

METAFLEX™ 5000 METAMAT™ 2 HR RATED FIRE BARRIER TYPE MW2H06 FOR WALL JOINT SYSTEMS INSTALLATION INSTRUCTIONS

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.

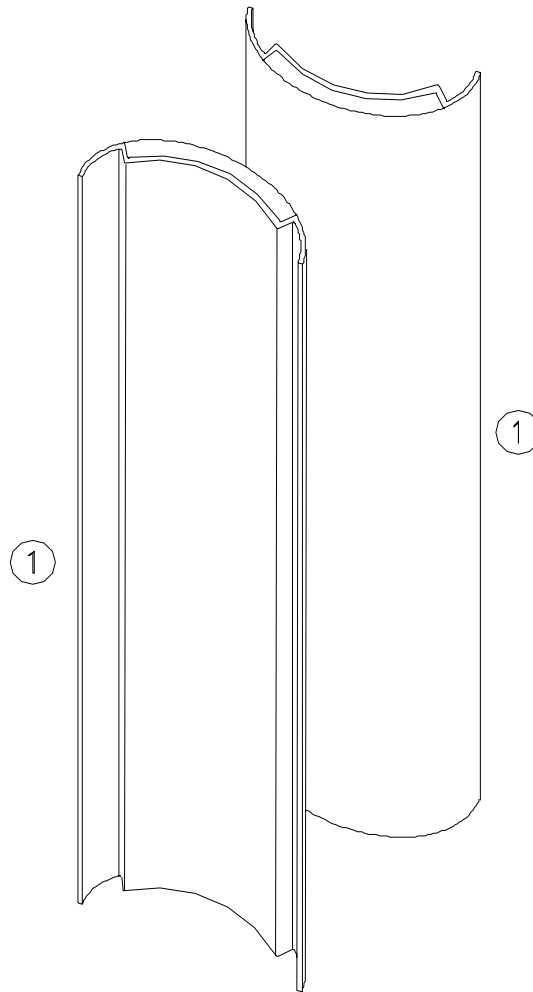


Figure 1

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
- F. Aluminum Foil Tape (2" wide)

Parts:

- 1. MetaMat
- 2. Anchors (not shown)
- 3. Washers (not shown)

PROCEDURES:

These instructions are applicable to MetaMat fire barrier, models MW2H06 for wall joints used in conjunction with metallic or elastomeric joint covers. The MetaMat is illustrated in Figure 1. Use the appropriate joint cover system installation instructions for installation of the joint cover.

STEP 1. Select one layer of the MetaMat fire barrier. Place it into its installed position, fabric side in contact with the wall, so that it is draped into the joint, spanning the joint, and so that the edges of the layer are flush with the wall surface.

STEP 2. 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 2). Ensure that the anchors are installed along the outside edges of the blanket layer of the package. 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 3. Repeat Step 1 and Step 2 for the other MetaMat layer on the opposite face of the wall (Figure 3).

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.

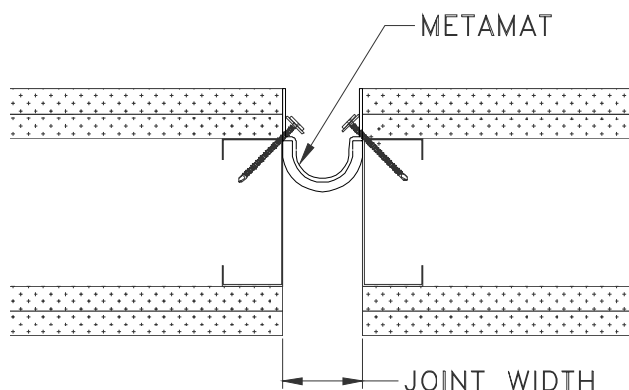


Figure 2

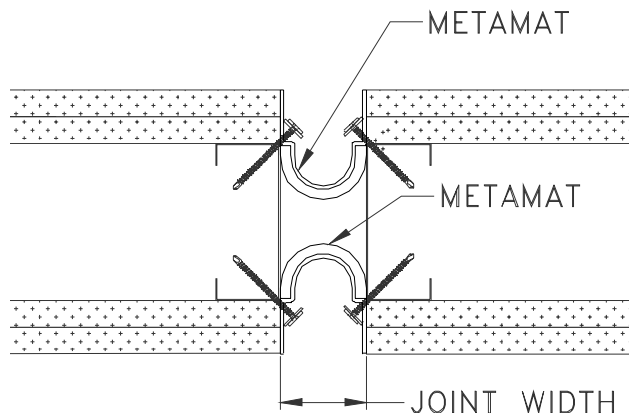


Figure 3

SPLICING:

Overlap the mating sections ends 6" and adhere the mating ends together using a general purpose spray adhesive (Tri-Star 315, 3M Hi-Strength 90) (Figure 4).

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

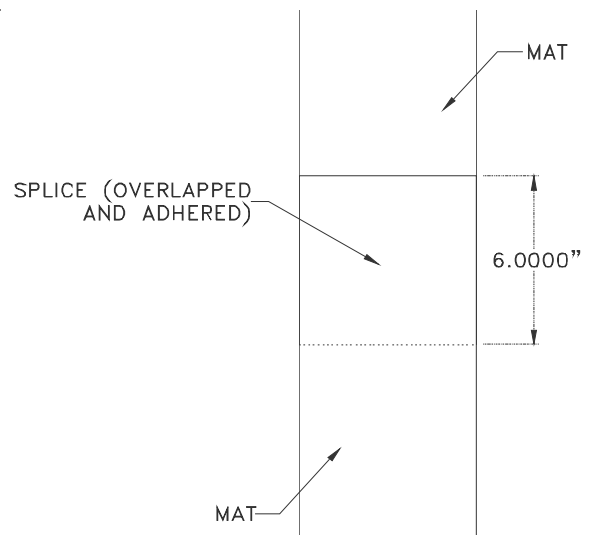


Figure 4

METAFLEX™ 5000 METAMAT™ 2 HR RATED WALL JOINT FIRE BARRIER SYSTEMS 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.

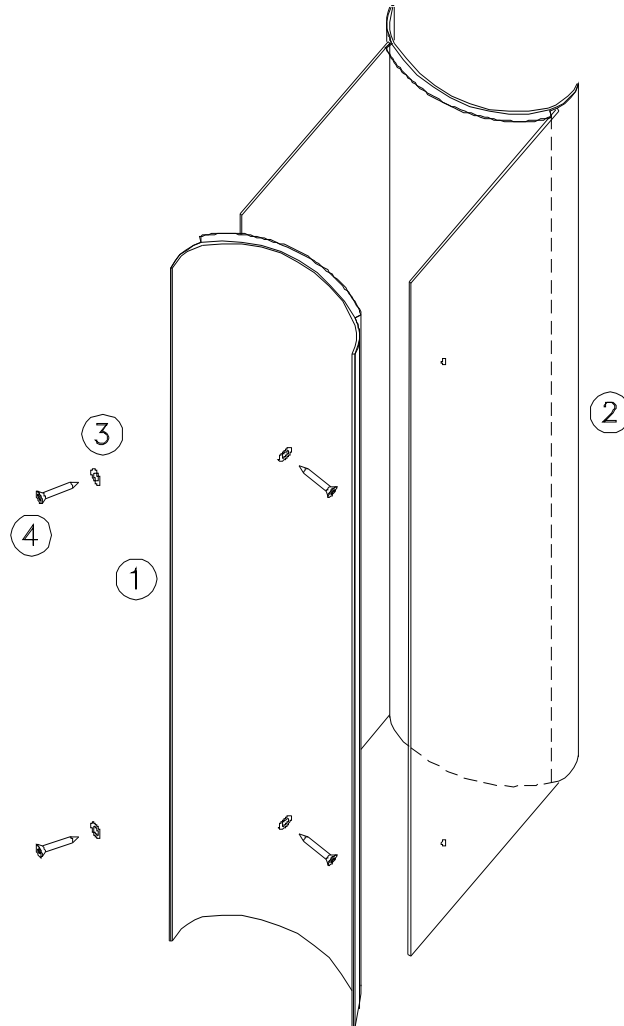


Figure 1

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

Parts:

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

* Lacing anchors are used in the fabrication of the back layer. They are not shown in these instructions.

PROCEDURES:

These instructions are applicable to MetaMat fire barrier model MW2H06, 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 ATTACHED TO THE RETAINERS SHOULD BE TOWARD THE INSTALLER AS SHOWN IN FIGURE 2.

NOTE: THE DRAPE OF THE METAMAT LAYERS WHEN INSTALLED MAY NOT BE A "U" AS SHOWN HEREIN. THE DRAPE MAY BE IN MORE OF AN "S" SHAPE. THIS IS TYPICAL AND WILL NOT AFFECT THE PERFORMANCE OF THE FIRE BARRIER.

STEP 1. Select the back layer (having the galvanized retainers) and the front layer of MetaMat fire barrier. Place the front layer into its installed position inside the retainers of the back MetaMat layer, so that its edges of the front layer are flush with the edges of the galvanized retainers. Drill pilot holes for the anchors through the front layer and into the galvanized retainers of the back layer. Anchor spacing is 10" o.c. with anchors a minimum of 2" from each end of each section of the fire barrier.

STEP 2. Select the fire barrier, back layer and corresponding front layer. Place them into their installed position in the joint so that the edges of the galvanized retainers and the front layer are flush with the surface of the wall and so that the fire barrier layers span 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. 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

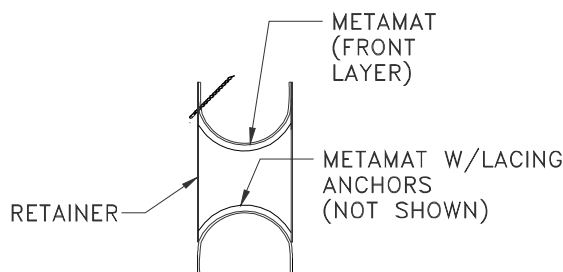


Figure 2

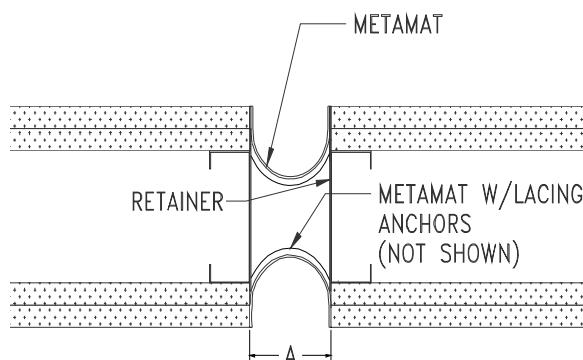


Figure 3

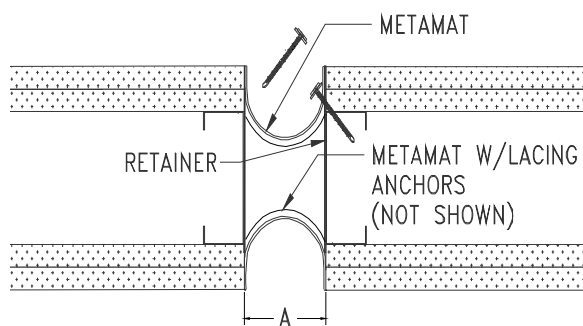


Figure 4

OR PLACE POLYETHYLENE TAPE ON METAL JOINT COVER SURFACES IN CONTACT WITH THE MATTE SURFACE OF THE METAMAT.

SPLICING

Back Package

STEP 5. If necessary, trim away retainer from back layer so that the mating sections ends can be overlapped 6".

STEP 6. Overlap the layers of the mating fire barrier sections in the manner shown in Figure 5.

STEP 7. Adhere the mating layers together using a general purpose spray adhesive (Misty Webbing Adhesive Spray A0039, 3M Hi-Strength 90).

Front Package

STEP 9. Overlap the layers of the mating fire barrier sections in the manner shown in Figure 6.

STEP 10. Adhere the mating layers together using a general purpose spray adhesive (Misty Webbing Adhesive Spray A0039, 3M Hi-Strength 90).

STEP 11. Install the MetaMat in accordance with the installation instructions.

NOTE: DURING INSTALLATION OF THE METAMAT, PLACE FASTENERS NEAR THE MIDPOINT OF THE LENGTH OF THE SPLICE ALIGNED WITH THE OTHER FASTENERS.

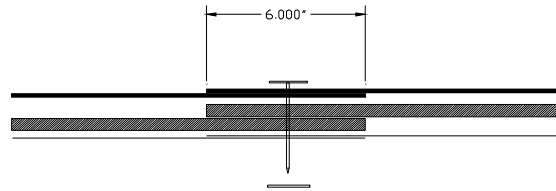


Figure 5

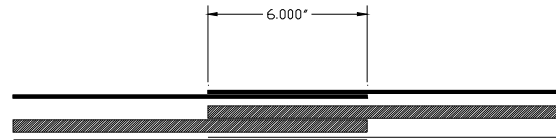


Figure 6



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