DRIZORO® Construction Products

MAXELASTIC®

EPD® CE
ENVIRONMENTAL PRODUCT DECLARATION

WATERPROOF ELASTIC SINGLE COMPONENT COATING FOR ALL TYPES OF ROOFS

DESCRIPTION

MAXELASTIC® is a waterproof elastic acrylic-based coating, specially formulated for all types of roofs. It is supplied in the form of a water-based, one-component thixotropic paste, ready to use. Once polymerised it is transformed into an UV-rays resistant and non-degradable elastomeric membrane, providing a crack-bridging, protective and 100% waterproof coating.

APPLICATIONS FIELDS

- Waterproofing, protection and decoration of all types of roofs, terraces, balconies, decks, facades, partition or vertical walls, in general.
- Bridging, sealing and waterproofing of hairline cracks, fissures, joints, junctions, (chimneys-tiles, floor-walls, etc.), and outstanding points subject to movements.
- Elastomeric protection against carbonation of concrete roof decks.
- Protection of polyurethane foam insulation from exposure to UV rays.
- Waterproofing and protection on tiles, metal plates, and fibre-cement boards.

ADVANTAGES

- Environmentally friendly: non-toxic, water-based, non-flammable and solvent-free product.

- Excellent elasticity and crack-bridging properties at both high and low temperatures. Forms a seamless continuous coating which does not need joints and accommodates movements due to settlements, vibrations or thermal movements from substrate.
- Excellent carbon dioxide diffusion barrier for concrete. Very high resistant to penetration of carbon dioxide, prevents the corrosion of rebars caused by carbonation process.
- Good adhesion on the most common substrates, filling and sealing pores and fissures without primers: concrete and masonry, cement mortars, bricks, porous tiles, metal surfaces, fibre-cement elements, plasterboards, wood, etc.
- Suitable for decorative finish. No maintenance is required. Available in 6 different colours.
- Maintains flexibility in a wide temperature range (-20°C to 90°C), expands and contracts along with the substrate to which it is applied.
- Ready to use and easy application manually (brush, roller, etc.) or mechanically by air-less spray equipments. Does not require skilled applicators. Cold applied.

APPLICATION INSTRUCTIONS

Surface preparation

Surface to be coated must be structurally sound, firm, without cement laitance and as uniform as possible, and preferably with a slight roughness, i.e. open textured surface. It must be dry, clean and free of paints, coatings, efflorescence, loose particles, grease, oils, curing agents, form release agents, dust, gypsum plasters, organic growth or any other contaminants that may affect to adhesion of the product.
If surface previously is coated with lime or acrylic treatments, etc., these should be removed, leaving only the remains strongly bounded.

For cleaning and preparing the substrate, preferably in case of the smooth and/or poorly absorbent substrates, use preferably sand blasting or high-pressure water cleaning methods, not being desirable aggressive mechanical means.

Before applying ***MAXELASTIC***®, all voids, holes, honeycombs, cavities, cold joints, tie holes, and static cracks without movement, once opened and routed to a minimum depth of 2 cm, must be repaired with the ***MAXREST***® (Technical Bulletin No. 2) structural repair mortar to provide an even surface.

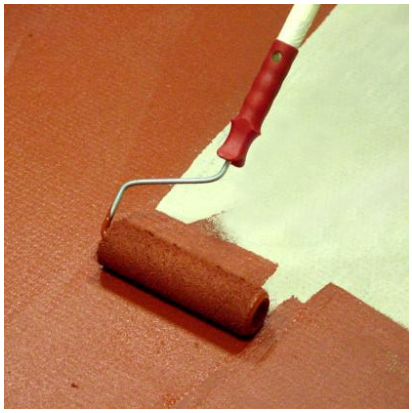
Rebars and other metal elements exposed during the substrate preparation should be cleaned and passivated with ***MAXREST***® ***PASSIVE*** (Technical Bulletin No. 12), while non-structural and surface iron elements must be cut to a depth of at least 2 cm and then covered with a suitable repair mortar.
Metal surfaces must be cleaned by sandblasting or shot blasting to remove all traces of corrosion or rust, and also must be degreased, dry and free of dust.

Application

MAXELASTIC® is supplied ready to use. Before application, stir the content of the packaging with a clean tool, or preferably by mechanical means such as a slow speed electric drill (300-400 rpm) fitted with a disc mixer until achieving a homogeneous product in colour and appearance. Do not mix for prolonged period nor use high-speed mixer, which may introduce air bubbles.

Work ***MAXELASTIC***® into the prepared substrate in order to fill all pores and small voids using a brush or roller. When using airless spray equipment, dilute with a sufficient but minimum amount of water to allow the easy application of the product.

Waterproofing and protection of concrete, mortar, metal surfaces and other substrates in general:
Apply ***MAXELASTIC***® in even and thick layer to provide a continuous and uniform coat; avoiding spread the product as if it were paint. Apply two coats at perpendicular directions with a recommended consumption from 1,0 to 1,5 kg/m^2 per coat, i.e., 2,0 to 3,0 kg/m^2 applied as two coats. Allow at least from 5 to 18 hours to dry, depending on environmental conditions and then apply the second coat until the required thickness is achieved.



On surfaces with high porosity and/or numerous cracks and fissures, apply a primer coat of ***MAXELASTIC®*** diluted with 20-30 % of water and then, two pure coats.

To reinforce the waterproofing membrane, apply a thick first coat of pure ***MAXELASTIC®*** with a consumption of 1,5 kg/m^2, and then spread the ***DRIZORO® MESH*** glass-fiber mesh (Technical Bulletin No. 210), into the fresh coating ensuring that mesh is completely embedded. Once it has dried (5-18 hours), apply a second coat of ***MAXELASTIC®*** with a consumption of 1,5 kg/m^2, directly over the top of the first reinforced coat. In case of large number of micro-cracks and/or movements, the whole area should be reinforced with the mesh.
Application on facades or vertical surfaces requires a first primer coat followed by two pure coats with a recommended consumption of 0,7 kg/m^2 per coat, i.e. a total consumption of 2,0 kg/m^2.

Waterproofing of roofs according to ETAG 005:
Apply two coats with a total consumption of 3,0 kg/m^2.

Junctions and other outstanding points:
Apply a thick pure coat of ***MAXELASTIC®*** with a consumption of 1,5 kg/m^2 and then spread a 10-20 cm wide strip of the ***DRIZORO® MESH 58*** glass fibre mesh into the fresh coating ensuring that mesh is completely embedded. Once it has dried (5-18 hours), apply a second coat of ***MAXELASTIC®*** with a consumption of 1,5 kg/m^2 directly over the top of the first reinforced coat. Both the elasticity of the product and the mesh will allow the joint to move without cracking the waterproof coating.

Active cracks and expansion joints:
Expansion joints or cracks subject to movements once opened up and clean, should be treated with a suitable elastomeric sealant from ***MAXFLEX®*** range. Optionally, once it has completely cured (4 days at 20°C), area may be coated following the procedure used for junctions and outstanding points.

Terraces and roofs subject to foot traffic or road traffic:
On a ***MAXELASTIC®*** waterproofing membrane reinforced with the ***DRIZORO® MESH 58*** fiber-glass mesh, apply a thick top layer of ***MAXELASTIC® STONE*** (Technical Bulletin No. 43) with a thickness from 2,0 to 3,0 mm, depending on the traffic expected to provide a protective course resistant to abrasion.

Application conditions
Do not apply when rain, contact with water, condensation, dampness and dew is expected within the first 24 h after application.
Do not apply with substrate and/or ambient temperature is at or below 5°C, or when are expected to fall below 5°C within 24 h after application. Do not apply to frozen or frost-covered surfaces.
Do not apply ***MAXELASTIC®*** above 90 % of relative humidity. Surface and ambient temperature must be at least 3°C higher than dew point.

Curing
Allow ***MAXELASTIC®*** to cure for at least 7 days at 20°C and 50 % R.H. before flooding tests. Lower temperatures and/or higher R.H. values increase the curing time.

Cleaning
All application tools must be cleaned immediately with water after use. Once product cures, this can only be removed by mechanical means.

CONSUMPTION

Waterproofing and protection of concrete, mortar, metal surfaces and other substrates in general:
Estimated consumption for ***MAXELASTIC®*** varies from 1,0 to 1,5 kg/m^2 per coat, i.e. a total consumption from 2,0 to 3,0 kg/m^2, applied into two coats.

Waterproofing of roofs according with ETAG 005:
Estimated consumption for ***MAXELASTIC***® is 1,5 kg/m^2 per coat, i.e. a total consumption of 3,0 kg/m^2, applied into two coats.

These figures are for guidance and 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 apply on substrates subject to raising damp or negative water pressure. Allow enough time for drying the substrate after rain, contact with water, damp, dew, condensation, etc, as well as after surface preparation.
- Allow new concrete and mortars a curing time of 28 days before application.
- Observe the recommended consumption per coat.
- Do not add solvents, thinners, additives, aggregates or other compounds.
- Do not apply on substrates vitrified or enamelled or treated with water repellent agents. Do not apply on bituminous materials, wood, plasters or paints.
- Not for immersion service. Do not apply under flooring, below-grade applications, on roofs with slopes of less than 2 % or situations wherein permanent contact with water such as planter boxes, green roofs, or areas wherein condensation or pools may occur.
- For other uses not specified in this Technical Bulletin, further information or questions regarding the application of the product, consult the Technical Department.

PACKAGING

MAXELASTIC® is supplied in 5 kg and 25 kg plastic drums. It is available in 6 different standard colours: white, grey, green, red, brick and black.

STORAGE

Twelve months in its unopened and undamaged original sealed packaging. Store in a cool, dry and covered place, protected from moisture, freezing and away from direct exposure to sunlight, at temperatures from 5°C to 35°C.

SAFETY AND HEALTH

MAXELASTIC® is not a toxic product but direct contact with skin and eyes must be avoided. 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 rib. If the irritation persists, seek medical assistance.

Consult the Material Safety Data Sheet for ***MAXELASTIC***®.

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.

MAXELASTIC®

TECHNICAL DATA

Product characteristics		
CE marking. ETAG-005. ETA-07/0242. *Description and Uses.* Liquid applied roof waterproofing kits, based on water dispersible polymers.		
General appearance and colour	One-component, coloured thixotropic paste	
Application and curing conditions		
Temperature / Relative Humidity, (ºC / %)	Ambient	Substrate
	> 5 / < 90	> 5 / ---
Waiting time between coats at 20°C, (h)	5-18	
Drying time at 20°C, (h)	24	
Total curing time at 20°C for flooding test, (d)	7	
Cured product characteristics		
External fire performance, UNE-EN 1187	Broof (t1)	
Reaction to fire, UNE-EN 13501 (Euroclass)	F	
Resistance to water vapour, UNE-EN 1931, μ	2.300	
Watertightness, TR-003	Watertight	
Adhesion to tile/concrete/overlapping, TR-004 (kPa)	811 / 1.216 / 1.232 (Suitable)	
Resistance to fatigue movements (-10°C, 500 cycles, W2) TR-008	Suitable	
Tensile strength and elongation at break, EN-ISO 527-3 (MPa / %)	5°C	40°C
	2,4 / 249	2,4 / 238
Classification according with ETAG 005		
Expected working life / Climatic zone of use	W2 (10 years) / S (Severe)	
User loads	P1	
Roofs slopes	S1 (< 5 %) - S4 (> 30 %)	
Minimum / Maximum surface temperatures	TL3 (-20°C) / TH4 (90°C)	
Thickness / Consumption*		
Dry film thickness per coat / total application, (mm)	0,5-0,75 / 1,0-1,5	
Consumption per coat / total application, (kg/m^2)	1,0-1,5 / 2,0-3,0	

* These figures are for guidance only and 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.

DRIZORO, S.A.U.
C/ Primavera 50-52 Parque Industrial Las Monjas
28850 TORREJON DE ARDOZ – MADRID (SPAIN)
Phone. +34 91 676 66 76 - +34 91 677 61 75
e-mail: info@drizoro.com Web site: drizoro.com