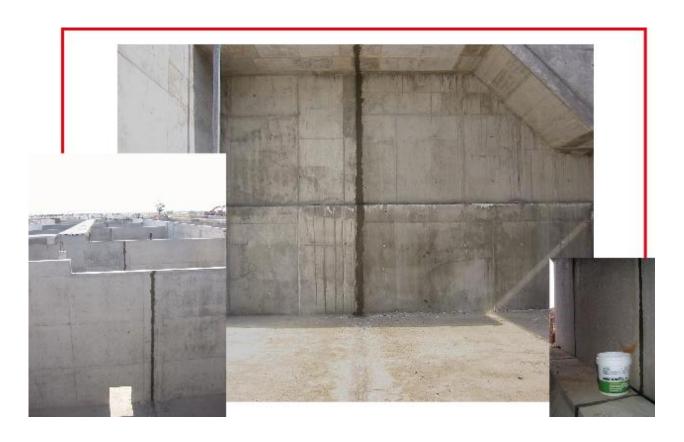




# ELASTIC MORTAR FOR SEALING JOINTS AND CRACKS SUBJECT TO MOVEMENT IN CONCRETE AND MASONRY



#### **DESCRIPTION**

MAXJOINT® ELASTIC is a two-component product. Component A is a liquid based on special synthetic resins. Component B, supplied in powder form, is a mortar based on a mixture of cements, additives, and special aggregates. When both components are mixed, an elastomeric product with high bond strength is achieved, suitable for sealing joints and cracks in concrete, pre-cast elements, mortars, and masonry.

#### **APPLICATION FIELDS**

- Sealing of joints between concrete precast structures.
- Joints in permanent immersion in pipelines, water reservoirs, water treatment plants, etc.
- Vertical joints in façades and building construction.
- Restoration of active cracks in concrete and masonry.
- Pointing mortar on substrates subject to movement.



#### **ADVANTAGES**

- Withstands a joint movement up to 15%.
- Very high weather resistance and durability. Maintenance-free.
- Excellent adhesion on damp surfaces: concrete, mortars, masonry, etc.
- Resistant to water or soils containing sulphates, wastewater, or marine water
- No bonding agent needed.
- Non-slump on vertical joints.
- Suitable for joints in permanent contact with drinking water.
- Easy to apply and finish.
- Non-toxic and non-flammable.
  Environmentally friendly.
- Can be painted once cured.

#### APPLICATION INSTRUCTIONS

#### Joint size

**MAXJOINT® ELASTIC** sealant can be applied when the minimum joint width is 8 mm, and the maximum is 30 mm. As a general rule, the depth of the joint will be approximately half the width, except where the width is less than 15 mm, in which case the depth and width will be equal.

Use the *MAXCEL*® closed-cell polyethylene joint backing rod (Technical Bulletin No. 48) with a diameter 25% greater than the joint width to limit the application depth and provide a suitable substrate for the placement and filling of the joint sealant. Similarly, the backing rod avoids that non-desirables stresses could appear by adherence for elastomeric sealant.

Before applying **MAXJOINT**® **ELASTIC**, dampen the surface with clean water, avoiding the formation of puddles, and then start the application once the surface acquires a matte appearance, if it is dry, proceed to saturate it with water again.

#### Surface preparation

The joint surfaces must be solid and clean, free of all traces of paint, efflorescence, loose particles, grease, form-stripping oils, dust, gypsum plaster or any coating which could affect the adhesion. If it could be necessary, a mechanical cleaning with air jet or with

solvents should be carried out to remove greases and oils.

**MAXJOINT® ELASTIC** has a very good adhesion on materials such as concrete or cement mortar without the need to use any primer. However, to improve adhesion on particularly porous surfaces, a Component A primer can be applied by brush. Apply the sealer once the water from the primer has evaporated and the primer still has a certain degree of stickiness; 30-120 min depending on environmental conditions. After this time or, if it is observed that the primer is dry, apply a new primer coat.

To avoid dirtying the substrate and provide a clean finish, it is recommended to cover and delimit the joint edges with a profiling adhesive tape before applying the primer and/or sealant.

#### Mixing

MAXJOINT® ELASTIC is supplied as two pre-weighed components. Pour the resin, component A, into a clean container and add the powder gradually, component B, while mixing with a low-speed mixing drill (400-600 rpm) fitted with a disc mixer, for about 2-3 minutes until achieving a homogeneous mixture free of lumps and thixotropic consistent. Avoid excessive mixing time and do not modify the proportions supplied between both components. Leave the mix to rest 5 minutes.

Depending on relative humidity and temperature, pot life can vary between 30-60 minutes approximately. If needed, re-mix again to keep its workability but do not add more water.

#### **Application**

While the surface is still wet, or primer is still tacky, apply *MAXJOINT*® *ELASTIC* into the joint by trowel, caulking gun, or putty knife. During the application, push against the bottom and edge joint to avoid internal air bubble. Wide joints will be executed in three phases, applying firstly the product over both joint edges and finally, a cordon in the middle. For smoothing the surface, soaped water can be used immediately after application.

#### **Application conditions**



Do not apply when rain, water contact, condensation or dew is expected within 24 h after application.

Optimum application temperature range is from 10°C to 30°C. Do not apply below 5°C or if lower temperatures are forecast within 24h after application. Do not apply onto frozen or frosted surfaces.

In the case of applications carried out at high temperatures, strong wind and/or low relative humidity, proceed to abundantly moisten the support with water. Avoid direct exposure to the sun with extreme heat for the application.

#### Curing

Avoid direct sunlight at very high temperature (>30°C) with strong in order to avoid a quick drying for **MAXJOINT**® **ELASTIC**, keeping its moisture curing at least the first 24 hours by protecting with wet burlaps and plastic sheets. Do not wet or apply curing agents.

**MAXJOINT® ELASTIC** can be coated by **MAXSEAL® FLEX**, **MAXELASTIC®** or **MAXSHEEN® ELASTIC**, after a curing time of 7 days.

For permanent immersion conditions uses, allow a curing time for 3 weeks (20°C and 50% R.H.). Lower temperatures, higher relative humidity and/or application in badly ventilated areas, a longer curing time is required.

Once **MAXJOINT**<sup>®</sup> **ELASTIC** is cured and before putting into permanent water contact, wash surface with water jet.

#### Cleaning

Tools must be cleaned with water immediately after application. Once the material hardens, it can only be removed by mechanical methods.

#### CONSUMPTION

Estimated consumption for **MAXJOINT® ELASTIC** depends on joint size:

Consumption (kg of sealant/lineal metre) = (1/790) x Width joint (mm) x Depth joint (mm)

This way, for a joint size of 10x10 mm, the estimated consumption is 0,125 kg of sealant per lineal metre of joint. One kg of *MAXJOINT*® *ELASTIC* fills a volume of 0,790 litres.

The coverage in lineal metres of joint for a 10 kg set of **MAXJOINT**<sup>®</sup> **ELASTIC** can be calculated through:

Coverage (lineal metre of joint/set) = 7.900x1/Width joint (mm)x1/Depth joint (mm)

Consumption figures may vary depending on porosity, texture and conditions for substrate, and application method. Perform a preliminary test on-site to ascertain the total consumption exactly under jobsite conditions

#### **IMPORTANT INDICATIONS**

- Do not use in joints with expected movement capability higher than 15%.
- Do not add cement, water, or aggregates to achieve higher coverage.
- Observe recommended consumption.
- Use the recommended mixing ratios.
- To retain its workability, remix the fresh mortar but never add more water. Mix and use. Do not mix more material that can be used in 20-30 minutes.
- Do not apply on water-repellent substrates, bituminous materials, or paints.
- Observe the recommended depth:width ratio.
- Avoid entrapment of air during the application of the elastomeric sealant.
- For sealing joints with a width greater than 3 cm, use the MAXFLEX® XJS elastic band.
- In the case of coating, wait for the complete curing of the product and use elastic coatings that minimize the appearance of unsightly cracks due to joint movement.
- For any application not specified in this Technical Bulletin, additional information, or doubts about the suitability of the water to be in contact with the coating, consult the Technical Department.



#### **PACKAGING**

**MAXJOINT® ELASTIC** is supplied in two-component pre-weight sets of 5 and 10 and, with a powder:resin ratio by weight of 1:1. Available in grey. On special request, also available in ivory, yellow, blue, tile, red, jade green, brown and black.



**STORAGE** 

Twelve months in its original unopened and undamaged sets. Store in a cool, dry place, and protected from humidity, frost, and direct exposure to the sunlight at temperatures above 5°C.

#### SAFETY AND HEALTH

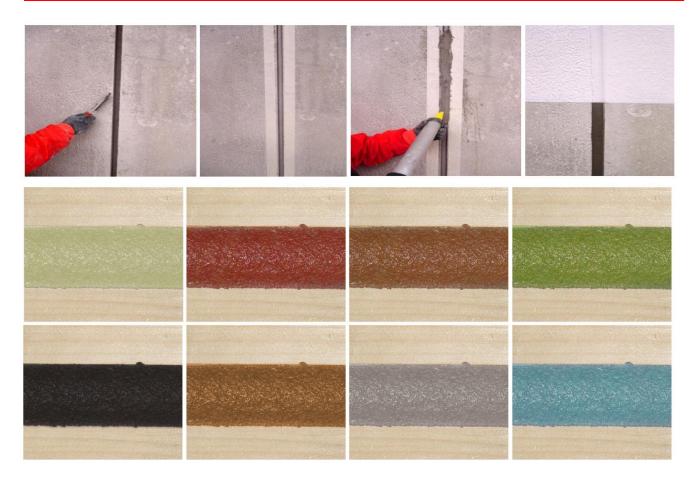
**MAXJOINT® ELASTIC** is a non-toxic product, but it is abrasive in its composition (Component B). Avoid direct contact with skin and eyes as well as the inhalation of dust. Use rubber gloves and safety goggles when handling, mixing, and applying the product. In case of contact with skin, wash affected area with soap and water. In case of contact with eyes, rinse immediately thoroughly with clean water but do not rub. If the irritation persists. medical seek assistance.

Consult the Material Safety Data Sheet for **MAXJOINT**® **ELASTIC**.

Disposal of the product and its packaging

should be carried out according to the current official regulations and it is the responsibility of the final user of the product.





#### **TECHNICAL DATA**

Product characteristics		
CE Marking, EN 15651-1		
Description: Elastomeric sealant for non-structural uses in façades, suitable for interior and exterior uses.		
Intended uses: Sealant for façade elements type F INT-EXT Class 7,5P.		
General appearance and colour for component A	Milky white liquid	
General appearance and colour for component B Grey powder		
Density for component A, (g/cm³) 1,00 ± 0,1		
Density for component B, (g/cm <sup>3</sup> ) 0,90 ± 0,10		
Maximum aggregate size for component B, (mm)	0,4	
Mixing ratio A:B, (by weight)	1:1	
Density for fresh mortar A+B, (g/cm³)	1,26 ± 0,10	
Application and curing conditions		
Minimum application temperature, (°C)	> 5	
Pot life at 20 °C & 50 % R.H., (min)	30 - 60	
Curing time at 20 °C & 50 % R.H.,		
- Coating with MAXSEAL® FLEX/MAXSHEEN® ELASTIC (weeks)	1	
- Permanent immersion conditions/flooding test (weeks)	3	
Cured product characteristics		
Density for cured product A+B, (g/cm <sup>3</sup> )	1,14 ± 0,10	
Shore A hardness, EN ISO 868	37	
Tensile strength, EN 28.339 (MPa)	0,38	
Secant modulus for elongation 60%, EN 28.339 (MPa)	0,38	
Elongation at break, EN 28339 (%)	60	
Elastic recovery after 1 h, EN 27.389 (%)	78	
Maximum service elongation, (%)	15	
Suitability for contact with potable water: European Directive 2002/72/CE	Suitable	



Joint size: Width x Depth (mm)	Consumption* (kg/lineal m)	Coverage (lineal m/Set)
10 x 10	0,125	79
15 x 7,5	0,140	71
20 x 10	0,250	40
25 x 12,5	0,400	25
30 x 15	0,570	17

(\*) Consumption may vary depending on porosity, texture and conditions for substrate, and application method. Perform a preliminary test on-site to ascertain the total consumption exactly under jobsite conditions

#### **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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