

Product

STARFLEX HR

cod. 6200 M100 / M300
9200 0000

**RAPID CURING PURE POLYUREA TWO-COMPONENT 100%
SOLIDS ELASTOMERIC**



Features

- Liquid applied product.
- Meets the requirements of standard 1504-2 for coatings: product for humidity control 2.2 (C), physical resistance 5.1 (C), chemical resistance 6.1 (C), increase in resistivity 8.2 (C)
- Fast Hardening with a very fast attainment of the final mechanical characteristics.
- Applicable also in vertical and ceiling.
- High elasticity, tenacity, resistance to puncturing, abrasion resistance and wear resistance with the ability of crack-bridging.
- Water impermeable, excellent chemical resistance and corrosion resistance.
- Substrate application temperature range: from -20°C a +40°C, dew point of > 5°C (in the absence of condensation).
- Operating temperatures from -40°C to +90°C on the air.

Application field

- Waterproofing of car parks.
- Waterproofing of bridges, viaducts, underground structures.
- Protection and waterproofing of hydraulic plants, pipes, and dams.
- Roof waterproofing for civil and industrial buildings.
- Seamless flexible system.
- Resistance against abrasion.
- Waterproofing for industrial plants, agriculture and petrochemical applications.

Application

PREPARATION

The substrate to be treated must be sound and free from contaminations and debris. Substrate must be with a minimum pull off strength of 1,5 MPa. After the preparation, apply the primer DUROGLASS P2 PRIMER or DUROGLASS P3 PRIMER, then take care to broadcast the substrate with suitable quartz grain size.

In case of crater formation (pinholes), the primer should be applied even in several coats in order to seal the substrate completely. Applying by trowel add to the mixed compound quartz 0.1-0.3 in size in a ratio of 1: 0.3 or 1: 0.5 in weight to A+B, and saturate (blinding) with quartz. The use of DUROGLASS P3 PRIMER and DUROGLASS P2 PRIMER is compatible with slightly damp substrates.

In the case of damp or counter-pressure substrates, first apply one or two coats of DUROGLASS FU BIANCO TIX or DUROGLASS FU RAPID according to the indications in the relative technical data sheets.

Application

The product can be applied exclusively by spraying devices (Proportional hot spray) with two-component airless pumping units, equipped with a mixing gun.

The necessary equipment must also include pre-heating the separate components at temperatures of at least 65-75 ° C. The best results are obtained with pressures of at least 190 - 210 Bar, material temperatures of 75 ° C with heated feeding pipes for the spray gun.

Application on the Metal: The STARFLEX HR can be used to protect iron substrate subjected to abrasion, because it must be clean and sandblasted at Sa 2 ½ level based on SSPC-SP10. For having corrosion resistance also on the steel substrate, we can apply two coats of DUROGLASS FF 4416 as a primer, then sprinkling of quartz with suitable granulometry, and then after 24 hours proceed with the application of STARFLEX HR.

Top coat

If the membrane has to be exposed to solar radiation, apply POLISTAR E / P or other in the available range of the approved UV resistant products, to the hardened substrate or in any case within 24 hours. The over coating has to be applied within 3-4 hours maximum after the application of STARFLEX HR.

In the case of damp substrates or back pressure apply one or two times DUROGLASS FU RAPID or DUROGLASS FU BIANCO TIX before, as it is written the related technical data sheet.

Technical Data

Color	Ral Chart (grey/red/green)
Density ISO 2811-1	1,10 ± 0,03 Kg/l
Viscosità 20°C	Component A 1.000 ± 200 mPa.s
UNI EN ISO 2555	Component B 1.250 ± 250 mPa.s
Pot life 22°C	3-4 seconds
UNI EN ISO 9514	
Mixing ratio	1 : 1 in volume 1 : 1 in weight
Dry contents	c.a. 99,8 %
UNI EN ISO 3251	
Theoretical consumption	2,2-4,4 Kg/m²
Theoretical thickness	2-4 mm

Hardening 22°C, 50% U.R.	-dry at touch 1 minutes -pedestrian passage 40 minutes -overapplication 80 minutes
Permeability to carbon dioxide EN 1062-6	R > 50 m
Permeability to water Vapour UNI ISO 7783-2	Class I
Capillary absorption and permeability to water UNI EN 1062-3	$w < 0,1 \text{ kg/m}^2 \cdot \text{h}^{0.5}$
UNI EN 1062-3 UNI EN ISO 6272	20Nm
Abrasion resistance UNI EN ISO 5470-1	Mola H22 1000 g 1000 giri : < 35 mg
Adhesion to concrete by pull-off test UNI EN 1542	> 3 MPa
Thermal shock resi- stance UNI EN 13687-05	> 3,3 MPa
Elongation at failure UNI EN 12311-2	> 300%
Tensile resistance UNI EN 12311-2	> 16 MPa
Failure resistance UNI EN 12310-2	> 12 KN/m
Hardness EN ISO 868	Shore D > 45 Shore A > 97
Crack bridging UNI EN 1062-7	Method B, dynamic: B1 (23); B2 (23); B3.1 (23); > B4.1 (23) Method A, static: A5 (23)
Ozone resistance UNI EN 1844	maximum
Chemical resistance EN 13529	Hydrocarbon mixer Acetic acid 10% Sulphuric acid 20% Sodium Hydroxide 20% Sodium chloride
Storage	The product in original sealed packs, that are stored in dry and protect area, at temperature from +5°C to +35°C, can be stored for 6 months.

CE		
1305		
MPM Srl - Via Adda, 15- 20090 Opera (MI)		
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1305-CPR-1222		
EN 1504-2	DoP 003	Product type 6200
moisture control product 2.2 (C) - physical resistance 5.1 (C) - chemical resistance 6.1 (C) - increased resistivity 8.2 (C)		
Permeability to CO ₂	R > 50 m	
Water vapour permeability	Class I	
Capillary absorption and permeability to water	< 0,1 kg/m ² · h ^{0.5}	
Adhesion force for direct traction	> 2,0 N/mm ²	
Crack resistance	A5 (23 °C)	
	> Classe B4.1	
Impact resistance	Class 3	
Thermal shock resistance	>2 N/mm ²	
Abrasion resistance	< 3000 mg	
Chemical attack resistance	CR4 (Class I & II), CR9 (Class I & II), CR10 (Class I & II), CR11 (Class I & II), CR12 (Class I & II),	
Dangerous substances releasing	The hardened product does not release dangerous substances	
Fire reaction	NPD	
Linear shrinkage	NPD	
Thermal expansion coefficient	NPD	
Oblique cut	NPD	
Thermal compatibility	NPD	
Chemical resistance	NPD	
Creep resistance	NPD	
Artificial atmospheric agents exposure	NPD	
Antistatic behavior	NPD	
Compression resistance	NPD	
Adhesion to humid concrete	NPD	

The data and prescriptions reported in this sheet, based on the best practical and laboratory experiences, are to be considered indicative in any case. Considering the different conditions of use, and the intervention of factors independent of MPM (substrate, environmental conditions, technical direction of installation, etc.), whoever intends to use it is required to establish whether the product is suitable for use or not. Our guaranteed obligation is limited to the quality and consistency of the finished product for the above data, only for technical data sheets accompanied by stamp and countersignature by the delegated staff of our headquarters. Furthermore, the customer is required to verify that these values are valid for the batch of product of his interest and are not exceeded and / replaced by subsequent editions and / or new formulations. The data contained may vary at any time without prior notice by MPM.