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FOR 7500 SERIES EXPANSION JOINT COVERS

IMPORTANT READ THE FOLLOWING BEFORE INSTALLING

Read the following installation instructions carefully, and be sure you understand them completely before you begin any work. Please note that these installation instructions are for standard installations and are not intended to replace any specific details or shop drawings that differ from those depicted.





These installation instructions are for use in the installation of 7500 Series Expansion Joint Cover Systems (Figure 1).

Blockouts are required for this installation. They can be formed at the time of the initial concrete pour or at installation time.

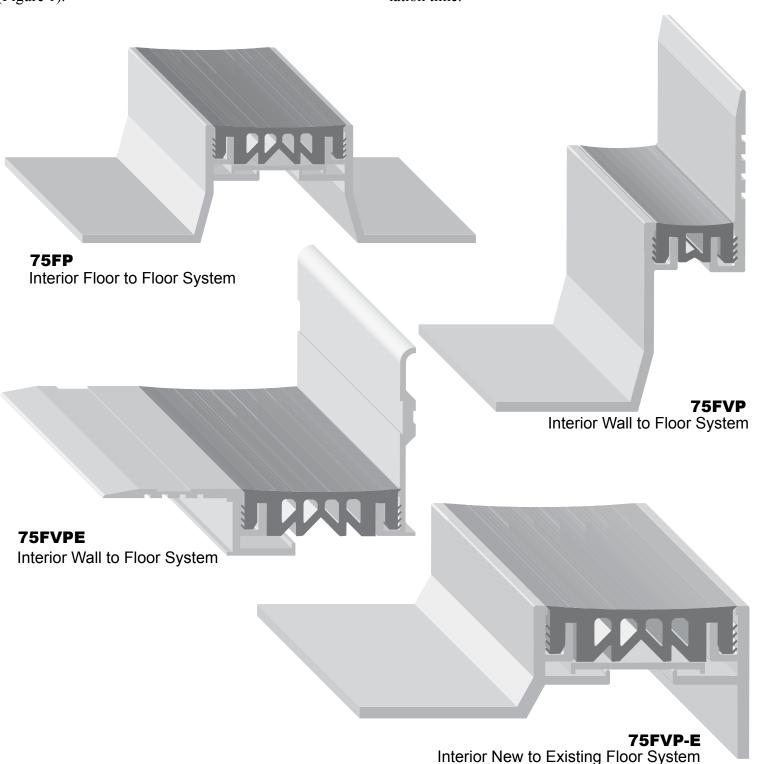


Figure 1—7500 Series Expansion Joint Systems



STORAGE

These expansion joint systems are shipped unassembled. Store these products in a fully supported horizontal position and in a clean, dry location.

CAUTION

All users should familiarize themselves with the MSDS information prior to the starting installation.

PROCEDURES PRE-INSTALLATION

PARTS

- Base Member Subchannel
- Subchannel Fasteners
- Wall Member (75 FVP Only)
- Wall Member Fasteners (75 FVP-E Only)
- Center Plate
- Face Seal

TOOLS REQUIRED

This is a list of tools and materials recommended for use in the installation of these expansion joint covers. Balco, Inc. does not provide these tools and materials.

- Drill Bits for Base Members
- Drill Bits for Anchors (Concrete)
- Electric Drill
- Sockets for Anchors
- Levels
- Awls
- Tape Measure
- Masking Tape
- Phillips Bits (for Wall Members)
- Rubber Mallet
- Wooden Block
- Grout

SURFACE PREP

Balco recommends that the concrete poured around joints and blockouts be vibrated before it is allowed to cure.

Blockout Prep

1. Provide blockouts, in accordance with the approved shop drawings. Blockouts may be formed at the time of the initial concrete poor or at a later time by removing material from the slab.

NOTE

If a topping slab or pavers are to be used for the finished flooring, blockouts are not need for the installation.

NOTE

Leave concrete forms in place in the blockout until installation time to protect the area from potential damage.

- 2. Inspect the blockouts to see that they are flat, level, and clear of all debris.
- 3. Test all concrete in and around the joint by tapping the areas with a hammer. If the concrete sounds hollow, cracks, crumbles, or loosens, the concrete must be removed and repaired with a structural repair mortar.
- 4. Use concrete saws and diamond grinding disks to correct any deviation within the joint.
- 5. Access to the bonding surface of the interface walls must be free and clear of debris. Any obstructions must be accounted for in the installation process.
- 6. Measure the joint opening and verify that you have the correct size for the joint (Figure 2).

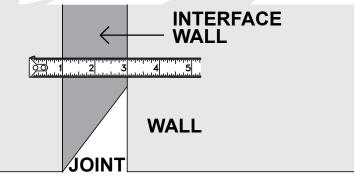


Figure 2—Measuring the Joint Size



NOTE

A tooled edge on the corners of the concrete is recommended. The radiused edge reduces the effects of impact loading from vehicles and lessens the chance of edge erosion, cracking or spalling.

7. Clean the interface walls of the concrete using a 50/50 mixture of water and Isopropyl alcohol to remove oil, grease, dirt, debris and other contaminants. Ensure the water/alcohol is completely dried from the cleaned surface prior to installation of the seal.

NOTE

Joints in steel, aluminum or other non-porous surfaces should be primed in preparation for the sealant installation.

NOTE

If fire barrier is provided with the system, install it at this time. Refer to the installation instructions for the fire barrier type provided.

NOTE

If water barrier is provided with the system, install it at this time. Refer to the installation instructions for the water barrier type provided.

BASE MEMBER PREP

1. Mark the locations for the anchor holes on all of the base members and drill the anchor holes.

NOTE

Standard anchor spacing is 20" o.c. with an anchor hole a maximum of 3" from each end of the base member section.

2. If using wall base members, anchor holes need to be countersunk.

SYSTEM INSTALLATION

SEAL AND BASE MEMBER INSTALLATION

All elastomeric seals should be installed in as long lengths as possible.

Warning

CUTTING THE SEAL INTO SMALL LENGTHS CAN CAUSE LEAKS AND WEAKEN THE SEAL.

7500 Series Installation (except 75FVP and 75FVP-E)

- 1. Place base members on a flat working surface about the width of the face seal apart with the channels facing each other.
- 2 **Center plate only**—Insert the center plate into both supporting tracks, filling the gap between members (Figure 3).

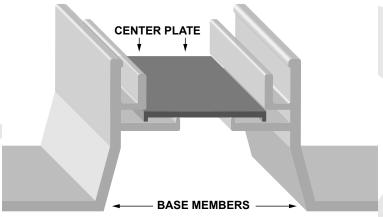


Figure 3—Base Members and Plate Assembly

3. Using a wood block and mallet, lightly tap the face seal tabs into the channels of the base members (Figure 4).



Figure 4—Seal Installation Method



NOTE

Lubricating the face seal's arrows with soapy water or liquid soap can make installation of the face seal easier

WARNING

DO NOT USE OILS OR OIL BASED LUBRICANTS ON THE FACE SEAL ARROWS.

CAUTION

Ensure the face seal tab is completely engaged into the channel

- 4. Repeat steps 1 through 3 until all base members have been assembled for the length of the joint. Ensure base members are butted up against each other.
- 5. Place the joint seal assembly into its installed position. Align the base members with the joint opening.

CAUTION

The base members should be completely on the substrate surface and not overhanging the joint.

- 6. Using the seal assembly as a template, mark the locations for the anchors on the substrate.
- 7. Remove the assembly and drill the anchor holes ¹/₄" deeper than the length of the anchors.
- 8. Clean all dust and debris from the blockout.
- 9. Place the assembly into its installed position.
- 10. Align the anchor holes of the members and substrate with each other. Ensure the base members are level with the finished floor. Shim as needed.
- 11. Attach the base members to the substrate with the anchors supplied by the manufacturer.

75FVP and 75FVP-E Installation Only

- 1. Using the wall base member as a template, mark the locations for the anchors on the wall substrate. Ensure the wall base member is straight, level, properly aligned and at the correct elevation.
- 2. Drill the anchor holes ½" deeper than the length of the anchors.
- 3. Clean all dust and debris from the blockout.

- 4. Place the wall base member into its installed position. Insure the anchor holes of the member and substrate align with each other.
- 5. Attach the wall base member to the substrate with the anchors supplied by the manufacturer.
- 6. Repeat steps 1 through 5 until all wall base members have been installed for the length of the joint. Ensure wall base members are butted up against each other.
- 7. Using a wood block and mallet, lightly tap the face seal tab into the channel along the installed wall base members the entire length of the joint (Figure 5).



Figure 5—Face Seal Wall Member Installation

CAUTION

Ensure the face seal tab is completely engaged into the channel.

8. Place the base member on the substrate opposite the wall base member aligned with the remaining face seal tab.

CAUTION

Ensure the base member is plumb with the joint opening.



9. The base member should be completely on the substrate surface and not overhanging the joint. Ensure the base member is level with the finished floor (Figure 6).

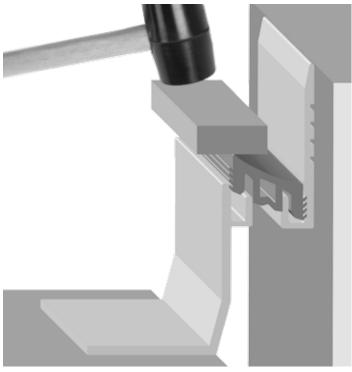


Figure 6—Seal Base Member Installed Position

- 10. Shim as needed.
- 11. Using the base member as a template, drill the anchor holes into the concrete.
- 12. Remove the base member and clean all dust and debris from the blockout.
- 13. Place the base memebr back into the installed position.
- 14. Attach the base member to the substrate with the anchors supplied by the manufacturer.
- 15. Repeat steps 8 and 14 until all base members have been installed for the length of the joint. Ensure base members are butted up against each other.
- 16. Using a wood block and mallet, lightly tap the face seal tab into the channel along the base members for the length of the joint (see Figure 6).

CAUTION

Ensure the face seal tab is completely engaged into the channel.

FINISH WORK

- 1. Place masking tape over the top of the joint cover system to protect it during grouting of the blockout.
- 2. Ensure the blockout is dammed well so that grout will not leak out onto lower levels.
- 3. Prepare grout in accordance with the grout manufacturer's instructions.
- 4. Install grout continuously between the base members and blockout (Figure 7).

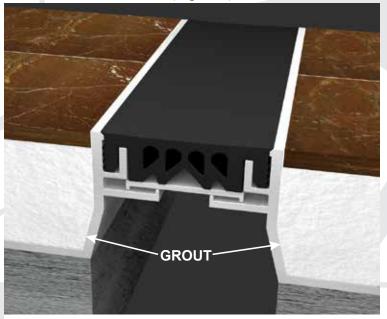


Figure 7—Grout Location

- 5. Remove all excess grout from any exposed surfaces of the joint assembly before grout sets up.
- 6. Install finish floor material in accordance with the manufacturer's instructions.