

Product

# STARFLEX HR-E

Cod. 6202 M100 / M300  
9202 0000



## HYBRID ELASTOMERIC POLYUREA MEMBRANE SOLVENT FREE.

Benefits

- The product fulfills 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).
- Ultra rapid, ultra resistant, ultra elastic.
- Applicable also in vertical and ceiling.
- Good resistance to chemical agents.
- Substrate application temperature range: from + 10 ° C to + 45 ° C.
- Operating temperatures from -35 ° C to + 85 ° C in the air.

Application fields

- Waterproofing of bridge, motorways, railways etc.
- Waterproofing of underground structures (foundations, masonry walls, etc.).
- Waterproofing of roofs.
- Waterproofing of roofs insulated with polyurethane foam.
- Waterproofing of decks and podiums.

Application

### SUBSRATE PREPARATION

Substrate to be treated must be free from debris and dust. Clean the substrate by either water jetting or air blowing and/or brushing. After having carried out the cleaning operations by applying DUROGLASS P3 as PRIMER, and 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 is compatible with slightly damp substrates.

In the case of damp 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.

### PRODUCT APPLICATION

The product can be applied exclusively by spraying devices (proportional hot spray) with two-components 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.

Once the substrate has been prepared and the extra quartz removed, spray the STARFLEX HR-E at a rate of 2.2 - 4.4 kg / m<sup>2</sup> for approx. 2 - 4 mm. thick.

The unprotected membrane, exposed to light, turns yellow and it's color will change.

### **FINISHING**

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.


### NOTES

There is a BroofT4 available version.

## Technical Data

<b>Color</b>	Ral (grey/red/green)
<b>Specific weight</b> <b>UNI EN ISO 2811-1</b>	1,1 ± 0,03 Kg/l
<b>Mixing ratio</b>	1: 1 in volume and in weight
<b>Viscosity at 20°C</b> <b>UNI EN ISO 2555</b>	Component A 2.000 ± 500 mPa.s Component B 1.250 ± 250 mPa.s
<b>Pot life 22°C</b> <b>UNI EN ISO 9514</b>	8-10 second
<b>Theoretical consumption</b>	2,2-4,4 Kg/m <sup>2</sup>
<b>Theoretical Thickness</b>	2-4 mm
<b>Dry contents</b> <b>UNI EN ISO 3251</b>	> 99,9 %
<b>Hardening at 22°C,</b> <b>50% U.R.</b>	dry to the touch 5 minuti walkable 20 minuti completely cured
<b>Permeability to carbon dioxide</b> <b>EN 1062-6 (method A)</b>	R> 50 m
<b>Permeability to water vapour</b> <b>EN ISO 7783-1</b>	Class I
<b>Capillary absorption and permeability to water</b> <b>UNI EN 1062-3</b>	w < 0,1 kg/m <sup>2</sup> · h <sup>0.5</sup>
<b>Direct traction resistance</b>	> 3,0 MPa

<b>UNI EN 1542</b>	
<b>Strike resistance</b> <b>UNI EN ISO 6272</b>	20Nm
<b>Wear resistance</b> <b>UNI EN ISO 5470-1</b>	< 40 mg (Mol H22 1000 g 1000 rounds)
<b>Crack bridging</b> <b>UNI EN 1062-7</b>	Method A, static: A5 (23° C) Method B, dynamic: B4.1 (23°C)
<b>Thermal shock resistance</b> <b>UNI EN 13687-05</b>	> 2,2 MPa
<b>Elongation to break point</b> <b>UNI EN 12311-2</b>	> 600 %
<b>Tensile strength</b> <b>UNI EN 12311-2</b>	> 14 MPa
<b>Hardness Shore A</b> <b>EN ISO 868</b>	> 75
<b>Flash point</b>	> 95°C
<b>Chemical resistance</b> <b>EN 13529</b>	Sulfuric acid 20%                      Classe I e II Sodium Hydroxide 20%                      Classe I e II Sodium chloride 20%                      Classe I e II Surfactants                                      Classe I e II
<b>Storage</b>	The product in the original sealed packages kept in a dry and protected place, at temperatures between + 5 ° C and + 35 ° C, can be kept for 6 months.

		
<b>1305</b>		
<b>MPM Srl - Via Adda, 15- 20090 Opera (MI)</b>		
<b>12</b>		
<b>1305-CPR-1222</b>		
<b>EN 1504-2</b>	<b>DoP 002</b>	<b>Product type 6202</b>
<b>Moisture control 2.2 (C) – Physical resistance 5.1 (C) -Chemical resistance 6.1 (C) - Increasing resistivity 8.2 (C)</b>		
Permeability to CO2	R > 50 m	
Permeability to water vapour	Classe I	
Capillary absorption and permeability to water	< 0,1 kg/m <sup>2</sup> x h <sup>0.5</sup>	
Direct traction resistance	> 2,0 N/mm <sup>2</sup>	
Crack bridging ability	A5 (23 °C) > Class B4.1	
Shock resistance	Class 3	
Thermal shock	> 2 N/mm <sup>2</sup>	
Abrasion resistance	< 3000 mg	
Chemical attack resistance	CR10 (Class I e II), CR11 (Class I e II), CR12 (Class I e II), CR14 (Class I e II),	
Release of dangerous substances	The hardened product does not release Dangerous substances	
Fire reaction	NPD	
Linear shrinkage	NPD	
Coefficient of thermal expansion	NPD	
Oblique shearing stress	NPD	
Thermal compatibility	NPD	
Chemical resistance	NPD	
Abrasion resistance	NPD	
Exposition to artificial weathering	NPD	
Antistatic features	NPD	
Compressive strength resistance	NPD	
Adhesion to green concrete	NPD	

CR10: Sulfuric acid (20%)

CR11: Sodium Hydroxide (20%)

CR12: Sodium chloride (20%)

CR14: Surfactants

The data and prescriptions contained in this schedule, based on the best practical and laboratory experiences, are to be considered in any case indicative. Given the different conditions of use, and the intervention of factors independent of MPM (support, environmental conditions, technical direction of application, etc.) those intending to use the product are held to establish whether it is suitable or not for the intended use. Our guarantee extends only to the quality and consistency of the finished product with the data given above, and only for technical schedules bearing the stamp and countersignature of the personnel delegated by our offices. The customer is further held to verify that these values are valid for the product batch concerning him and have not been updated and/or substituted by subsequent issues and/or new formulations. The data contained may vary at any moment without any obligation on the part of MPM to give prior notice.