

# Metaflex® 5000 MetaMat™ Wall Fire Barrier

## Installation Instructions

The following installation instructions are very important. Read them carefully, and be sure you understand them completely before you begin any work. Refer to Balco shop drawings for placement dimensions and anchor spacing.

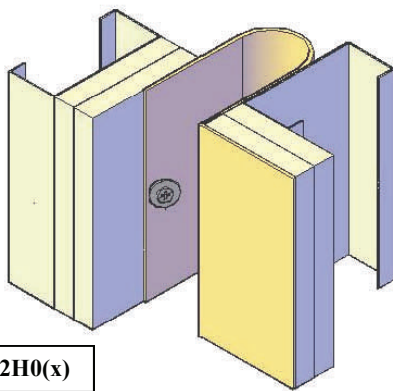
### Applicable Models:

MW2H03

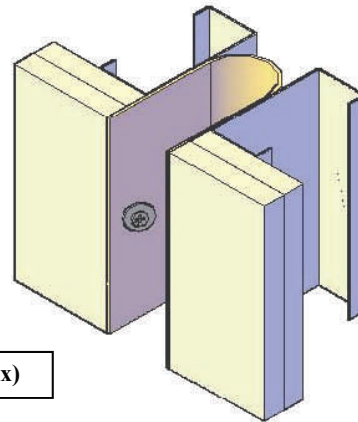
MCW2H03

MW2H04

MCW2H04



MCW2H0(x)



MW2H0(x)

MW 2H 04		
MetaMat™		
(F) Floor / (FV) Floor - Wall		Max. Joint Opening (Inches)
(W) Wall / (CW) Corner Wall		
Fire Rating (Hours)		

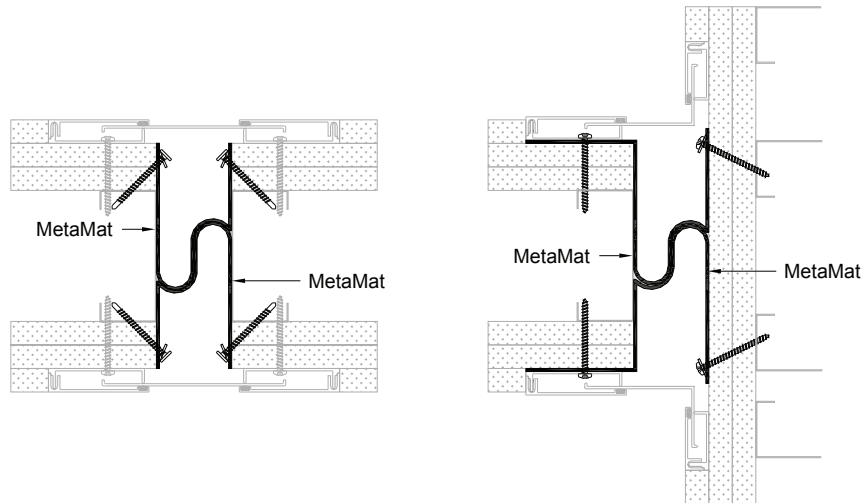
### Important Note:

MetaMat™ fire barrier must be installed in conjunction with an approved expansion joint cover type specific to the MetaMat™ product. The chart below indicates approved product combinations.

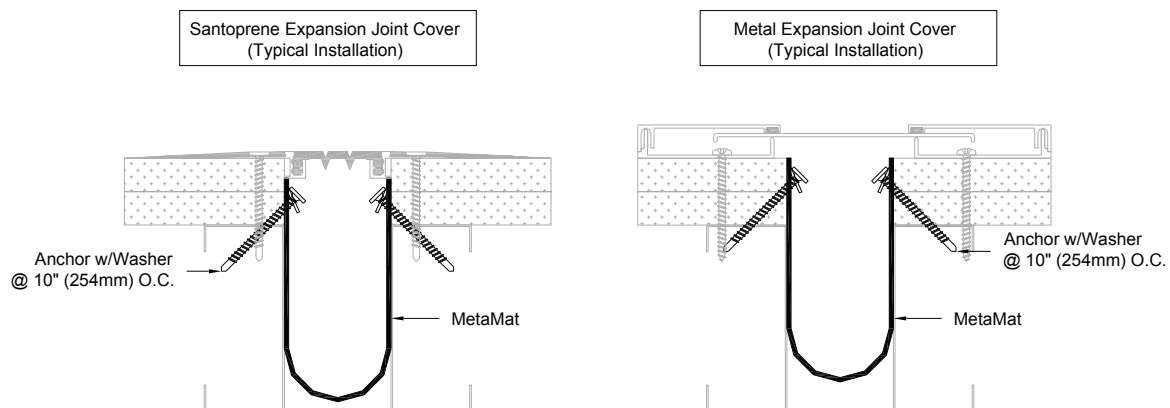
Fire Barrier Listing / Approved Cover Types		
MetaMat™ Model	Metal Cover	Santoprene / EPDM /PVC Cover
MW2H03	WW-D-0070	Pending
MCW2H03	WW-D-0070	Pending
MW2H04	WW-D-0069	WW-D-0073
MCW2H04	WW-D-0069	WW-D-0073

**Important Note:**

MetaMat™ fire listings require that MetaMat™ be installed on each side of the rated partition.

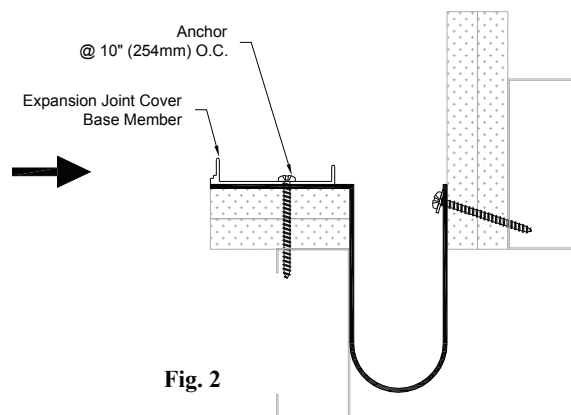
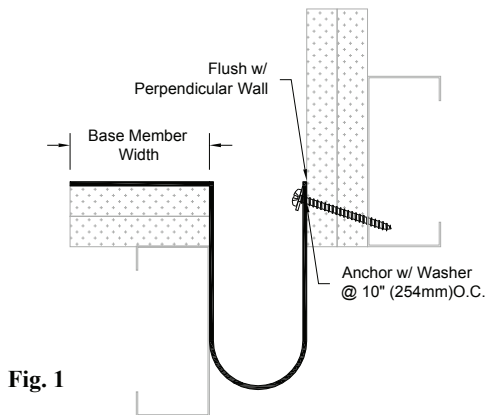
**Wall-to-Wall MetaMat™ w/ Expansion Joint Cover Installations**

1. Select one layer of MetaMat™ fire barrier and place it into its installed position so that the MetaMat drapes into the joint. Reference Balco shop drawings for mounting depth. Install the MetaMat™ so that the glossy surface faces out.
2. Secure the MetaMat™ to the inside of the joint using the factory provided anchors and washers. For gypsum / stud construction, ensure that the fasteners anchor through the steel stud. Anchors should be spaced a minimum of 2" (51mm) from the end of the MetaMat™, with each successive anchor spaced at 10" (254mm) O.C.
3. Repeat steps 1 and 2 for the opposite side of the joint.
4. Install the expansion joint cover in accordance with the product specific installation instructions.



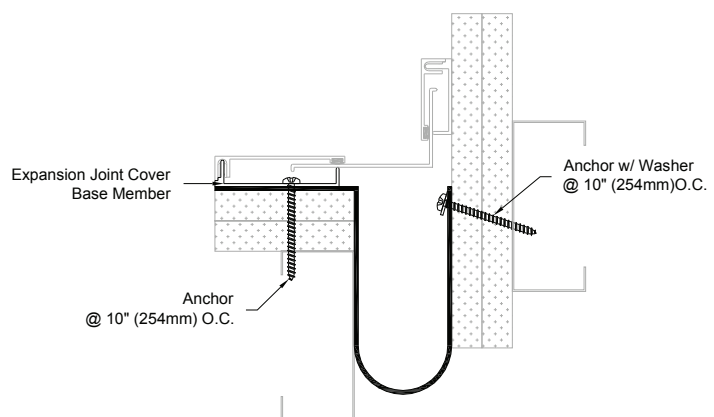
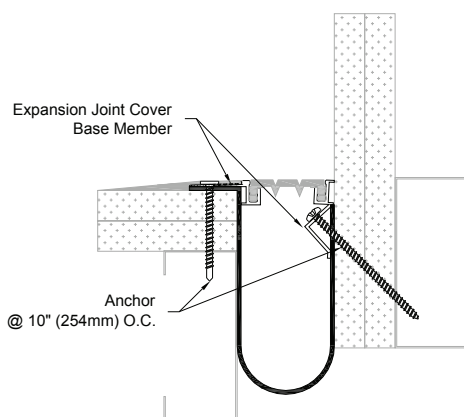
## Corner-Wall MetaMat™ w/ Expansion Joint Cover Installations

1. Select one layer of MetaMat™ fire barrier and place it into its installed position so that the MetaMat™ drapes into the joint. Install the MetaMat™ so that the glossy surface faces out.
  2. Secure the MetaMat™ to the wall parallel to the joint using the factory provided anchors and washers. For gypsum / stud construction, ensure that the fasteners anchor through the steel stud. Anchors should be spaced 2" (51mm) from the end of the MetaMat™, with each successive anchor spaced at 10" (254mm) O.C. (Fig. 1)
  3. Secure the MetaMat™ to the opposite side of the joint using the base member of the applicable expansion joint system. Anchors should be spaced 2" (51mm) from the end of the MetaMat™, with each successive anchor spaced at 10" (254mm) O.C. (Fig. 2)
- ♦ MetaMat™ must be anchored to the wall using either a metal base member, metal anchor strap, or washer. The anchorage configuration will be dependent upon the corresponding expansion joint cover model.
4. Install the expansion joint cover in accordance with the product specific installation instructions.



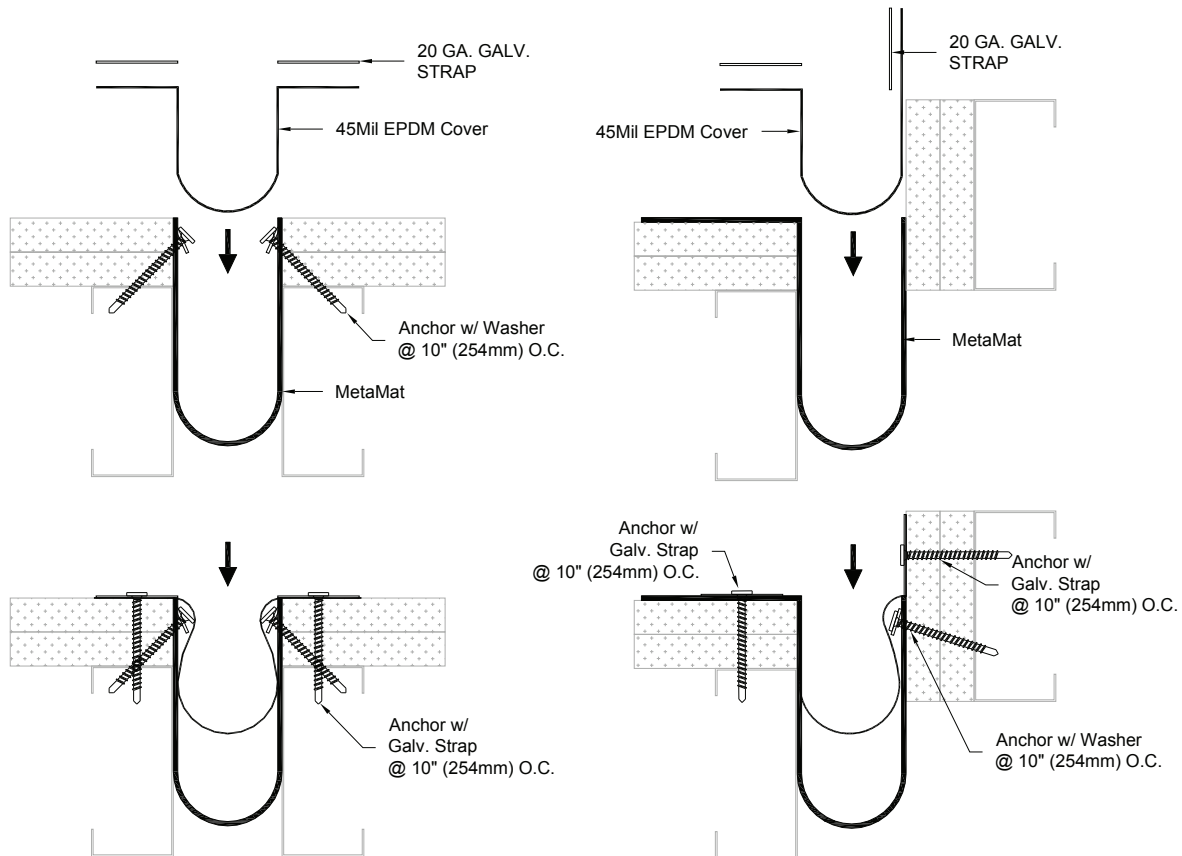
Santoprene Expansion Joint Cover  
(Typical Installation)

Metal Expansion Joint Cover  
(Typical Installation)



**MetaMat™ Installations Using EPDM Covers***(Recommended for Concealed Wall Fire Barrier Locations)*

1. Select one layer of MetaMat™ fire barrier and place it into its installed position so that the MetaMat™ drapes into the joint. Install the MetaMat™ so that the glossy surface faces out.
2. Secure the MetaMat™ fire barrier to the wall using the factory provided anchors and washers. For gypsum / stud construction, ensure that the fasteners anchor through the steel stud. Anchors should be spaced a minimum of 2" (51mm) from the end of the MetaMat™, with each successive anchor spaced at 10" (254mm) O.C.
3. Place the EPDM cover inside the joint so that it drapes inside of the MetaMat™ fire barrier. Secure the EPDM to the wall using the factory provided anchors and galvanized straps. For gypsum / stud construction, ensure that the fasteners anchor through the steel stud. Anchors should be spaced a minimum of 2" (51mm) from the end of the MetaMat™, with each successive anchor spaced at 10" (254mm) O.C.

**Splicing MetaMat™ Fire Barrier**

Splicing MetaMat™ fire barrier may be accomplished by overlapping the mating sections 6" (152mm) and using a general purpose spray adhesive (3M High-Strength 90, by others). Place fasteners near the midpoint of the splice.

# METAFLEX™ 5000 METAMAT™ 2 HR RATED WALL JOINT FIRE BARRIERS UP TO 4" MAX. FOR SINGLE SIDE INSTALLATION

The following installation instructions are very important. Read them carefully, and be sure you understand them completely before you begin any work. Store this product in a clean, dry, protected location.

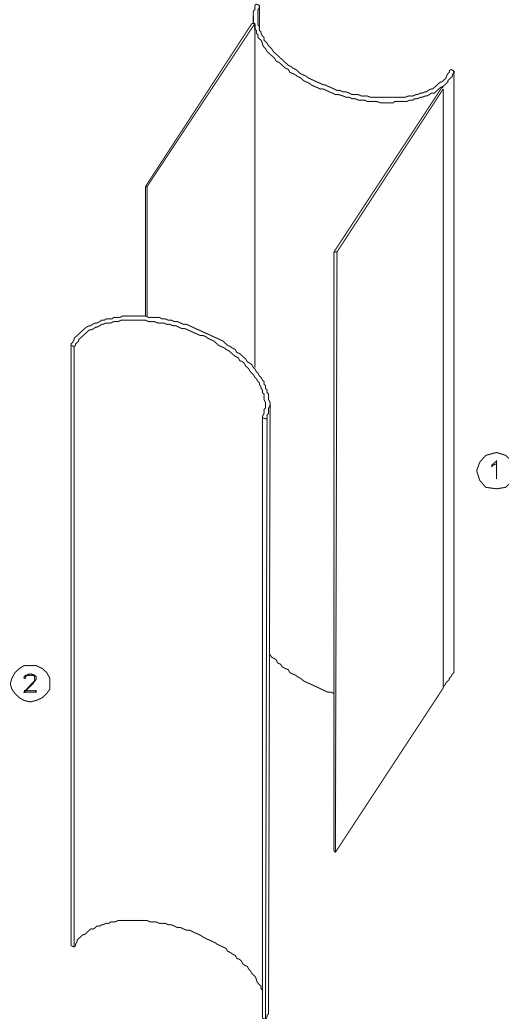


Figure 1

## Tools required :

This is a list of tools and materials recommended for use in the installation of MetaMat. These tools and materials are not provided by Balco, Inc.

- A. Electric Drill
- B. Drill Bits (appropriate for substrate)
- C. Phillips, Slotted and Hex Screw Drivers
- D. Utility Knife
- E. General Purpose Adhesive

## Parts:

- 1. MetaMat w/Retainer (back layer)
- 2. MetaMat (front layer)
- 3. Anchors (not shown)
- 4. Washers (not shown)

## PROCEDURES:

These instructions are applicable to MetaMat fire barrier models fabricated for single side of wall installation. The MetaMat is illustrated in Figure 1. Use the appropriate joint cover system installation instructions for installation of the joint cover.

**NOTE:** THE DRAPE OF THE METAMAT LAYER RIVETED TO THE RETAINERS SHOULD BE TOWARD THE INSTALLER AS SHOWN IN FIGURE 2.

**STEP 1.** Select the layer of the MetaMat fire barrier which is riveted to galvanized retainers. Place this layer into its installed position so that it spans the joint and so that the retainers are in contact with the joint interface surfaces of the wall (Figure 2).

**NOTE:** METAMAT IS GLOSSY ON ONE SIDE AND MATTED ON THE OTHER. INSTALL THE METAMAT SO THAT THE GLOSSY SURFACE IS IN CONTACT WITH THE GALVANIZED RETAINERS.

**STEP 2.** Select the front layer of MetaMat fire barrier. Place this layer into its installed position so that its edges are flush with the surface of the wall and so that it spans the joint (Figure 3). Note that it may be necessary to fold, without creasing, the layers of MetaMat together with one another.

**STEP 3.** Select the fasteners and washers provided by the factory. Place a washer onto each fastener. Using the fasteners, attach the MetaMat layer to the wall (Figure 4). For steel stud and gypsum wallboard walls, ensure that the fasteners are anchored through the steel stud. Anchor spacing is 10" o.c. with anchors a minimum of 2" from each end of each MetaMat. Clean away all dust and debris from the fire barrier and from the installation area.

**STEP 4.** Complete the installation of the joint cover system in accordance with the installation instructions appropriate for the system.

**NOTE:** TO INHIBIT CORROSION, PAINT OR PLACE POLYETHYLENE TAPE ON METAL JOINT COVER SURFACES IN CONTACT WITH THE MATTE SURFACE OF THE METAMAT.

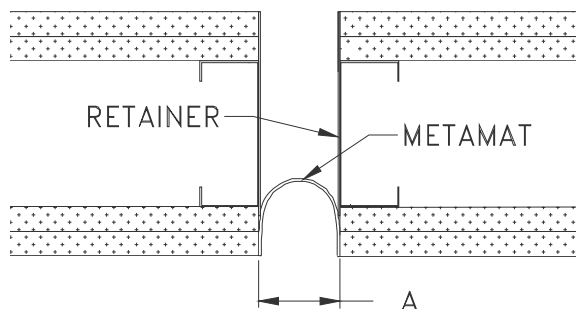


Figure 2

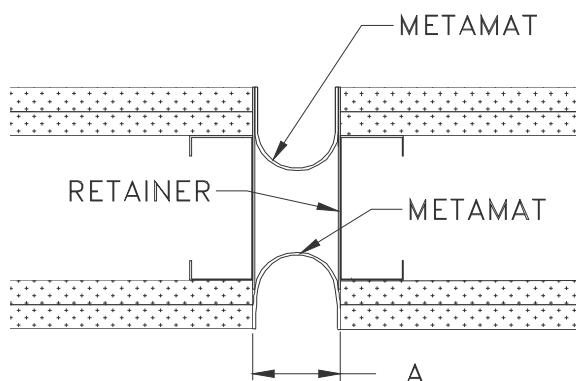


Figure 3

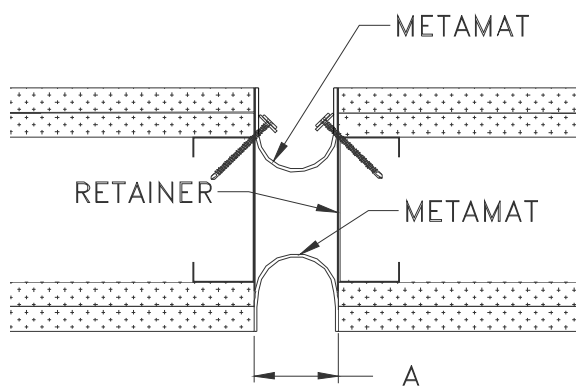
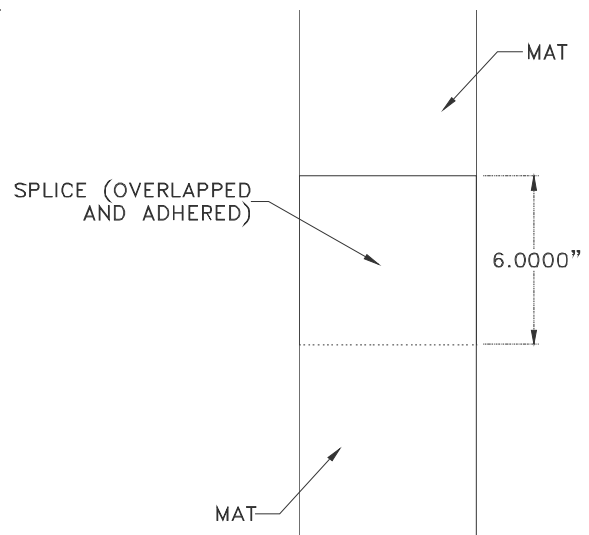


Figure 4

### **SPLICING:**

If necessary, trim away retainer from back layer so that the mating sections ends can be overlapped 6". Ahere the mating ends together using a general purpose spray adhesive (Misty Webbing Adhesive Spray A0039, 3MHi-Strength 90) (Figure 5). Overlap the mating sections of the front layer 6" and adhere the overlap together using the same adhesive.

**NOTE: DURING INSTALLATION OF THE METAMAT, PLACE FASTENERS NEAR THE MIDPOINT OF THE SPLICE.**



**Figure 5**



# **INSTALLATION INSTRUCTIONS FOR BALCO, INC. 6" MAX. METAMAT™ FIRE BARRIER TRANSITIONS**

The following installation instructions are very important. Read them carefully, and be sure you understand them completely before you begin any work. Store this product in the horizontal position in a clean, dry location. Store this product in a protected area.

## **Tools required :**

This is a list of tools and materials recommended for use in the installation of MetaMat. These tools and materials are not provided by Balco, Inc.

- A. Utility Knife
- B. Spray Adhesive
- C. Tape Measure
- D. Markers (Red or Blue are recommended)

## **PROCEDURES:**

These instructions are applicable to MetaMat fire barrier transitions in a different plane. Specifically, these instructions are for installation of transitions from wall to floor above (MW2H06 to MF2H06) and of transitions from wall to ceiling above (MW2H06).

### **Wall to Floor Above**

- STEP 1.** If the transition is field fabricated, prepare the transition in accordance with the shop drawings provided and the instructions on the drawing.
- STEP 2.** Install the floor fire barrier in accordance with the appropriate installation instructions. Select the transition. Place the transition into its installed position so that the horizontal leg of the transition cradles the drape of the floor fire barrier package and so that the vertical leg of the transition is in the proper position in the wall.
- STEP 3.** Bond the horizontal leg of the transition onto the bottom of the mating floor MetaMat package.
- STEP 4.** Install the vertical leg of the transition in accordance with the appropriate installation instructions for MetaMat in walls. Place anchors for the wall MetaMat at 3" from the top of the vertical leg of the transition
- STEP 5.** Select a lacing anchor. Push the lacing anchor through the horizontal leg of the transition and the floor MetaMat package. Push the galvanized washer onto the lacing anchor nail and bend the nail over. Ensure that the edge of the lacing anchor washer is along or near the centerline of the fire barrier.
- STEP 6.** Install the wall fire barrier, MetaMat, splicing the vertical leg of the transition with the vertical MetaMat in accordance with the standard installation instructions.
- STEP 7.** Install the floor joint cover system and the wall joint cover system in accordance with the installation instructions for the system



## Wall to Ceiling Above

- STEP 1.** Install the ceiling fire barrier in accordance with the appropriate installation instructions. The ceiling fire barrier shall be extended at the interface with the wall joint so that its end will be flush with the bottom of the wall fire barrier at its maximum drape.
- STEP 2.** Install the wall fire barrier in accordance with the appropriate installation instructions. At the intersection of the wall fire barrier and the ceiling fire barrier, the wall fire barrier shall extend into the drape of the ceiling fire barrier to its bottom. Bond each edge of the wall fire barrier to the corresponding edge of the ceiling fire barrier so that the proper drape of the wall fire barrier is maintained at the transition. Use the same glue to bond the fire barriers together as is used for the fire barrier installation.
- STEP 3.** Install the ceiling joint cover system and the wall joint cover system in accordance with the installation instructions for the system