9. Using the offset table in the Excel installation instructions determine the lengths needed for the required offset. Remember to include the 2 inches of clearance between the chimney and the outside wall in your calculation. You may find it convenient to install an adjustable length between the elbows. This will allow you to offset the exact distance you require. The offset table on page 18 should be used when no adjustable length is required. Use the table on page 19 when an adjustable length is required.



Fasten the required lengths together and push them through the radiation shield from the outside until they rest on the elbow. Fasten them to the elbow with the three metal screws provided.

10. From outside, attach the exterior portion of the insulated wall radiation shield (galvanized plate) to the framed opening using 4-2" nails or #8 x 1 1/2" wood screws. Seal the joint between the plate and the wall with silicone caulking. Do not install the exterior portion of the insulated radiation shield if the chimney will be located in an exterior chase and not exposed to the elements.
11. Use another elbow to turn the chimney vertically. Secure the elbow to the chimney lengths using the three metal screws provided.
12. Install the remaining chimney as described in the Excel installation instructions. A wall support should be installed on the first chimney length above the return elbow.

