SOCKEL-SM
Bonding, reinforcing and repair mortar for plinth areas

PRODUCT PROFILE

Render bonding layer for overcoating XPS-R (extruded polystyrene rigid foam) board, e.g. STYRODUR® or equivalent, in plinth areas, where necessary after preparation.
Bonding and reinforcing mortar for plinth and below-ground insulation board. Bonding mortar for SaTT board. Reinforcing mortar for WARM WALL systems with ceramic cladding and for EPS concrete forms in plinth areas. Thin-coat bonding render for smooth concrete surfaces. Thin-coat repair mortar for overcoating existing, strong textured renderwork of mortar group P III without painted finish. Reinforcing mortar for scrim reinforcement to cement basecoat over composite masonry. SOCKEL-SM cannot be used to accommodate structural cracking!

- mortar group P III to DIN 18550
- premixed dry mortar with cementitious binder
- low-chromate to TRGS (German Technical Regulations for Hazardous Substances) 613
- for indoors and outdoors
- with fibre and bonding admixtures
- water-repellent
- vapour-permeable
- tough
- good workability
- for manual or machine application
- grey

TECHNICAL DATA

(DIN 18550/18557/4108/52617)

Bulk density:	1.5	kg/dm^3
Tensile bending strength:	5.2	N/mm^2
Compressive strength:	11.4	N/mm^2
Dynamic elastic modulus:	6300	N/mm^2
Water vapour diffusion resistance factor µ:	15	
Thermal conductivity λ:	0.87	W/(m•K)
Water absorption coefficient:	$w < 0.5\ kg/(m^2 \cdot h^{0.5})$	

	Grading	Coat thickness	Coverage kg/m^2	Coverage m^2/bag
SOCKEL-SM Original	1.0 mm			
Bonding (existing level renderwork)			4.0	7.5
Reinforcement		5.0 mm	7.0	4.3
Overcoating textured renderwork			5.0	6.0

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

Set water to approx. 200 ltr when starting up machine with D4-3 pump (half capacity), then set to lean mortar consistency. Pre-lubricate hoses with wallpaper paste.

For manual application: stir bag contents with approx. 6.3 ltr water, allow wet mortar to mature for approx. 15 minutes and restir thoroughly. 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 precoated 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 SOCKEL-SM 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 SOCKEL-SM. Then fix MARMORIT angle scrim sections straight and true to line.

Apply 5-7 mm coat of SOCKEL-SM (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 or 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. Particularly in areas subject to splashing, apply MARMORIT SOCKEL-SM up to a height of 30 cm above ground level. Allow reinforcing layer to dry and set for min. 8 days prior to continuing work. For mak3 scratch render, apply a further 2-3 mm coat of SOCKEL-SM and horizontally roughen surface with broom.

Allow min. 21 days drying time for areas to receive ceramic cladding finish.

Double-layer reinforcement:

To WARM WALL and STYRODUR®/XPS-R board surfaces in plinth areas or other surfaces subject to higher loads (columns, paintable felt-floated renderwork etc.), apply a further approx. 4 mm coat of SOCKEL-SM to whole surface after first reinforcing coat has set and bed a second scrim layer (see "Reinforcement") in wet mortar so as to break joint with first layer. Allow to dry and set for min. 8 days prior to continuing work.

Felt-floated areas:

Apply a further approx. 2-3 mm coat of SOCKEL-SM after second reinforcing coat has set and felt float when mortar begins to set.

Repair mortar:

To level out uneven texture of clean, strong or suitably pre-treated cement renders, apply max. 10 mm coat of SOCKEL-SM. Incorporate MARMORIT scrim where required.

Thin-coat bonding render:

Clean down concrete surfaces with high-pressure water jet to remove dust and allow to dry. Apply approx. 5 mm coat of SOCKEL-SM, strike off level and remove fins/protrusions after initial set.

Render bonding layer:

Sand/roughen smooth- or rough-faced STYRODUR® board or equivalent fixed flush with masonry and thoroughly dust down. Additionally secure smooth-faced board. Clean down small lightweight woodfibre slab/composite panel surfaces using dry methods and dust down.

Apply 5-10 mm coat of SOCKEL-SM, strike off with notched trowel and roughen. Allow to 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. SOCKEL-SM shall be allowed to dry and set prior to application of finishing coats and paints!
After fully drying out and setting, all reinforcing mortar surfaces in contact with ground or gravel beds shall be waterproofed/protected against moisture ingress 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
Mortar exhibits a strong alkaline reaction upon contact with water. 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
Rendering machine such as PFT G4/G5 or equivalent for large-scale application
Stator: D4-3 green, half capacity
Rotor: D4-3, half capacity
Mortar remixer: Rotoquirl required!
Mortar hoses: 25 mm dia
Wet mortar pumping distance up to 30 m
See technical information on render and machine.

COMPOSITION
Binder:
Portland cement to DIN 1164
Aggregate:
Quartz and limestone graded to DIN 4226, 0-1.0 mm
Admixtures:
Special fibres, 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
30 kg paper bags.
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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