MAPESIL STONE MATT

Neutral, mould-resistant silicone sealant with matt finish and very low emission level of volatile organic compounds (VOC) for stone and marble





WHERE TO USE

Mapesil Stone Matt is a solvent-free sealant with low modulus of elasticity, specifically formulated for sealing natural stone and porous materials in general, not subject to surface exudation or plasticisers migration from the sealant that could stain the surface it is applied on.

The chemical characteristics of the product also make it perfectly suitable for materials with low or no absorbency, such as metals, painted surfaces and glass.

The product generally has a good bond strength on these substrates also without primer (consult MAPEI Technical Services Department beforehand).

Mapesil Stone Matt, unlike traditional silicone sealants, features a matt surface finish after polymerisation, for a further aesthetic value in specific architectural works.

Thanks to its low modulus of elasticity, **Mapesil Stone Matt** is suitable for sealing expansion and fillet joints also in case of great movements both in interior and exterior, such as:

- Stone floors and coverings
- Rainscreens
- Prefabricated panels
- Fittings and wall openings
- Similar and/or different covering elements

TECHNICAL CHARACTERISTICS

Mapesil Stone Matt is a one-component, solvent-free, neutral-crosslinking silicone sealant in a thick paste, to be applied both on horizontal and vertical surfaces. The product can be easily smoothed and trimmed also in case of complex joints shapes.

Mapesil Stone Matt cures reacting to humidity in the air at environmental temperature, forming an adhesive and flexible final product.

Seals obtained with **Mapesil Stone Matt** do not alter over time, even when exposed to weather, industrial environments, thermal shocks or water; the seals remain flexible at a temperature from -40°C up to +200°C. **Mapesil Stone Matt** delays the formation of surface moulds if exposed to damp environments.

The resistance of **Mapesil Stone Matt** to chemicals is good; however, due to the variety of products and working conditions under which it can be used, it is necessay to carry out preliminary tests in cases of doubt. **Mapesil Stone Matt** bonds perfectly to most of the substrates used in building industry without the need for a primer (glass, ceramic, marble, aluminium, galvanized steel sheets, concrete, stainless steel, PVC). In case of prolonged immersion in water or severe mechanical stresses, apply **Primer FD** beforehand.



In case of doubt, please consult MAPEI Technical Services Department or carry out preliminary tests. **Mapesil Stone Matt** is particularly suitable for surfaces sensitive to acids on which conventional neutral or acid sealants normally provoke changes in colour or staining of the substrate.

Mapesil Stone Matt complies with EN 15651-1 norm ("Sealants for internal and external façade elements") with performance rating F-EXT-INT-CC, with EN 15651-2 norm ("Sealants for glazing") type G-CC, with EN 15651-3 norm ("Sealants for joints in sanitary areas") type XSI and EN 15651-4 norm ("Sealants for pedestrian walkaways") with performance rating PW-EXT-INT-CC.

ADVANTAGES

- Neutral cross-linking compatible with numerous building materials: flexibility of use.
- Matt colours: excellent aesthetic result.
- Does not stain or waterproof surfaces: aesthetics maintained over time.
- High viscosity: can be shaped and smoothed easily.
- Excellent resistance to atmospheric agents: long-lasting.
- High elasticity: absorbs large movements.
- Contains biocide: delays the formation of mould in damp environments.
- Free from MEKO (Methyl Ethyl Ket Oxime): no safety labeling required

RECOMMENDATIONS

- Do not apply **Mapesil Stone Matt** on rubber, heavily-plasticised plastics or bitumen. The oil and plasticising agents in the substrate may migrate to the surface and compromise the bond or penetrate into the sealant leading to a variation in colour and mechanical characteristics.
- Do not smooth **Mapesil Stone Matt** with wet tools or sealants smoothers, so that its natural matt finish is not affected.
- During reticulation Mapesil Stone Matt gives off a characteristic smell: if used in interior, always apply in suitably ventilated areas.
- Do not use Mapesil Stone Matt for sealing floors with high level of traffic (use more suitable products such as Mapeflex PU 45 FT, Mapeflex E-PU 21 SL, Mapeflex Xpress 80/400).
- In case of seals on natural stone do not use **Primer FD**.

APPLICATION PROCEDURE

All the surfaces to be sealed must be dry, sound and free of dust, crumbling parts, oil, grease, wax, old paint and rust.

To guarantee that the sealant works correctly, it needs to be free to expand and contract in the joint. Therefore, it Is necessary that:

- it only bonds perfectly to the side walls of the joint, and not to the bottom;
- the width of the joint is calculated correctly so that the product does not extend more than 25% of the initial width of the joint;
- the thickness of seals using Mapesil Stone Matt is as indicated in the following table.

Joint width (mm)	5	7.5	10	15	20	25	30	35	40
Depth of sealant (mm)	5	7.5	10	10	10	12.5	15	17.5	20
300 ml cartridge yield (linear metres)	12.0	5.3	3.0	2.0	1.5	1.0	0.7	0.5	0.4
pre-filler Mapefoam (Ø mm)	6	10	15	20	25	30	40	40	40

Also, to protect the substrate from staining, apply masking tape along the edges of the joint before extruding and smoothing **Mapesil Stone Matt**.

Regulate the depth of the joint to avoid **Mapesil Stone Matt** sticking to the bottom by inserting **Mapefoam** polyethylene foam cord in the joint.



Application of Primer FD

If a coat of **Primer FD** is required, apply the product with a small brush where required, leave it to dry for a few minutes so that the solvent evaporates and then apply **Mapesil Stone Matt**.

Application of Mapesil Stone Matt

Mapesil Stone Matt is available in 300 ml cartridges. Cut the tip of the cartridge near the thread and screw on the nozzle. Trim the tip of the nozzle at 45° according to the width of joint required and insert the cartridge into a suitable **Mapei Gun**.

Finish the surface of **Mapesil Stone Matt** with a dry suitable tool before the skin forms on the surface.

Polymerisation

When **Mapesil Stone Matt** is exposed to the air, the surrounding humidity sets off the cure reaction and the sealant becomes flexible.

The surrounding temperature only has a small impact on the cure rate of **Mapesil Stone Matt**, while the level of humidity in the surrounding air has the most influence. We highly recommend that the product is never applied if the temperature is below 0°C.

CLEANING

Traces of partially cured **Mapesil Stone Matt** may be removed from tools and the surface of the substrate with common solvents such as ethyl acetate or benzene. Once the product has completely cured, the sealant may only be removed mechanically.

PACKAGING

Mapesil Stone Matt is supplied in 300 ml catridges in the following colours in matt version: 100 white, 110 grey manhattan, 110 textured grey manhattan, 111 silver grey, 111 textured silver grey, 113 cement grey, 120 black, 130 jasmine beige, 130 textured jasmine beige, 132 beige 2000. The product is packed in 12 cartridge boxes.

STORAGE

Mapesil Stone Matt cartridges may be stored for up to 18 months in a dry, cool area at a temperature between +5°C and +25°C.

SAFETY INSTRUCTIONS FOR PREPARATION AND APPLICATION

Instructions for the safe use of our products can be found on the latest version of the Safety Data Sheet, available from our website www.mapei.com. PRODUCT FOR PROFESSIONAL USE

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Classification according to EN 15651-1:	F-EXT-INT-CC 25 LM
Classification according to EN 15651-2:	G-CC 25 LM
Classification according to EN 15651-3:	class XS1
Classification according to EN 15651-4:	PW-EXT-INT-CC 20 LM
Staining certification for absorbent substrates:	no staining according to ASTM C1248



Consistency:	highly thixotropic paste
Colour:	white (100), manhattan 2000 (110), manhattan 2000 textured (110 TEX), silver grey textured (111 TEX), cement grey (113), black (120), jasmine (130), jasmine textured (130 TEX), beige 2000 (132)
Density (ISO 1181) (g/cm³):	1.22
EMICODE:	EC1 Plus – very low emission

APPLICATION DATA (at +23°C - 50% R.H.)			
Application temperature:	from +5°C to +40°C		
Time to form surface skin:	10 minutes		
Reticulation rate from outside to the inside (mm): - 1 day:	2.5-3.0		

FINAL PERFORMANCE	
Tensile strength according to ISO 37 (N/mm²):	1.6
Elongation at failure according to ISO 37-1 (%):	500
Shore A hardness (ISO 868):	37
Modulus of elasticity at 100% according to ISO 37 (N/mm²):	0.4
Maximum movement allowed when in service (%):	25
Resistance to water:	excellent
Resistance to ageing:	excellent
Resistance to atmospheric agents:	excellent
Resistance to chemicals, acids and diluted alkalis:	good
Resistance to soap and detergents:	excellent
Resistance to solvents:	limited
Service temperature:	from -40°C to +200°C

COLOURS

Mapesil	Stone Matt	
100	WHITE	



110	MANHATTAN 2000	
113	CEMENT GREY	
120	BLACK	
130	JASMINE	
132	BEIGE 2000	

Textured colours





110 TEX 111 TEX

130 TEX

N.B.: Due to the printing processes involved, the colours should be taken as merely indicative of the shades of the actual product

WARNING

Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application; for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application. In every case, the user alone is fully responsible for any consequences deriving from the use of the product. **Please refer to the current version of the Technical Data Sheet, available from our website www.mapei.com**

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement or replace requirements per the TDS in force at the time of the MAPEI product installation.

The most up-to-date TDS can be downloaded from our website www.mapei.com. ANY ALTERATION TO THE WORDING OR REQUIREMENTS CONTAINED OR DERIVED FROM THIS TDS EXCLUDES THE RESPONSIBILITY OF MAPEI.



