



MAXFLEX®

100 LM

LOW MODULUS ONE-COMPONENT POLYURETHANE-BASED JOINT SEALANT

DESCRIPTION

MAXFLEX® 100 LM is an one-component, polyurethane-based, elastomeric sealant. It cures at ambient temperature under the influence of the atmospheric humidity, providing a joint sealant with low elasticity modulus.

APPLICATION FIELDS

- Sealing of expansion joints in heavy and light pre-fabricated panels or pre-cast units, as well as sealing jobs in traditional masonry.
- Waterproofing of joints in façade panels, curtain walls, exterior glazing, etc.
- Sealing of joints between door and window frames, etc.

ADVANTAGES

- Low elasticity modulus and withstands joint movements up to 25 %.
- Fast curing, without shrinkage.
- Suitable for vertical uses.
- High resistance to UV and weathering.
- Odour free and non-corrosive material.
- Can be painted over, once it is fully cured and clean.
- Easy to use. One-component and ready to apply.

APPLICATION INSTRUCTIONS

Dimensions of joints

MAXFLEX® 100 LM sealant can be used for joints wherein the minimum and maximum width should be about 8 mm and 25 mm, respectively. For general proposes, depth of

the sealant should be about the half of the width of the joint, with the exception of under 15 mm joints, where depth and width must be equal. For expansion joints, width of joint should be four times than movement expected.

To seal deep joints, it is advisable to use a closed cell polyethylene backer rod, such as **MAXCEL®** (Technical Bulletin N.: 48) with a diameter 25% larger in diameter than the width of the joint. To maintain the sealant depth, install the backer-rod by compressing and rolling it into the joint gap. Do not prime the backer-rod.

Surface preparation

Surfaces of joint to be sealed must be structurally sound and clean, free of dust, coatings, efflorescences, oil, grease, gypsum or any foreign material that could affect to adhesion. Substrate should be provided with a slight roughness and dry. If necessary, cleaning with mechanical means such as grinding, sandblasting or wire brushing or with non-grease solvents can be used for removing greases and oils.

To prevent staining the edges of the joints and provide a better finish, it is advisable to place masking tape on either sides of the joint before applying the primer or the sealant.

Application

MAXFLEX® 100 LM cartridges and bags are ready to use using a caulking gun with a properly sized nozzle. Do not open product container until all previous jobs have been completed.

During application, press the nozzle against the edges of the joint and against the bottom to prevent air bubbles. For thin joints, sealant should be applied in a single pass from the

deepest point to the surface. In wider joints, it should be applied in three steps, the first two, on the edges of the joint and the third, filling in the centre.

MAXFLEX® 100 LM has a good adhesion over construction materials such as concrete, glass, aluminium, etc., without the need of using a primer. Nonetheless in order to improve the adhesion on both porous or non-porous surfaces, a priming of **PRIMER® 1** should be applied with a recommended coverage from 0,13 to 0,17 l/m² (Technical Bulletin N.: 68) using a bush. Apply sealant after primer has released the solvent but is still tacky, i.e. from 30 to 120 minute. Drying-time will vary depending on temperature and humidity. After this time or if it is noticed that primer is dry, a new coat of primer must be applied.

After application, in order to smooth over the surface, soapy water can be used. Sealant application is finished by removing the masking tape before starting the curing process for the product.

Application conditions

Do not apply with temperatures below 5 °C or if lower temperatures are expected during the 24 hours following the application of the sealant. Do not apply on frozen or frosted surfaces or when relative humidity for the air is higher than 90 %. Surface and air temperature must be at least 3 °C higher than dew point during the application and curing process.

Do not apply if rain is expected within 24 h after the application of the sealant.

Curing

MAXFLEX® 100 LM can be painted over once it has cured completely, allow a curing time of at least 3 days (at 20°C and 50% R.H.). Applications carried out at lower temperatures with high humidity or poor ventilation will require longer drying and curing times. Preferably use solvent-free elastic coatings (acrylic or vinyl dispersion paints) and make a previous test on-site.

Cleaning

Tools and equipments can be cleaned with **MAXSOLVENT®** immediately after use. Once the product hardens, it can only be removed by mechanical methods.

CONSUMPTION

The estimated consumption for **MAXFLEX® 100 LM** depends of joints and can be calculated from:

Consumption (ml of sealant/lineal metre of joint) = Width of the joint (mm) * Depth of the sealant (mm)

For a 10 x 10 mm joint, the estimated consumption is about 100 ml per 1 m length of joint. These figures may vary depending on the roughness, the surface conditions and the application procedure used. A preliminary test on-site will determine the coverage exactly.

Coverage for a 300 ml cartridge of **MAXFLEX® 100 LM** can be estimated form:

Coverage (lineal meters of joint/300 ml cartridge) = 300 * 1/Width of the joint (mm) * 1/Depth of the sealant (mm)

IMPORTANT INDICATIONS

- Do not apply with temperatures below 5°C.
- Use a suitable **DRIZORO®** primer with **MAXFLEX®** range sealants.
- Avoid trapping air in the joint during application of the sealant.
- Protect the sealed joints against contact with water or solvents, for at least 24 hours after application of the sealant.
- When a finish coating is required, observe the total curing time for the sealant and use a elastic coating which could absorbs the joint movement.
- For further information and other uses not specified in this Technical Bulletin, consult our Technical Department.

PACKAGING

MAXFLEX® 100 LM is supplied in 300 ml plastic cartridges and 600 ml plastic bag/sausages. It is available in dark grey, white, grey, brown and black.

STORAGE

Twelve months in its original unopened containers in a dry and covered place, with temperatures between 5 °C and 30 °C. Protect against direct sunlight and frost.

SAFETY AND HEALTH

MAXFLEX® 100 LM contains polyisocyanates susceptible of causing allergies. When applying the sealant do not work without the protection of rubber gloves. If the product

comes in contact with the eyes, rinse immediately with clean water without rubbing and seek medical assistance. In case of skin contact, wash with abundant water and soap. If ingested, seek immediate medical assistance. Do not induce vomiting.

For further information, Safety Data Sheet for **MAXFLEX® 100 LM** is available by request.

The final user must do disposal of the product and its empty containers according to official regulations.

TECHNICAL DATA

Characteristics of the product	
Density (g/cm ³)	1,3
Conditions for application and curing	
Temperature for application and curing (°C)	From +5 to +40
Skin over time at 23 °C and 50% R.H. (minutes)	60 – 100
Curing rate at 23 °C and 50% R.H. (mm/24 hours)	3
Characteristics for the cured product	
In-service joint movement (%)	25
Tensile strength (MPa)	0,4
Elastic modulus at 100 % (MPa)	0,46
Elongation at break (%)	80
Elastic recovery (%)	80
Shore A hardness	20
Service temperature range (°C)	From -20 to +80
Consumption	
Consumption* per 10x10 mm joint (ml of sealant/meter of joint)	100

(*)These figures may vary depending on the roughness and the surface conditions. A preliminary test on-site will determine the coverage exactly.

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.** 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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