

Wabo®MDM TransFlex – Installation Sequence and Procedure

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.

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.

Pre-Installation Notes

The work shall consist of furnishing and installing a Wabo®MDM TransFlex segmental plate expansion joint assembly in accordance with the details shown on the plans and the requirements of the specifications. The Wabo®MDM TransFlex segmental plate expansion joint assembly is prefabricated in modules of specific lengths based on contract requirements.

Transportation and Handling

- Wabo®MDM TransFlex requires careful handling to avoid damage during unloading. Lifting eyes for straps and/or chains are located to properly unload, lift and lower the joint assembly. Refer to approved shop drawings for lifting details as applicable. The Wabo®MDM TransFlex modules can be furnished preassembled or in components based on contract/contractor requirements for lifting, storing, and installation.

Inspection

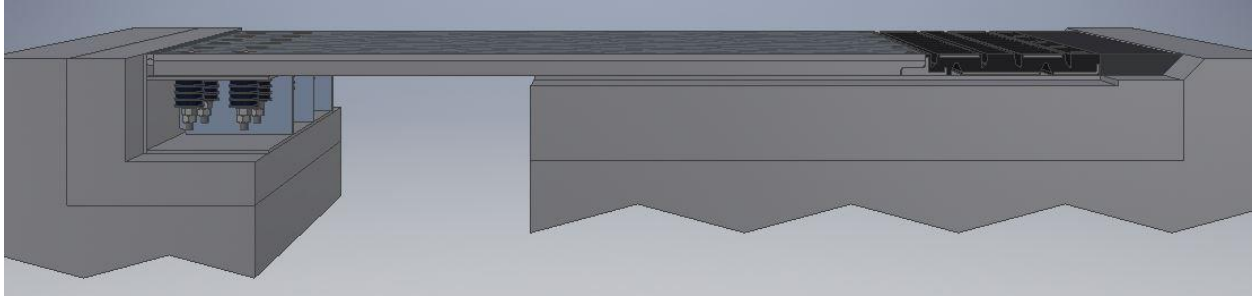
- Contractor should thoroughly inspect Wabo®MDM TransFlex modules upon arrival to ensure all parts are in good condition. Contractor should also consult the Bill of Lading in conjunction with the Bill of Materials on the approved shop drawings to ensure all hardware, sealants, etc. have been shipped. Any variances should be noted and photographed. Contact WBA immediately with any matters or questions.

On-site Storage

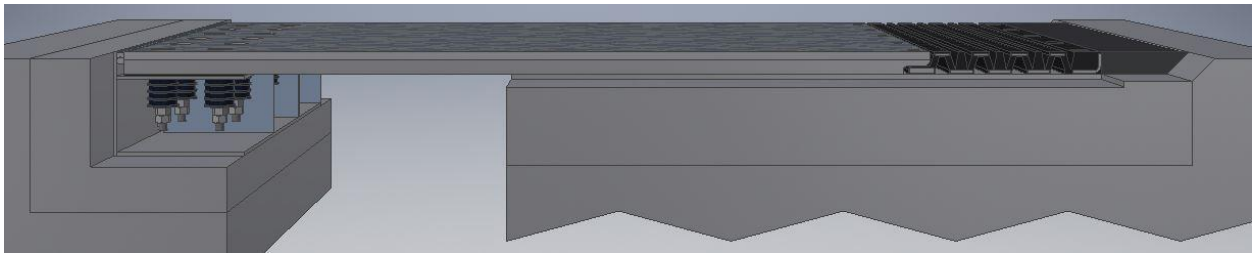
- If installation does not immediately take place after unloading the Wabo®MDM TransFlex modules should be stored properly on a flat, sound surface in an area out of the way of heavy construction equipment.

Blockout Preparation

- The Wabo®MDM TransFlex typically is shipped preassembled. Proper field handling of the is of utmost importance to avoid damage to the fabricated preassembled joint modules 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. Care should be taken not to set the joint above finish grade.
- Newly placed concrete: the blockout must be dry and clean (free of dirt, coatings, rust, grease, oil, and other contaminants), sound and durable. New concrete must be cured (minimum of 14 days).
- Aged concrete: loose, contaminated, weak, spalled, deteriorated and/or delaminated concrete must be removed to sound concrete and repaired prior to placement.
- Ensure recess will suit size and configuration of the Wabo®MDM TransFlex. Refer to contract plans and approved shop drawings for project specific requirements
- Consult with EIC (Engineer in charge) for any removal of interfering reinforcement
- Clean the area where the Wabo®MDM TransFlex will be installed using compressed (pressurized) air to remove any accumulated debris.
- Place necessary formwork and rebar reinforcement within the blockout area



Wabo®MDM TransFlex: Models MDM-650 and MDM-900



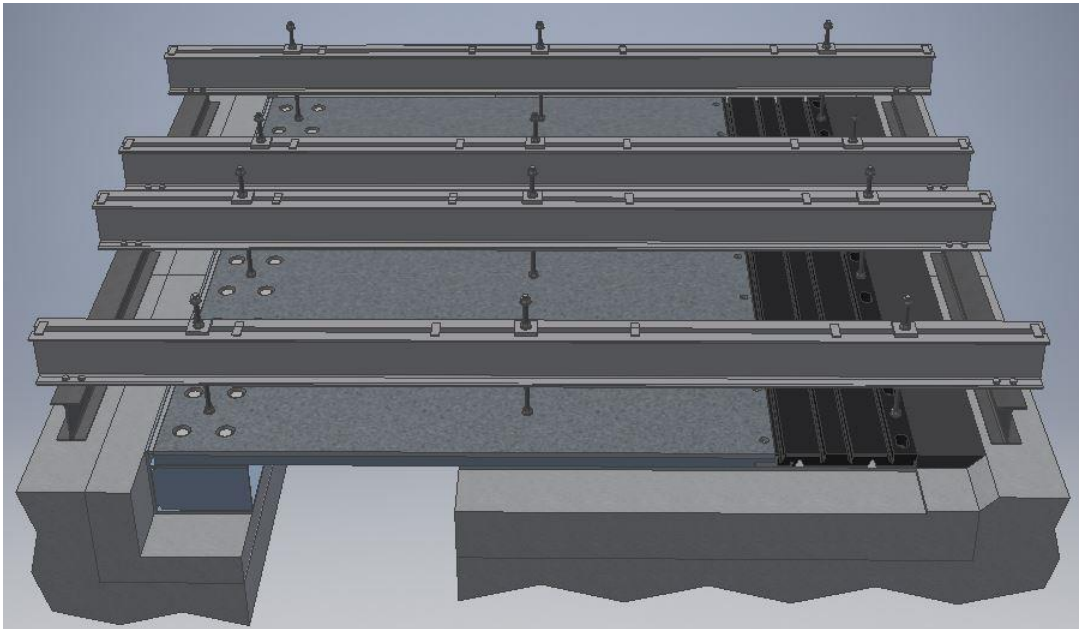
Wabo®MDM TransFlex: Models MDM-1600 through MDM-3200

Construction Sequence

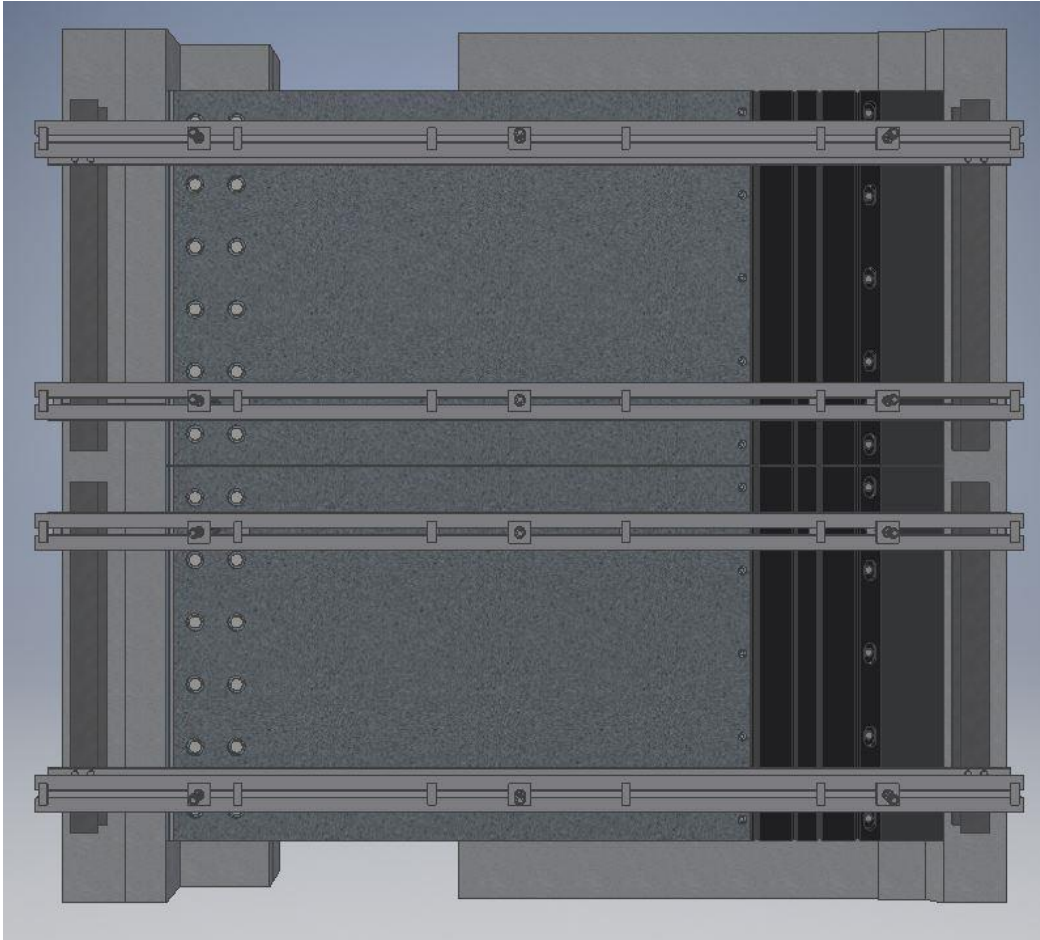
Preassembled Module

- Lift and suspend the module in the joint blockout using the installation assembly devices and temporary I-beams as shown in the approved shop drawings
- Place all required rebar reinforcement and formwork
- Adjust and set to grade using the threaded rods provided (set at or below grade as directed by engineer)
- Adjust the Wabo®MDM TransFlex expansion joint module for temperature before securing or 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. See approved shop drawings for torque requirements.
- Place additional modules as required for construction staging following the above procedure
- Cover/protect top of joint prior to concrete pour.
- Pour self-consolidating concrete (SCC) below support plates and channel/box assemblies

- Let the SCC develop a minimum 1500 psi strength before proceeding to the next construction stage/phase
- Once concrete reaches minimum strength loosen bolts on Temporary Lifting and Setting Device to allow joint to function until concrete reaches minimum strength (to be determined by Engineer).
- Pour all required sealants (i.e. Wabo®SiliconeSeal between deck plates, elastomeric segmental panel sealant)
- Prep the deck substrate for elastomeric concrete as described in Wabo®Crete II installation procedure document.
- Pour Wabo®Crete Elastomeric Concrete as shown in approved shop drawings



Wabo®MDM TransFlex: Lifting and Installation Assembly



Wabo®MDM TransFlex: Lifting and Installation Assembly

Module Furnished as Components

- Lift and suspend the channel/box assembly and support plate in the joint blockout using the installation assembly device and temporary I-beams as shown in the approved shop drawings
- Place all required rebar reinforcement and formwork
- Adjust the channel/box assembly and support plate to the proper elevation using the threaded rods (set at or below grade as directed by engineer). Ensure that the proper amount of space/clearance is left for the deck plate and elastomeric segmental panel to be installed at roadway grade
- Place additional channel/box assemblies and support plates as required for construction staging following the above procedure

- Pour self-consolidating concrete (SCC) below support plates and channel/box assemblies
- Let the SCC develop a minimum 1500 psi strength before proceeding to the next construction stage/phase
- Bolt the deck plate to the channel/box as shown in the approved shop drawings
- Adjust the elastomeric segmental panel for temperature. 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. See approved shop drawings for torque requirements.



- Pour all required sealants (i.e. Wabo®SiliconeSeal between deck plates, and elastomeric segmental panel sealants)
- Prep the deck substrate for elastomeric concrete as described in Wabo®Crete II installation procedure document.
- Pour Wabo®Crete Elastomeric Concrete as shown in approved shop drawings

*Watson Bowman Acme is your Strongest Partner for Expansion Joint Systems & Responsible Solutions.
Follow us on social media for industry news, new product announcements & more:*

