DRIZORO® Construction Products

MAXFLEX® 100 HM

HIGH MODULUS ONE-COMPONENT POLYURETHANE-BASED JOINT SEALANT AND ADHESIVE

DESCRIPTION

MAXFLEX® 100 HM is an one-component, polyurethane-based, elastomeric sealant and adhesive. It cures at ambient temperature under the influence of the atmospheric humidity, providing a bonding with high elasticity modulus.

APPLICATION FIELDS

- Fixing of traditional and prefabricated roof tiles.
- Fixing of bases and footing, joint covers, etc.
- Fixing of wooden battens, friezes, etc., in interior renovation.
- Fixing of water-swelling profiles and other construction elements with a flexible bonding.

ADVANTAGES

- Very good adhesion over most common construction materials such as concrete, fired clay, earthenware, anodised aluminium, wood, without primer.
- Fast curing, without shrinkage
- 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

Surface preparation

Surfaces of joint to be bonded 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. Non-grease solvents can be used for removing greases and oils.

Application

MAXFLEX® 100 HM 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 surface to prevent air bubbles.

Apply ***MAXFLEX® 100 HM*** by spotting or stripping in 1 to 3 mm thickness. Fix the piece to be bonded by manually exerting enough pressure to flatten the spot or strip applied. If it were necessary, fix the piece so that it does not move during the first hours of polymerisation. The elements to be fixed whose weight exceeds 8 kg/m^2 must be supported for 8 - 15 hours.

MAXFLEX® 100 HM has a very 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 especially non-porous surfaces, i.e. metal surfaces, a priming of ***PRIMER 1*** should be applied with a recommended coverage from 0,13 to 0,17 l/m^2 (Technical Bulletin N.: 68) using a brush.

Apply the sealant after primer has released the solvent but it is still tacky, i.e. from 30 to 120. 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.

Application by double bonding: Apply enough ***MAXFLEX® 100 HM*** on the piece to be bonded and put it in contact with the substrate so that it becomes impregnated with the sealant-adhesive. Separate immediately and wait for about 25 minutes. Place again the piece finally over the substrate pressing firmly.

Application conditions
Do not apply with temperatures below 5 ºC 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 ºC higher than dew point during the application and curing process.
Do not apply if rain is expected within 24 hours after application.

Curing
MAXFLEX® 100 HM can be painted over once it has cured completely, allow a curing time of at least 3 days (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 of ***MAXFLEX® 100 HM*** for a 10 x 10 mm joint is about 100 ml per 1 m length of joint. This figure may vary depending on the roughness, the surface conditions and the application procedure used. A preliminary test on-site will determine the coverage exactly.

IMPORTANT INDICATIONS

- Do not apply with temperatures below 5 ºC.
- Avoid trapping air during application of the sealant.
- Protect the bonding areas against contact with water or solvents, for at least 24 hours after application of the sealant.
- For further information and other uses not specified in this Technical Bulletin, consult our Technical Department.

PACKAGING

MAXFLEX® 100 HM is supplied in 300 ml plastic cartridges and 600 ml plastic bag/sausages. It is available in 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 HM contains polyisocynates 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 HM*** 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)	45
Curing rate at 23 °C and 50% R.H. (mm/24 hours)	3,0
Open time, at 23°C and 50 % R.H. (minutes)	From 25 to 35
Characteristics for the cured product	
Elastic modulus at 100 % (MPa)	0,50
Elongation at break (%)	250
Elastic recovery (%)	> 70
Shore A hardness	50
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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