



Lustro® Microfibre-reinforced mortar

PRODUCT PROFILE

Bonding and reinforcing mortar for MARMORIT WARM WALL insulation systems: TONGUE & GROOVED, polimell, RAIL/CAVITY RAIL, volamit, LAMELLE and MINERAL FIBRE. As reinforcing mortar for application to large XPS surfaces, EPS concrete forms etc.; as thin-coat render to smooth concrete surfaces; as background preparation to small lightweight woodfibre slab/composite panel surfaces; as reinforcing mortar for scrim applied to hardened basecoats.

Lustro may be applied to strong, textured, crazed, dusted-down mineral renders/renderers, including those with resin emulsion coat, and to pure synthetic resin render coats (where necessary after suitable preparation). Structural cracking cannot be accommodated!

- mortar group P II to DIN 18550
- premixed dry mortar with lime/cementitious binder
- low-chromate to TRGS (German Technical Regulations for Hazardous Substances) 613
- for indoors and outdoors
- with EPS aggregate, textile microfibre and bonding admixture
- fire rating A2 (non-combustible)
- water-repellent
- vapour-permeable
- tough
- lightweight material
- for manual or machine application
- natural white

TECHNICAL DATA

(DIN 18550/18557/4108/52617)

Bulk density:	0.87	kg/dm ³
Tensile bending strength:	1.8	N/mm ²
Compressive strength:	3.44	N/mm ²
Tensile/compressive strength ratio:	0.53	
Dynamic elastic modulus:	1600	N/mm ²
Water vapour diffusion resistance factor μ :	12	
Design thermal conductivity λ_R :	0.29	0.87 W/(m•K)
Water absorption coefficient:	w < 0.5 kg/(m ² •h ^{0.5})	

	Grading	Coat thickness	Coverage kg/m ²	Coverage m ² /bag m ² /tonne	
Lustro	1.2 mm				
Bonding (new-build)			3.1	6.5	320
Bonding (existing level renderwork)			1.8	11.1	550
Reinforcement		5 mm	4.3	4.7	230
Over-coating textured renderwork			3.0	6.7	330
Render bonding layer		5 mm	3.0	6.7	330

The above figures are approximate values and may vary according to background type.

PREPARATION

Cover or watertightly mask dirt-sensitive elements. Protect weather-exposed work surfaces from rain. In the event of exposure to sunshine or very warm weather, hang nets around scaffolding until renderwork dries or postpone works until more favourable weather conditions prevail. Check existing renderwork for strength and adhesion to background. Hack out and re-render any hollows. Clean down concrete, masonry or existing renderwork with high-pressure water jet to remove dust and allow to fully dry out. Stabilize chalking or friable surfaces using Tiefengrund LF deep-penetrating primer. Roughen smooth-faced XPS insulation board (STYRODUR or equivalent), carefully dust down and additionally secure as required.

APPLICATION

For machine application: set water to approx. 240 ltr when starting up, then set to lean mortar consistency.

For manual application: stir bag contents with approx. 8 ltr water. Apply mortar within 2 hours of mixing.

Insulation board bonding:

With TONGUE & GROOVED, WOLLE or XPS-R insulation board WARM WALL systems, apply with 40% bond area for ribbon-and-dab method or to whole surface with notched trowel.

With polimell, volamit and TONGUE & GROOVED WARM WALL systems, spray undulating strips of wet mortar directly onto background, with 50% bond area for polimell/volamit and 60% for TONGUE & GROOVED. Press down polimell, TONGUE & GROOVED or volamit insulation board, sliding into place and tapping to align.

For manual application of polimell and volamit, apply mortar strips at 10 cm centres to pre-coated panel face. Bond to background and tap firmly to align. With LAMELLE WARM WALL system, first apply thin coat and press firmly to work into surface, then apply Lustro over whole bonding face using notched trowel.

Fix insulation board in stretcher bond formation, without toothed corner arrangement for insulation thickness up to 200 mm, with toothed corner arrangement for insulation thickness of 220 mm and upwards. Allow min. 48 hours drying time prior to continuing work.

Insulation board reinforcement:

Fully bed MARMORIT jamb/lintel corner scrim unit or fabric strip at internal angles between jamb and lintel using Lustro. Then fix MARMORIT angle scrim sections straight and true to line.

Apply 5-7 mm coat of Lustro (min. 5 mm thickness required; 7 mm for scratch render) and strike off level using darby. Bed corner scrim chevrons or approx. 30 x 50 cm scrim patches in wet mortar diagonally above and below corners of all openings.

Subsequently incorporate MARMORIT scrim over whole surface, with min. 10 cm lap at joints.

Completely cover scrim with mortar. Scrape surface lightly after initial set. Use MARMORIT SOCKEL-SM up to a height of 30 cm above ground level for areas subject to splashing. Allow reinforcing layer to fully dry and set for min. 8 days prior to continuing work. For mak3 scratch render, apply a further 2-3 mm coat of Lustro and horizontally roughen surface with broom.

Repair mortar:

To level out uneven texture of clean, strong or suitably pre-treated existing renderwork or coatings, apply max. 10 mm coat of Lustro. Incorporate MARMORIT scrim where required.

Thin-coat bonding render:

Clean concrete surfaces to remove dust. Apply 3-5 mm coat of Lustro, strike off level and remove fins/protrusions after initial set.

Render bonding layer:

For large and small areas of XPS board, lightweight woodfibre slab and composite panel (DIN 1102/1104) etc.: apply 5-10 mm coat of Lustro, strike off using widely notched trowel and roughen with broom while freshly applied. Allow to dry and set for min. 3 days prior to application of LUP222

REINFORCEMENT

Reinforcing mortar with scrim over whole basecoat surface:

Apply 4 mm coat of Lustro, strike off level and true. Beneath actual scrim layer, incorporate a corner scrim chevron or approx. 30 x 50 cm scrim patch directly abutting and diagonally above or below corners of all openings.

Embed MARMORIT basecoat/reinforcing scrim near surface and without creases, with min. 10 cm lap at joints.

Double-layer reinforcement:

To WARM WALL surfaces such as attached piers/pilasters, paintable felt-floated renderwork and finishing coats with aggregate size <2 mm and brushed finishes, apply a further approx. 4 mm coat of Lustro to whole surface after first reinforcing coat has set and incorporate a second layer of MARMORIT scrim so as to break joint with first layer. Alternatively, a second scrim layer may be embedded in freshly placed reinforcing mortar. In this case, apply 2-3 mm coat of Lustro to first reinforcement layer and embed scrim so as to break joint.

Embed diagonal reinforcement between scrim layers. Ensure that scrim is completely covered by Lustro. Allow to fully dry and set for min. 8 days prior to continuing work.

PLEASE NOTE

Rendering works are subject to the requirements of DIN 18550 and DIN 18350 VOB (German Construction Contract Procedures) Part C.

Mix dry mortar only with clean water. Do not use any foreign additives.

Do not apply at air and/or wall temperatures below +5°C. Protect fresh renderwork against frost and premature drying out.

After fully drying out and setting, all reinforcing mortar surfaces in contact with ground or gravel beds shall be waterproofed/protected against moisture ingress, starting from basement wall waterproof barrier up to approx. 5 cm above ground level, in accordance with DIN 18195. Alternatively, a 2.5 mm coat of MARMORIT SOCKEL-DICHT may be applied. Cover with nonwoven-faced studded sheet after drying.

SAFETY AT WORK

Avoid contact with skin and eyes. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Once set, the material poses no physiological or ecological hazards.

MACHINE/EQUIPMENT

MARMORIT MA-MA mixer, Lustromat or rendering machines such as PFT G4/G5 or equivalent for large-scale application. With MA-MA, do not set to maximum revolutions as trough will run dry.

Stator: D4-3 green, half capacity

Rotor: D4-3, half capacity

Mortar hoses: 25 mm dia

Wet mortar pumping distance up to 40 m

Additional equipment such as SM adhesive gun is recommended.

See technical information on render and machine.

COMPOSITION

Binder:

Hydrated lime to DIN 1060

White Portland cement to DIN 1164

Aggregate:

Limestone graded to DIN 4226 and lightweight aggregate

Admixtures:

Textile microfibre, water retaining and bonding admixtures, water-repellents

QUALITY

The product is subject to continuous in-house and external monitoring to DIN 18557 and carries the RAL Quality Label for premixed dry mortar.

DELIVERY FORM/SHELF LIFE

20 kg paper bags, in bulk form and in container with MA-MA machine or Lustromat

Shelf life 6 months, subject to storage in dry, moisture-protected environment.

SUPPLY

Via Marmorit approved applicators or local distributors

NOTE

This data sheet, which replaces all previous editions, is designed to provide you with advice and assistance. The information presented herein reflects our present state of knowledge. It cannot, however, embody the sum total of good practice, nor incorporate the provisions of all relevant standards, codes of practice and guidelines. These – together with the relevant application rules and guidelines – shall be duly observed by the applicator!

TECHNICAL ADVICE

Information and advice may be provided by our external representatives or the MARMORIT Technical Department

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