

## BETONSEAL MS 2.0

### Monocomponent sealant for waterproofing systems based on BETONGUAINA and BETONGUAINA.S

#### Description

BETONSEAL MS 2.0 is a solventless and isocyanate-free, one component and neutral sealant based on MS Polymer™, with low elastic modulus, fast cross-linking, high elasticity and excellent adhesion properties to many substrates, without any need to use a primer. Moreover, BETONSEAL MS 2.0 exhibits excellent UV and weather resistance, almost no shrinkage and permanent elasticity at temperatures ranging from -40°C to +100°C.

Due to its overcoatability features, it is specifically suited for sealing joints and for the realization of elastic coves to be coated, wet on wet, with BETONGUAINA and BETONGUAINA.S.

#### Where to Use





BETONSEAL MS 2.0 is used to make:

- flashings and gutters elastic coupling with the building structure consisting of the following materials:
  - sand and cement screeds primed with NORPHEN FONDO IGRO and copper, normal galvanized and prepainted metal sheets, all types of stainless steel, anodized aluminum degreased with BETONSEAL CLEANER;
  - sand and cement screeds treated with NORPHEN FONDO IGRO and rigid PVC treated with BETONSEAL PRIMER;
- elastic coves on terraces after treatment of the cement surfaces with NORPHEN FONDO IGRO;
- treatment of non-structural joints on terraces before laying BETONGUAINA or BETONGUAINA.S after treating both the crack and the breaking with NORPHEN FONDO IGRO and laying BRIGHT STONE PROFILE H;
- cracks waterproof "bridge" sealing on screeds to be coated with BETONGUAINA or BETONGUAINA.S treated with NORPHEN FONDO IGRO;
- exposed sealing of non structural-joints on tiles, both as a fractioning-joint and an expansion joint.

#### Application

BETONSEAL MS 2.0 adheres without a primer to many substrates provided they are clean and without dust, loose parts or grease. However, to certain substrates adhesion develops only performing the pre-treatments referred to in the table below:

	<i>Substrate</i>	<i>Surface treatment</i>
<b>POROUS MATERIALS</b>	cement	NORPHEN FONDO IGRO
	stoneware, clinker	(1)
	brick	NORPHEN FONDO IGRO
	untreated wood	NORPHEN FONDO IGRO
<b>METALS</b>	anodized aluminum	(1)
	aluminum	sand. / BETONSEAL PRIMER
	steel	(1)
	stainless steel	(1)
	galvanized metal sheet	sand. / BETONSEAL PRIMER
<b>PAINTED SURFACES</b>	painted metal sheet	sand. / BETONSEAL PRIMER
	painted aluminum	sand. / BETONSEAL PRIMER
	varnished wood	sand. / BETONSEAL PRIMER
	NORPHEN W3	NORPHEN FONDO IGRO
	NORPHEN SW SMALTO	(1)
	NORPHEN 200	(1)
	NORDPUR ESTERNI	(1)
	NORDPUR SW	(1)
<b>PLASTICS ELASTOMERS</b>	Rigid PVC	BETONSEAL PRIMER
	Plasticized PVC	(2)
	fiberglass	sanding
	methacrylate (Plexiglas)	(2)

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	polycarbonate	unusable surface
	PS and PU foam	(1)
	ABS	BETONSEAL PRIMER
	EPDM	unusable surface
	laminate	(1)
	BETONSEAL MS 2.0	(1)
	BETONGUAINA: BETONGUAINA.S:	BETONSEAL PRIMER

Notes: (1) use without primer/treatment. On metals, it is always recommended to clean by washing with BETONSEAL CLEANER. (2) limited use, to be tested prior to application.

#### How to use

- properly prepare the surface to be sealed;
- extrude BETONSEAL MS 2.0 with a professional spray gun ensuring the sealant is pushed towards joints side walls and against the substrate, facilitating adhesion;
- adjust the surface with an appropriate trowel or a small spatula within 10-15 minutes from extrusion.

**Do not use** on surfaces with a moisture content above 5% (measured with carbide hygrometer);

#### Tips on How to Create Joints

A properly made joint ensures the sealant maximum movement absorption capacity, and therefore a long-lasting and efficient sealing.

If joints are subject to movement, their size and shape must be compatible with the sealant elongation capacity: rectangular sections with lower depth values than width and grip on the side walls only, fully minimize any stress exerted to pull the substrates apart as well as tearing risks. It is advisable to insert FILTENE, an anti-adherent polyethylene foam joint filler, into the bottom of the joint for correct sizing of the section and to prevent the sealant from adhering to the bottom.

#### Special Warnings and Instructions

- Overpainting: may be carried out both with water-borne and solvent-borne products, as well as wet on wet or after polymerisation.
- Take into account that adhesion of the BETONGUAINA and BETONGUAINA.S waterproofing systems onto the sealant is enhanced by wet-on-wet application.
- Use ACETONE to clean off fresh smears of product.
- Hands should be washed with soap and water.

#### Specifications

Bulk Density,	g/cm <sup>3</sup>	1.48 ± 0.05
Shore Hardness, DIN 53505	A	20 ± 3
Elastic Modulus at 100%, ISO 8339	MPa	0.37 ± 0.05
Ultimate Elongation, ISO 8339	%	550 ± 50
Ultimate Tensile Strength, ISO 8339	MPa	0.58 ± 0.05
Resistance to Temperature	°C	from -40 to +100
Resistance to UV Rays	---	high
Tack Time	Min.	120 ± 40
Speed of Hardening through the Layer, at 20°C, 50% RH	mm/24h	2.5 ± 0.5
Application Temperature	°C	from +1 to +40
Water absorption, ASTM D 570-98	% p/p	+ 2.0 ± 0.6 + 1.2 ± 0.5 + 2.4 ± 0.5
2 h / 100°C		
24 h / 23°C		
7 days / 23°C		



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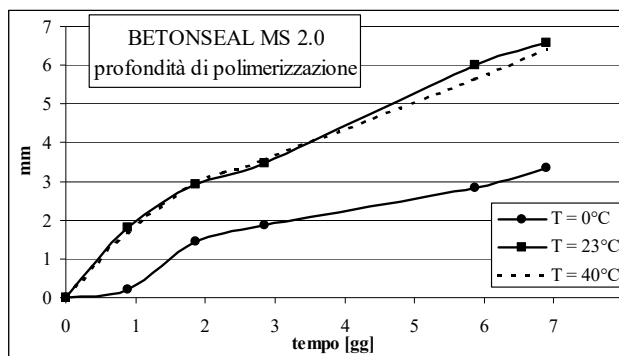
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	21 days / 23°C 5 weeks / 23°C		+ 4.4 ± 0.5 + 4.8 ± 0.5
Colours		---	white grey

Note: the test method is in accordance with the standard written to the side.

A graph is given below showing the polymerisation depth trend against time in relation to the temperature:



### Labelling, packaging and storage

Indication of danger	none
Packaging	290 ml cartridge in box of 24 pieces 600 ml bag in box of 20 pieces
Storage	12 months in a dry place between +5 and +25°C Storage for long periods at a temperature above 25°C shortens the product shelf life

### Legal notice

Tips on how to use our products match the current state of our knowledge and do not imply any assumption of responsibility or/and liability for the final result of works. Therefore, customers are not exempt from the responsibility to verify the suitability of products for use and final aims through preliminary tests. The website [www.nordresine.com](http://www.nordresine.com) contains the latest revision of this datasheet.

### Edition

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