

# MODEL FB17 WALL FIRE BARRIER INSTALLATION INSTRUCTIONS (20" to 30" Max. Open)



## IMPORTANT INFORMATION

Prior to the commencement of Installation all materials **MUST** be inspected for Damage. Any damage must be reported to Construction Specialties 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**

10/03/2018



**Construction Specialties™**

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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.

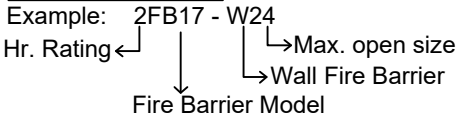
**TOOLS:**

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.

FB17 Nomenclature

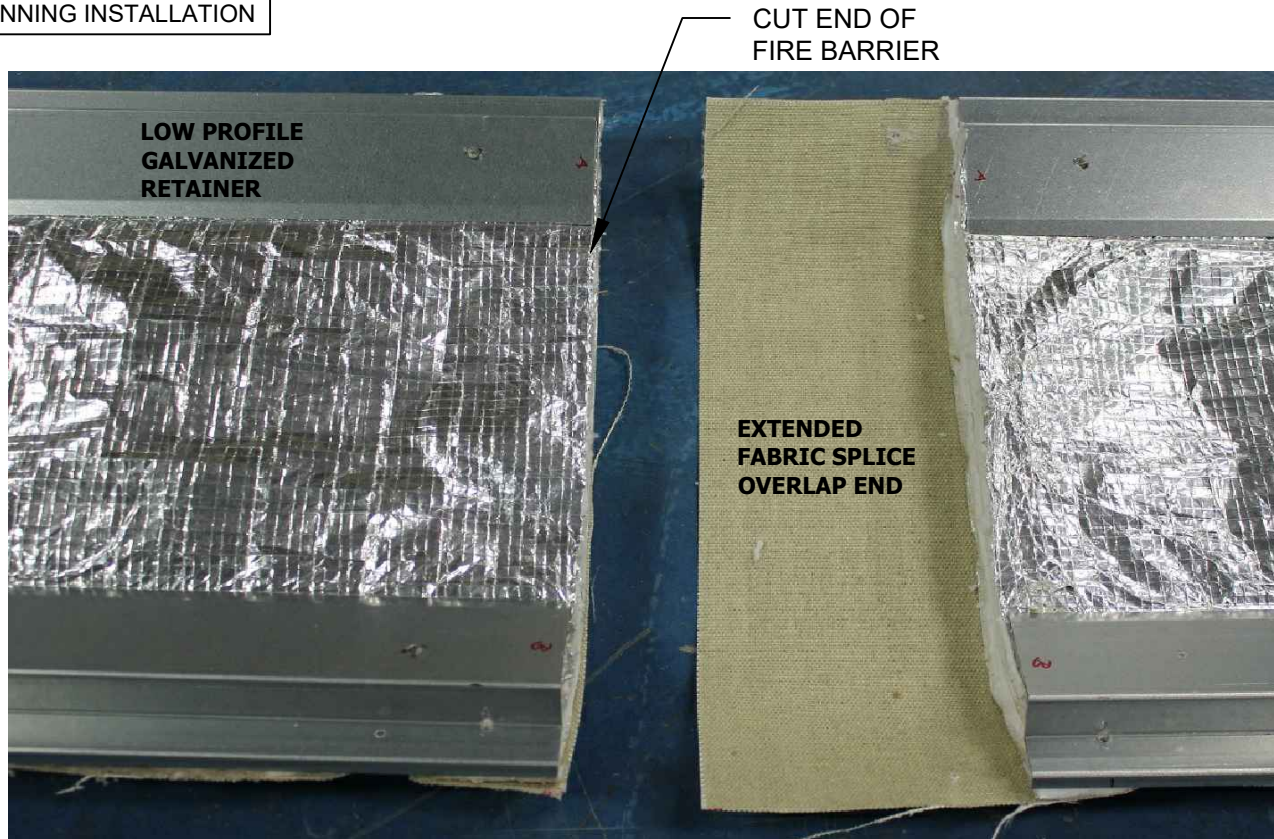


To view / download Installation Instructions for FB17 use QR code or visit [www.c-sgroup.com/expansion-joint-covers/accessories/fb-17](http://www.c-sgroup.com/expansion-joint-covers/accessories/fb-17)



# STEP 1

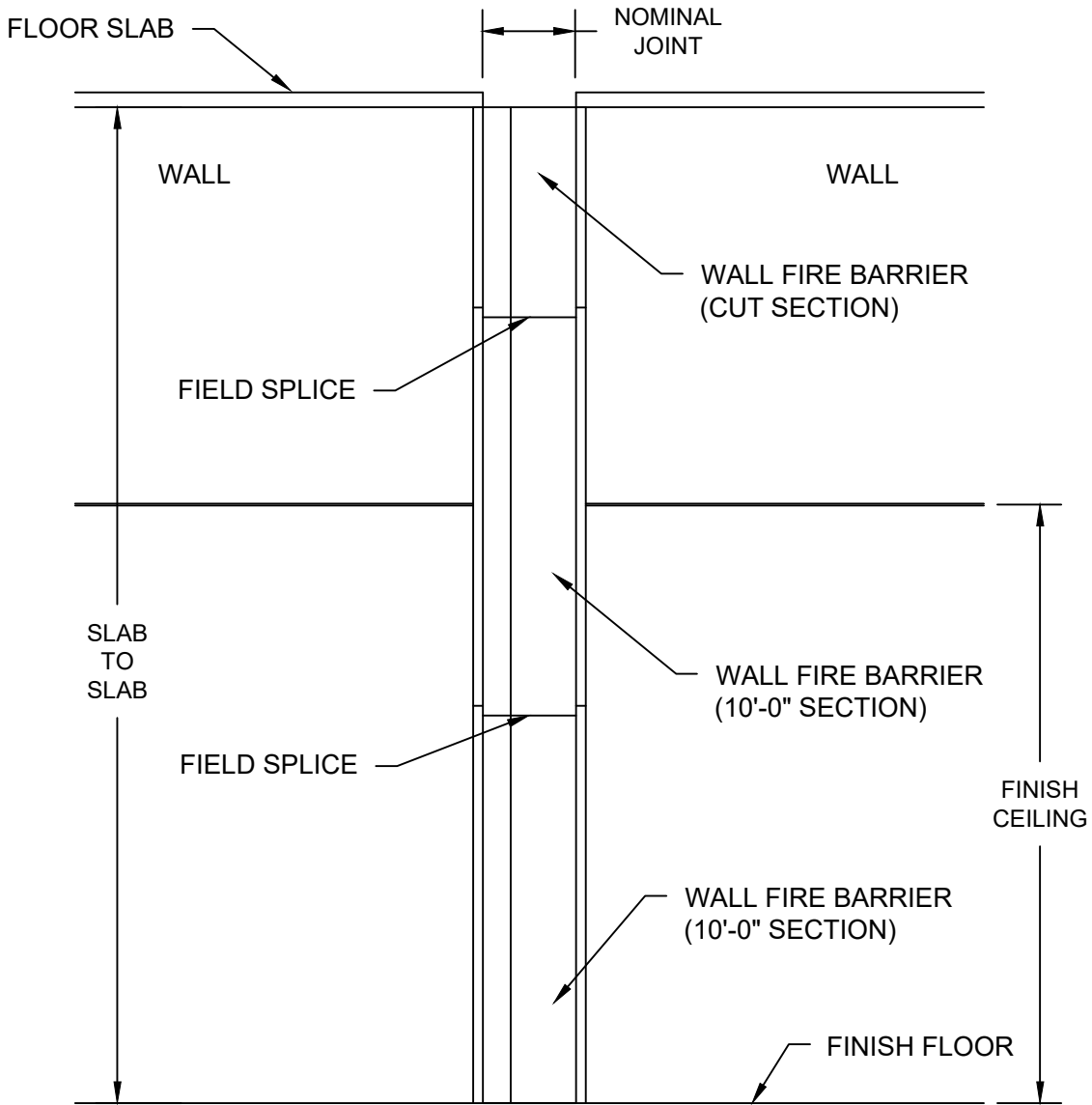
**BEGINNING INSTALLATION**



Installation Notes:

- 1.) The FB17 wall fire barrier has an extended fabric splice overlap end for field splicing. See field splicing instructions later in these instructions explaining the splicing method.
- 2.) The wall fire barrier has attached Galvanized Retainers, Surface Mount (SM), Low Profile (LP), or a combination of Surface Mount and Low Profile retainers.

Installation Notes:



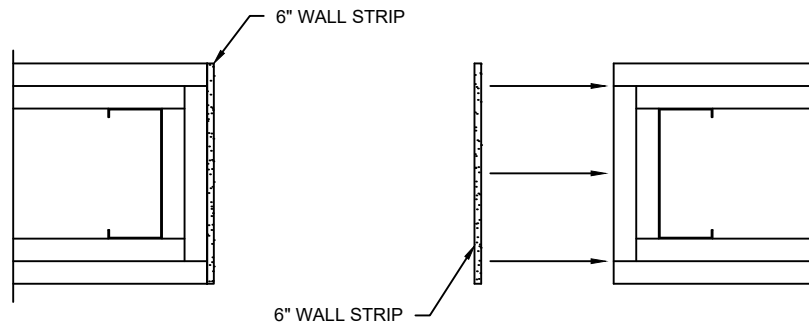
Installation Notes:

- 3.) Wall Fire Barriers are to extend the full height of the rated wall, from floor slab to the underside of the floor slab above.
- 4.) The FB17 Wall Fire Barrier Assemblies have been supplied in 10' lengths and are to be field spliced together to cover the overall height.
- 5.) Field cutting barriers to the specific overall length may be required.

# STEP 1

## INSTALLATION OF WALL STRIPS

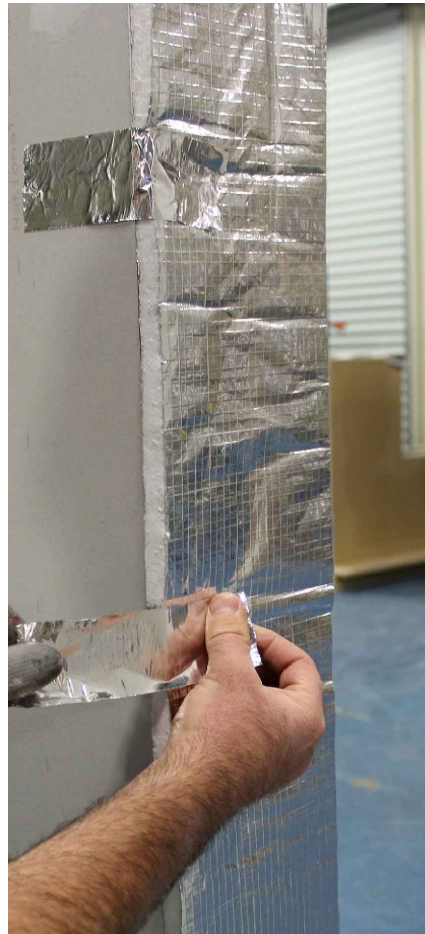
- 1.1) Locate the FB17 6" wide Wall Strips, typically supplied in 10' lengths. You may need to splice sections of Wall Strip together to accommodate the full height, simply butt the Wall Strips tightly together. 6" Wall Strips typically run from floor to the slab above both sides of the wall joint opening. (Fig. 1A & 1B)
- 1.2) Beginning at the top of the wall, align the one vertical edge of the Wall Strip with one face of the wall. Tape or staple the Wall Strip to temporarily hold in place, maintaining alignment with the joint face as you work towards the floor. (Fig. 1C & 1D)
- 1.3) Repeat for the opposite joint face.



(Fig. 1A)



(Fig. 1B)



(Fig. 1C)



(Fig. 1D)

# STEP 2

## INSTALLATION OF WALL FIRE BARRIER / RETAINERS

2.1) 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. (Fig. 2A)

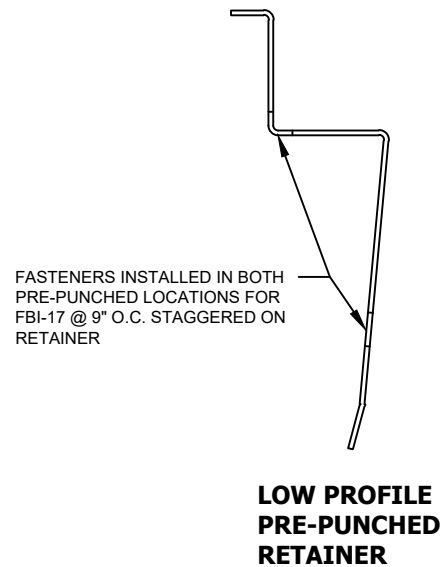
### 2.2) LOW PROFILE FIRE BARRIER RETAINERS:

Begin installation at the bottom of the wall with the first section of Fire Barrier, in its proper orientation for splicing, seat the Fire Barrier so that the Low Profile Galvanized Retainers are along each joint edge. Install the CS supplied fasteners per the manufacturer's guidelines. (Fig 2A)

\*Low Profile Retainer fasteners are to be installed in the upper and lower pre-punched hole locations staggered at 9" O.C. (Fig 2B)



(Fig. 2A)



(Fig. 2B)

# STEP 2 Con't

## INSTALLATION OF WALL FIRE BARRIER / RETAINERS

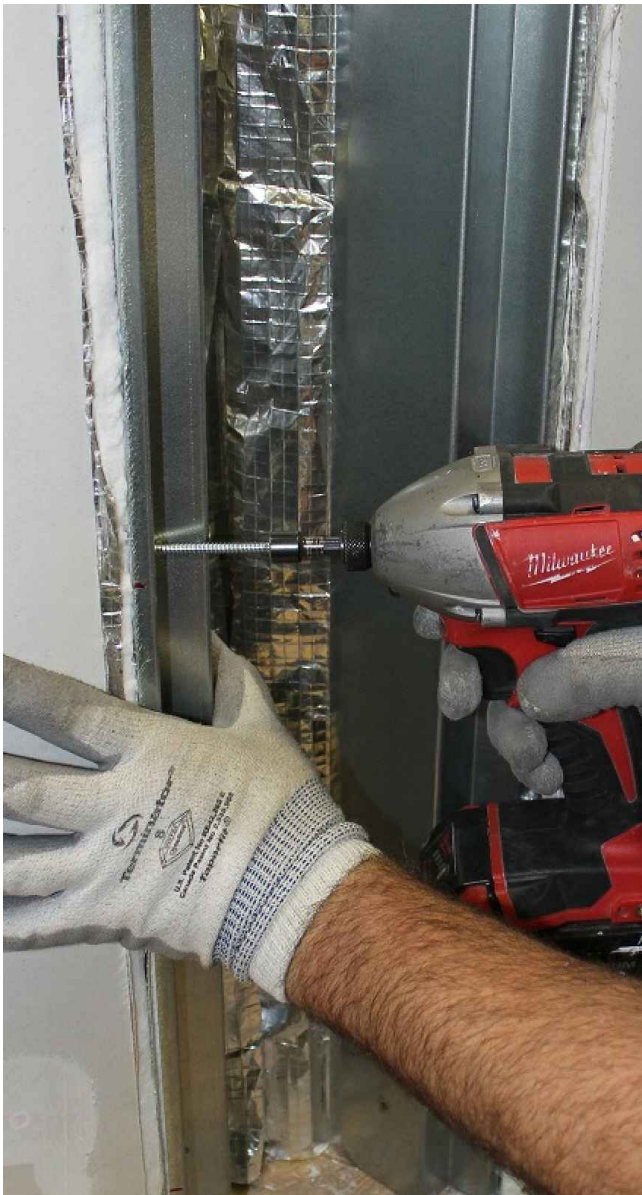
### 2.3) SURFACE MOUNTED FIRE BARRIER RETAINERS:

The top mounting fastener hole needs to be field drilled before installing the Surface Mounted fire barrier sections. Starting 6" from the end and 12" O.C. drill fastener locations centered in the top portion of the surface mounted flange.

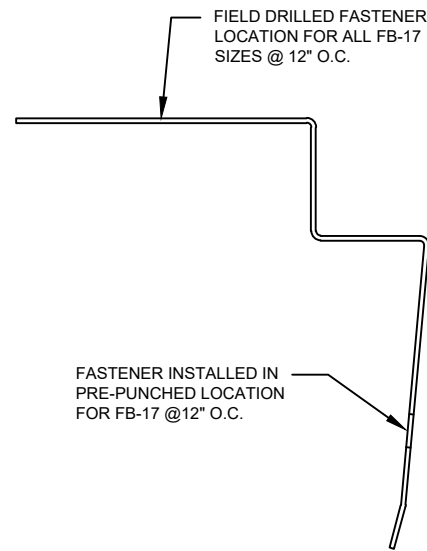
2.4) Install the fire barrier seating the first section of fire barrier at the bottom of the wall so that the Surface Galvanized Retainers are along each edge and rest on the surface of the wall substrate material. While holding the Fire Barrier tightly against the installed wall strips and face of the wall joint, install the CS supplied fasteners per the manufacture's guidelines.

\*Surface Mounted Retainer fasteners are installed in field drilled hole locations at 12" O.C. max. Install a second fastener in the pre-punched locations for fire barrier at 12" O.C. (Fig 2C)

2.5) Fasteners should be snug tight to the Fire Barrier, just enough that the Fire Barrier is in firm contact with the substrate.



(Fig. 2D)



**SURFACE MOUNT RETAINER**

(Fig. 2C)

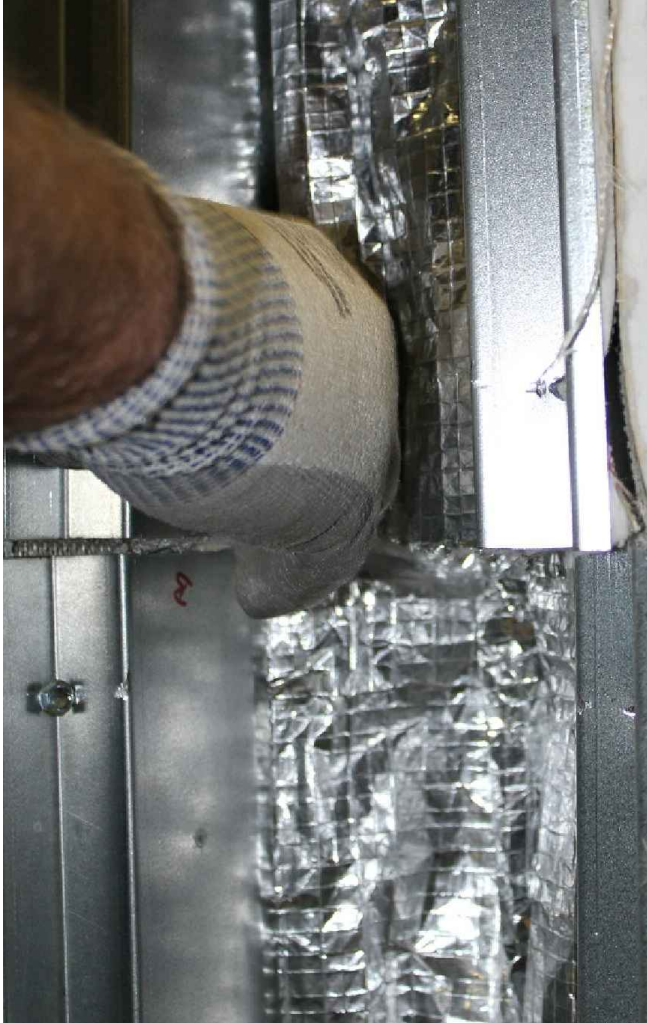
# STEP 3

## SPLICING INSTRUCTION METHODS

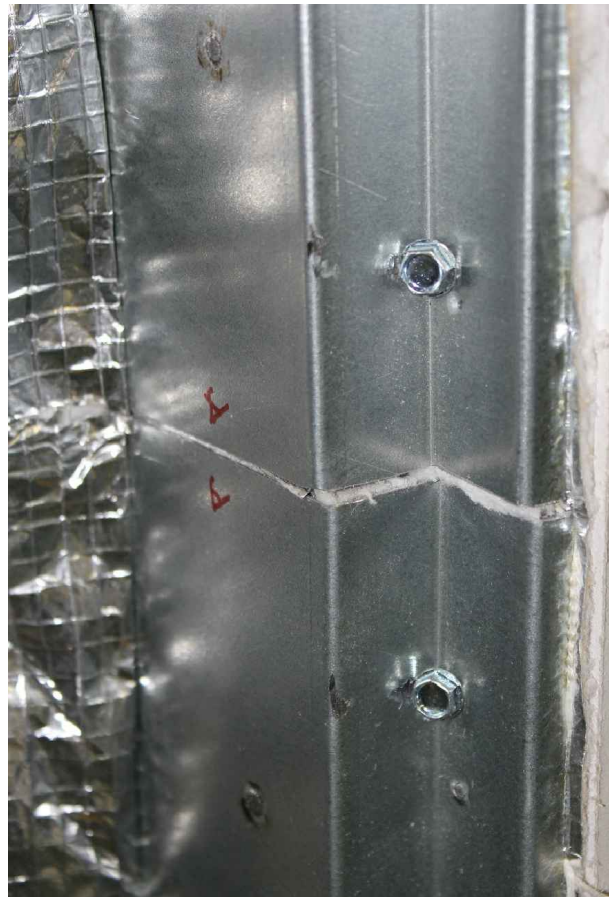
The following instructions are to be used to splice together two pieces of FB17 Fire Barrier sections.

### **FBI-17 MAX. OPEN SIZES OF 21"-30" REQUIRES NO INNER SPLICING STRIP**

3.1) When additional lengths of fire barrier are needed butt the cut end of the fire barrier tightly to the end segment with the extended fabric splice material. (Fig. 3A & 3B) Follow installation instructions in Step 2 to anchor the retainers in place.



(Fig. 3A)



(Fig. 3B)

# STEP 4

## TOP SPLICE STRIP INSTALLATION

Note: At the butted segments of Fire Barrier a Top Splice Strip of insulation is pinned 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 your max. open dimension. (Fig. 4A) Measure in 6" and draw a centerline mark the length of the cut Top Splice Strip. (Fig. 4B)

SPLICE STRIP CHART - WALL FIRE BARRIERS	
FIRE BARRIER MODEL SIZE (MAX OPEN)	TOP SPLICE STRIP
2FB17-W21	22"
2FB17-W24	25"
2FB17-W27	28"
2FB17-W30	31"

(Fig. 4A)



(Fig. 4B)

- 4.2) At the spliced section of fire barrier fold the Splice Strip into a "U" shape without creasing, and place into the joint. Align the centerline mark with the butted segments of fire barrier. Using the supplied Foil Tape, tape exposed side edges of fire barrier blanket, sealing edges to the galvanized retainers. (Fig. 4C)



(Fig. 4C)

- 4.3) The Top Splice Strip is pinned in position with four (4) Splice Pins. Bend the Splice Spins at approximately 75° degree angle before installing. Install two (2) Splice Pins, one each side of the centerline, at the top and bottom of the Splice Strip. Install Splice Pins pushing in and upward for the top pins and in and downward for the bottom pins to hold Splice Strip in place. (Fig. 4D, 4E & 4F)



(Fig. 4D)



(Fig. 4E)



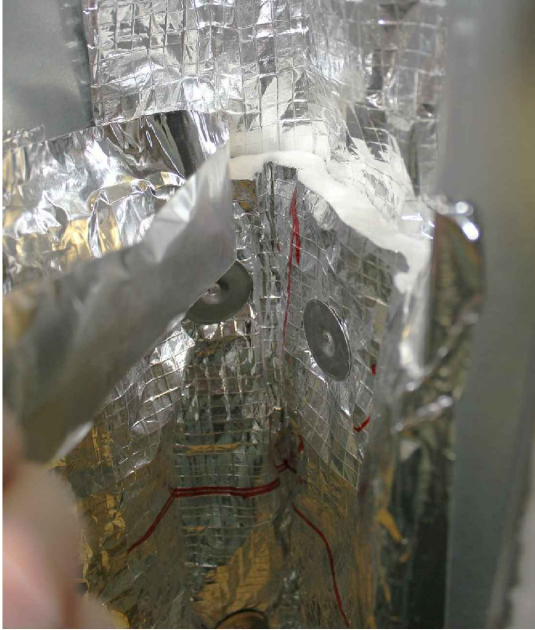
(Fig. 4F)



# STEP 4 Con't

## TOP SPLICE STRIP INSTALLATION

- 4.4) Using the supplied Foil Tape, tape all exposed fire barrier blanket areas of the Top Splice strip. (Fig. 4G)
- 4.5) Apply Foil Tape over the four (4) splice pin heads to secure in place (Fig. 4H)



(Fig. 4G)



(Fig. 4H)

# STEP 5

## TOP HEAT SHIELD INSTALLATION

Note: The Top Heat Shield supplied in 50' lengths is  $\frac{1}{2}$ " thick on fire barrier max. open sizes of 9" - 18" and 1" thick on fire barrier max. open sizes of 21" - 30". Beginning at the same end as the wall fire barrier installation, begin installing the Top Heat Shield.

- 5.1) Unroll the length of Top Heat Shield and place over the wall fire barrier folding into a "U" shape without creasing. Align the end of the Top Heat Shield with the end of the wall fire barrier and the galvanized retainers. (Fig. 5.A)



(Fig. 5A)

# STEP 5 Con't

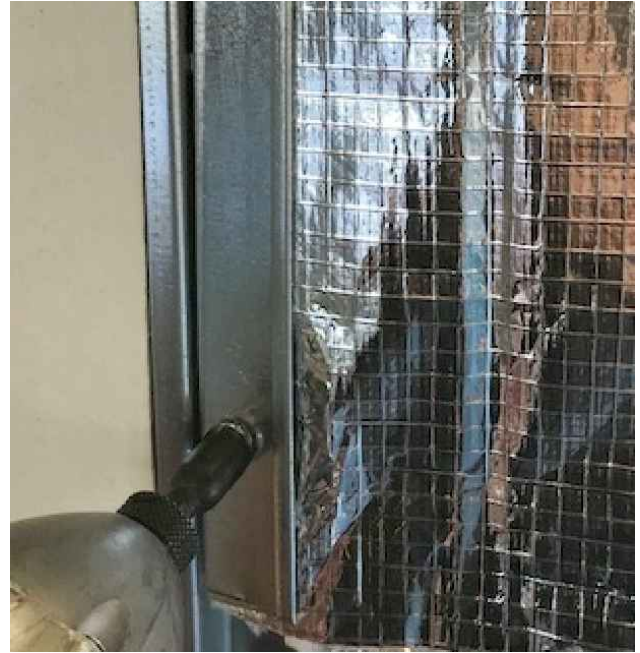
## TOP HEAT SHIELD INSTALLATION

Note: Max. open fire barrier sizes of 21"-30" are installed with Washer Strips.

- 5.2) Place the length of Top Heat Shield so that one edge sits on the top edge of the galvanized retainer. Use a few pieces of duct tape to temporarily hold in place. (Fig. 5B)
- 5.3) Place the supplied length of Washer strip, along the top edge of the galvanized retainer. Attach both the Top Heat Shield and the Washer Strip installing the supplied fasteners in the predrilled 9" O.C. holes. Repeat installation for the opposite side of the wall. (Fig. 5C - 5D)



(Fig. 5B)



(Fig. 5C)



(Fig. 5D)

- 5.4) If additional lengths of Top Heat Shield is required, overlap the previous length by 6". Proceed and install the next section repeating attachment as indicated in STEP 5.

# STEP 6

## CUTTING DOWN A FIRE BARRIER LENGTH

**Note:** 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)

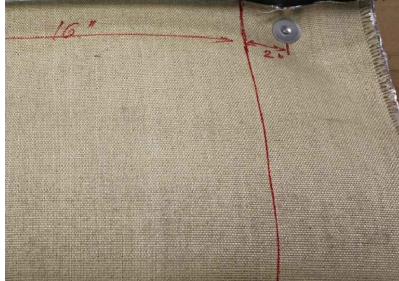


Fig. 6A



Fig. 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 through 6E)

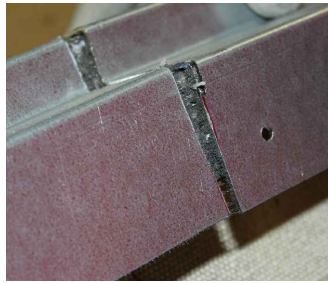


Fig. 6C



Fig. 6D



Fig. 6E

- 6.3) 1 1/2" in and 1/2" down from the cut end of the galvanized retainer 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)



Fig. 6F

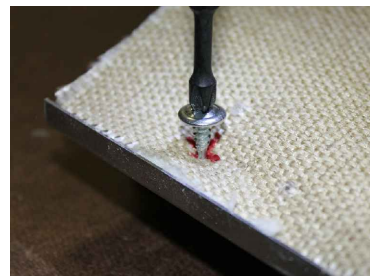


Fig. 6G

- 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.

# STEP 7

## CREATING FABRIC OVERLAP SPLICING END

**Note:** 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. 7A



Fig. 7B

- 7.2) If a weld pin is located in the 6" section of the fire barrier 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)

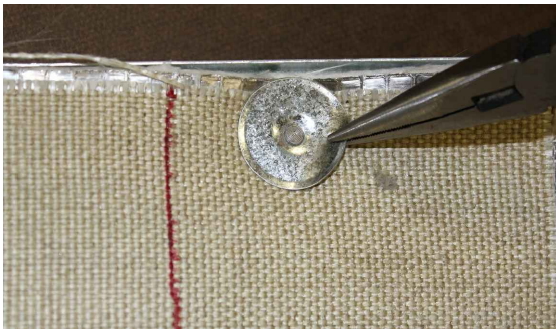


Fig. 7C

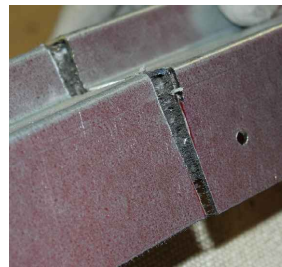


Fig. 7D



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 1/2" 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)

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



Fig. 7F



Fig. 7G



Fig. 7H