MODEL FB97-LS
FLOOR JOINT FIRE BARRIER
INSTALLATION INSTRUCTIONS

IMPORTANT INFORMATION

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

3/24/17

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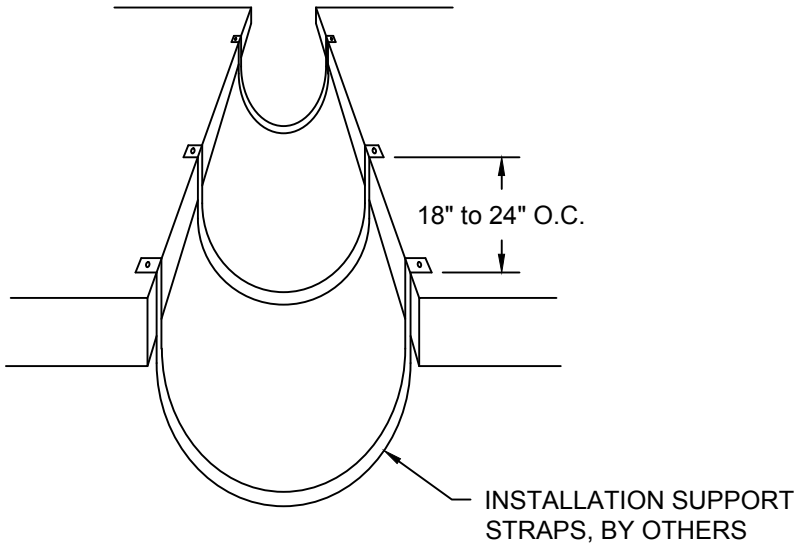
INSTALLATION INFORMATION AND NOTES

TOOLS:
The following tools may be needed for installation of the FB97 fire barriers:

- Fabric or Leather Work Gloves
- Measuring Tape
- Level
- Tin Snips
- Hammer
- Permanent Marker
- Circular and/or Chop Saw (standard and abrasive blades)
- Drill
- Duct Tape
- Screwdrivers
- $\frac{1}{2}$" Wrench
- Utility Knife

Notes:
1.) ALWAYS WEAR GLOVES when handling and cutting the barrier as the edges of the stainless steel foil may cause cuts.
2.) Before beginning installation, review the architectural drawings and the approved Construction Specialties shop drawings to establish the extent of the run of fire barrier.
3.) Check the joint to make sure that it is clear of any materials that will impede installation of the fire barriers. Make sure that the area around the joint is clean and accessible.
4.) Before beginning installation it is necessary to establish the orientation of the slide track to the slab, and the barrier to that slide track.
- Check the architectural drawings and the approved Construction Specialties shop drawings for specific locations to receive the slide track assembly.
- With the slide track location established, the barrier must be oriented to the track so the field splices can be made properly. Refer to Step 1.



5.) Depending on the joint width, barrier size, and quantity of barrier to be installed, you may find it helpful to use "installation support straps." The support straps are used to support the weight of the barrier sections and to hold them in the proper location for anchoring to the slab.
- Straps can be made from any strong flexible material such as nylon webbing or thin gauge galvanized steel ($1\frac{1}{2}$" to 2" wide).
- The length of the support strap can be determined by measuring the overall width around the outside of the barrier. Install several straps and set a barrier in place to confirm the proper length and anchoring.
- The straps should be removed, if possible, following installation of the barriers.

Notes:
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.

STEP 1

BEGINNING INSTALLATION

GALVANIZED RETAINER

STAGGERED LAYERS

SPLICE RECEIVING END

Fig. 1.1

STAINLESS STEEL FOIL

CUT AWAY EXTENDING PORTION OF HEAT SHIELD AND GALV. FOR END CONDITION

SPLICE OVERLAP END

Fig. 1.2

STEP 1:

Note: The FB-97 Fire Barrier is generally supplied in (10) foot lengths with the layers staggered to allow for field splicing. See field splicing instructions later in these sheets.

1.1) When beginning installation, make sure that the First Barrier segment is placed so that the "Splice Receiving End" of the Barrier is in position for the next Barrier segment. (See Fig. 1.1)

1.2) At the "Splice Overlap End" of the Barrier (See Fig. 1.2), use tin snips and a utility knife to cut away the portion of the Middle Heat Shield that extends beyond the Galvanized Retainer. (Note: This end of the Barrier will be the starting end for installation.)

STEP 2

POSITIONING THE TADPOLE GASKET

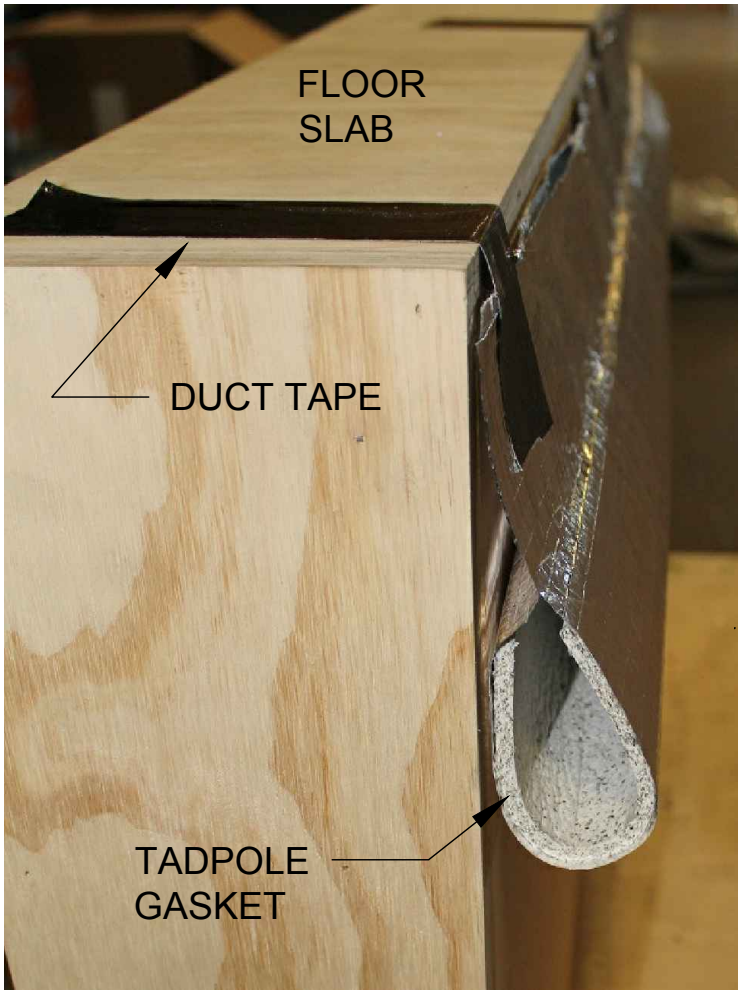


Fig. 2.2

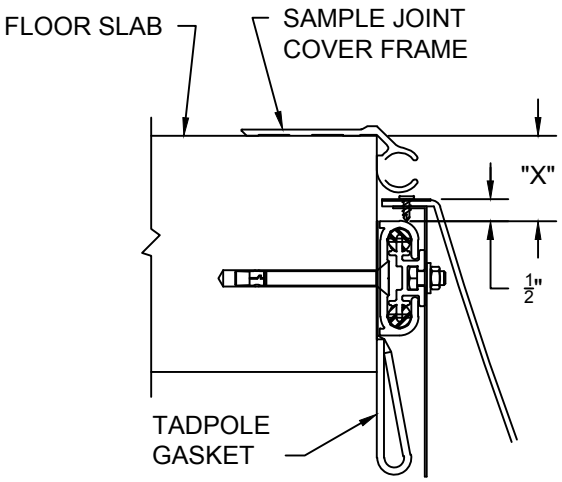


Fig. 2.1

STEP 2:

Note: The Tadpole Gasket will mount behind the Lateral Slide Track and should align with the top edge of the track. Depending on the adjacent joint cover system, both the Tadpole Gasket and Slide Track may need to provide clearance for the joint cover framing. Review the approved Construction Specialties shop drawings to establish dimension "X" for each condition and which side of the joint receives the Tadpole Gasket and Slide Track.

2.1) Establish dimension "X" and snap a level chalk line along the face of the slab. (See Fig. 2.1)

2.2) Position lengths of the Fire Barrier Tadpole Gasket along the chalk line and temporarily hold in place with several strips of Duct Tape. (See Fig. 2.2)

STEP 3

INSTALLING THE LATERAL SLIDE TRACK

STEP 3:

Note: Proper installation of the Lateral Slide Track is critical. Extra care must be taken to prevent the track from being pulled out of flatness. If the fasteners are over tightened, the track may deflect to follow the uneven face of the slab. These deflections may prevent the Slide Carriers from moving properly. The anchors should be simply snug against the track, and Shims should be installed as needed to support the track.

3.1) Beginning at one end of the joint, place a length of Lateral Slide Track along the top edge of the Tadpole Gasket.

3.2) While holding the track level, use the track as a template and drill the holes for the Construction Specialties supplied Anchor Bolts.

3.3) Place the Anchor Bolts into the holes and begin to tighten, but not completely. (See Fig. 3.1)

3.4) Check the fit of the track to the face of the slab to determine if Shims will be required. Position the Shims where needed.

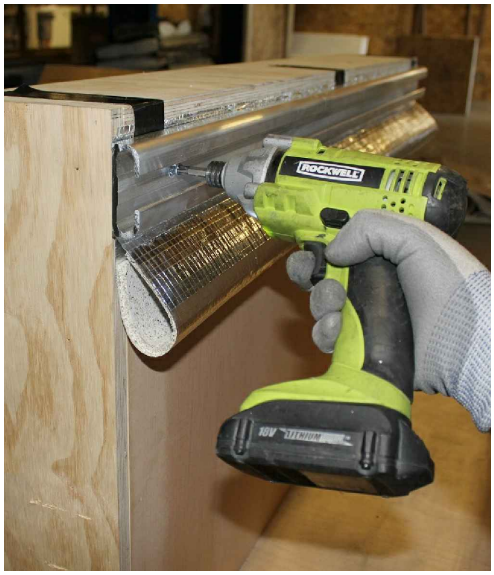


Fig. 3.1

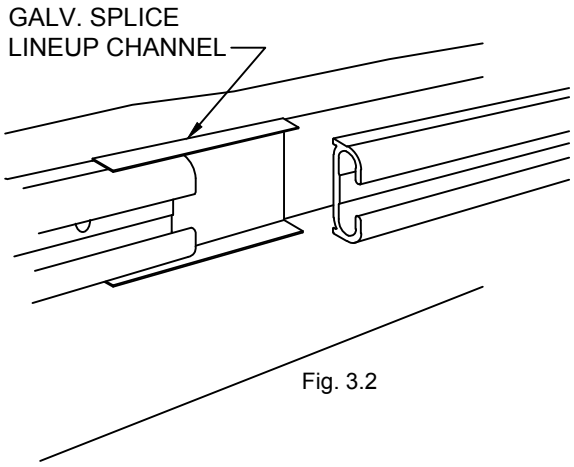


Fig. 3.2

3.5) Place a Splice Lineup Channel at the end of the track for alignment of the next piece of track. (See Fig. 3.2)

3.6) Tighten the Anchor Bolts until they are snug to the track. Run a piece of Slide Carrier along the full length of the track to insure free movement. Adjust as required.

3.7) Insert one 5/16" bolt into each Slide Carrier piece (See Fig. 3.3) before inserting the appropriate number of Slide Carrier pieces into the track. (See Fig. 3.4) Check a section of the fire barrier to determine the appropriate number. Slide Carriers are required at 18" centers.

Continue with track installation for the remainder of the run.

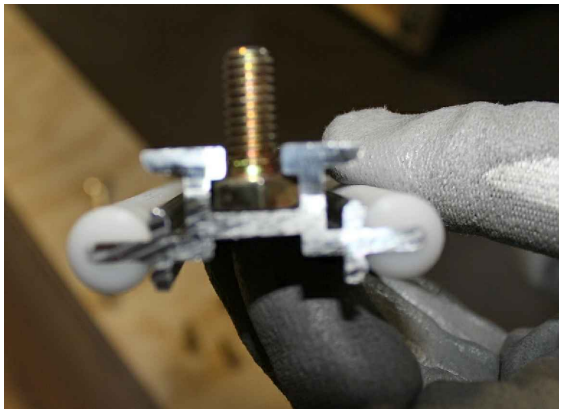


Fig. 3.3

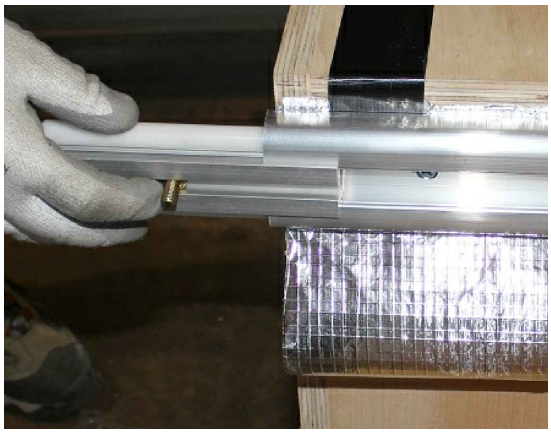


Fig. 3.4

STEP 4

ANCHORING THE BARRIER AND GALV. RETAINERS

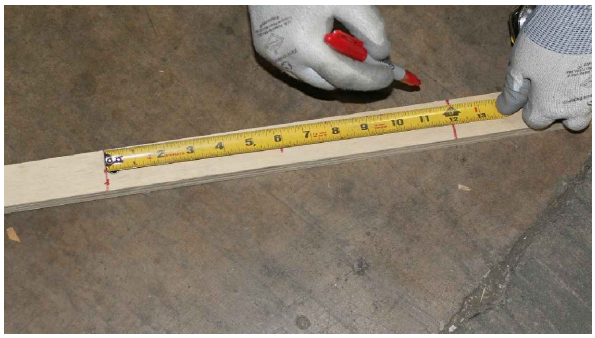


Fig. 4.1

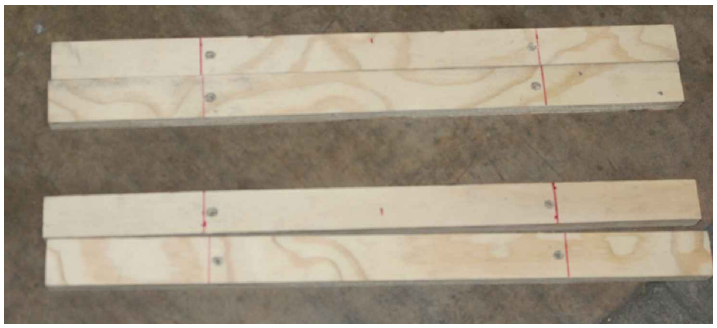


Fig. 4.2

STEP 4:

Note: The Fire Barrier assemblies can be quite heavy and because of their flexibility, can be difficult to handle. It is helpful to attach several Wood Spreaders across the top of the Barrier assembly to serve as handles to position the Barrier for attachment.

4.1) Cut two Wood Spreaders per Fire barrier length longer than the joint width. Measure and mark the joint width on Wood Spreaders. (See Fig. 4.1 & 4.2)

4.2) Attach Wood Spreaders to the non-Lateral Slide Assembly side of the Fire Barrier Galvanized Retainer with sheet metal screws. (See Fig. 4.3)

4.3) Beginning at one end of the joint with the first section of Barrier in the proper orientation for splicing, lower the Barrier into the joint. Align the holes in the Galvanized Retainer with the bolts in the Slide Carriers.

Fig. 4.3

STEP 4 Con't

ANCHORING THE BARRIER AND GALV. RETAINERS

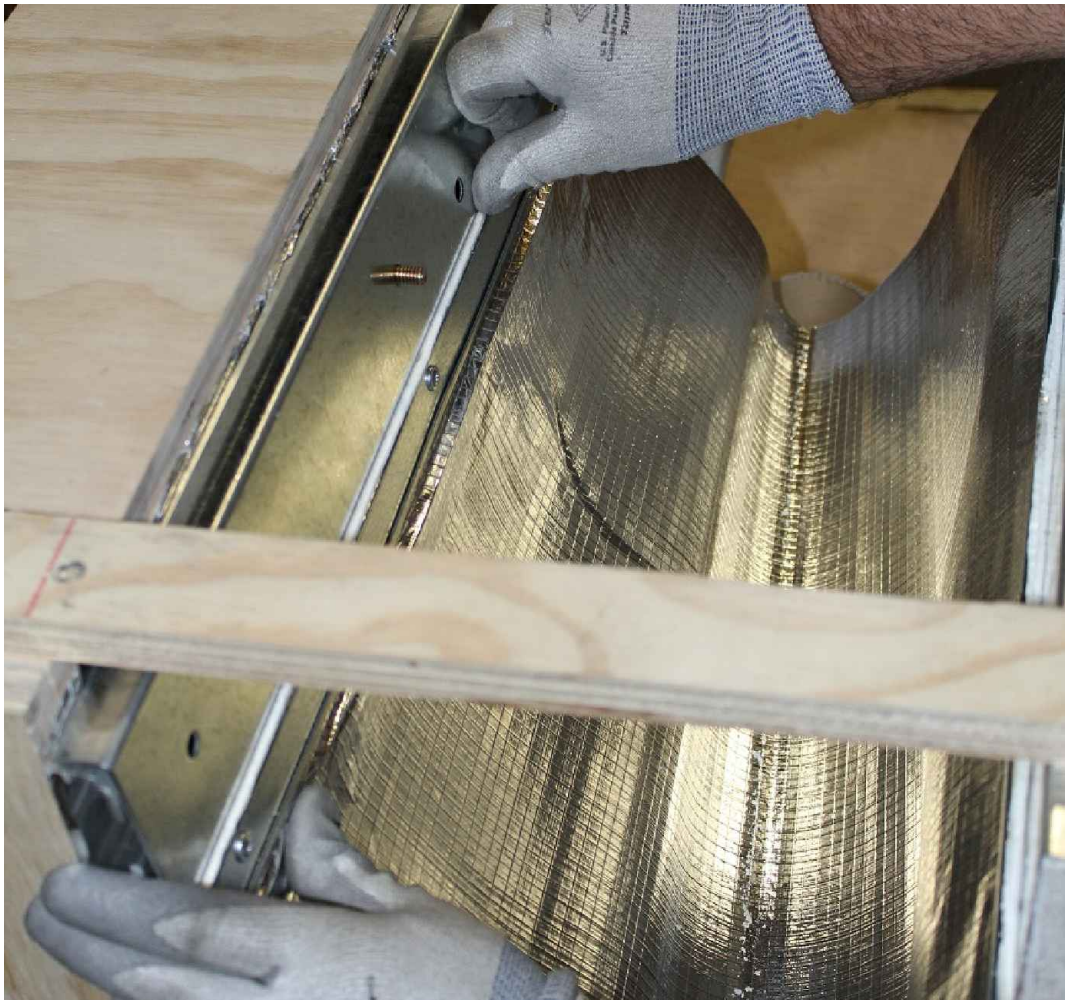


Fig. 4.4

4.4) Seat the Galvanized Retainer on the bolts. Place Washers and Lock Nuts on each bolt. Tighten to secure this side of the Barrier. (See Fig. 4.4 & 4.5)

Fig. 4.5

STEP 4 Con't

ANCHORING THE BARRIER AND GALV. RETAINERS

Fig. 4.6

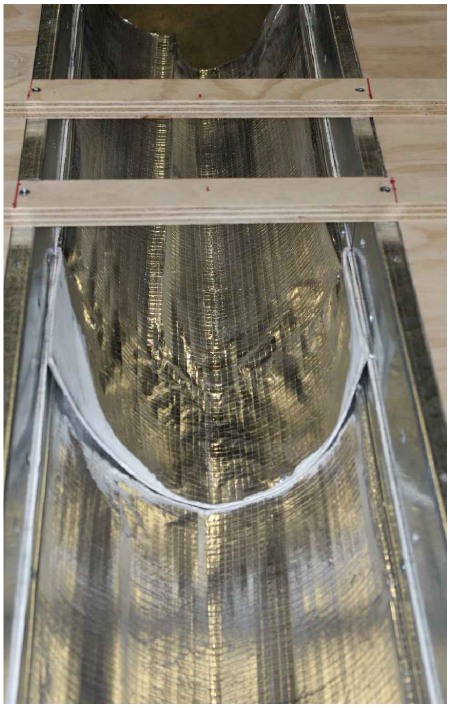
4.5) Using the holes in the Galvanized Retainer as a template, drill the holes for Anchor Bolts for the opposite side of the Barrier. Remove the Barrier to clean out the holes, reposition the Barrier and insert the CS supplied Anchor Bolts. Anchor bolts installed snug tight to the fire barrier, just tightened enough that the fire barrier is in firm contact with the substrate. The fire barrier material should not be crushed during installation. (See Fig. 4.6) (Note: It may be necessary to detach the Wood Spreaders as you work in order to fully tighten the bolts.) (See Fig. 4.7)

Fig. 4.7

STEP 5

FIELD SPLICE INSTRUCTIONS

STEP 5:



Note: With the end segment of the Fire Barrier in place, prepare the adjacent section of Barrier for installation as indicated in Step 4. install the second segment of Barrier while creating a field splice as described below.

5.1) Position the next segment of Fire Barrier so that it is in the proper orientation for splicing. (See Fig. 5.1)

Fig. 5.1

5.2) Apply (2) beads of the CS supplied Firestop Sealant (See Fig. 5.2 & 5.3) (approx. $\frac{1}{2}$" wide) to the inside surface of the staggered layers of the first Barrier segment.

Fig. 5.2

Fig. 5.3

5.3) Insert the next segment of Barrier into the joint as described in Step 4, leading with the Splice End. Lay the bottom surface of the staggered layers into the Firestop Sealant and butt the ends of the layers and Galvanized Retainers together. Make sure that the ends of the Barriers are butted tightly together. (Note: The Middle Heat Shield should overlap the Middle Heat Shield of the end Barrier by 6" as well.)

5.4) Lower the remaining portion of the Barrier into the joint until the Galvanized Retainers rest on the slabs. Make sure that the ends of the Barriers are butted tightly together. Anchor the Barrier as indicated in Step 4

5.5) Lift the end of the Middle Heat Shield at the splice, and press the top staggered layers into the Firestop Sealant to seat the caulking. Reposition the overlap of the Heat Shield.

Note: Continue with installation of the remaining Fire Barrier segments, following these guidelines, for the remainder of the run.

STEP 6

INSTALLING THE TOP HEAT SHIELD

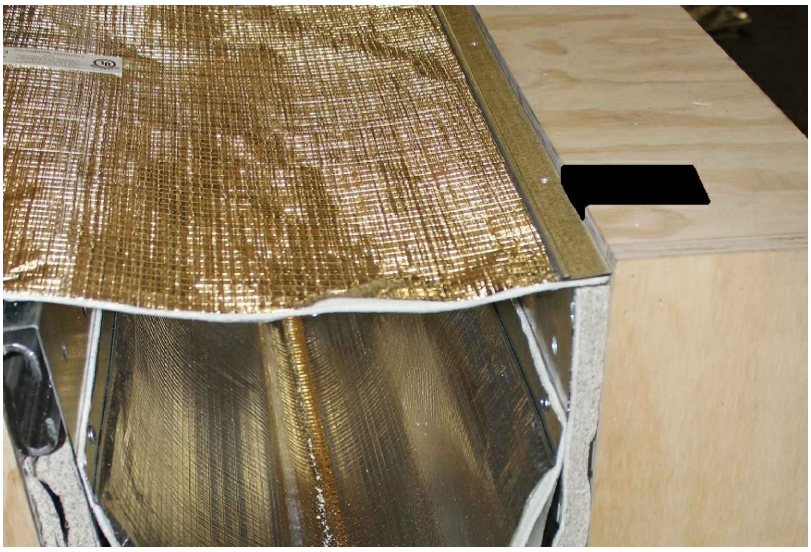


Fig. 6.1

STEP 4:

Note: The Top Heat Shield has been supplied in 10'-6" lengths. Beginning at the same end as the Main Fire Barrier installation, begin installing the Top Heat Shield. The Heat Shield UL Label side must be face up when installed.

4.1) Place the length of Top Heat Shield so that one edge aligns with the outside edge of the Galvanized Retainer. Use a few pieces of Duct Tape, placed along the edge of the Heat Shield, to temporarily hold it in place.

4.2) Place a length of Galvanized Washer Strip along the flange of the Heat Shield. Attach both the Washer Strip and Heat Shield to the Galvanized Retainer with the Construction Specialties supplied TEK Screws. (See Fig 6.1)

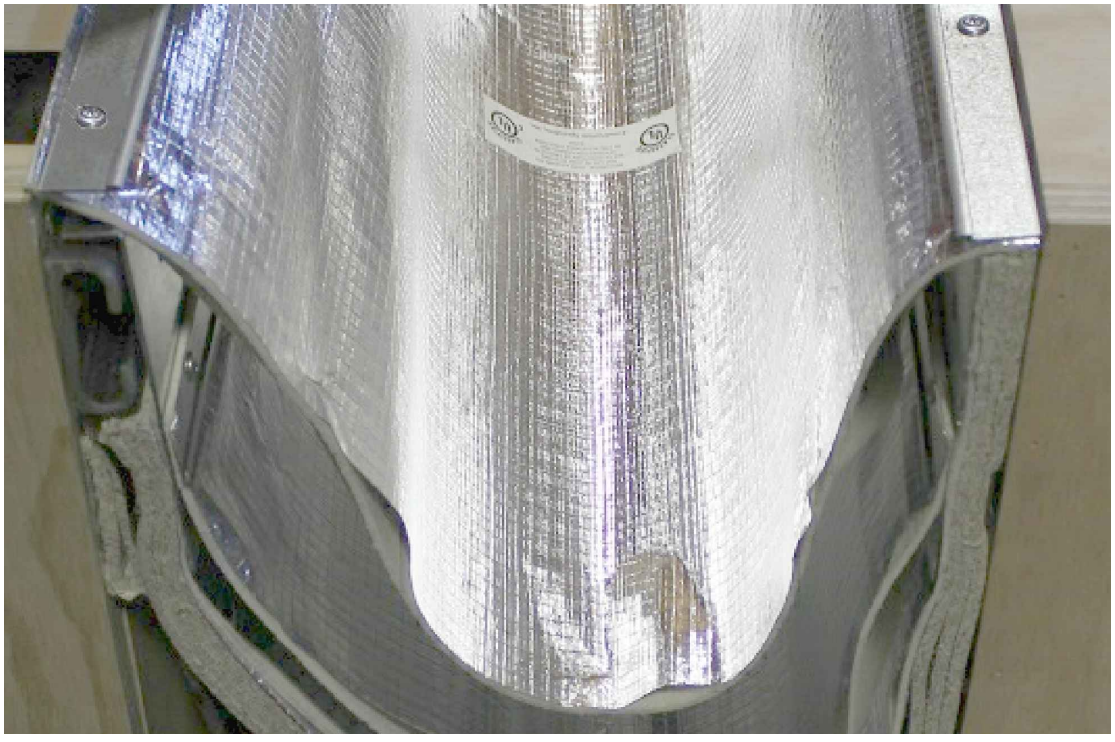


Fig. 6.2

4.4) Align the opposite edge with the outside edge of the other Galvanized Retainer, and tape it in place. (Note: By aligning the edges with the Galvanized Retainers, the Heat Shield will drape properly into the joint.)

4.5) Anchor the Heat Shield to the Fire Barrier Retainer with the Washer Strip and Construction Specialties supplied anchors. (See Fig. 6.2) If additional length of Top Heat Shield is required, overlap the previous length by 6". Proceed and install next section repeating attachment as indicated above.