



# MAXFLEX<sup>®</sup> XJS

## ELASTIC SEALING SYSTEM FOR EXPANSION JOINTS AND CRACKS

### DESCRIPTION

**MAXFLEX<sup>®</sup> XJS** is a sealing system consisted of a thermoplastic elastomeric strip (TPE) with two lateral fleece edges, which is fixed to the surface using an epoxy-based adhesive, **MAXEPOX<sup>®</sup> JOINT**, or a flexible cement-based mortar, **MAXSEAL<sup>®</sup> FLEX**, over expansion joints or cracks subjected to extreme movements or exposed to chemicals. It assures a watertight joint while allowing the movement of the treated element, for both interior and exterior applications.

### APPLICATIONS

- Waterproofing of expansion joints on walls, channels, tunnels, roofs and terraces, water reservoirs, sewage plants, tunnels, swimming pools, fountains, basements and foundations.
- Sealing and repair of wide and irregular joints subjected to big movements and expansions.
- Waterproofing of cracks and active fissures in concrete.
- Waterproofing of junctions and corner joints in bathrooms, changing rooms, etc.

### ADVANTAGES

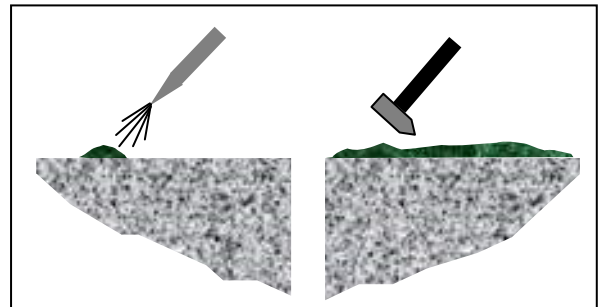
- Very high elasticity.
- Totally waterproof system for joints.
- Suitable for applications in permanent water immersion.
- Excellent adhesion to usual substrates and building materials used in construction.
- Does not require a dry substrate for fixing.
- Very good chemical resistance: salts, diluted acid and alkali solutions.

- Weather resistant. Withstands UV radiation and ozone.
- Very easy to apply. Applicable on damp or dry surfaces with **MAXSEAL<sup>®</sup> FLEX** or **MAXEPOX<sup>®</sup> JOINT**, respectively.
- Good resistance and permanently elastic, even at low temperatures.
- Complete water tightness.

### APPLICATIONS INSTRUCTIONS

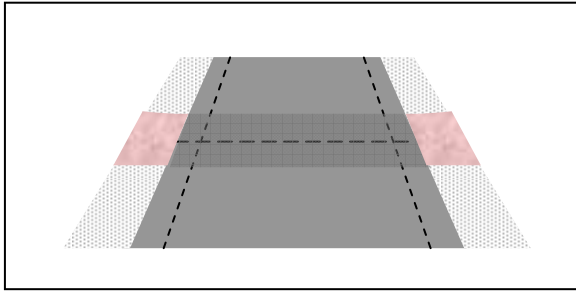
#### Surface preparation

Substrate must be clean, sound and free from any dust, rust, oil, greases or other materials, which could affect the adhesion of the elastic system. Remove laitance, casting skins, loose or cracked parts using brushes, grinders or sandblasting methods. Before the placement of **MAXFLEX<sup>®</sup> XJS**, all surface damages, such as defects, cavities, honeycombs, peggings, gravel pockets should be patched and filled with a repair mortar such as **MAXREST<sup>®</sup>** (Technical Bulletin nº2). Also deteriorated joint faces should be repaired prior to placement of **MAXFLEX<sup>®</sup> XJS**. When using an epoxy-based adhesive, substrate must be fully dry.



#### Strip preparation

Using a scissor cut **MAXFLEX<sup>®</sup> XJS** pieces to the specified length according to the work plan. Pre-assemble all strip joints, mitres, crossing or corners before the placement. Make sure that all fleece edges are dry if **MAXEPOX<sup>®</sup> JOINT** is used as adhesive material.



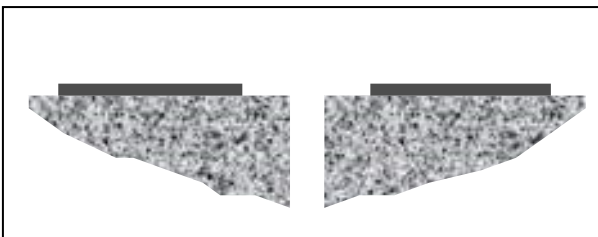
*Strip preparation*

**Application**

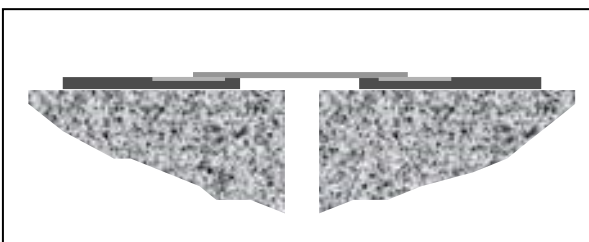
Depending on the type of substrate, the work conditions and the technical requirements, two different products can be used for fixing the TPE thermoplastic elastomeric strips.

**MAXEPOX® JOINT**, is an epoxy-based adhesive, (Technical Bulletin N°: 72), which requires a perfectly dry substrate to ensure a good bonding. **MAXSEAL® FLEX** (Technical Bulletin N°: 29) is a cement-based material, preferably the smooth version, which allows applications over wet substrates. This material provides enough adhesion to the majority of substrates (concrete, mortars, brick, etc...) in the usual working conditions and also supplies important material savings when compared to epoxy-based material.

*Application of the base bonding layer.* Independently of the adhesive material used, take into account the pot life of the product applied. Observe the instructions for mixing and application given in the respective technical bulletins.

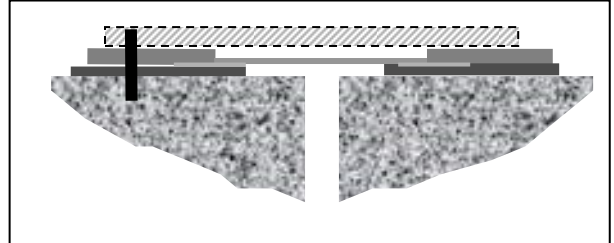


*Application of the base bonding layer*



*Placement of MAXFLEX® XJS on the base bonding layer*

Using a brush, roller or trowel, apply a base layer of bonding material on the prepared substrate along the joint or crack, on each side of the joint/crack (adhesive should be extend at least 4 mm past the edge of the white fabric) to a layer thickness of about 1,0-1,5 mm.



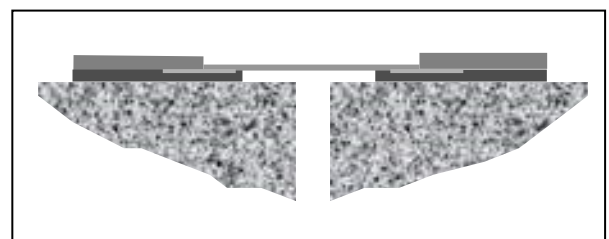
*Protection of MAXFLEX® XJS against mechanical damages with a metal sheet*

*Placement of the pieces.* Immediately after the base bonding layer application, the **MAXFLEX® XJS** pieces must be applied with the white fabric strips facing down, onto the adhesive material. Press firmly the white fabric with a trowel or hard roller in order to allow the adhesive impregnate the fabric strips.

**Application of the adhesive overcoat**

Using a brush, roller or trowel, apply the adhesive overcoat over the white fabric strips in a “wet on wet” application. These strips must be completely impregnated and covered with the adhesive (2-3 mm thick).

It is not necessary to cover the TPE thermoplastic elastomeric strip with the adhesive. On **MAXEPOX® JOINT** should be sanded with silica sand.



*Application of the adhesive overcoat*

*Mechanical protection.* Expansion area of **MAXFLEX® XJS** should be protected against mechanical damages in areas subjected to traffic with a stainless steel or metal sheet cover.

*Welding pieces.* When welding two different **MAXFLEX® XJS** pieces, a overlapping with a patch of at least 5 cm length is recommended.

Connections are made using a polychloroprene-based adhesive material or by heating means, i.e. hand welding tool. Patches for the overlapping areas are made from the elastic expansion area of **MAXFLEX® XJS**. Surface of these patches to be joined and lap areas must be clean, dry and free from grease or dust. If cleaning agents are used, allow drying out for 30 minutes. Site tests to verify welding techniques are advisable. For hot welding, avoid to scorch (smoke and discoloration of elastic part is noticed) or under heating with no weld forming. For solvent welding, apply the solvent in the lap and then, using a hard roller press down the lap until it gains enough strength.

### Application conditions

For bonding material, optimum application temperature range is between 5 and 25 °C. Do not apply below 5 °C or if lower temperatures are expected within the following 24 hours after application. Do not apply on frozen surfaces or if rain is expected 24 hours after application. Polychloroprene-based welding material is only for use above 10 °C and when relative humidity is not very high.

### Curing

Curing time required to put the product into service or to immerse it in water will depend on temperature and relative humidity conditions on site. When using **MAXSEAL® FLEX** as bonding material, it will require a minimum of 14 days, at 20 °C and 50 % R.H., to ensure that the product has cured enough to be in permanent contact with water. For the application with **MAXEPOX® JOINT** the curing time is 4-5 days. Applications made at lower temperatures or sites without ventilation will require longer curing periods.

### Cleaning.

All tools and equipment can be cleaned with water when the cement-based adhesive is used, or with **MAXEPOX® SOLVENT** if the adhesive is the epoxy-based one. Once it cures, material can only be removed by mechanical means.

## CONSUMPTION

Total consumption for **MAXEPOX® JOINT**, is about 0,7 to 0,8 kg/linear meter and for **MAXSEAL® FLEX**, is about 1,5 to 2,0 kg/linear meter. These figures may vary depending on substrate conditions. A preliminary test on-site will determine the coverage exactly

## PACKAGING

**MAXFLEX® XJS** is supplied in three different widths, in colour grey:

**MAXFLEX® XJS 120** of 120 mm wide in 50 m long rolls,

**MAXFLEX® XJS 140** of 140 mm wide in 30 m long rolls

**MAXFLEX® XJS 170** of 170 mm wide in 30 m long rolls

**MAXFLEX® XJS 220** of 220 mm wide in 30 m long rolls

**MAXFLEX® XJS 325** of 325 mm wide in 30 m long rolls.

## STORAGE

Twenty four months, in its original packaging, in a dry and covered place, protected from frost.

## IMPORTANT INDICATIONS

- **MAXFLEX® XJS** must not be exposed at temperatures exceeding 70 °C during long time periods.
- Do not apply on frozen or frosted surfaces.
- Prior to using other adhesives, check compatibility and suitability for these materials.

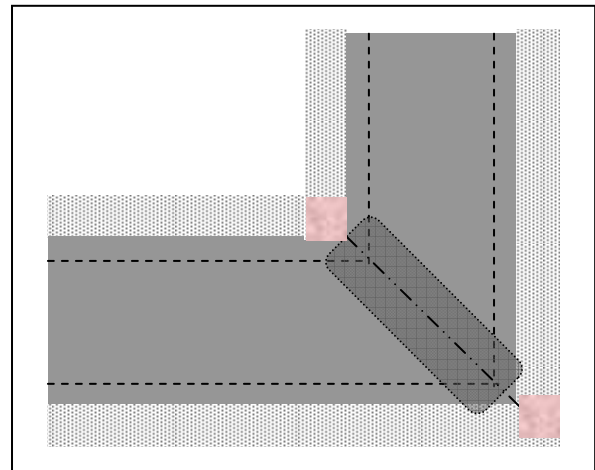
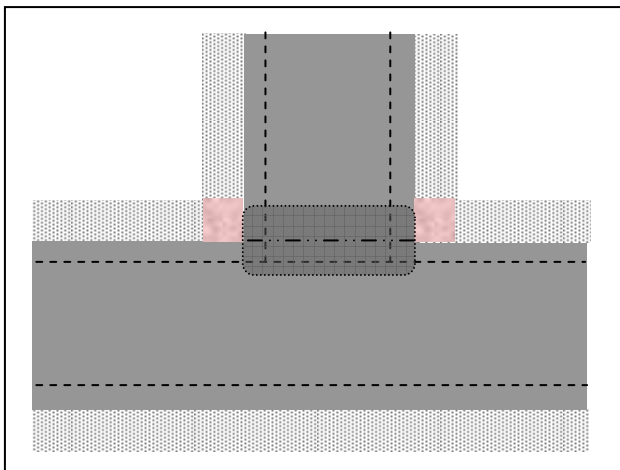
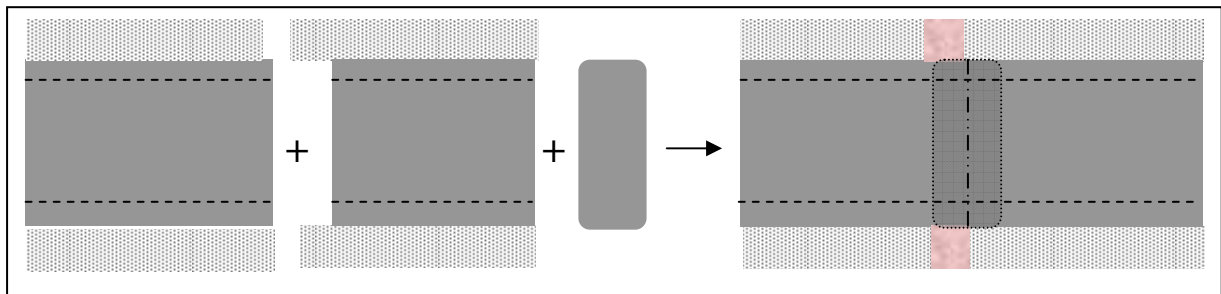
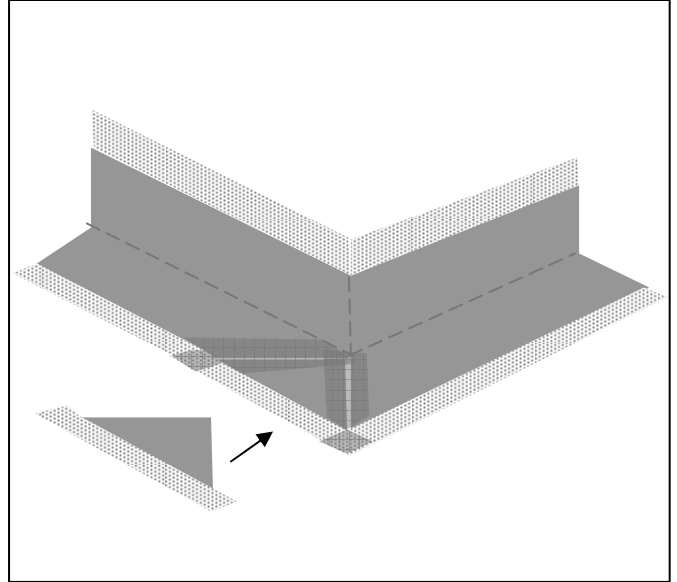
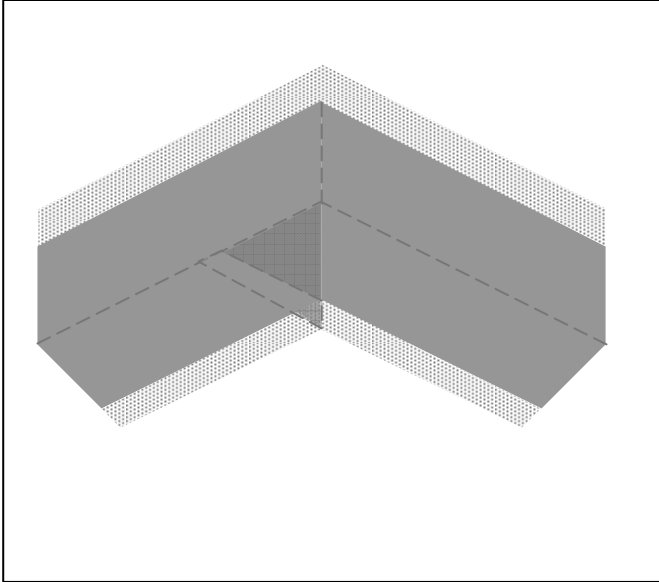
## SAFETY AND HEALTH

**MAXFLEX® XJS** is not a hazardous product, but the precautions indicated in the technical bulletins for the bonding materials used must be observed, as they are abrasive in their compositions.

Skin and eye contact must be avoided. Safety goggles and protective gloves must be used during application. In case of skin contact, wash affected areas with soap and water. In case of eye contact rinse thoroughly with clean water but do not rub. Consult a doctor if irritation continues.

Safety Data Sheet for **MAXFLEX® XJS**,  
**MAXSEAL® FLEX** or **MAXEPOX® JOINT** is  
available by request.

Disposal of the product and its empty packaging  
must be made by the final user and according to  
official regulations.



## TECHNICAL DATA

	MAXFLEX® XJS 120	MAXFLEX® XJS 140	MAXFLEX® XJS 170	MAXFLEX® XJS 220	MAXFLEX® XJS 325
<b>Product characteristics</b>					
Description	Thermoplastic Elastomer (TPE) strip with two white fabric edges				
Color	Gris				
Total/roll width, EN 1848-2 (mm)	120	140	170	220	325
Roll length, (m)	50	30	30	30	30
Width for elastic area, (mm)	70	95	120	155	230
Width usable for elastic area, (mm)	0	35	65	115	170
Thickness for elastic area, EN 1849-2 (mm)	0,5	1,2	1,2	1,2	1,2
Tensile strength, EN ISO 527-1 (MPa)	> 2	> 4,5	> 4,5	> 4,5	> 4,5
Elongation at break, EN ISO 527-1 (%)	350	> 450	650	650	650
Folding at low temperature, SIA V280/3 (°C)	- 30	- 30	- 30	- 30	- 30
Ozone resistance, DIN 53509, ISO 1431	Resistant				
Behaviour in water, SIA V280/13	Resistant				
UV radiation resistance, DIN 54001, ISO 105	Resistant				
Hot bitumen exposure, DIN 16726/5.19	Resistant				
Chemical resistance:					
- Salt water, diluted alkalies and acids, bitumen	Resistant				
- Mineral oils, petrol and solvents	Non resistant				
Suitability for contact with drinking water RD 140/2003	Suitable				

## GUARANTEE

The information contained in this leaflet is based on our experience and technical knowledge, obtained through laboratory testing and from bibliographic material. **DRIZORO®**, **S.A.U.** reserves the right to introduce changes without prior notice. Any use of this data beyond the purposes expressly specified in the leaflet will not be the Company's responsibility unless authorised by us. We shall not accept responsibility exceeding the value of the purchased product. The data shown on consumptions, measurement and yields are for guidance only and based on our experience. These data are subject to variation due to the specific atmospheric and jobsite conditions so reasonable variations from the data may be experienced. In order to know the real data, a test on the jobsite must be done, and it will be carried out under the client responsibility. We shall not accept responsibility exceeding the value of the purchased product. For any other doubt, consult our Technical Department. This version of bulletin replaces the previous one.



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