

ROAD JOINTS

JEP EXPANSION JOINT

Data sheet n°: CV1-4



- Quick installation
- Robust

- 3 axis movement capacity
- Watertight

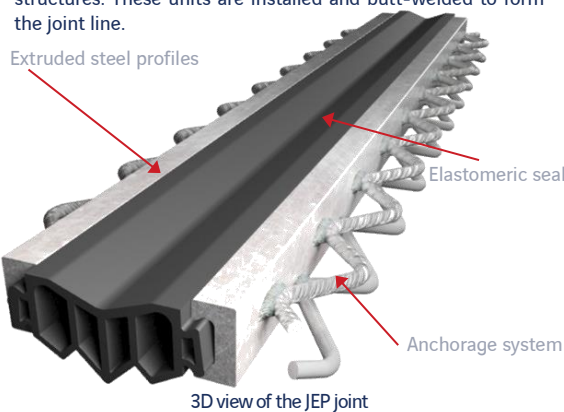
Introduction

Expansion joints for road bridges are used to ensure the continuity of the running surface and its load bearing capacity (safety and comfort of the users) while guaranteeing the structure freedom of movement.

Description

JEP joints belong to the nosing joint range and comprise two extruded steel profiles, supplied in 3.50-metre length and laid face-to-face. These sections maintain an extruded elastomeric seal preventing debris and water ingress.

The profiles are fitted with two wavy steel anchoring sections embedded in a resin mortar beam bonded to the main structures. These units are installed and butt-welded to form the joint line.



Applications

- Concrete, steel, and composite structures
- Slab, cable-stayed, suspension, lifting or tilting bridges
- New build or repair works

Advantages

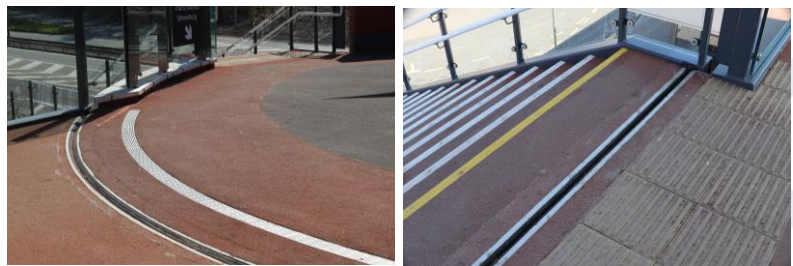
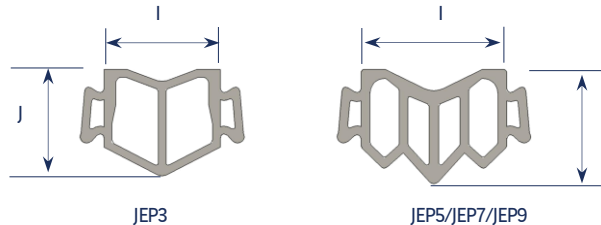
- **Easy to install:** the JEP joint is placed within the revetment thickness of the bridge. No need to create recesses, no need to add connectors to the main structures thanks to the adhesive property of the resin mortar
- **Ideal solution for specific issues:** replacement of existing joints, lane by lane installation, renovation work requiring very short traffic interruptions or when execution speed is of primary importance
- **Watertight** joint, due to the efficiency of the continuous elastomeric clamped seal
- **Three axis movement capacity:** the absence of saw teeth allows the JEP joint to move in the 3 degrees of freedom. Suitable for flexible deck, skew angle lines, structures on elastomeric bearings
- **Robust:** large steel profiles and very resistant mortar resin



JEP welded to an orthotropic deck (Rouen, France)

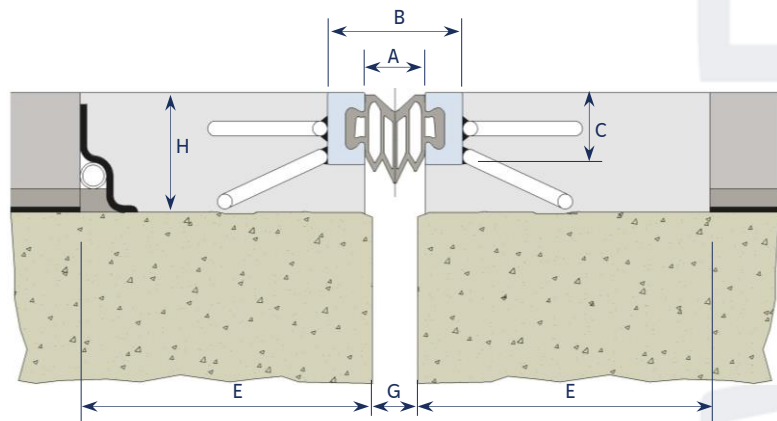
Models

The JEP joint is available for four ranges of movements. Only the elastomeric seal changes between these models:



Telford footbridge (UK)

General dimensions



Type	Movement capacity	A		B		C	G		E	H	I	J
		mini	maxi	mini	maxi		mini	maxi	mini	mini		
JEP3	30	20	50	70	100	48	10	40	140	80	60	55
JEP5	50	25	75	75	125	48	10	60	140	80	75	59
JEP7	70	25	95	75	145	48	10	80	140	80	95	59
JEP9	90	35	125	85	175	48	10	100	140	80	125	72

Dimensions in mm

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Installation

The JEP joint is installed on site by Freyssinet specialist teams. The JEP units are installed successively and butt-welded to form the joint line. They are tightly anchored to the main structure by wavy anchoring sections embedded in a resin mortar beam.

Installation is performed mainly after the revetment execution to guarantee a precise altimeter setting of the joint.

Phasing:

- Cutting and clearing of the revetment
- Installing and setting of the metallic elements and drain(s)
- Pouring of the resin mortar
- Removing of the installation arms and the spacing forms
- Positioning the elastomeric section.

The resin has been specially developed to absorb the impacts due to the traffic and to quickly achieve the necessary strength to handle the traffic.

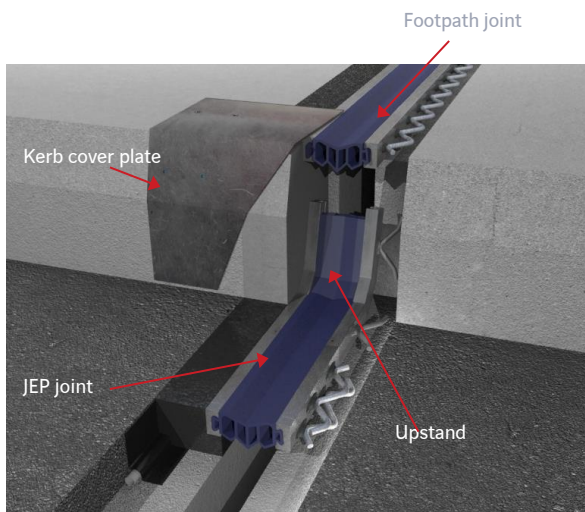


JEP footpath (Switzerland)

Add-ons

To ensure general expansion joint watertightness and joint continuity on footpaths (or non-traffic areas), the following accessories are available:

- Footpath joints
- End section upstands



Upstand detail



JEP joint installation on A1 Highway (France)

Global approach

- Specification and design services
- Manufacture by carefully selected partners
- Production supervision to ensure compliance with specifications defined
- Full installation / replacement or technical support
- Inspection and maintenance
- Certifications include ISO 9001, ISO 14001, ISO 45001