

Continuous waterproofing system for walkable roofs, based on MasterSeal M 811 membrane for spray applications, Cool Roof certified, Broof-t2 UNI EN 13501/5, ETA 18/0296.

MATERIAL DESCRIPTION

The MasterSeal Roof 2111 system is divided, for an average thickness of 2-2.5 mm in:

- primer from the MasterSeal P and MasterTop P line: a specific primer is associated with each type of substrate;
- MasterSeal M 811 instant polymerization waterproofing membrane, applied using a sprayer equipped with a bimixer (ratio 1/1);
- elastic polyurethane finish (MasterSeal TC 259 (or MasterSeal TC 269 or MasterTop TC 471W), to give the system resistance to UV radiation, resistance to stagnant water, the desired color and solar reflectance properties.



FIELDS OF APPLICATION

MasterSeal Roof 2111 is ideal for waterproofing industrial, commercial, hospital, sloping roofs, inverted roofs, walkable terraces, garden terraces, horizontal walkable surfaces.

FEATURES AND BENEFITS

MasterSeal Roof 2111 has the following peculiar characteristics:

- is characterized by extreme reactivity (polymerizes in a few seconds);
- adheres monolithically to the substrate;
- can be applied to a variety of different substrates (reinforced concrete, bituminous sheath);
- has a very high resistance to shocks and abrasion;
- UV resistant;
- it has very high elastic characteristics and crack bridging ability;
- complies with the principles defined in UNI EN 1504/2 ("Concrete surface protection systems") and the relative acceptance limits;
- membrane with fire reaction class Cfl-S1 according to UNI EN 13501-1;
- Broof-t2 fire reaction class according to UNI EN 13501-5;
- UNI 10686 certified as an encapsulating system for type A asbestos cement according to Ministerial Decree 20/8/1999;
- "Cool Roof" certified;
- anti-root certified, UNI CEN / TC 14416
- ETA 18/0296 (liquid systems for waterproofing roofs).

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





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PACKAGING

Product	Pack	Kg
MasterTop P 604	Cans	30 (A+B)
MasterTop P 622	Cans	17,20 (A+B)
MasterSeal P 770	Cans	5 (A+B)
MasterTop P 686W	Cans	25 (A+B)
MasterSeal P 684	Cans	4,7
MasterSeal P 681	Cans	10 (A+B)
MasterSeal P 691	Cans	19,5
MasterSeal M 811	Cans	A: 210, B: 220
MasterSeal TC 259	Cans	12,5
MasterSeal TC 269	Cans	10 (A+B)
MasterTop TC 417W	Cans	10 (A+B)

STORAGE

Store the product in a sheltered, dry place at a temperature anywhere between +15 $^\circ C$ and +25 $^\circ C.$



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System Build	aterial		duct	Function	kg/m²
		MasterTop P 60 MasterSeal P 7		Primer for reinforced concrete	0,3-0,5
		MasterTop P 68	36W	Water-based primer for bituminous membrane	0,1-0,2
Primer		MasterSeal P 6	84	Primer for sheet metal	0,03-0,06
		MasterSeal P 6	81	Primer for steel	0,6-1
		MasterSeal P 6	91	Primer for filming and for bituminous sheath	0,05-0,15
Spray membr	ane	MasterSeal M 8		Membrane	2-2,5
		MasterSeal TC		One-component finish	0,4-0,5
Top Coat		MasterSeal TC	269	Two-component finish	0,3-0,4
		MasterTop TC 4	417W	Two-component water-based finish	0,2
Technical in application o		according UNI EN 1504	4/2 (with an	Limits and classes	Performances
	In the abse	ence of thermal cycles	UNI EN 1542	> 0.8 MPa	> 3.0 MPa
Adhesion to concrete	After 50 cycles of freezing and thawing with de-icing salts UNI EN 13687/1		su supporto MC (0,40) EN 1766	> 0.8 MPa	> 3.0 MPa
Crack bridgin	g ability at 2	3°C UNI EN 1062/7	Static	Class A1; A2; A3; A4; A5	Class A ₅
		Dynamic	Class B ₁ , B ₂ B _{3.1} B _{3.2} B _{4.1} B _{4.2}	Class B _{4.2}	
Crack bridging ability at -20°C UNI EN 1062/7		Static	Class A ₁ ; A ₂ ; A ₃ ; A ₄ ; A ₅	Class A ₅	
		Dynamic	Class B ₁ , B ₂ B _{3.1} B _{3.2} B _{4.1} B _{4.2}	Class B _{4.2}	
Permeability	Water vapor	NI EN ISO 7783/1. Equ thickness Sd, Sd = µ s Vapor diff. S = thickne	s, µ = coefficient	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	UNI EN 1062/6. Equiv of air Sd, Sd = $\mu \cdot s$, μ CO2, s = thickness	alent thickness	Sd > 50 m	Sd > 50 m
	To water	For capillary absorptio	n EN 1062/3	< 0,1 kg·m ⁻² ·h ^{-0,5}	0,01 kg⋅m ⁻² ⋅h ^{-0,5}
Mechanical resistance	Impact	UNI EN 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 (lo wheel H22 / 1000 cycl		Weight loose < 3000 mg	< 260 mg
UV resistance		er artificial atmospheric a V rays and condensation	agents (2000	No swelling, cracks or flaking	No swelling, cracks or flaking (color change)
Fire reaction class, UNI EN 13501-5			BRoof-t1, t2, t3, t4	B _{Roof} -t ₂	
Fire reaction class MasterSeal M811 UNI EN 13501-1		Fire reaction classes: A1fl, A2fl, Bfl, Cfl, Dfl, E1fl, F1fl; Smoke emission classes: S1, S2	C _{fl} -S ₁		
MasterSeal MasterSeal	TC 259 with TC 269 with	NI EN 13036/4 MasterTop F5 0.4 kg / ı MasterTop F5 0.4 kg / ı ith MasterTop F5 0.25 k	m²	Class III (wet test for external surfaces > 55 units)	Classe III



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In the event that the system with anti-slip characteristics is to be created, the consumption of MasterSeal TC 259, MasterSeal TC 269 and MasterTop TC 417 W must be increased by 0.2 kg / m2, the latter being made in two coats with interposed sowing of MasterTop quartz. F 5.

Technical data according to Cool Roof and UNI CEN / TC 14416 (referred to 2 mm)	Limits and classes	Performance
Solar Reflectance (MasterSeal Roof RAL 9010, 9003) Thermal emissivity (MasterSeal Roof RAL 9010, 9003),	R > 65%; E > 80%; SRI > 78%	R > 84%; E > 88%; SRI > 105%
Solar Reflectance Index (MasterSeal Roof RAL 9010, 9003)		



Resistance	to	root	No	No
penetration,	UNI	CEN /		
TC 14416			penetration	penetration

ETAG 18/0296 del 15/12/2020



European Technical Assessment	ETA 18/0296 of 15.12.2020	
General part		

Technical A	ssessment Body issuing the ETA: ITeC
	ing to Article 29 of Regulation (EU) No 305/2011 and is member sean Organisation for Technical Assessment)
Trade name of the construction product	MasterSeal Roof 2111
Product family to which the construction product belongs	Product Area Code: 03 Liquid applied roof waterproofing kit based on polyurethane.
Manufacturer	BASF Coatings GmbH
	372 Donnerschweer D-26126 Oldenburg Germany
Manufacturing plant(s)	BASF Coatings GmbH
	372 Donnerschweer D-26126 Oldenburg Germany
This European Technical Assessment contains	7 pages including 2 annexes which form an integral part of this assessment.
This European Technical Assessment is issued in accordance with Regulation (EU) 305/2011, on the basis of	EAD 030350-00-0402.
This ETA replaces	ETA 18/0298 issued on 02.09.2019.

According to this standard, MasterSeal Roof 2111 is a system of type W3, S, from P1 to P4, from S1 to S4, TL4-TH4 whose abbreviations mean:

• W: expected service life

Class	W1	W2	W3
expected service life	5	10	25



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S: climatic category

Class	М	S
Annual radiant exposure by horizontal surface and average temperature of the hottest month of the year	Moderate (5 GJ/m² T < 22°C)	Severe (5 GJ/m² T > 22°C)

S: Slope

Class	S1	S 2	S 3	S4
Slope %	< 5	5 - 10	10 - 30	>30

P: imposed loads of the roof

Class	P1	P2	P3	P4
load	low	Moderate	Normal	Special

TL: minimum bearable temperature

Class	TL1	TL2	TL3	TL4
°C	+5	-10	-20	-30

• TH: maximum bearable temperature

Class	TH1	TH2	TH3	TH4
°C	+30	+60	+80	+90

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

Via Vicinale delle Corti, 21 – 31100 Treviso – Italia T +39 0422 429200 F +39 0422 421802 www.master-builders-solutions.com/it-it e-mail: infomac@mbcc-group.com

APPLICATION SHEET

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

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 <u>www.master-builders-solutions.com/it-it</u> or contact <u>infomac@mbcc-group.com</u>.

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



For further information, please consult the local Technician of Master Builders Solutions. The technical advice on how to use our products, either written or verbally given, are based on the current state of our scientific and practical expertise, and does not imply the assumption of any guarantee and/or responsibility for the final results of works executed using our products.

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This version supersedes all the previous ones.