

MM SUPPORT GUIDE & DATA SHEET

1. Product description

Mineral dry bagged masonry restoration repair mortar with hydraulic lime binders with special aggregates, fibres and additions.

2. General application and uses

MM-Stone-Support restoration mortars for building out badly eroded sections of natural stone, brick, granite, terracotta or cast masonry which is to be finished in one of the Masons Mortar Ltd family of **Surface Repair products**. Can be formulated to provide options for the specifier and applicator in terms of application thickness, strength and vapour permeability.

3. Material Properties Range (measured @ 30 days)

- Bulk Density 1500-1800g/Ltr.
- Water demand 5 – 5.5 Ltrs per 25KG
- Open time 60mins
- Compressive strength 5 / 10 /15N/mm²
- Modulus of Elasticity 3500-15000 MPa
- Shrinkage 76/0.87mm/M²
- Vapour permeability 0.5-0.8 gxm²xhx mmHg

4. Application instructions

Ambient and materials / surface temperature range to be within 5°C – 30°C
Out-with these ranges, consult our technical department.

5. Background / substrate preparation

- Cut back surface of defective masonry to a sound base using a toothed chisel. **MM-Stone-Support** should not be brought out to more than 10mm from the finished plane of the repair and should be measured from any tooling depth to maintain a water-proof permeable finish with Surface Repair Finish materials.
- All backgrounds must be free of salts, dust, loose or friable materials.
- Clean surfaces with mild grit blasting, pressure washing, and/or brushing with a stiff bristle brush.
- Dampen background, to control suction by pre-wetting if required.
- No standing-water, remove excess water with a sponge.
- Very low suction backgrounds may require an SBR addition – seek advice.

- **MM-Stone-Support** can bridge stable joints, but it is recommended that for all surface masonry repairs, the joint integrity is maintained.

6. Mixing

- For best results use hand-held drill or whisk type mixer. Mix dry powder into water gradually, start wet, work to drier consistency. Do not short mix; short mixing requires greater water content and will lead to bleed or shrinkage. Over mixing will weaken the material. Mix for 3-4 minutes with suitable mechanical means.
- If hand mixing, mix only small amounts and ensure the materials are properly mixed, usually around 4-5 minutes of vigorous mixing.
- The final mix should be sufficiently plastic for placing and should form a ball readily in the hand when turned over a few times. The stiffer the mortar the less slumping will occur, however there must be sufficient plasticity to form an intimate contact with the background.

7. Application (one or two coats)

- Apply as a single layer of not more than 25mm for the first application – can be applied in more than one pass and an initial thin tight coat is always preferable to ensure an intimate bond with the background, provided fresh mortar is applied directly to the thin tight coat, wet on wet.
- Cure according to instructions (see below), a further layer of 20mm may be applied not less than 7 days later on a properly cured sub-base.
- Do not overcoat any **MM-Stone-Support** which has not been properly cured for 7 days with either a second application of Support or with any of Masons Mortar Ltd family of **Surface Repair** Finishing Products.
- Finishing materials should be 10mm thick at the thinnest point to ensure a water-proof yet permeable repair. Do not apply any **Surface Repair** finishing products at more than the thickness of the **MM-Stone-Support** mortar final coat.
- Care should be exercised to ensure that **MM-Stone-Support** is as even in thickness as possible. Do not work to a feathered edge. **Never** use **MM-Stone-Support** where the thickness variation will result in the final Surface Repair finish being thicker than the last **MM-Stone-Support**. Always work with successively diminishing coat thickness.

8. Forming shapes (roughly) between layers

- Form with appropriate tools as the mortar takes its initial set, 4-8 hours depending on ambient conditions, (may be overnight in cool weather).
- Form approximate shapes with trowel edges, sculpting tools, or when firmer with sanding blocks, tungsten carbide abrasive sheet, scratch floats and the like can be done from 4 to 24 hours.
- All repairs should be overfilled and cut back, for the most accurate method of shaping, fibres will protrude more when **MM-Stone-Support** Products dry out.

- **Do not use with Masons Mortar Ltd Colour Packs** as this will affect the final strength and consequently the performance of **MM-Stone-Support**

9. **Consumption**

- 17-18KGs per M2 at 10mm thick.

10. **Clean up**

- Wash tools with clean water immediately after use.

11. **Curing**

- Keep mortar damp not wet for the first 24 hours under protective covers, allow to dry out naturally for not less than 7 full days. If the temperature falls below 5°C at any time within the first 24 hours, extend the curing time by a further 24 hours where the temperature is at or above 5°C This is to ensure the mortar achieves its proper final strength.
- Cure each application as above. **MM-Stone-Support** must not be over coated with any **Surface Repair Finishing** mortars for at least 7 full days.

Special versions, higher strength, **MM-Stone-Support** can be placed in temporary form work with reinforcing, cramps and anchorages where required. **MM-Stone-Support must never be used with Step Repair.**

Fibre content as supplied is pre-determined for the use of the product as described and should not be increased.

The MM family of Surface repair mortars includes optional variations to suit specific conditions and backgrounds. Masons Mortar Ltd Technical department is available to discuss all aspects of Masonry Surface Repair.

Contact Masons Mortar Technical via e-mail:

technical@masonsmortar.co.uk if you are in any doubt about the suitability, procedure or use of any of the MM range of surface repair products.

Hazardous substances classification

- **R 38:** Irritating to the skin

- **R 41:** Risk of serious damage to the eyes
- **S 2:** Keep out of reach of children
- **S22:** Do not breathe dust
- **S24/25:** Avoid contact with skin and eyes
- **S26:** In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- **S37/39:** Wear suitable gloves and eye / face protection
- **S46:** If swallowed, seek medical advice immediately and show this container or label

Transport Hazard Class

N/A

Disposal

EC waste code no 170101

Any residue must be emptied out of bags or containers before recycling.

Solidify any residual material with water and after consulting the relevant authorities, dispose of in a construction material land fill site.