

ROAD JOINTS

N EXPANSION JOINT

Data sheet n°: CV1-2

- High shock absorption capacity
- Cost-effective
- Corrosion protection
- User comfort

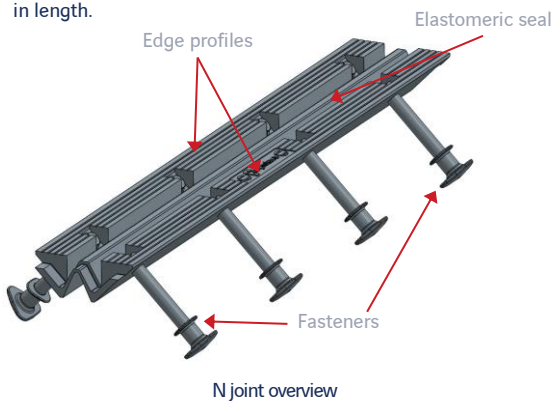
Introduction

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

N joint is part of our nosing joints range and comprises:

- Two edge elastomeric profiles anchored to the adjacent structures and connected by a flexible elastomeric seal which is not flush with the running surface of the road bridge.
- Metal inserts (steel or cast iron) embedded in the edge profiles provide the necessary mechanical strength for the joint.
- This assembly forms a single block system joint of 1 or 2 metres in length.



N joint overview

Applications

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

Advantages

- **High shock absorption capacity**, without equivalent in the nosing joints' category, owing to the flexibility and damping properties of the high-quality rubber implemented
- **Corrosion resistant**: metal parts are not directly subjected to chemical or corrosive attack
- **Cost-effective solution**, since N joint monolithic elements are produced by compression moulding, a technique which allows for high quality and competitive manufacturing costs.

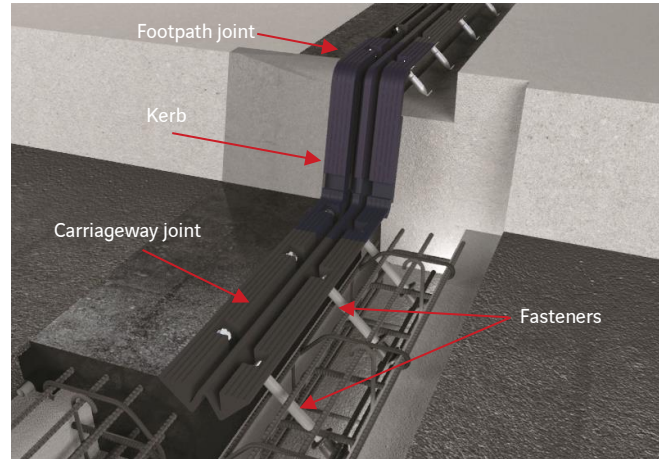
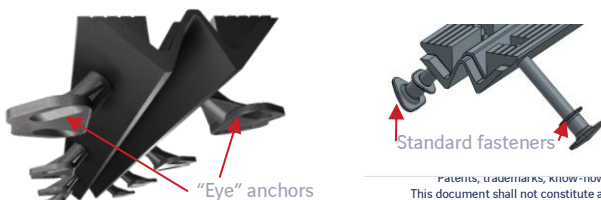
Models

The N joint is proposed in two versions:

- 2-m long profile with steel inserts and NR/SBR rubber coating
- 1-m long profile with cast iron inserts and CR rubber coating

Both types can be combined with two different fixing systems:

- Standard fasteners, consisting of long screws embedded in the concrete filling the rebates
- "Eye" anchors, allowing the N joint to be installed within the thickness of the running surface of the structure



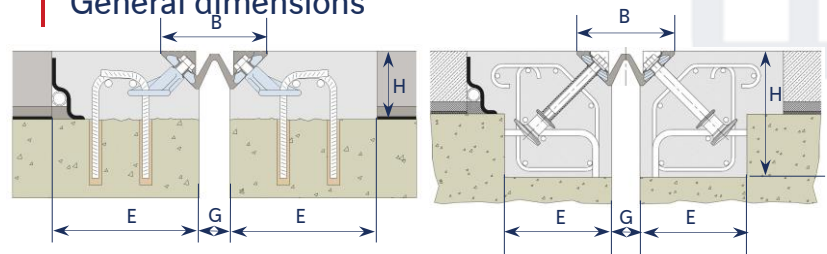
Movement range

The N joint is designed with a single movement capacity of 65 mm. For skew angles under 70 gr, the movement capacity is reduced. The table below shows the movement capacity of N joints depending on the skew angle of the main structure.

Type\skew angle	Straight 100 gr	90 gr	80 gr	70 gr	60 gr	50 gr
N65	65	65	68	52	40	33

Table 1: Capacity movement vs skew angle

General dimensions



N joint without rebate (left) | with rebate (right)

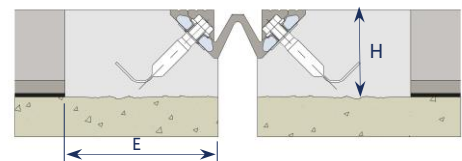
Type	B		G		E	H
	mini	maxi	mini	maxi	mini	mini
N65 with/without rebate	120	185	20	85	170	200/70

Table 2: General dimensions

Add-ons

To ensure overall waterproofing and joint continuity on footpaths (or non-traffic areas), the following add-ons are available:

- Footpath joints
- End-section upstands



The rebate dimensions for the footpath joint are: E x H=170 x 150 mm

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

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