

Class A5 crack bridging polyurethane waterproofing membrane at -20°C for spray applications of the systems MasterSeal Roof 2111, MasterSeal Traffic 2218, 2389 and MasterSeal 6811.

MATERIAL DESCRIPTION

MasterSeal M 811 is a continuous-type, instanthardening, high-performance polyurethane membrane applied by a sprayer equipped with a bimixer, with a catalysis ratio 1/1.





FIELDS OF APPLICATION

MasterSeal M 811 is specifically indicated for waterproofing of:

- roofing in accordance with the provisions of the MasterSeal Roof 2111 system;
- covered basins and tanks containing drinking water and white water in general as indicated in the specific MasterSeal 6811 system;
- concrete slabs that can be driven over according to the provisions of the specific MasterSeal Traffic 2218 and 2389 systems.

FEATURES AND BENEFITS

MasterSeal M 811 has the following peculiar characteristics:

- is characterized by extreme reactivity (polymerizes in a few seconds):
- not solvent-based;
- it has very high elastic characteristics and crack bridging ability even at very low temperatures: these properties allow the coating to remain intact through the cracks in the substrate;
- adheres monolithically to the substrate;
- has a very high impact resistance;
- complies with the principles defined in UNI EN 1504/2 ("Concrete surface protection systems") and the relative acceptance limits;
- fire reaction class Cfl-S1 UNI EN 13501-1;
- certified for contact with drinking water according to Ministerial Decree 174 6/4/2004 (Regulation concerning materials and objects that can be used in fixed systems for the collection, treatment, adduction and distribution of water intended for human consumption);
- anti-root certified, UNI CEN / TC 14416.

For specific technical characteristics, refer to the performance of the entire MasterSeal Roof 2111, MasterSeal 6811, MasterSeal Traffic 2218 and MasterSeal Traffic 2389 system.

In compliance with the European Regulation (EU No 305/2011 and EU No. 574/2014) the product is provided with the CE marking both according to UNI EN 1504-2 and





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UNI EN 13813 and the relative DoP (Declaration of Performance).

THEORICAL COVERAGE

 $2 - 2.5 \text{ kg/m}^2$.

PACKAGING

A: 210 kg can B: 220 kg can

STORAGE

Store the material in the original containers, in a dry and covered place at a temperature between 15 and 25°C. Do not expose to direct sunlight.



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Data for the application										
Mixing ratio			Weight 100 A: 106 B Volume 100 A: 100 B			Superficial hardness		Shore A > 80 Shore D > 30		
Density			A: 1,06 kg/litro B: 1,08 kg/litro A+B: 1,07 kg/litro			Glass transition temperature		- 45°C		
Viscosity at 20°C			A: 1700 mPa·s B: 1800 mPa·s			Recoating times		10°C: / 8 h 20°C: / 4 h 30°C: / 2		
Application pressure			130 - 180 bar			Complete hardening at 23°C			2 days	
Application temperature			Comp A 70 – 75 °C Comp B 70 – 75 °C			Consumption		2 – 2,5 kg/m²		
Gel time at 20°C			14 s			Packaging		A: 210 kg can B: 220 kg.can		
Technical infapplication of	g UNI EN 1504/2 (with a			an	Limits and classes		Performances			
Adhesion to	In the absence of thermal cycles			eles	UNI EN 1542 su supporto		> 0.8 MPa	> 0.8 MPa		
concrete	After 50 cycles of freezing and thawing with de-icing salts UNI EN 13687/1				MC (0,4 176		> 0.8 MPa		> 3.0 MPa	
Crack bridgin	EN 1062/7		Static		Class A ₁ ; A ₂ ; A ₃ ; A ₄ ; A ₅		Classe A ₅			
			Dynamic		Class B ₁ , B ₂ B _{3.1} B _{3.2} B _{4.1} B _{4.2}		Classe B _{4.2}			
Crack bridgin	EN 1062/7 S		Static		Class A ₁ ; A ₂ ; A ₃ ; A ₄ ; A ₅		Classe A ₅			
				Dynamic		0	Class B ₁ , B ₂ B _{3.1} B _{3.2} B _{4.1} B	3 _{4.2}	Classe B _{4.2}	
Permeability	Water vapor	UNI EN ISO 7783/1. Equivalent air thickness Sd, Sd = μ s, μ = coefficient Vapor diff., S = thickness					Class I: Sd <5 m (Permeable), Class II: Sd >5 and < 50 m, Class III: Sd> 50 m (Not Perm.)		Sd < 2,5 m (Classe I)	
	To CO ₂	of air So	1062/6. Equivalent thickness d, Sd = $\mu \cdot s$, μ = coeff. Diff. thickness				Sd > 50 m		Sd > 50 m	
	To water	For cap	illary absorption EN 1062/3				< 0,1 kg·m ⁻² ·h ^{-0,5}		0,01 kg·m ⁻² ·h ^{-0,5}	
Mechanical resistance	Impact		N ISO 6272				Class I: 4 N·m, Class II: 10 N·m, Class III: 20 N·m		Class III (without any damage)	
	Abrasion UNI EN ISO 5470/1 (load 1000 g wheel H22 / 1000 cycles)					g	Loss in weight < 3000 mg		< 200 mg	
UV resistance	Aging under artificial atmospheric agents (2000 hours of UV rays and condensation) UNI EN 1062/11						No swelling, cracks or flaking		No swelling, cracks or flaking (color change)	
					NI EN 13501-1		Classes A1fl, A2fl, Bfl, Cfl, Dfl, E1fl, F1fl; Smoke emission classes: S1, S2		C _{fl} -S ₁	
Technical data concerning the hydraulic pressure and the anti-root characteristics (referred to 2 mm)						Limits and classes		Performances		
Positive hydraulic pressure resistance UNI EN 12390/8						Guidelines Cons. Sup. LL.	PP	5 bar		
Resistance to negative hydraulic pressure UNI 8298/8						Average penetration <20 r	nm	2.5 bar		
Resistance to root penetration UNI CEN / TC 14416						Penetration. maximum <50	mm	No penetration		



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APPLICATION SHEET

For every detail relating to the application aspects, always refer to the specific document MasterSeal Roof Waterproofing Roofing Application Manual ".

TEMPERATURE

The application can take place when the ambient temperature is between + 5°C and + 40°C and always higher than 3 °C with respect to the dew point.

SPRAY APPLICATION

Use a specific spray pump equipped with a bimixer.

The machine keeps the two components separate and heated and allows them to be mixed only in the lance, given the extremely rapid polymerization of the material (10 seconds).

If the application is interrupted and resumed within the recoating time, directly overlap the membrane by at least 20 cm, otherwise overlap after applying the primer MasterSeal P 691, specific for "spray shots".

WARNINGS

MasterSeal M 811 changes color when exposed to UV rays. However, short-term exposure to UV rays does not compromise the durability of the intervention.

TOOL CLEANING

Clean tools immediately after use with P 200 thinner. Use a 1% sodium hypochlorite (bleach) solution in water. Leave to act for at least 30 minutes and a maximum of 60 minutes, then wash thoroughly with tap water.

In the case of heavily soiled surfaces, this process can be repeated a second time or higher concentrations of sodium hypochlorite (maximum 5%) can be used.

SAFETY INSTRUCTION

For information on the correct and safe use, transport, storage and disposal of the product, consult the most recent Safety Data Sheet.

OTHER SERVICES

For price analysis, specifications, supplementary brochures, references, reports and technical assistance, visit the website www.master-builders-solutions.com/it-it or contact infomac@mbcc-group.com.

Scan the QR code to visit the product page and download the latest version of this datasheet.





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Since 16/12/1992, Master Builders Solutions Italia Spa has been operating under a Certified Quality System compliant with the UNI EN ISO 9001 Standard. Furthermore, the Environmental Management System is certified according to the UNI EN ISO 14001 Standard and the Safety Management System is certified according to the UNI ISO 45001 Standard.

Master Builders Solutions Italia Spa

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This version supersedes all the previous ones.