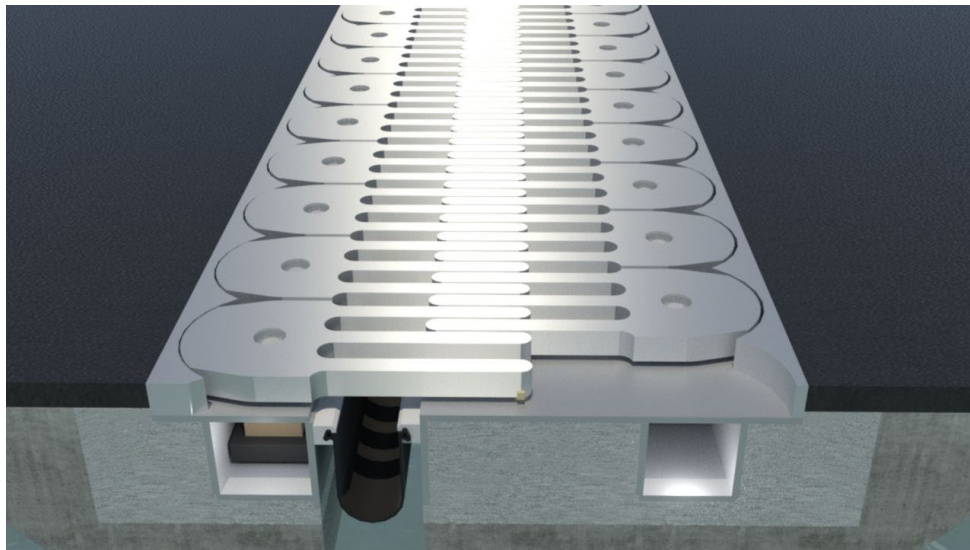


Installation Procedure

Last Updated: August 2024



Wabo® Trident Finger Joint

For Bridge & Highway Applications

The following installation procedure is very important and must be fully understood prior to beginning any work. To ensure proper installation and performance of expansion joint system the following actions must be completed by the installing contractor. Failure to do so will affect product warranty.

- 1) Carefully read and understand installation procedure. Contact WBA's Technical Service Department at (800) 677-4922 for product assistance.
- 2) Inspect all shipments and materials for missing or damaged components and hardware. Contact Customer Service at (800) 677-4922 with WBA's order number and invoice for prompt assistance.
- 3) Inspect substrate or adjacent construction for acceptance before beginning work. Report unacceptable construction to the project manager for scheduled repair work.
- 4) Review WBA shop drawings for project specific detailed information if Engineering services were purchased at time of order.

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Health & Safety

During the installation of any Watson Bowman Acme product, appropriate personal protective items should be worn at all times, including but not limited to the following:

- Proper work clothing
- Safety glasses
- Safety boots
- Gloves
- Hard hat



Local rules and regulations regarding safe work environments and health should be followed.

Installation

The work shall consist of furnishing and installing a Wabo®Trident Finger Joint system in accordance with the details shown on the plans and the requirements of the specifications. Placement of the Wabo®Trident Finger Joint system shall consist of proper surface preparations, material, and application of materials. The Wabo®Trident Finger Joint system is prefabricated.

1

Field Preparation

Block-outs are to be prepared to proper depths and widths as per shop drawings and consistent throughout.

Proper field handling is of utmost importance to avoid damage to the fabricated joint system while it is lifted and lowered into its final position. The joint system shall be set to line and grade, ensuring that the system's uppermost plane matches the finished roadway profile.

The structure temperature shall be measured by recording the surface temperature of the concrete and/or steel with a surface thermometer as described below.

Record the temperature of the underside of the concrete slab at each end of the superstructure element adjacent to the expansion joint. Take the average of the readings to use with the temperature chart shown on the plans. In lieu of surface readings, internal slab readings may be taken by drilling a 1/4" diameter hole 3" into the concrete slab; filling the hole with water and inserting a probe thermometer.

Before casting in the Joint system to the structure, the setting dimension shall be adjusted under the direction of the Field Engineer, to correspond to the proper ambient temperature dimension as shown on the shop drawings. The adjustment is accomplished by means of shipping and leveling devices, furnished by the manufacturer, which shall accompany the expansion joint system to the job site.

2 Joint Placement

Utilize the manufacturer's Leveling Device to position joint system into the blockout. Align face of the steel bulkhead to reflect the structural gap opening, ensuring that the Steel Base Plates are supported and are not cantilevered into the joint opening.

Properly place formwork to maintain joint opening. Prior to placement of the concrete, all Lifting and/or Shipping Devices shall be removed. Leveling Devices on top of the joint need to remain in place and the bolts loosen.

When casting the joint system into the structure, care should be taken so that proper compaction of concrete around the system is achieved.

Remove Leveling Devices after concrete has taken its initial set. (Review / EIC). Remove Finger Joint Plates. Remove formwork as needed.

To Install Trough, apply Wabo®PrimaLub with a brush to all cavity surfaces of Steel Base Members. Install trough in continuous length. Use of installation tool or pogo stick to install lugs. (See Figures 1-4 on last page).

Replace Wabo®Trident Finger Plates, do not fully tighten bolts. Use spacers between each set of opposing fingers to ensure parallel alignment.

After all finger plates are installed and properly aligned, tighten bolts to specified Torque requirements as per Shop Drawings. Remove spacers from opposing sets of finger plates.

3 Field Splicing

If the system is to be installed in sections, the manufacturer will ship the joint with the appropriate ends beveled for field welding. Once the first joint section is installed and concrete has been cast, the adjacent length is field welded. Special care is to be taken following field-welded details shown on the manufacturer's shop drawings.

4 Trough Installation

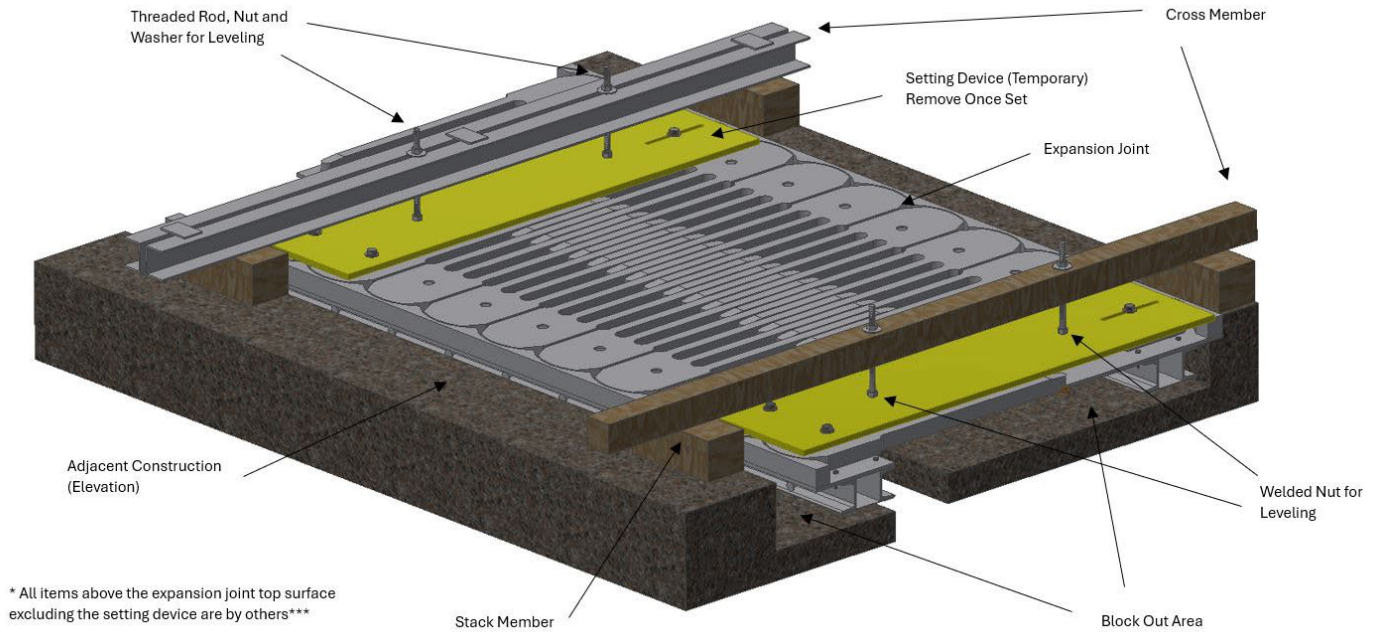
If gutter is not pre-assembled, after concrete cure remove sliding side finger plates by removing the bolts.

Apply Wabo®PrimaLub to machined cavity along each side of support plates, and a small portion on the rubber lug of gutter.

Insert bottom lug of gutter into machined cavity and insert top lug into cavities on each side of gutter using a seal installation tool.

Remove excess Wabo®PrimaLub.

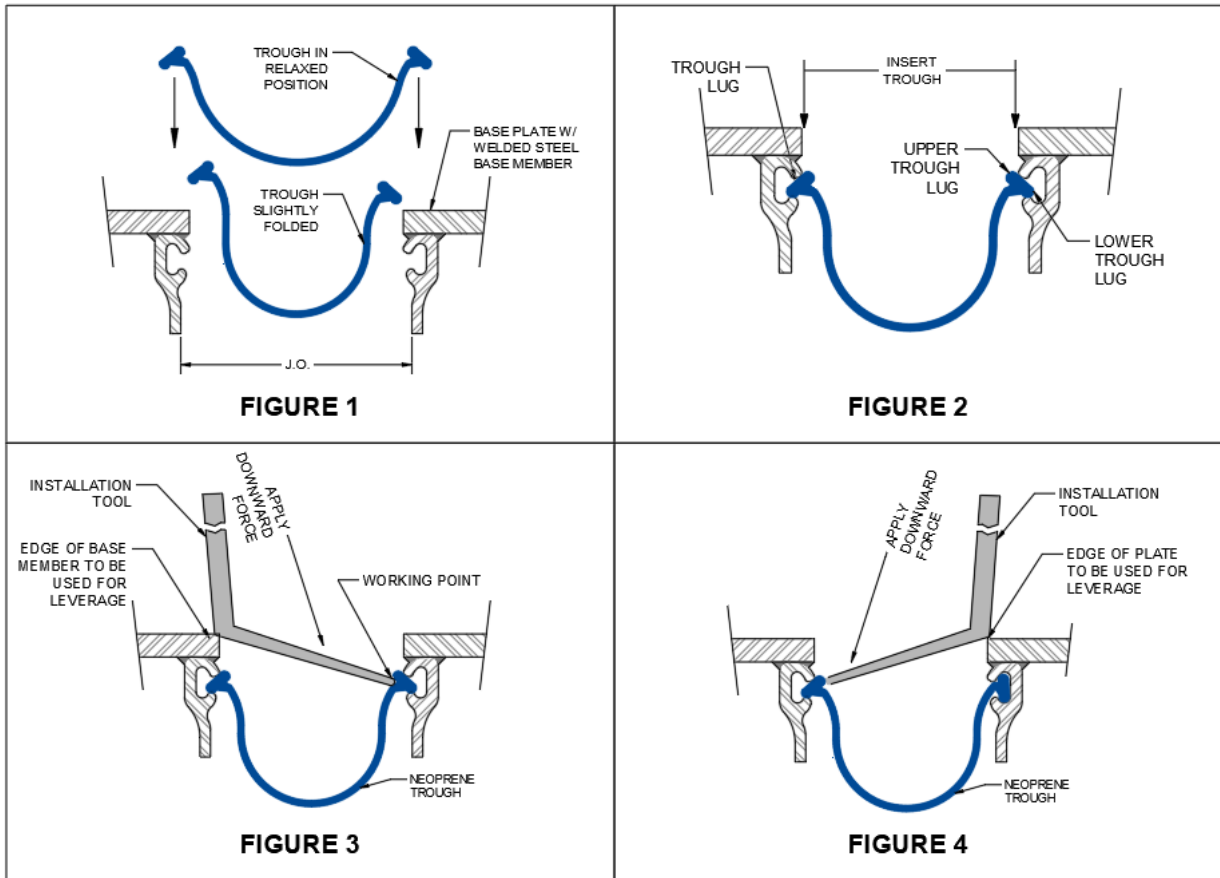
Replace sliding side finger plates and properly torque bolts.



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