

# SEALING & BONDING WABO® BUSTUFF SYSTEM

YOUR STRONGEST PARTNER FOR EXPANSION JOINT & SEALING SYSTEMS





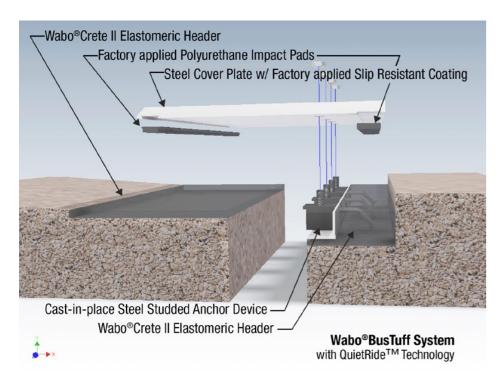
# WABO® BUSTUFF (BTS)

## Heavy duty expansion joint system

Designed and proven to accommodate high load, high speed, high daily traffic count parking deck challenges

THIS SYSTEM HAS ALSO BEEN DESIGNED AND TESTED TO WITHSTAND THE MOST DEMANDING SEISMIC EVENTS, RESULTING IN THE MOST FULLY FUNCTIONAL EXPANSION JOINT SYSTEM IN THE MARKETPLACE.

Successful seismic testing of the BusTuff system was conducted in 2012 at the Pacific Earthquake Engineering Research (PEER) Center, University of California, Berkeley. This system will effectively handle up to a Magnitude 8 seismic event, allowing for continuous use even during significant seismic activity.



#### **SPECIFY**

#### **SERIOUS LOADING CAPABILITIES:**

The Wabo®BusTuff system absorbs impact and carry axle loads up to and including 40,000 pounds

- Handles 30% horizontal impact forces created by large vehicles traveling at high speeds across the system
- Accommodates slab movements in all directions while eliminating failure modes most often associated with plate-type systems

#### WARO® BUSTUFF

#### **RECOMMENDED APPLICATIONS:**

- Fly-in/elevated bridge structures at Public Transportation facilities
- Airport Terminal Pickup Locations in proximity to buses
- New construction and staged construction rehabilitation projects
- Horizontal use, high speed, high vehicle weight, and high daily traffic count applications

## TECHNICAL SYSTEM DATA

Each Wabo®BusTuff expansion control system is specifically designed to suit individual project conditions.

Considerations for use are high loads (vehicles higher in weight than passenger vehicles and pickup trucks i.e. oscillating buses), vehicles traveling at speeds in excess of 15 miles per hour, transitions in elevation across opposing decks, and locations where large vehicle count-per-day exists.

Our technical staff can provide the highly skilled engineering services required to transform design considerations, joint opening(s), and thermal and/or seismic movements into a maintenance-free system built to last. Preassembly and shorter sized panels allow for quick lane-by-lane installation on retrofit applications.

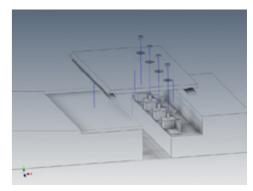
## PHYSICAL SYSTEM PROPERTIES

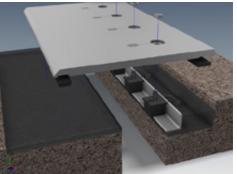
Steel Edge Members – all steel members and cover plates are manufactured from structural steel, and are designed by WBA Engineering staff to properly carry loads, limit deflection, and account for infinite fatigue life.

QuietRideTM Technology – ensures no "plate slap" of metal to substrate due to repeated heavy loading. Factory poured high density polyurethane pads are kept in constant contact to the adjacent structure by hardware that is installed to a specified torque. Specially designed nonmetallic compression springs maintain specified hardware tension throughout the expansion joint's service life.

Slip Resistant Coating – high coefficient of friction slip resistant epoxy coating factory applied to ensure years of service under the most aggressive environments

Wabo®Crete ii Elastomeric Header – absorbs traffic impact loads and evenly disperses them into the deck slab, while allowing the system to flex with deck loads.







#### FEATURES & BENEFITS

Not your average plate joint system.

FEATURES	BENEFITS
Design Longevity	Structural elements designed for infinite fatigue life. Maintenance free, structural steel components
Unique Anchorage System	Fastening system engineered to secure cover plate under any conditions, displacements and rotations
Sound Attenuation	Engineered to completely eliminate cover plate slapping and bouncing by using our QuietRide™ technology
Easy Install	Lane-by-lane installation of plates promotes simple process

#### **SPECIFY**

Serious loading capabilities Install when concrete substrate is clean, sound, dry, and cured

- Minimize splice points by installing the optional drain trough in longest possible continuous length
- Do not allow any of the Wabo®Crete II elastomeric concrete components to freeze prior to installation. Store all components out of direct sunlight in a clean, dry location between 10°C and 32°C
- Shelf life of chemical components is 1 year
- Periodically inspect bolt hole filler and edge void sealant and repair localized areas as needed

	3	6	9	12	18	24	30	36	48	60
System Depth	3.75	3.75	4.00	4.00	4.50	4.75	5.50	5.75	6.25	7.25
Blockout Depth	1.25	1.25	1.50	1.50	2.00	2.25	2.50	2.75	3.25	3.75
Blockout Length	7	7	7	7	9	9	9	11	13	15
Header Length*	4	4	5	7	11	14	18	22	29	36
Plate Length	15	16	19	22	30	36	42	50	54	78

<sup>\*</sup>Header length based upon thermal movements of 20% the maximum gap
\*\*Project dimensions may vary







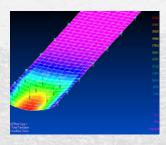
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# Heavy duty expansion joint system













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#### **WE ARE SIKA**

#### In May 2023, Watson Bowman Acme became part of Sika.

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, industrial flooring as well as roofing and waterproofing systems.



