

***BALCO INC***

2626 South Sheridan • PO Box 17249 • Wichita, Kansas 67217  
Phone: (316) 945-9328 • Fax: (316) 945-0789

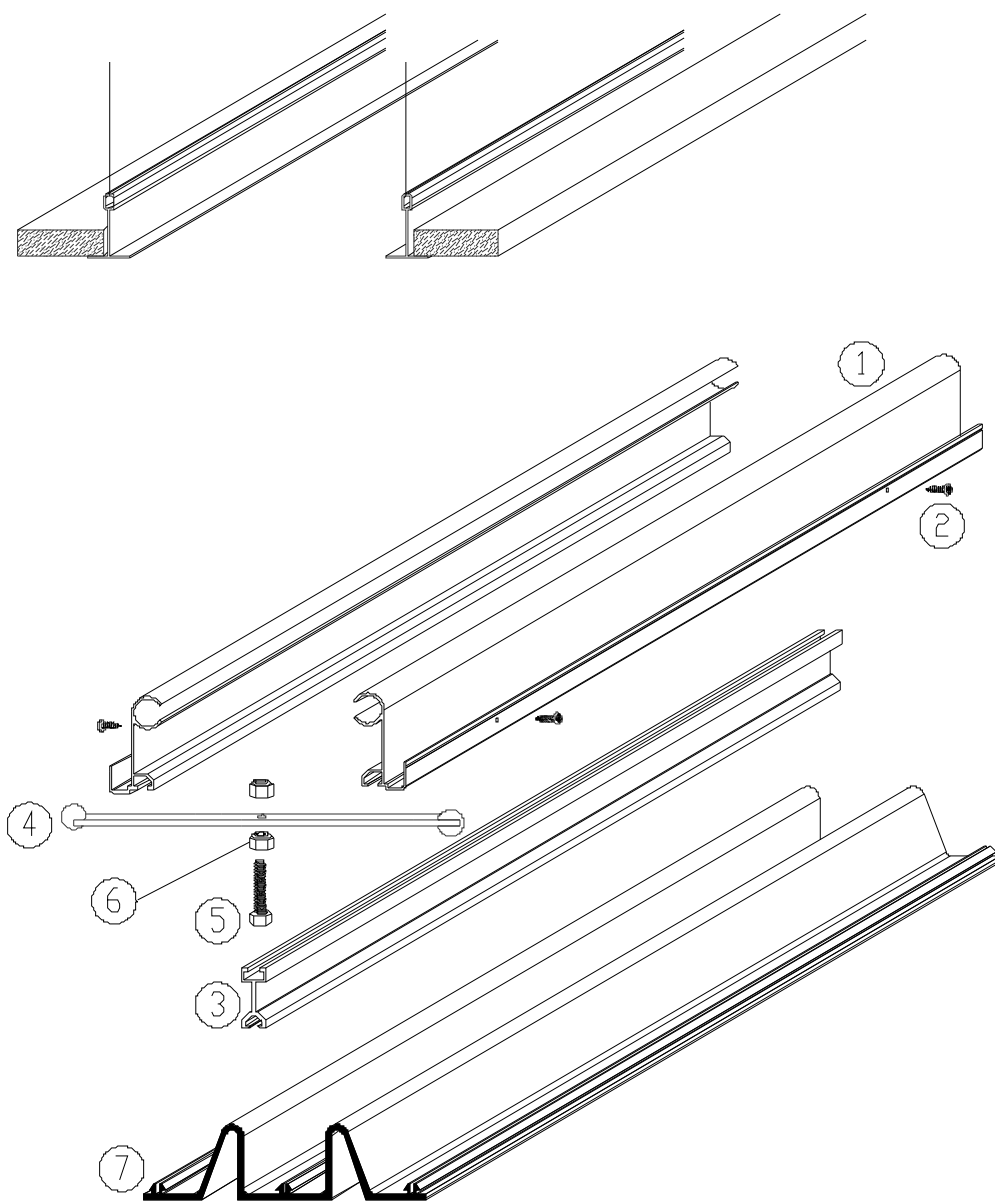
***INSTALLATION INSTRUCTIONS  
FOR BALCO, INC.  
TYPES ACWW 6" & WIDER  
CEILING JOINT COVER SYSTEMS***

# INSTALLATION INSTRUCTIONS FOR BALCO, INC. TYPES ACWW-6 AND WIDER CEILING JOINT COVERS

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.



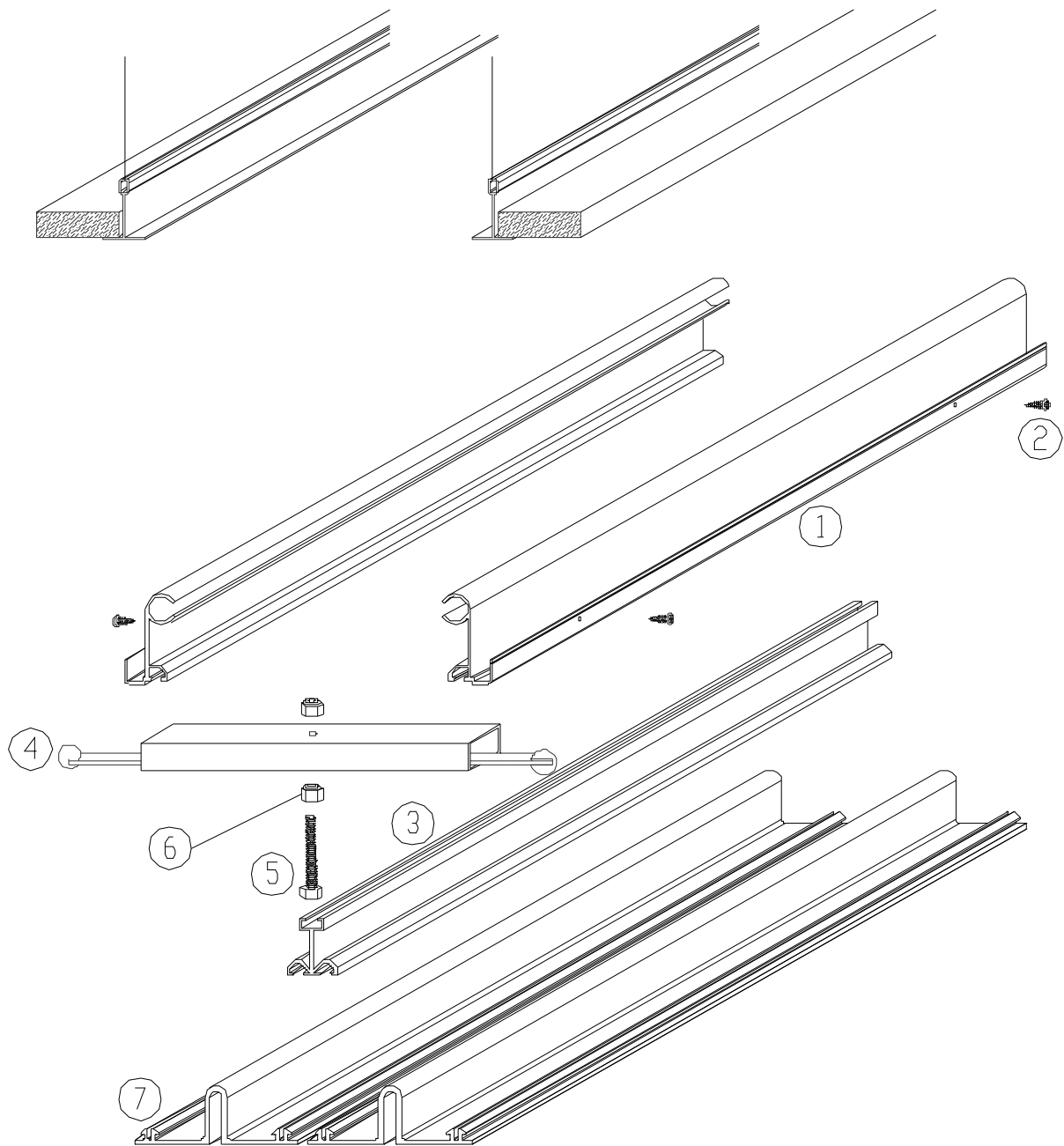


Figure 2

## PARTS

1. Base Member
2. Base Member Fasteners
3. Face Seal Subchannel
4. Centering Bar
5. Centering Bar Bolt
6. Centering Bar Nuts
7. Face Seal(s)

## TOOLS REQUIRED

This is a list of tools and materials recommended for use in the installation of these joint systems. Tools and materials in this list are not provided by Balco, Inc.

- A. Drill Bits for Base Members (Metal).
- B. Drill Bits for Concrete (if required)
- C. Electric Drill
- D. Phillips, Slotted and Hex Drivers
- E. Channel Locks
- F. Crescent Wrench

## INSTALLATION

These installation instructions are for use in the installation of Balco, Inc. ACWW-6 and wider Expansion Joint Cover Systems. The System is illustrated in Figure 1 and Figure 2. The joint cover system shall be installed as follows:

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

**STEP 2.** Attach the ceiling tees (ceiling tile supports, by others) to the slab above in accordance with the ceiling tee manufacturer's installation instructions. Ensure that the ceiling tees are set at the proper width to form the joint. Ensure that the ceiling tees are properly aligned with one another. Make any necessary adjustments.

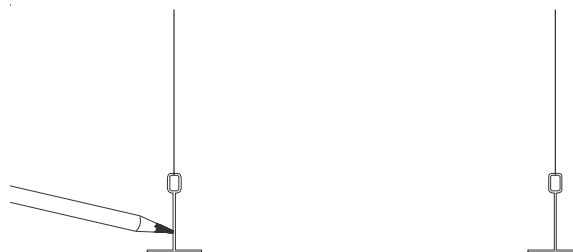


Figure 3

**STEP 3.** Mark the locations for the anchor holes on one of the ceiling tees, see Figure 3. Ensure that the base member is level and properly aligned. Standard anchor hole spacing is 20" O.C., with anchor holes a nominal 3" from each end of the base member. Repeat this procedure for the opposite ceiling tee.

**STEP 4.** Drill the anchor holes into the ceiling tees at the marked locations. Repeat this procedure for each section of the base member.

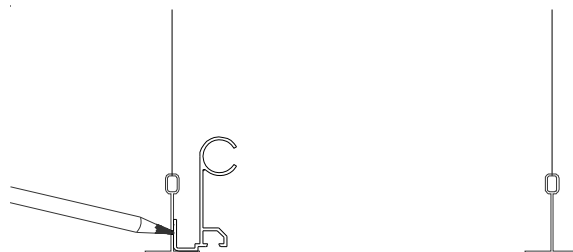


Figure 4

**STEP 5.** Select a section of the base member. Place the base member into installed position on the ceiling tee. Ensure that the base member is straight, level and properly aligned. Using the ceiling tee as a template, mark the locations for the anchors on the base member section (see Figure 4). Remove the base member from its installed position, and drill the anchor

holes into the base member at the marked locations. Repeat this procedure for each section of the base member.

**STEP 6.** Select the base member section and the anchors. Place the base member into its installed position on the ceiling tee, ensuring that the base member is level and properly aligned and that the anchor holes in the base member are aligned with the anchor holes in the ceiling tee. Using the fasteners provided by the factory, attach the base member to the ceiling tee (see Figure 5).

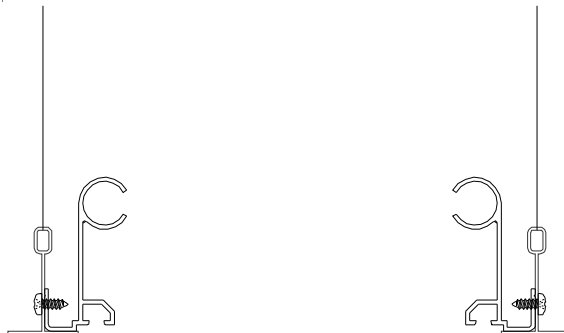


Figure 5

NOTE: THE RECOMMENDED FACE SEAL LENGTH, IF POSSIBLE, IS THE JOINT LENGTH. THIS ALLOWS THE SAME SECTION OF FACE SEAL TO BE INSTALLED INTO MULTIPLE SECTIONS OF BASE MEMBER AND WALL MEMBER, IF NECESSARY, MINIMIZING FACE SEAL SPLICING AND ENHANCING THE OVERALL APPEARANCE OF THE SYSTEM.

**STEP 7.** Determine the number of centering bars required for the section of the joint cover system. The centering bars are spaced 20" O.C. with a centering bar placed at one-half the nominal joint width from each end of the base member sections. Select those centering bars, the centering bar nuts, and the centering bar bolts.

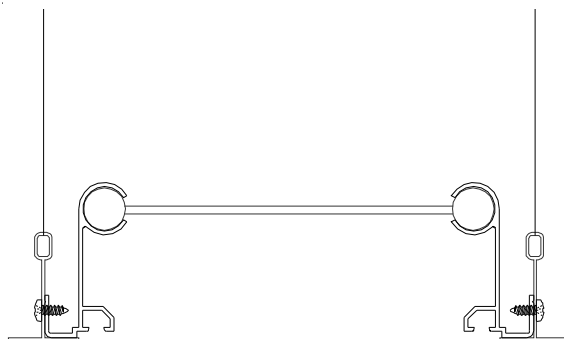


Figure 6

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

**STEP 8.** Select one of the centering bars and insert one of its spheres into the corresponding base member subchannel. Insert the other sphere into the opposite base member channel (see Figure 7). Repeat the centering bar installation procedure for each of the centering bars for the section of the joint cover system.

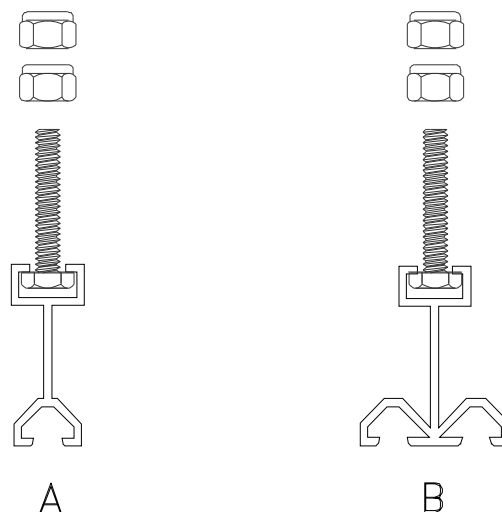


Figure 7

**STEP 9.** Select a section of the subchannel, If the subchannel supports a transition in the face seal, miter the subchannel as necessary for the transition. Determine the location of each centering bar along the subchannel and mark those locations on the subchannel

**STEP 10.** Select centering bar bolts and nuts for each centering bar in the section of the joint cover being installed. Determine the location of each centering bar along the subchannel and mark those locations on the subchannel. Determine the location of each centering bar along the subchannel and mark those locations on the subchannel.

**STEP 11.** Insert the head of each centering bar bolt into the subchannel receiver and slide each bolt into its installed position, the locations marked in Step 15 (see Figure 7, A or B).

**STEP 12.** Using the lock nuts provided by the factory, fasten each centering bar bolt into position along the subchannel (see Figure 8).

**STEP 13.** Place the subchannel, with attached bolts, in its installed position between the installed base members. Slide the first centering bar along the base members' tracks until the anchor hole in the centering bar is aligned with the first bolt in the subchannel's receiver.

**STEP 14.** Insert the bolt through the centering bar, and attach the centering bar to the subchannel using one of the jamb nuts provided by the factory (see Figure 9). Ensure that the centering bar maintains the proper position. Repeat this procedure for each subsequent centering bar in this section of the joint cover system.

**STEP 15.** Abutting sections of the subchannel must be spliced together. This applies to all transitions as well as standard splices.

**NOTE: MATING SECTIONS OF THE SUBCHANNEL MUST BE MITERED, AS APPROPRIATE, AT INSIDE CORNER TRANSITIONS, AT OUTSIDE CORNER**

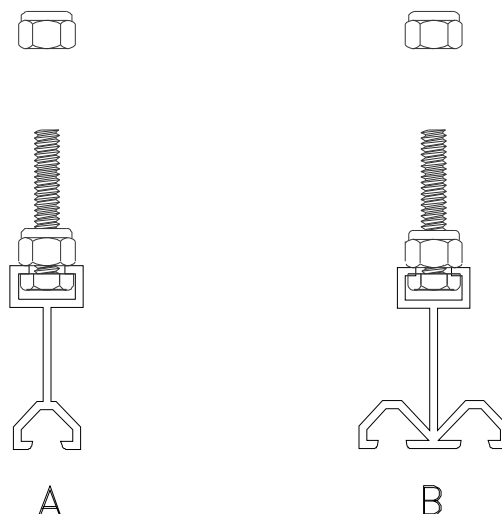


Figure 8

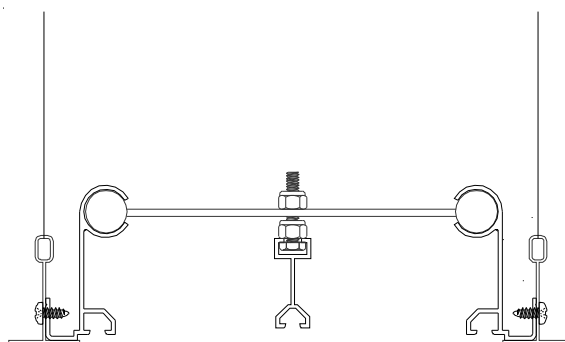


Figure 9

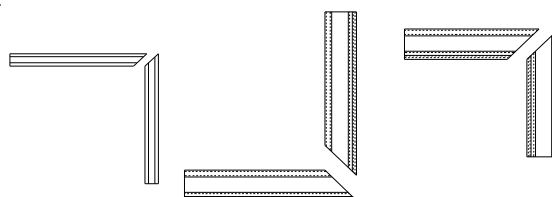


Figure 10

## TRANSITIONS, AND AT 90° SAME PLANE TRANSITIONS.

**STEP 16.** If necessary for a transition, miter the subchannel to match the mating, installed subchannel (see Figure 10).

**STEP 17.** Select the splice bar, the splice bar bolts and the lock nuts. Slide two (2) splice bolts into the splice end of the receiver of each section of mating subchannel. Ensure that the splice bar conforms to the splice or transition.

**STEP 18.** Insert the splice bolts in one of the subchannel's receivers through the anchor holes in one leg of the splice bar.

**STEP 19.** Place the mating subchannel into its installed position abutting the installed section of the subchannel, inserting the splice bolts in the other subchannel's receiver through the anchor holes in the other leg of the splice bar. Ensure that the splice bar is nominally centered over the splice or transition.

**STEP 20.** Using the lock nuts, attach the splice bar to both of the mating subchannels (see Figure 11).

**NOTE: IF TRIMMING OR MITERING THE  
FACE IS NECESSARY, BALCO, INC.  
RECOMMENDS USING A HACKSAW.**

**STEP 21.** Select the face seal(s). Determine the length of face seal or face seals, for systems requiring two seals, required for the installation. Mark the face seal(s) at the location at which it (they) need(s) to be cut to attain the required length.

**STEP 22.** If the face seal(s) has (have) not been cut to length, cut the face seal to the required length. Ensure that there is no stretch in the face seal as it is measured and trimmed.

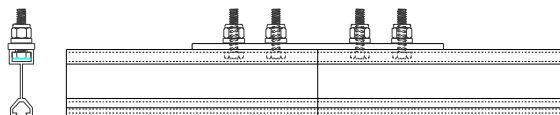


Figure 11

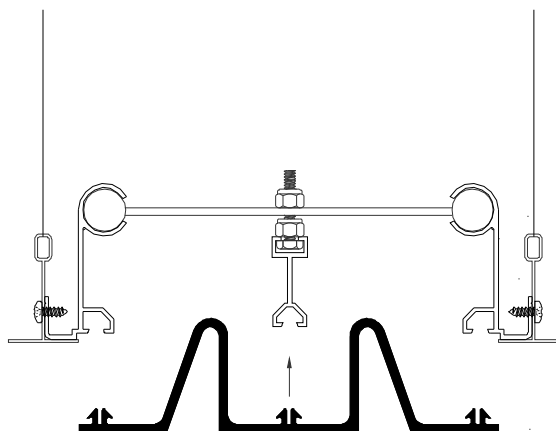


Figure 12

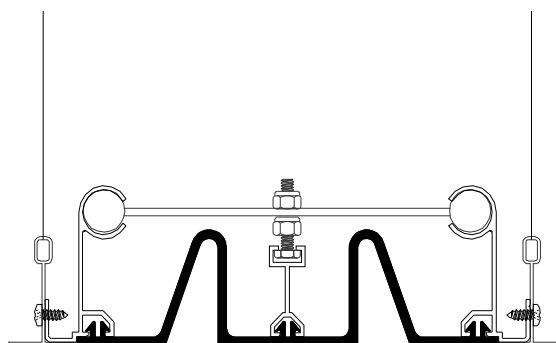


Figure 13

**STEP 23.** Attach the face seal to the subchannel by inserting the face seal's center arrow continuously into the subchannel's receiver (see Figure 12). For side by side seals, insert one of each face seal's arrows into one of the subchannel's receivers.

**STEP 24.** Attach the face seal to the base member by inserting the face seal's arrow continuously into the base member's receiver. Attach the face seal to the corner wall member by inserting the face seal's arrow continuously into the base member's receiver (see Figure 13).

NOTE: IF THE JOINT REQUIRES THE USE OF MULTIPLE SECTIONS OF THE BASE MEMBERS, ASSEMBLE THE SYSTEM SO THAT EACH BASE MEMBERS WILL BE INSTALLED AT THE LOCATIONS ALONG THE JOINT WHERE THEY WERE USED TO MARK THE ANCHOR HOLES INTO THE SUBSTRATE.

**STEP 25.** Install the ceiling tiles (by others) onto the tees in accordance with the tee manufacturer's instructions (see Figure 14).

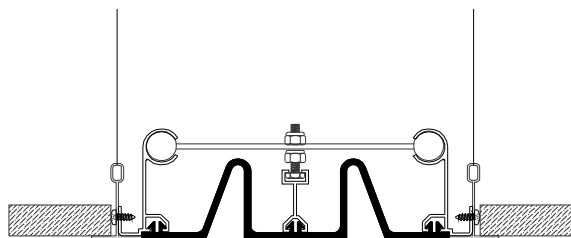


Figure 14



## **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