

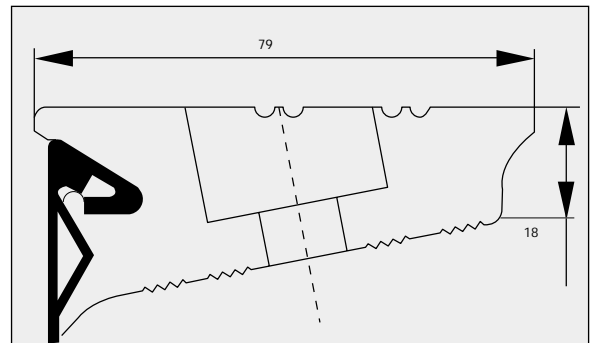
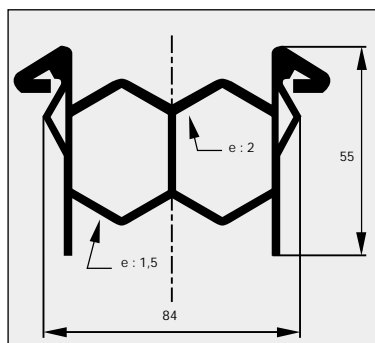
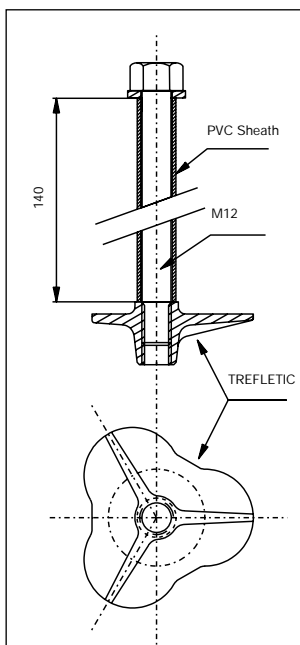
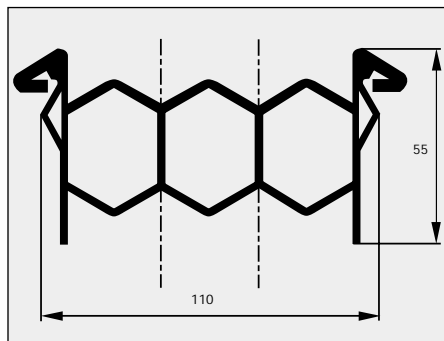


DESCRIPTION

The EJ 50 and EJX 80 joints are designed for movements of a structure which do not exceed 50 mm or 80 mm.

They are made of three main components:

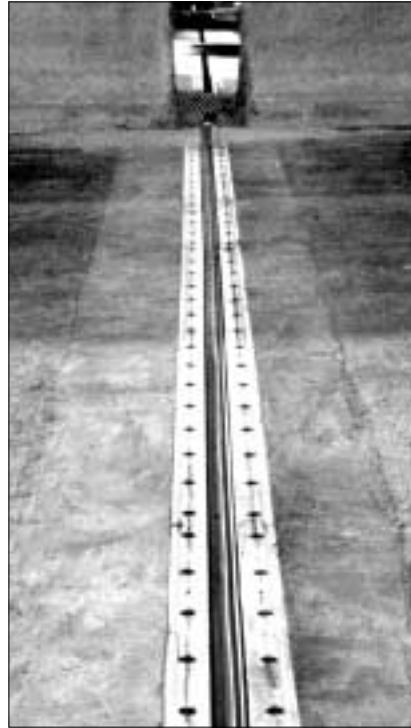
- **Metallic elements:** they are made of three meters long extruded aluminium elements.
- **Elastomeric profile:** it is inserted between the two metallic elements and it prevents any penetration of water or foreign bodies. It is locked into the aluminium element by means of a special key. It is removable.
- **Fixation:** the metallic elements are strongly fixed to the structure by means of five prestressed tie-bolts on each side. The posttensioning provides a permanent compression stress between the joints and the structure which is necessary to guarantee an excellent resistance against shocks and vibrations.





ADVANTAGES

- Very good comfort.
- No metal to metal contact which generates noises. No riveted or welded fixations.
- Very good resistance to the fatigue due to the fixation by prestressed tie-bolts.
- Possibility of absorbing vertical and seismic movements. Possibility of jacking the structure.
- Prevention of intrusion of foreign elements and water into the gap.
- Good resistance to the corrosion.
- No horizontal force between the two parts of the structure.
- Removability without destruction of the structure, in case of refection of the road surface.
- No maintenance.
- Good maniability thanks to the short and light elements.



JOINT CAPACITY 50 MM - 80 MM



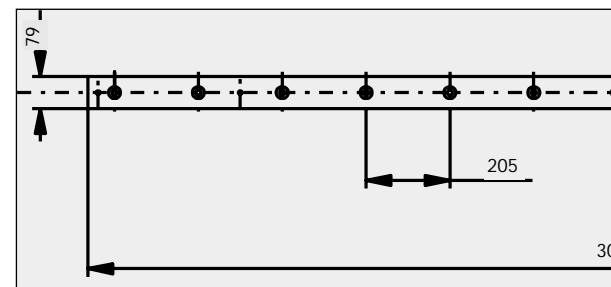
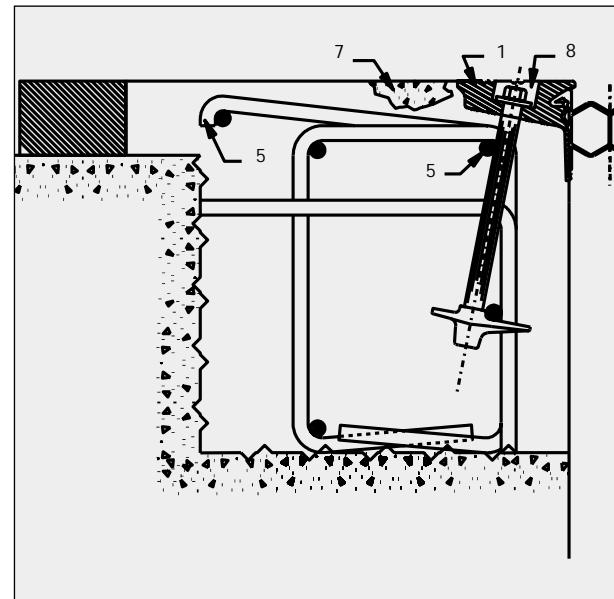
- ① Extruded aluminium element
- ② Elastomeric profile
- ③ Repartition anchor trefletic
- ④ Prestressed tie-bolt \varnothing 12 mm
- ⑤ Connexion bar with the structure
- ⑥ Existing reinforcement bars
- ⑦ Filling with concrete
- ⑧ Filling with bitumen

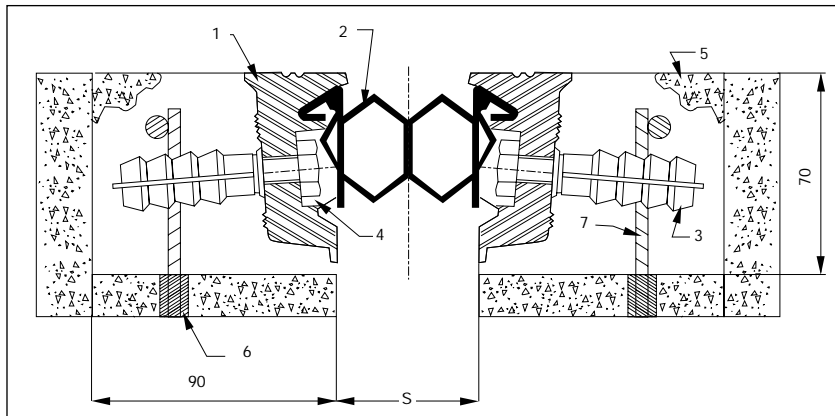
ETIC reserves the right to change any specification of the joints without prior notice.



ADDITIONAL DEVICES

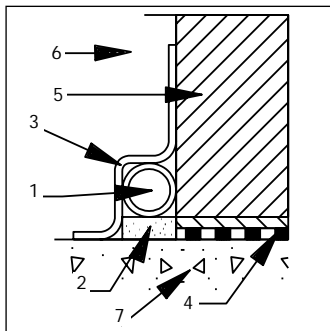
- DRAIN
- ① Drain (stainless steel) \varnothing 18 mm
 - ② Bitumen
 - ③ Waterproofing sheet
 - ④ Waterproofing complex of the bridge
 - ⑤ Asphalt
 - ⑥ Filling with concrete
 - ⑦ Structure concrete



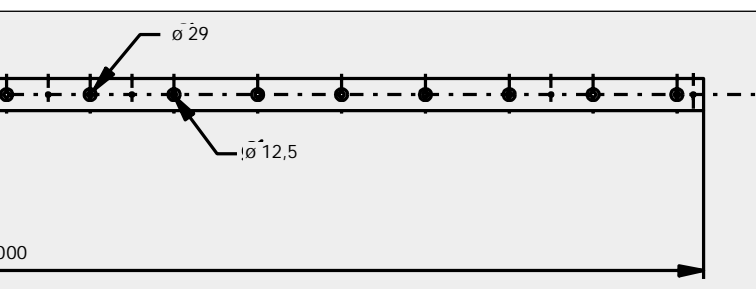
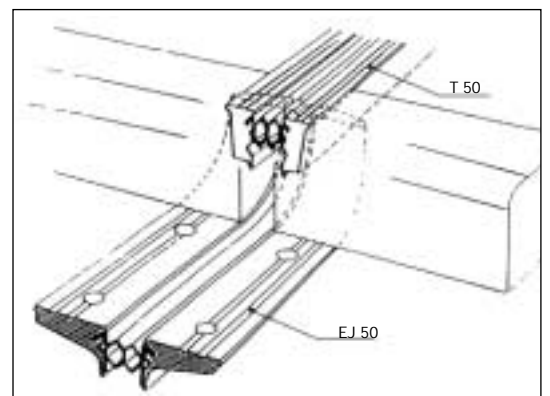
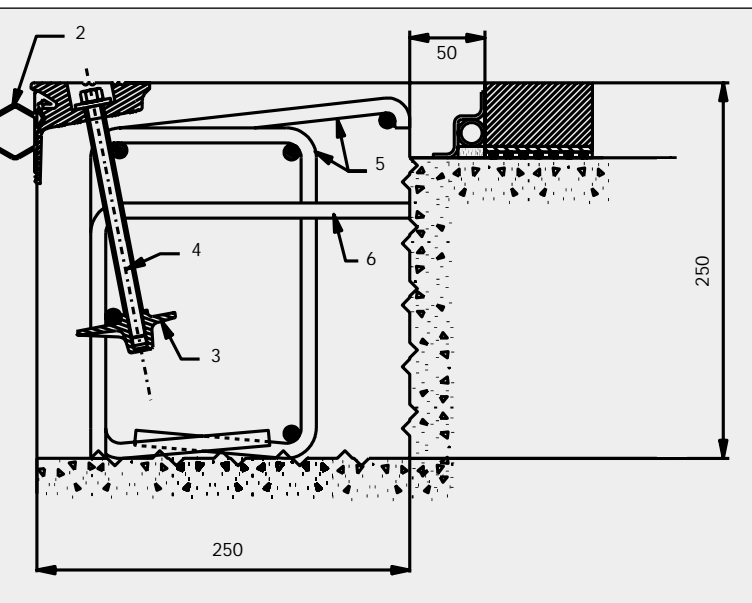


FOOTPATH JOINT

- ① Aluminium element
- ② Elastomeric profile
- ③ Plastirail anchor
- ④ Bolt
- ⑤ Concrete filling
- ⑥ Hole for reinforcement
- ⑦ Reinforcement bar



UPSTAND



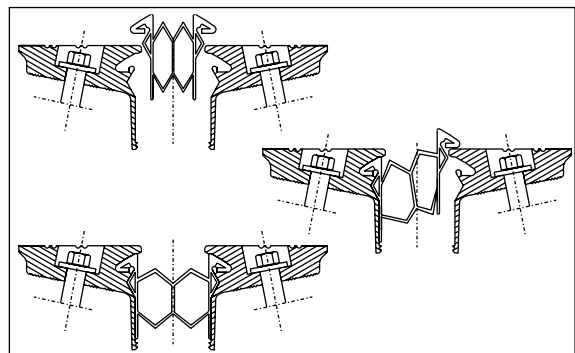
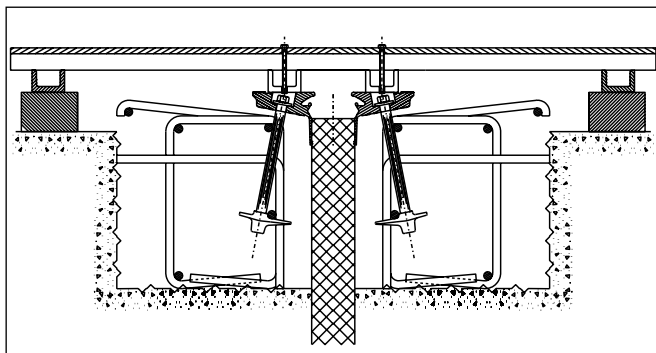
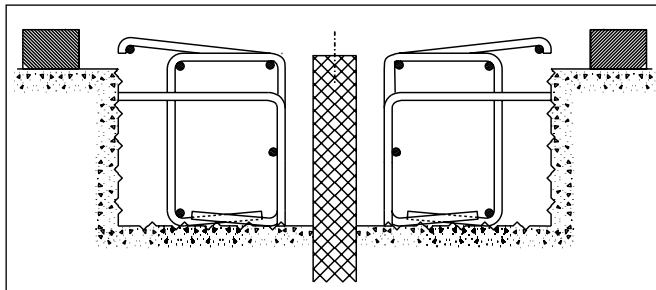
INSTALLATION

The EJ 50 and EJX 80 joints are installed in a recess. The following operations have to be performed:

- Cutting the road surface,
- Preparation of the concrete surface,
- Cleaning the recess,
- Installation of additional reinforcement,
- Installation and adjustment of the metallic elements by means of support brackets,



- Control of the gap between the metallic elements, according to the temperature,
- Concreting the recess,
- Installation of the elastomeric profile,
- Tensioning the tie-bolts by means of a torque wrench,
- Filling the tie-bolts head recess with bitumen.



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