

***BALCO INC***

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***INSTALLATION INSTRUCTIONS  
FOR TYPE ATS  
(AIR TERMINAL SPECIAL)  
JOINT COVER SYSTEMS***



# INSTALLATION INSTRUCTIONS FOR BALCO, INC. ATS SERIES (AIR TERMINAL SPECIAL) EXPANSION JOINT COVER SYSTEMS

The following installation instructions are very important. Read them carefully, and be sure you understand them completely before you begin any work.

## STORAGE & HANDLING

The expansion joint covers are shipped unassembled. Store this product in the horizontal position in a clean, dry location. This is a finished product. Store this product in a protected area. Please note that stainless steel and bronze cover plates are also available with this model.

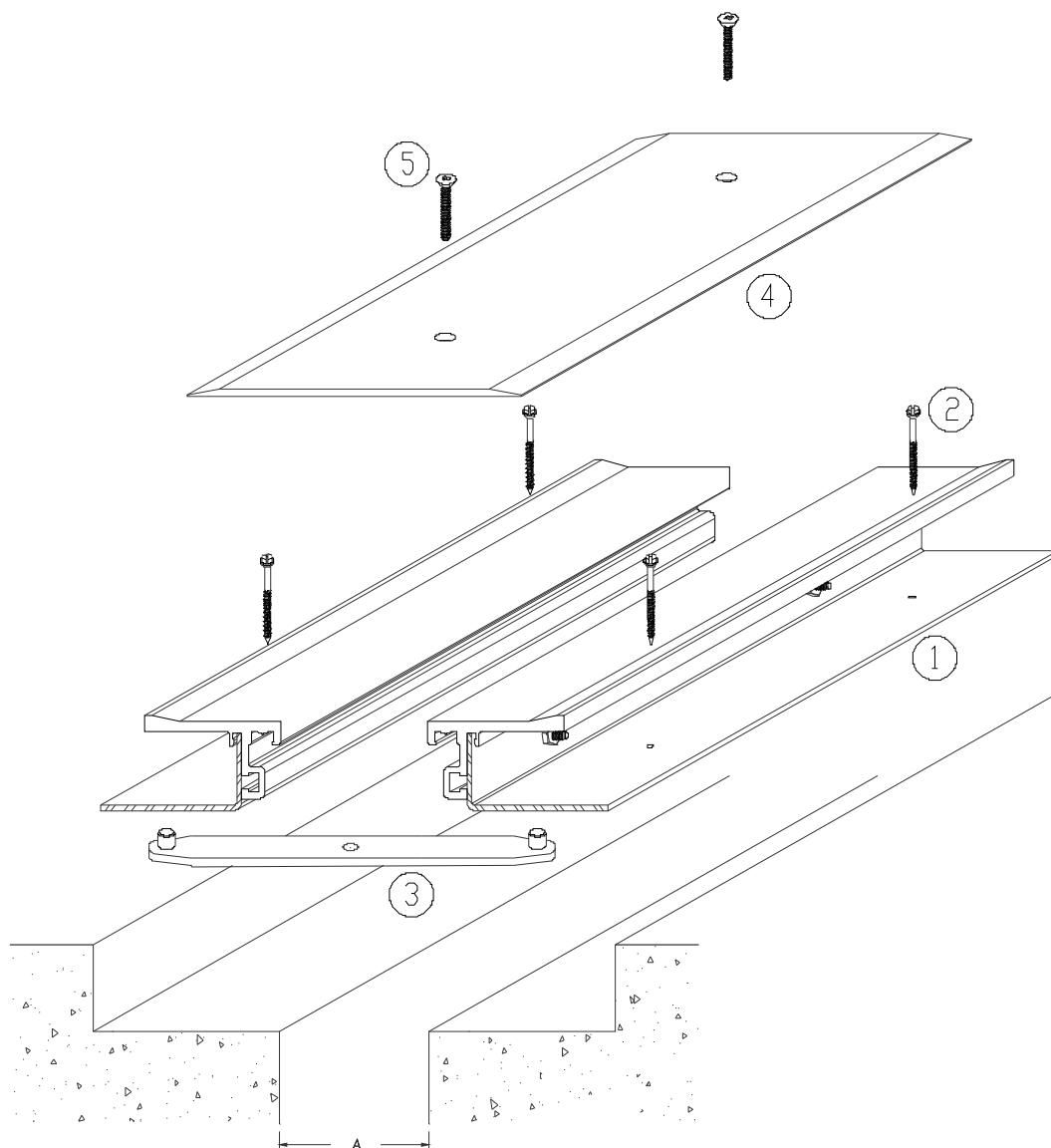


Figure 1

### Parts:

1. Base Member Assembly
2. Base Member Assembly Anchors
3. Centering Bars
4. Center Plate
5. Centering Bar Bolts

### Tools Required:

The following tools and materials are recommended for use in the installation of the grid. Balco, Inc. does not provide these tools and materials:

- A. Drill Bit for Concrete
- B. Drill Bit for Metal
- C. Electric Drill
- D. Marking Pens
- E. Tape Measure
- F. Sockets
- G. Phillips, Slotted and Hex Screw Driver Bits
- H. Grout
- I. Clean Rags

## INSTALLATION

These installation instructions are for use in the installation of expansion joint cover types ATS-2, ATS-3, and ATS-4. The ATS Series is illustrated in Figure 1. The joint cover system shall be installed as follows:

**STEP 1.** Review Balco, Inc. approved shop drawings for types and locations.

NOTE: BASE MEMBER EXTRUSIONS ARE ATTACHED TO CONTINUOUS STEEL ANGLES AT THE FACTORY. ANGLES ARE CARBON STEEL UNLESS STAINLESS STEEL ANGLES ARE SPECIFIED. THE BASE MEMBERS AND THE CONTINUOUS STEEL ANGLES MAKE UP THE BASE MEMBER ASSEMBLY.

**STEP 2.** Provide blockouts for Balco, Inc. expansion joint covers in accordance with the approved shop drawings. Blockouts may be formed at the time of the initial concrete pour or at a later time by removing material from the slab. To ensure a good installation, use level and true blockout materials. Inspect the blockouts to see that they are flat, level, and clear of all debris. Prepare and clean the blockouts as needed.

**STEP 3.** If the anchor holes have not been pre-drilled in the base member assemblies at the factory, mark the locations for the anchor holes on the steel angles (see Figure 2). Standard anchor spacing is 20" O.C. with an anchor at a nominal 3" from each end of the base member assembly. If necessary, drill the holes into the base member assemblies at the marked locations. Repeat this procedure for each section of the base member assemblies.

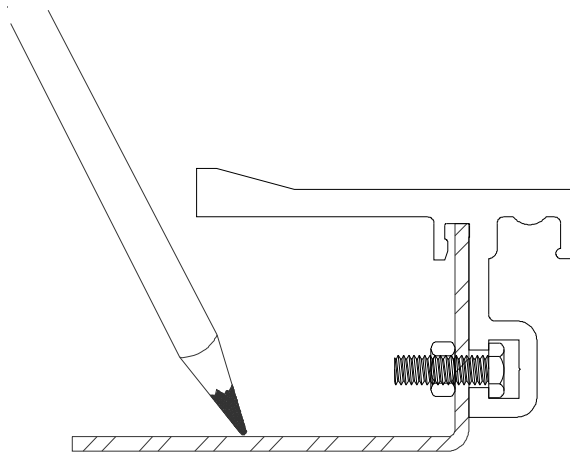


Figure 2

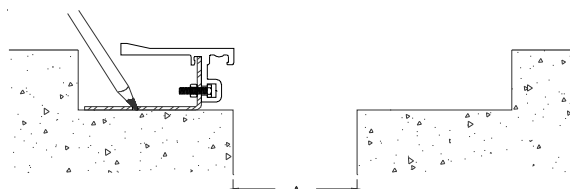


Figure 3

**STEP 4.** If fire barrier is specified, install it at this time. Refer to the installation instructions appropriate for the type of fire barrier provided for the recommended procedures to use in the installation of the fire barrier.

**STEP 5.** If water barrier is specified, install it at this time. Refer to the installation instructions entitled, "INSTALLATION INSTRUCTIONS FOR BALCO, INC. .045 EPDM WATER BARRIER SYSTEMS" for the recommended procedures for the installation of the water barrier.

NOTE: THE OPTIONAL WATER BARRIER MAY BE EITHER EPDM OR HYPALON. THE BASIC INSTALLATION OF THE WATER BARRIER IS THE SAME REGARDLESS OF WHICH OF THESE MATERIALS IS PROVIDED BY THE FACTORY. RECOMMENDED SPLICING METHODS VARY DEPENDING UPON WHICH MATERIAL IS PROVIDED.

**STEP 6.** Select a base member assembly, and place it into the blockout in the installed position. Ensure that the base member assembly is level, flush with the finished floor, and plumb with the edge of the joint. Using the base member assembly as a template, mark the locations for the anchors on the concrete (see Figure 3).

**STEP 7.** Remove the base member assembly from its position, and drill the anchor holes into the concrete at the marked locations. Drill the anchor holes 1/4" deeper than the length of the anchors. Clean away all dust and debris from the blockout.

NOTE: OBSERVE NORMAL SAFETY PRECAUTIONS WHEN DRILLING TO AVOID ALL UTILITIES AND RE-BAR.

**STEP 8.** Select base member assembly and the base member assembly anchors. Place the base member assemblies back into position in the blockout. Shim the base member assemblies as necessary to properly align them with the finished floor. Ensure that the base member assemblies are level, plumb, properly aligned, and flush with the finished floor. Using the base member assembly fasteners, attach the base member assembly to the concrete. Repeat this procedure for the opposite base member assembly, see Figure 4, and for each subsequent section of the joint cover system.

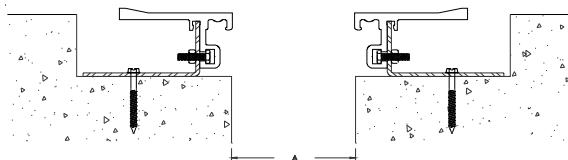


Figure 4

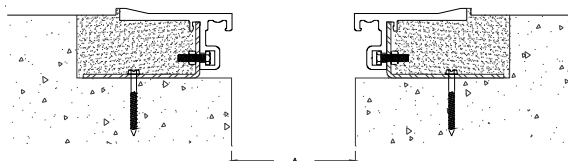


Figure 5

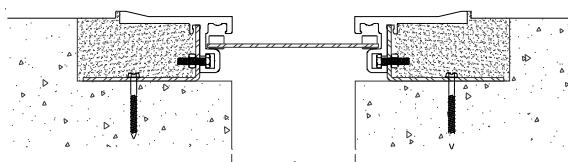


Figure 6

**STEP 9.** Fill the breakout with non-shrink grout (not supplied by Balco, Inc.). The grout must be level with the top of the slab (see Figure 5). Remove any excess grout from the exposed surfaces of the expansion joint cover system before the grout cures.

NOTE: CENTERING BAR INSTALLATION MUST BE UNIFORM. ALL CENTERING BARS MUST BE INSTALLED DIAGONALLY AND MUST BE PARALLEL WITH ONE ANOTHER.

**STEP 10.** Select the centering bars for the section of the joint cover system. Select one of the centering bars, and insert one of its pins into the track of one of the base member assemblies. Insert the other pin into the track of the opposite base member assembly (see Figure 6). Repeat the procedure for each of the centering bars in the section of the joint cover system being installed.

**STEP 11.** If applicable, install finished floor material in accordance with the material manufacturer's installation instructions (see Figure 7).

**STEP 12.** Select a section of the cover plate, and lay it beside the installed base member assemblies. Ensure that the cover plate is properly aligned with the base member assemblies. Slide the centering bars into position so that the anchor hole in the center of each centering bar is aligned with the corresponding anchor hole in the cover plate.

**STEP 13.** Place the cover plate in position over the joint, and insert the centering bar screws through the anchor holes in the cover plate and into the anchor holes in the centering bars, see Figure 8.

**STEP 14.** Hand tighten the centering bar screws until the cover plate is held firmly in position. Do not overtighten the centering bar screws (see Figure 9).

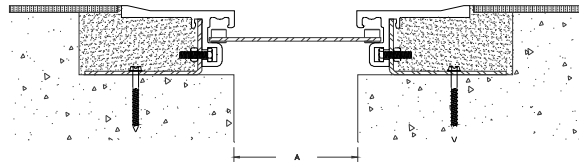


Figure 7

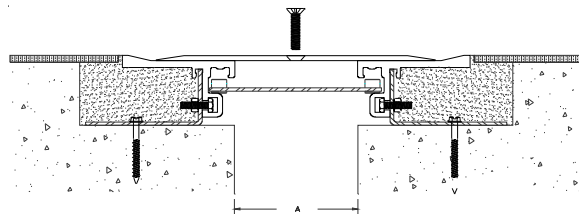


Figure 8

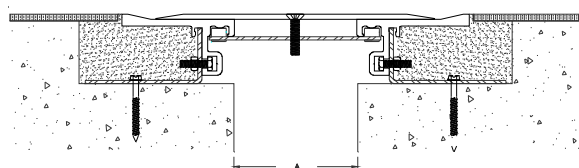


Figure 9

## **WARRANTY POLICY**

Balco, Inc. warrants to its purchasers that all products sold by it will be free from manufacturing and material defects. Any defective product will be replaced or repaired free of any charge, provided a claim is brought to our attention, in writing, within the established warranty period following the date of shipment by us and provided our examination shows the product has failed under the terms of this warranty. The established warranty period for exterior joint cover systems (Duraflex™) is five (5) years provided the systems are installed by a Balco Certified Installer. The established warranty period for grids and mats is two (2) years. The established warranty period for all other Balco, Inc. products is one (1) year. Balco, Inc. will not be responsible for installation costs involved in such repair or replacement. Balco, Inc. shall have no obligation under this warranty if owner subjects materials to improper conditions (refer to Balco's installation instructions) This is in lieu of all other warranties, expressed or implied, and is the sole warranty extended by Balco, Inc. Our liability under this warranty is limited to repair or replacement and does not include any responsibility for consequential or other damage of any nature. It is further agreed and understood that the price stated for the seller's products is consideration for the limitation of seller's liability hereunder.

### **REGISTERED TRADEMARKS:**

"VINYLINES" "SAF-T-GLO"  
"METAFLEX" "SAF-TEN BEVEL"  
"SENTRY" "DURAFLEX"  
"ILLUMI-TREAD"

### **BALCO, INC. PATENT NUMBERS:**

5,357,727; 5,782,044; 5,829,216;  
5,832,678; 6,014,848; 6,115,980;  
6,581,347; 6,942,419; 6,955,017;  
6,962,026; 7,104,717; 7,856,781  
SAF-T-GLO patent pending