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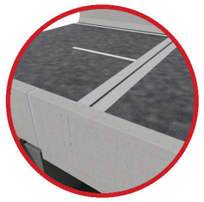
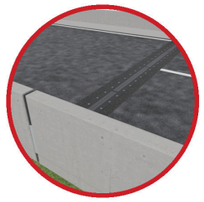


ABUTMENT – EXPANSION JOINT

UNIJOINT CL100 STRIP SEAL

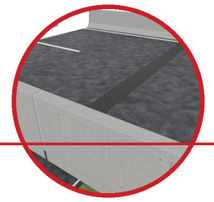
Steel edge beams anchored in the nosings hold a replaceable rubber strip seal that folds and opens with the deck movement.



PIER 1 – EXPANSION JOINT

UNIJOINT RJ MODULE JOINT

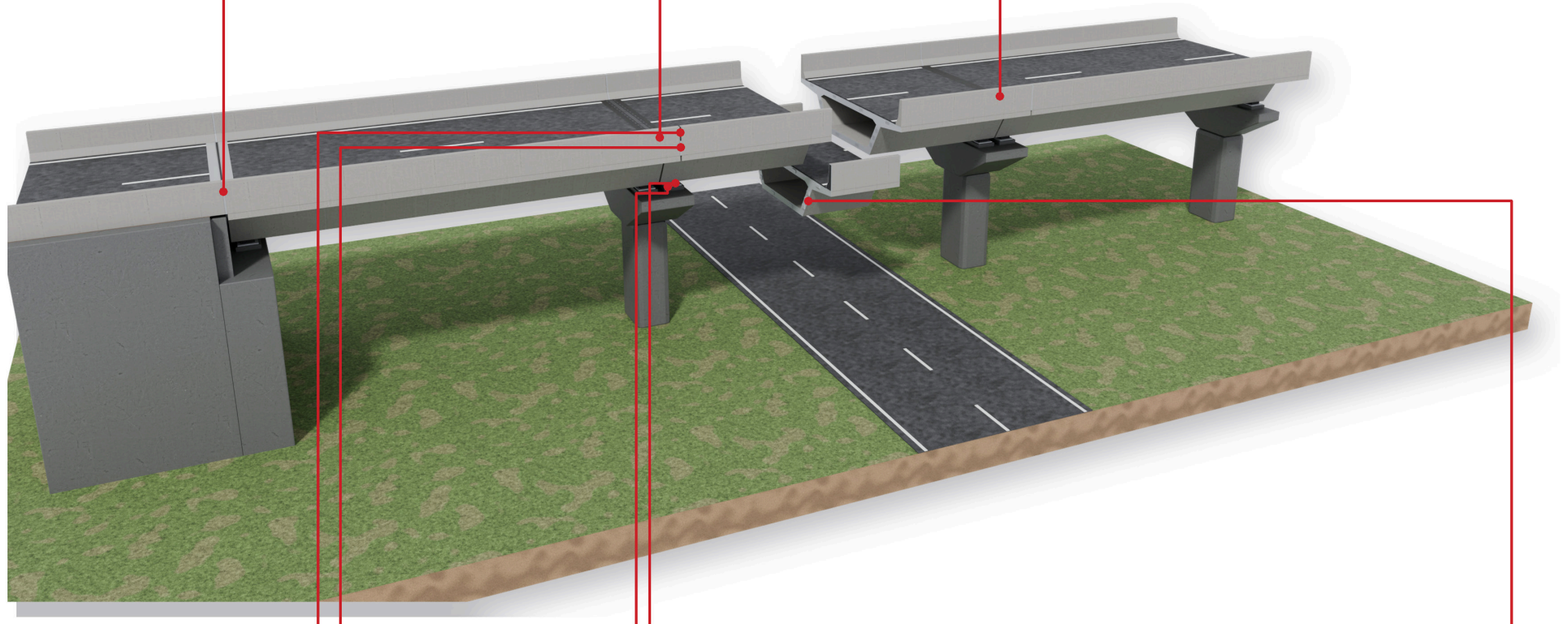
Steel-reinforced elastomer modules (RJ 80 shown) bolted to the deck, with UNISEAL® AP77 nosings both sides.



PIER 2 – EXPANSION JOINT

UNISEAL® AP77 ASPHALTIC PLUG

Polymer-modified binder and single-size aggregate over a steel bridging plate, flush with the asphalt. For small movements.





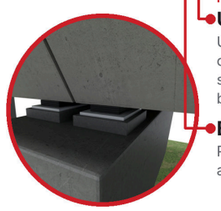
PARAPET JOINT

UNIFLEX® PE FILLERBOARD

Cut to the parapet profile, full height, over the deck joint.

UNISEAL® PU SEALANT

Traffic face, top and back, over the fillerboard (primed). Shown part-applied.



PIER HEAD – BEARINGS

UNIJOINT RUBBER BEARING PAD

Under each web of the box girder, on the pier head and abutment shelf, in full contact with the bedding.

EPOXY MORTAR BEDDING

Placed level on the clean pedestal and cured before the pad is set.



SEGMENTAL JOINT

UNISTICK EA 1015

On both match-cast faces of every segment joint, keys fully filled; temporary stressing while it cures. (One segment shown lowered.)

LEGEND

- Precast segments / pier / abutment (by others)
- Asphalt surfacing (by others)
- UNIJOINT CL100 – steel edge beams
- UNIJOINT CL100 seal / RJ module / bearing pad
- CL100 nosing
- UNISEAL® AP77 plug joint / RJ nosing
- Epoxy mortar bedding
- UNISTICK EA 1015
- UNIFLEX® PE fillerboard
- UNISEAL® PU sealant

GENERAL NOTES (FOR GUIDANCE ONLY)

1. Typical joints shown together for illustration – not one design. A real bridge uses the joint type the bridge engineer specifies for each joint.
2. UNIJOINT CL100 at the abutment (UR-JT-04), RJ module joint with AP77 nosings at pier 1 (UR-JT-05), UNISEAL® AP77 plug at pier 2 (UR-SL-04).
3. UNIJOINT rubber bearing pads under each web on epoxy mortar bedding; keep a clear gap, no mortar bridging the pad (UR-JT-02).
4. UNISTICK EA 1015 on both match-cast faces, keys fully filled; temporary stressing while it cures (UR-SK-01).
5. Parapet joints over the deck joints: UNIFLEX® PE cut to the profile, UNISEAL® on the primed traffic face, top and back (see UR-SY-02 2D).
6. Sizes, movement ranges and bearing layout as per the bridge engineer and each product's TDS.

3D ILLUSTRATION – BRIDGE HIGHWAY JOINT SYSTEM

SEGMENTAL BOX-GIRDER VIADUCT – ONE SEGMENT SHOWN LOWERED – JOINT TYPES SHOWN TOGETHER FOR ILLUSTRATION – NOT TO SCALE

UNITY RELIANCE

UNITY RELIANCE (M) SDN BHD
135B, Jalan Kip 8, Kawasan Perindustrian Kepong,
52200 Kuala Lumpur, Malaysia
T: 03-6734 7941 | M: 010-785 1159
unityreliance88@gmail.com | www.unityreliance.com

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This drawing is a generic product illustration. It is NOT an engineering design and has not been prepared, checked or endorsed by a professional engineer. Unity Reliance (M) Sdn Bhd is a product supplier, not a design consultant. All sizes, bedding thickness, edge distances, reinforcement, dowels and installation details shall be designed, verified and approved by the project's qualified engineer. Unity Reliance (M) Sdn Bhd accepts no responsibility for structural design, site conditions, workmanship, or any loss or damage arising from the use of this drawing. Product supply is governed by the relevant TDS and terms of sale.

REVISIONS

REV	DATE	DESCRIPTION
0	07/11/26	FIRST ISSUE - 3D ILLUSTRATION

PRODUCT
UNIJOINT CL100 • UNIJOINT RJ • UNISEAL® AP77
UNIJOINT RUBBER BEARING PAD • EPOXY MORTAR
UNISTICK EA 1015 • UNIFLEX® PE • UNISEAL® PU

DRAWING TITLE
BRIDGE HIGHWAY JOINT SYSTEM
3D ILLUSTRATION

DRAWING NO.
UR-SY-02

REV
0

SCALE	SIZE	DATE	DRAWN
NTS	A3	07/11/26	UR

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NOT FOR CONSTRUCTION