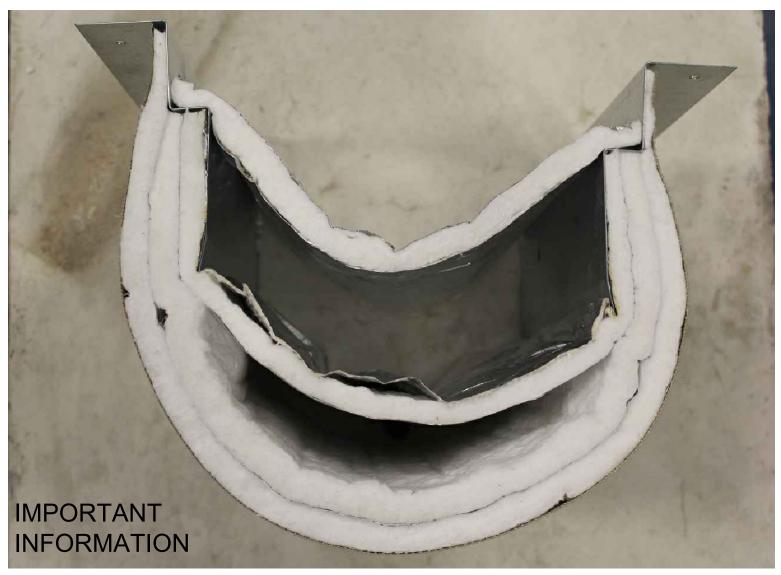
MODEL FB17 FLOOR FIRE BARRIER INSTALLATION INSTRUCTIONS



Prior to the commencement of Installation, all materials MUST be inspected for Damage. Any damage must be reported to CONSTRUCTION SPECIALTIES, INC., as soon as possible, so that replacement materials may be furnished without delay.

All work must be completed as per Architect's Approved "Shop Drawings", and in accordance with these Installation Instructions. When installation is complete, all materials must be protected from damage until the Architect's FINAL INSPECTION.

All materials should be arranged in the order that they are to be installed. All hardware required for each portion of the work should be placed with the appropriate materials.

Please review all Approved Shop Drawings and this Document to familiarize yourself with all the details and components of this assembly.

IMPORTANT:

READ THROUGH ALL INSTRUCTIONS PRIOR TO STARTING INSTALLATION 05/15/2024



Construction Specialties® www.c-sgroup.com

6696 Route 405 Highway, Muncy, PA 17756 Phone: (800) 233-8493 / Fax: (570) 546-8022

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General Instructions:

ALWAYS WEAR GLOVES when handling and cutting the barrier.

Before beginning installation, review the architectural drawings and approved Construction Specialties Inc. shop drawings to familiarize yourself with the joint cover models and locations.

Check all of the joint cover components to confirm that the correct joint cover model and size have been received. Also, check for materials that may have been damaged during shipping. Report all incorrect and/or damaged components to CS at 800-233-8493.

Read through all the steps of these instructions prior to beginning work.

TOOLS:

The following tools may be needed for installation of the FB17 fire barriers:

- Fabric or Leather Work Gloves

- Measuring Tape

- Hammer Drill

- Permanent Marker

- Tin Snips or Grinder

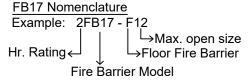
- Hammer

- Utility Knife

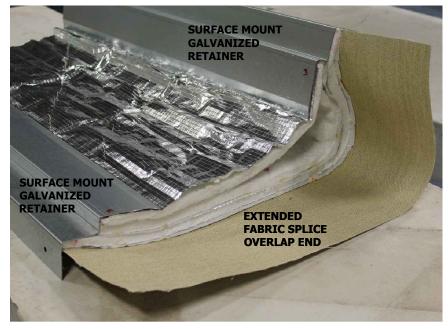
- Drill

- Quick Grip Clamps

Model designating - FB17 supplied is based on the max. open width.

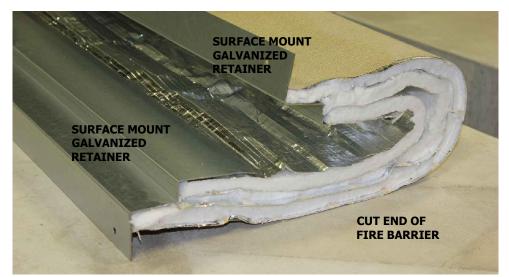


To view / download specific Installation Instructions for FB17 Horizontal Transitions of 90°, "T", or "X" Crossovers use QR code or visit www.c-sgroup.com/expansion-joint-covers/ accessories/fb-17



STEP 1

BEGINNING INSTALLATION



<u>Note:</u> The FB17 fire barrier is supplied in 10' lengths with a extended fabric splice overlap end for field splicing. See field splicing instructions later in these instructions.

The FB17 Fire Barrier has attached Galvanized Retainers, Surface Mount (SM), Low Profile (LP), or a combination of Surface Mount and Low Profile retainers.

INSTALLATION OF FIRE BARRIER / RETAINERS

Note: When beginning installation, make sure that the first barrier segment is placed so that the "Extended Fabric Splice Overlap End" of the barrier is in the correct orientation position for the next barrier segment.

- 2.1) Beginning at one end of the joint with the first section of fire barrier, in its proper orientation for splicing, lower fire barrier into the joint and align with the joint end.
- 2.2) Seat the fire barrier so that the Surface Mounted Galvanized Retainers (Fig. 2A) are along each edge and rest on the surface of the slabs. Hold the fire barrier tightly to the inside face of slabs securing with adjustable grip clamps. If fire barrier is with Low Profile Galvanized Retainers (Fig. 2B) align the top edge of the Retainers with the top of the joint slabs.





(Fig. 2B)

(Fig. 2A)

Note: The fasteners should be snug tight to the fire barrier, just enough that the fire barrier is in firm contact with the substrate. (Fig. 2C) Fire Barrier installed without a cover plate, drill the Surface Mounted Galvanized Retainer starting 3" in from the end and 18" O.C. for supplied fasteners. (Fig. 2D - 2E)

2.3) Retainer Fastener Locations:

*Note: Surface Mounted Galvanized Retainers do not have pre-drilled fastener holes and will need to be drilled in the field. To hold the fire barrier temporarily install fasteners as necessary.

<u>Surfaced Mounted Galvanized Retainers</u> (Fig. 2A) and using the joint cover frame to anchor the fire barrier retainer in place - Measure and mark the frame fastener centerline locations on the Surface Mounted Retainer flange and drill out prior to installing. Using the retainer as a template drill the substrate, remove and clean out the holes.

<u>Low Profile Galvanized Retainers</u> (Fig. 2B) Using the retainer as a template, drill the holes for the supplied fasteners with maximum spacing of 18" o.c., remove the barrier to clean out the holes. Reposition the barrier held tightly against the substrate with the adjustable clamps and install supplied fasteners per manufacturer's guidelines.



(Fig. 2D)

ANCHOR LOCATION 24" O.C. TO HOLD FB TEMPORARILY UNTIL JOINT COVER FRAME IS INSTALLED



(Fig. 2E)

SPLICING INSTRUCTION METHODS

The following instructions are to be used to splice together two pieces of FB17 Fire Barrier sections. Recommended procedure is to install the Inner splice Strip piece on a flat surface prior to installing in the joint space.

INSTALLING INNER SPLICE STRIP PIECE ON A FLAT SURFACE

3.1) Locate the 12" wide Splice Strip roll, using the Splice Strip chart measure to cut a Inner Splice Strip piece, per your Fire Barrier Model Size dimension. (Fig. 3A - 3C)



(Fig. 3A)



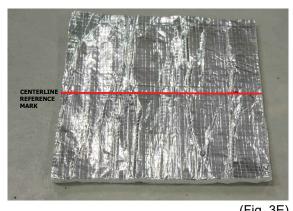
(Fig. 3C)

- SPLICE STRIP CHART FLOOR FIRE BARRIER FIRE BARRIER **INNER MODEL SIZE SPLICE** (MAX OPEN) **STRIP** 2FB17-F9 9" 2FB17-F12 12" 15" 2FB17-F15 2FB17-F18 18" 2FB17-F21 21" 24" 2FB17-F24 2FB17-F27 27" 30" 2FB17-F30
- (Fig. 3B)

- 3.2) Using a utility knife cut the Inner Splice Strip to the max. open measurement. (Fig. 3D)
- 3.3) Draw a reference line marking the centerline of the max. open measurement on the Inner Splice Strip piece. (Fig. 3E)



(Fig. 3D)



(Fig. 3E)

STEP 3 Con't

SPLICING INSTRUCTION METHODS

INSTALLING INNER SPLICE STRIP PIECE ON A FLAT SURFACE

3.4) At the cut end of the fire barrier (no Extended Fabric Splice Material is seen Fig. 3F) insert the cut Inner Splicing Strip piece fully between the first and second fire barrier layers. (Fig. 3G) Align the Inner Splice Strip end with the cut end of the fire barrier. (Fig. 3H)







G)

(Fig. 3F)

- 4.5) Butt the cut end of fire barrier with the inserted Inner Splicing Strip to the installed end segment with the Extended Fabric Splice Material. (Fig. 3J)
- 4.6) Install the fire barrier retainers following installation instructions in Step 2. With the two fire barrier segments butted and anchored in place gently pull up and back the top layer of Fire Barrier blanket from each segment. (Fig. 3K)



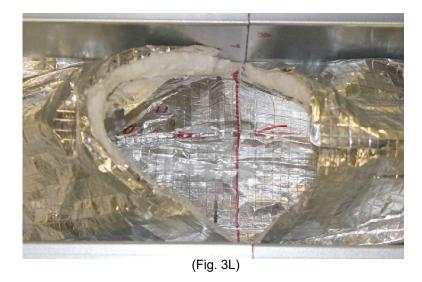
(Fig. 3J)



(Fig. 3K)

(Fig. 3H)

- 3.7) Slide the Inner Splicing Strip piece so that the centerline mark aligns with the butt ends of the galvanized retainers. (Fig. 3L)
- 3.8) Gently push down the top layer of fire barrier blankets into the joint "U" shaped drape. The fire barrier segments should be aligned and butted back together. (Fig. 3M)





(Fig. 3M)

TOP SPLICE STRIP INSTALLATION

<u>Note:</u> At the butted segments of Fire Barrier a Top Splice Strip of insulation is installed and taped in place to insulate the butt Joints.

4.1) Locate the 12" Splice Strip roll, using the Splice Strip Chart cut one Top Splice Strip at the total length dimension per the Fire Barrier Model size. (Fig. 4A)

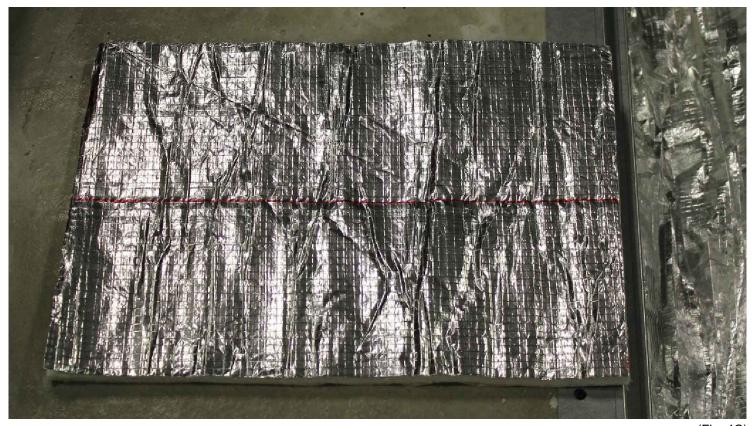


(Fig. 4A)

SPLICE STRIP CHART - FLOOR FIRE BARRIER	
FIRE BARRIER MODEL SIZE (MAX OPEN)	TOP SPLICE STRIP
2FB17-F9	13"
2FB17-F12	16"
2FB17-F15	19"
2FB17-F18	22"
2FB17-F21	24"
2FB17-F24	27"
2FB17-F27	30"
2FB17-F30	33"

(Fig. 4B)

4.2) Measure in 6" and draw a centerline mark the length of the cut Top Splice Strip. (Fig. 4C)



(Fig. 4C)

STEP 4 Con't

TOP SPLICE STRIP INSTALLATION

4.3) At the Spliced section of fire barrier fold the Top Splice Strip into a "U" shape without creasing and place into the joint aligning the centerline mark with the butted segments of fire barrier in the joint. (Fig. 4D)



(Fig. 4D)



(Fig. 4E)

4.5) Using the CS supplied Foil Tape, tape all exposed fire barrier blanket areas of the Top Splice Strip, sealing the top edges and ends to the galvanized retainers and fire barrier blankets. (Fig. 4E - 4G)



(Fig. 4G)

(Fig. 4F)

TOP HEAT SHIELD INSTALLATION

Note: The Top Heat Shield has been supplied in 50' lengths. Beginning at the same end as the Main Fire Barrier installation, begin installing the Top Heat Shield.

- 5.1) Place the length of Top Heat Shield over the joint and unroll over the length of the fire barrier. (Fig 5A)
- 5.2) Fold the Top Heat Shield into a "U" shape without creasing, installing into the joint, align the end of the Top Heat Shield with the end of the fire barrier and the galvanized retainers. (Fig. 5B)
- 5.3) Install the Top Heat Shield along the edge of the galvanized retainers with the supplied fastener and washers at 12" O.C.. (Fig 5C)



Fig. 5A



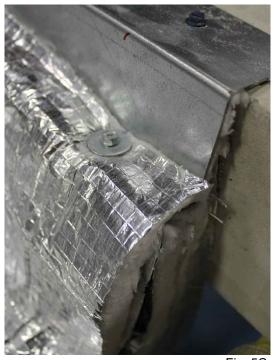


Fig. 5C

5.4) If additional length of Top Heat Shield is required, overlap the previous length by 6". Proceed and install next section repeating attachment of the Top Heat Shield as indicated above.

CUTTING DOWN A FIRE BARRIER LENGTH

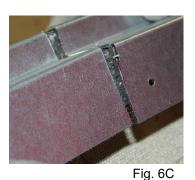
<u>Note:</u> If a 10' length of Fire Barrier needs to be cut down, cutting between weld pins, follow the instructions below to properly secure blanket to the galvanized retainer.

- 6.1) Measure in from the cut end of the fire barrier the length needing to be cut off. Mark a cut line on the fire barrier blanket material and galvanized retainers to follow. (Fig. 6A 6B)
- 6.2) Cut the galvanized retainers using a grinder and a utility knife to cut the fire barrier blanket material along the marked cutting line. (Fig. 6C 6E



Fig. 65

Fig. 6B



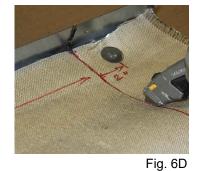




Fig. 6E

- 6.3) Measure in 1 1/2" and 1" down from the cut end of the galvanized retainer marking the location to install the supplied self drilling #8 x 1/2" sheet metal screw. (Fig. 6F) The screw is installed through the fire blanket area in the upper portion of the galvanized retainer. (Fig. 6G)
- 6.4) Cut off the screw portion that protrudes out from the galvanized retainer. (Fig. 6H 6J)









Fig. 6H

Fig. 6J

6.5) Follow installation instructions Steps 2 through 7 to install cut down fire barrier segments in the joint or to splicing together.

Fig. 6G

CREATING FABRIC OVERLAP SPLICING END

<u>Note:</u> To create a 6" fabric Overlap Splicing End on a cut down segment of Fire Barrier requires 6" of fabric to remain from cut end of the fire barrier segment. Follow the instructions below.

7.1) Measure in and mark the fire barrier / galvanized retainers the length needing to be cut off from the end segment of the fire barrier. To create the fabric Overlap Splicing End measure back 6" on the fire barrier fabric towards the cut end of the fire barrier. Draw a reference line, on the fire barrier fabric, at the 6" mark. (Fig. 7A - 7B)

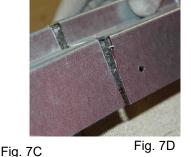


Fig. 7B

Fig. 7A

- 7.2) If a weld pin is located in the 6" section of fire barrier fabric, from the cut end, remove with a pair of pliers. (Fig. 7C)
- 7.3) Fold back the 6" fabric material, cut the galvanized retainers and fire barrier blanket material along the 6" folded fire barrier fabric. (Fig. 7D 7E)





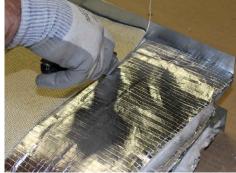


Fig. 7E

- 7.4) Fold the 6" Overlap Fabric back out over the cut end of the fire barrier blanket. (Fig. 7F)
- 7.5) 1 1/2" in and 1" down from the cut end of the galvanized retainer install the supplied self drilling #8 x 1/2" sheet metal screw. The screw is installed through the fire blanket area in the upper portion of the galvanized retainer. (Fig. 7F 7G)
- 7.6) Cut off the screw portion that protrudes out from the galvanized retainer. (Fig. 7H)





Fig. 7F

Fig. 7H

7.7) Follow installation instructions Steps 2 through 7 to install / splice cut down fire barrier segments in the joint.