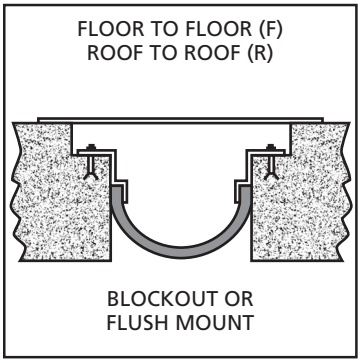
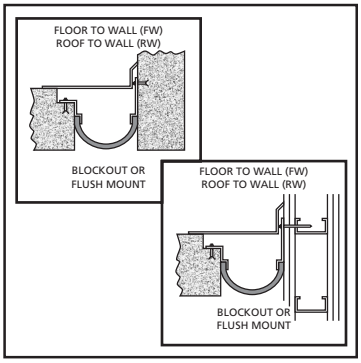
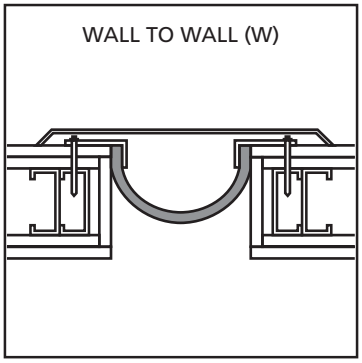
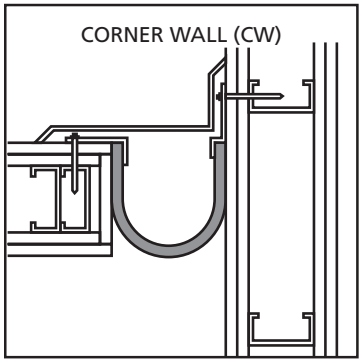
Thermal Structures Inc.

FS 5800
EXPANSION JOINT –EJ– FIRE BARRIER*
Installation Instructions









Horizontal:	Horizontal:	Vertical:	Vertical:
FS 5800-F1	FS 5800-FW1	FS 5800-W1	FS 5800-CW1
FS 5800-F2	FS 5800-FW2	FS 5800-W2	FS 5800-CW2
FS 5800-F3	FS 5800-FW3	FS 5800-W3	FS 5800-CW3
FS 5800-F4	FS 5800-FW4	FS 5800-W4	FS 5800-CW4
FS 5800-F5	FS 5800-FW5	FS 5800-W5	FS 5800-CW5
FS 5800-F6	FS 5800-FW6	FS 5800-W6	FS 5800-CW6

General Instructions:

- Fire Barriers must be installed in accordance with installation instructions to maintain UL® Rating.
- These instructions are for all horizontal and vertical FS 5800 installations for 1" - 6" nominal joint widths
- If splicing is required, see the separate splicing instructions.
- The galvanized flanges are always required for installation
- Appropriate fasteners supplied by others are required for all the horizontal and vertical installations.
- Typically, the same fasteners can be used to fasten the cover plate mechanism and the fire barriers.
- Wear heavy duty work gloves and eye protection during the entire installation process.

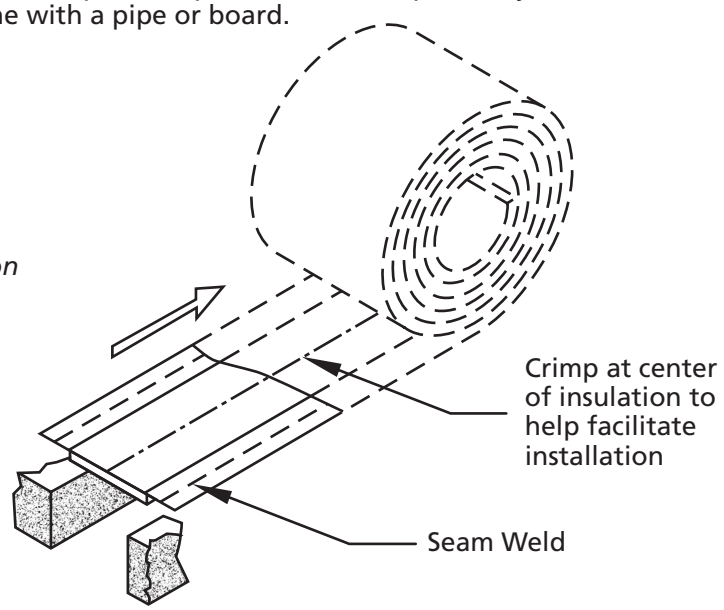
Packaging:

Each carton contains one 25 foot roll of FS 5800 EJ Fire Barrier, one kit with the necessary material for splicing, the installation instructions and the splicing instructions.
The galvanized flanges necessary for installation are packaged separately

Material Preparation:

Roll out product face up (the side with the UL® label) and cut to length. The insulation portion of the product can be formed into a "U" or "V" shape to help it fit into the expansion joint. This can be done by crimping the insulation along the center line with a pipe or board.

Fig. A
Material Preparation



*U.S. Patent No. 6,125,601

Step 1

After completing material preparation described on page 1 and as shown in Fig. A, place the fire barrier in the expansion joint. The foil flanges can be folded along the seam weld line onto the exposed face of the concrete slab. (See Fig. B). With the low profile (LP) galvanized flange, the foil flanges can be folded along the seam weld line down inside the expansion joint void so that no part of the barrier is on the exposed surface of the floor (See Fig. C)

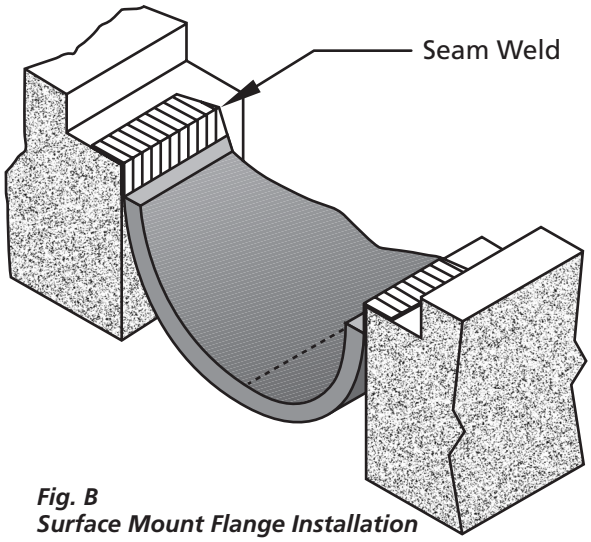


Fig. B
Surface Mount Flange Installation

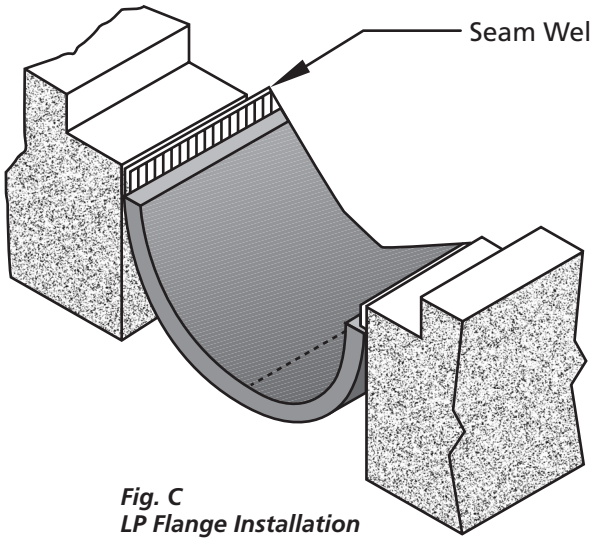


Fig. C
LP Flange Installation

Step 2

Cut the galvanized flanges to length and drill appropriate size holes with maximum spacing of 18". Install the flanges with appropriate fasteners (by others) as shown (See Figs. D & E)

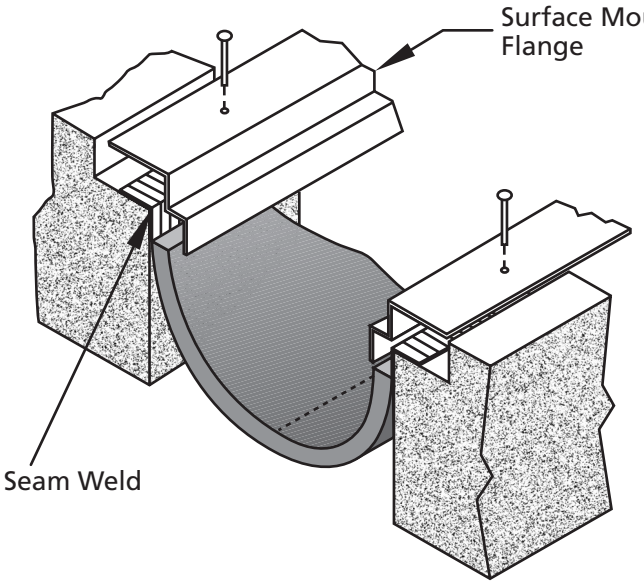


Fig. D
Surface Mount Flange Installation

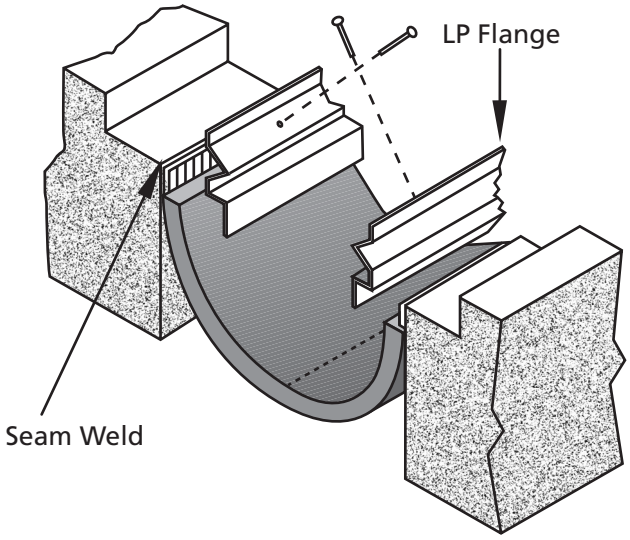


Fig. E
LP Flange Installation

Step 3

Install the expansion joint covers (by others) over the joint or in the blockout with appropriate fasteners (by others).

Installation Instructions
Floor to Wall
Roof to Wall

Step 1

After completing material preparation described on page 1 and as shown in Fig. A, place the fire barrier in the expansion joint. The foil flanges can be folded along the seam weld line onto the exposed face of the floor slab. The foil flange can be run up the wall on the other side of the joint. (See Fig. B2). With the Low Profile (LP) galvanized flange configuration on the wall side, the foil flange can be folded over itself before the galvanized flange is fastened into place. (See Fig. C2).

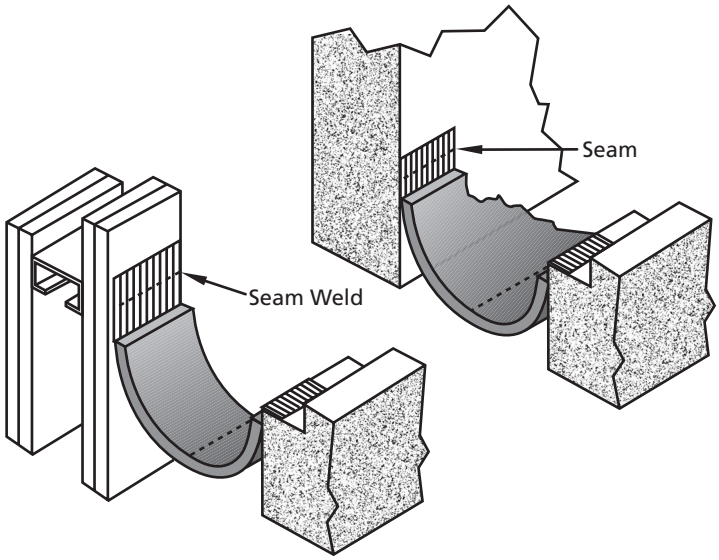


Fig. B2
Surface Mount Flange Installation

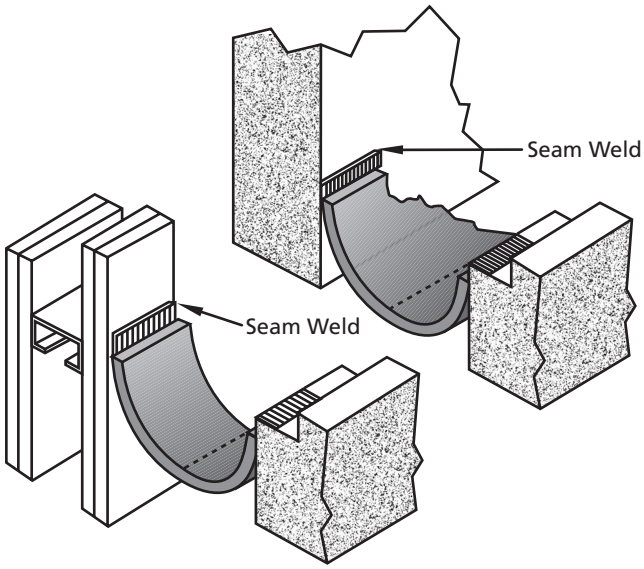


Fig. C2
LP Flange Installation

Step 2

Cut the galvanized flanges to length and drill appropriate size holes with maximum spacing of 18". Install the flanges with appropriate fasteners (by others) as shown. (See Fig. D2 & E2)

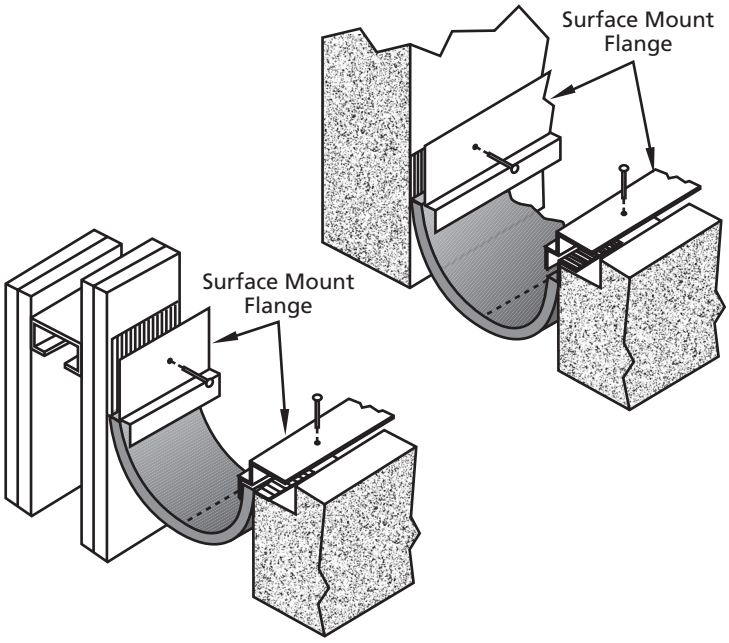


Fig. D2
Surface Mount Flange Installation

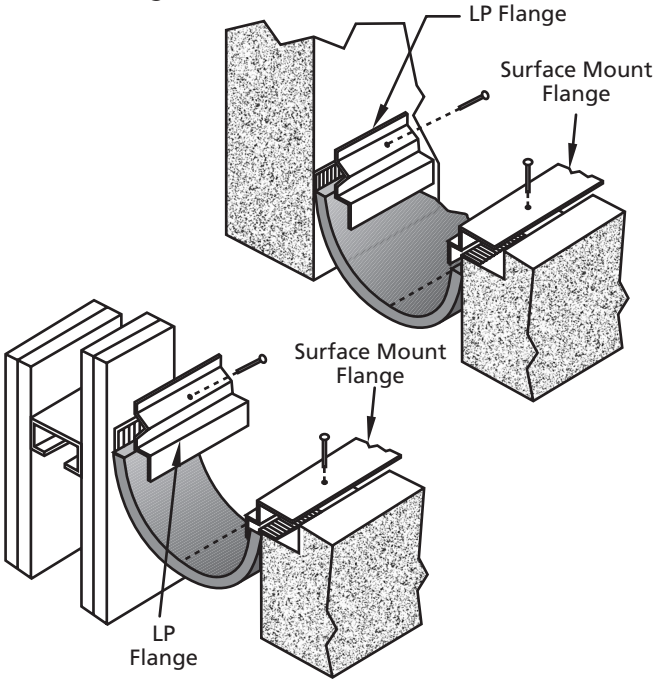


Fig. E2
LP Flange Installation

Step 3

Install the expansion joint covers (by others) over the joint or in the blockout with appropriate fasteners (by others).

Installation Instructions
Wall Joints

Step 1

After completing material preparation described on page 1 and as shown in Fig. A, place the fire barrier in the expansion joint. The foil flanges can be entirely on the exposed surface of the wall for the Surface Mount galvanized flange (See Fig. B1).

With the Low Profile (LP) galvanized flanges, the foil flanges can be inside the joint cavity so that no part of the barrier is on the exposed surface of the wall. (See Fig. C1).

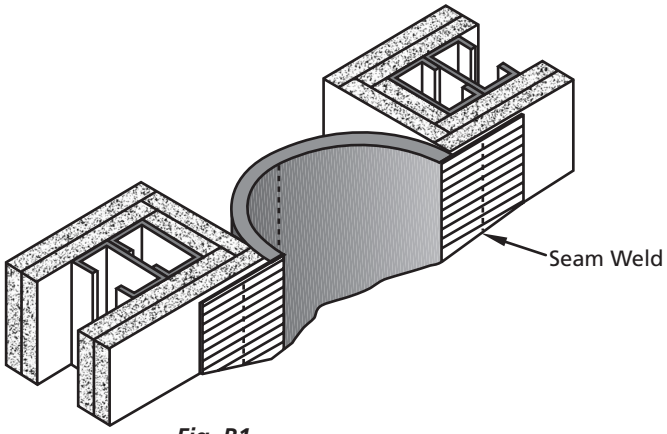


Fig. B1
Surface Mount Flange Installation

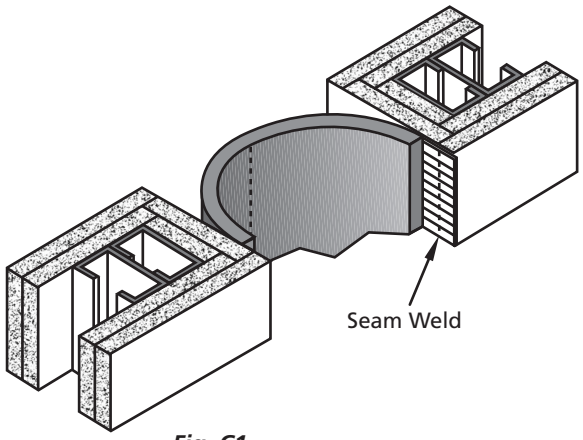


Fig. C1
LP Flange Installation

Step 2

Cut the galvanized flanges to length and drill appropriate size holes with maximum spacing of 18".
Install the flanges with appropriate fasteners (by others) as shown. (See Fig. D1 & E1).

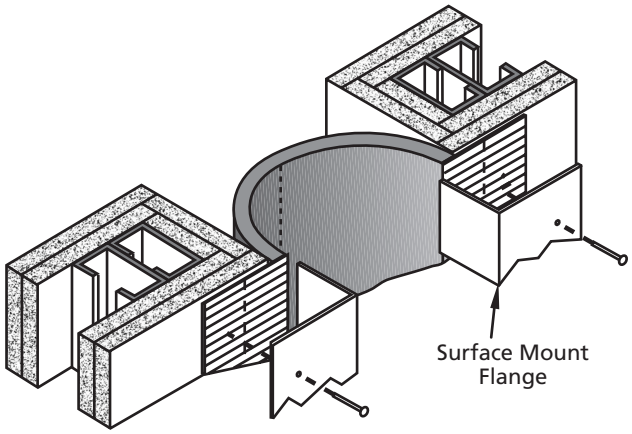


Fig. D1
Surface Mount Flange Installation

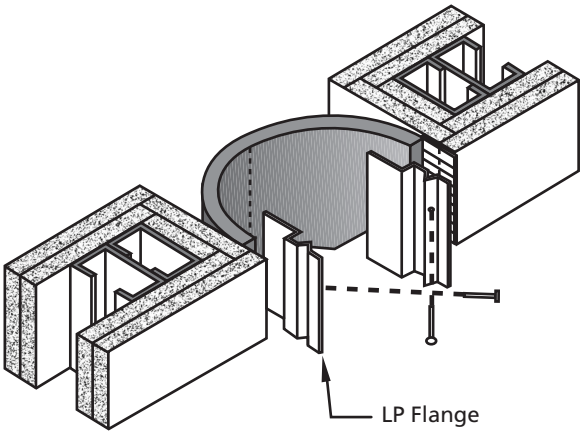


Fig. E1
LP Flange Installation

Step 3

Install the expansion joint covers (by others) to either side or both sides of the wall when accessible with appropriate fasteners (by others).

Installation Instructions
Corner Wall

Step 1

After completing material preparation described on page 1 and as shown in Fig. A, place the fire barrier in the expansion joint. The foil flanges can be folded along the seam weld line onto the exposed face of the wall. The foil flange can be run out the wall on the other side of the joint. (See Fig. B3).
With the Low Profile (LP) galvanized flange configuration on the wall side, the foil flange can be folded over itself before the galvanized flange is fastened into place (See Fig. C3).

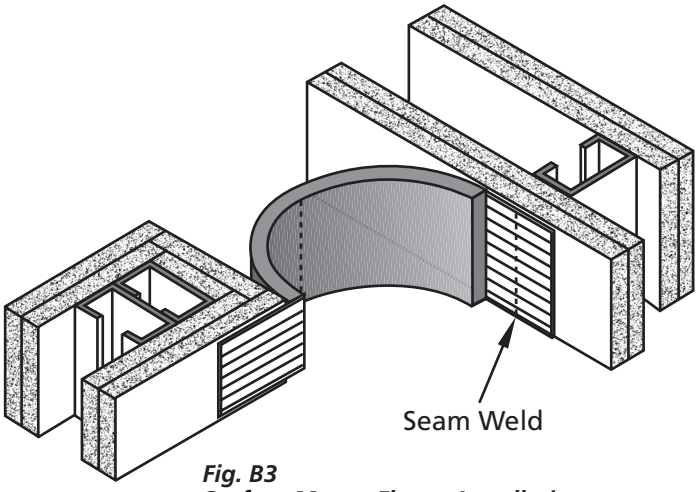


Fig. B3
Surface Mount Flange Installation

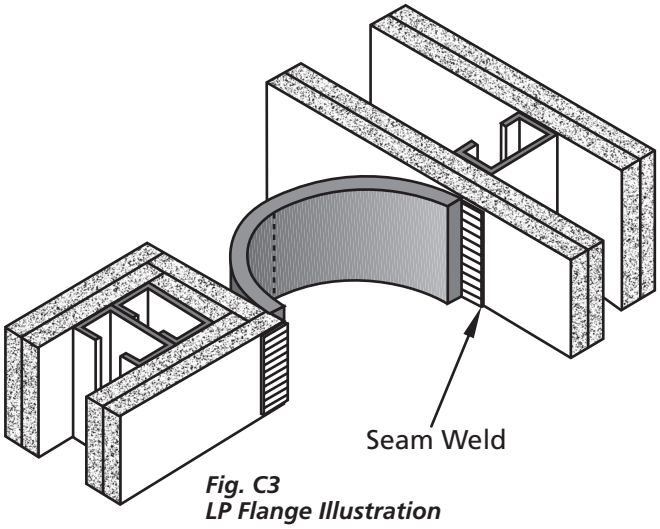


Fig. C3
LP Flange Illustration

Step 2

Cut the galvanized flanges to length and drill appropriate size holes with maximum spacing of 18".
Install the flanges with appropriate fasteners (by others) as shown. (See Fig. D3 & E3).

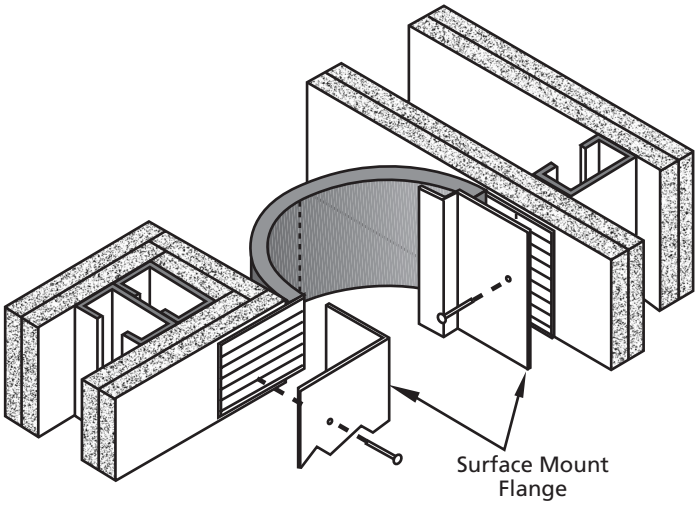


Fig. D3
Surface Mount Flange Installation

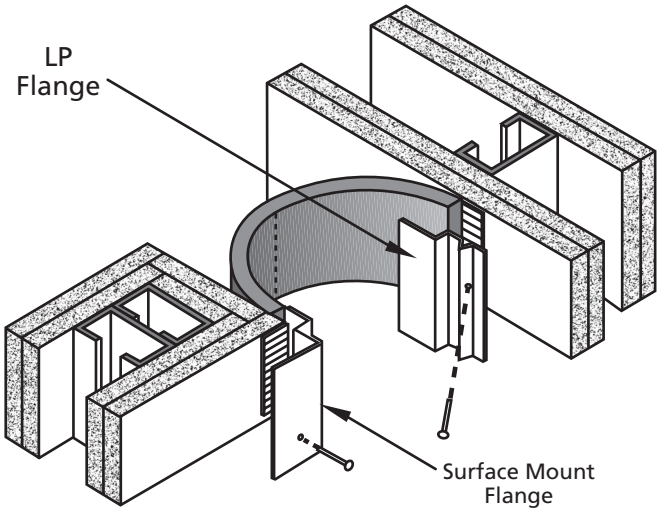


Fig. E3
LP Flange Installation

Step 3

Install the expansion joint covers (by others) to either side or both sides of the wall when accessible with appropriate fasteners (by others).