



Baumit Specification – Baumit SilikonTop on to sand and cement Backgrounds.

Revised Jan 2013

M20 PLASTERED/RENDERED/ROUGHCAST COATINGS

To be read with Preliminaries/General conditions.

TYPE(S) OF COATING

200 EXTERNAL SELF-FINISHED RENDER SYSTEM : Render system onto medium density concrete blockwork, Scud, Sand and cement base coat 13-15mm, Baumit SilikonTop resin render with quartz aggregate and film preservation.

- Location: External walls generally and as noted on the drawings
- Background: Dense concrete block Clause F10 271.
- Preparation: Existing substrate should be clean, dry, load bearing and free of loose coatings, dirt, algae, fungus or deleterious materials etc. Make good as necessary.

Blockwork substrates should be tested for suction / absorption prior to application of render coatings. Some damp or low suction substrates may not require a suction regulating pre-treatment and simple 'wetting' may be sufficient. For dry, absorbent substrates, a regulating pre-treatment is specified below.

- Pre-treatment: Solvent-free, concentrated penetrating, hydrophobicising, adhesion improving and substrate consolidating siloxane based primer, diluted 1:10 by volume with water applied by brush, roller or spray to friable, sanding or highly absorbent surfaces.
- Scud :2:1 sand & cement scud mix, giving good coverage to block work.
- Levelling Coat: Sand and cement Base coat 13-15mm thickness, leveled and floated to a fine finish.
- Priming Coat: - Spray Brush or Roller applied Priming coat. Adhesion-promoting, Absorbency regulating Priming Coat CO₂ and water vapour permeable, Alkali-resistant (Baumit Uni- Primer)
- Render / Finish: (Baumit SilikonTop resin coat with quartz Scratch)

Technical data

Aggregate size:	1.5/2.0/3.0 mm
Density:	ca. 1800 kg/m ³
Thermal conductivity λ:	ca. 0. 70 W/mK
Water vapour diffusion resistance μ-value:	ca. 60 - 80
Water capillary coefficient w-value:	< 0.10 kg/m ² h ^{0,5} (W ₂)
Sd-value:	0.12 – 0.16 m (2 mm coating)
Bond strength:	> 0.3 MPa
Colour tones:	Selected from Baumit Life colours

- Colour: To be agreed in consultation with Architect and following preparation of wall sample panels. Options to include 888 standard colours for Baumit Life range.
- . Consult with manufacturer for details of colour options and to obtain samples.
- Accessories: PVCu Bellcast beads – to system base. PVCu Stop beads – at interfaces (used in conjunction with proprietary flexible sealant)
- PVCu Movement joint Beads – at blockwork contraction joints.
- Proprietary PVCu Angle & Stop Beads– for use as an aid to creating arrisses, stops, etc. in the levelling coat only.



Baumit Specification – Baumit SilikonTop on to sand and cement Backgrounds.

Revised Jan 2013

Samples:

Provide sample(s) as per Clause F10 / 740

Obtain approval before starting work.

Keep sample(s) available on site throughout the contract for inspection/comparison purposes.

Once samples of coatings have been approved do not change type or proportion of constituent materials. Ensure that supplies and batch numbers of materials are sufficient to give consistent uniformity of colour. Ensure uniformity of texture during application.

- Ready to use cement gauged render mortars:

Mix proportions: Except where stated otherwise, all mixes to be in strict accordance with Manufacturer instructions. Once mixed, use within the prescribed period. Do not re-temper to restore workability.

- 497 Cold weather:

Do not use frozen materials or apply coatings on frozen or frost-bound substrates. Do not apply when the air and / or substrate temperature is below 5 degrees centigrade. Maintain temperature of work above freezing until the material has fully set.

- 510 Suitability of Substrates:

Substrate shall be:

- Structurally sound, and free from cracks and gaps.

- Of sufficient flatness / regularity to allow the finished application to be completed to the required tolerances.

- Free from dirt, oil, dust, efflorescence, mould, algae and other deleterious materials.

The cutting, chasing, fixing and making good of conduits, service penetrations, etc. should be completed prior to commencement of the works.

- 634 Beads / Stops / Accessories: Product reference:

Bellcast / Stop / Movement / StopSeal / Drip beads.

Material: PVCu beads, corrosion resistant at least equal to grade 304 of BS 1449 Part 2.

Application:

Provide beads/stops at all arris and stop-ends except where specified otherwise. Cut neatly and form mitres at return angles.

Fix securely using the longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with the background.

- 650 Movement Joints:

Do not continue coatings across joints with dissimilar solid backgrounds without break. Render systems do not require control or expansion joints except where:

a) the substrate has an existing control joint, contraction joint, expansion joint or live building crack or b) the system is being applied to dissimilar substrates.

These joints to extend through the render system and to be formed using either:

PVCu or proprietary stainless steel render stop beads, bedded in the levelling render coat either side of the expansion joint. Levelling, reinforcing and finish plasters to be worked to the beads both sides of the joint. The joint gap to be primed and filled with proprietary gun applied sealant.

PVCu or proprietary stainless steel movement joint bead bedded in levelling render and allowed to set. Levelling, reinforcing and finish renders to be worked to either side of the bead.



Baumit Specification – Baumit SilikonTop on to sand and cement Backgrounds.

Revised Jan 2013

Some movement joints may be bridged using the render system utilizing a detail which incorporates an isolation membrane of breather paper and an expanded metal lath render carrier mechanically fixed. Consult with the manufacturer for further information, as this detail must be designed / installed strictly in accordance with their recommendations and drawings.

- 810 Application generally:

Apply coatings firmly to achieve good adhesion, and in one continuous operation between angles and joints. Appearance of finished surfaces shall be even and consistent, free from rippling, hollows, ridges, cracks and crazing.

Finish to a true plane, to correct line and level, with angles and corners to right angles unless specified otherwise, and with reveals, heads, etc. plumb / level and square.

Prevent excessively rapid or localised drying out of cementitious coats.

- 815 Dubbing out rendering:

Use levelling coat material - maximum thickness of any one coat: 12mm.

Apply coatings firmly to achieve good adhesion. Allow each coat to set in accordance with manufacturers recommendations before the next is applied.

- 820 Finish coat:

Even texture to specification.

- 880 Curing and drying: General: Prevent premature setting and uneven drying of each coat.

Curing coatings: Keep each cementitious coat damp by covering with polyethylene sheet and/ or spraying with water if prevailing conditions are likely to result in accelerated drying.

Curing period (minimum): Consult with manufacturer for recommendations and details.

Final coat: Hang sheeting clear of the final coat.

Drying: Allow each coat to dry thoroughly, with drying shrinkage substantially complete before applying next coat.

Protection and Cleaning: Adequately protect newly applied external coatings against frost and rain in accordance with the manufacturers Winter Working Policy. Consult with manufacturer for guidance on cleaning and protection.

- 900 General:

All installations to be carried out by and/or supervised by applicators registered with the manufacturer.

- 910 Additives:

Products / materials are not to be altered with any additives, except for small amounts of clean water as directed by the manufacturer. Antifreeze, accelerators, rapid binders etc. are not to be used under any circumstances.



Baumit Specification – Baumit SilikonTop on to sand and cement Backgrounds.

Revised Jan 2013

- 915 Setting Out:

Establish a horizontal line at the base of the substrate. Install a PVCu or stainless steel render stop or bellcast bead of appropriate depth. Embed fully using the levelling render, and allow to set.

Install PVCu or stainless steel render stop beads of appropriate depth to all regular interfaces. Embed fully using the levelling render, and allow to set.

Install PVCu or stainless steel render movement joint or back-to-back stop beads of appropriate depth to all movement joints. Embed fully using the levelling render and allow to set.

- 920 Inspection of Completed Installation:

As soon as possible after completion of the work and before removing scaffolding, carry out an inspection with the CA to identify any defects

449 ADMIXTURES:

- Do not use unless specified or approved.
- Do not use admixtures of any type with proprietary mixes.
- Do not use calcium chloride or any admixtures containing calcium chloride.

453 MIXING:

- Measure materials accurately by volume using clean gauge boxes. Proportions of specified mortar mixes are for damp sand. Adjust proportions if dry sand is used.
- Mix materials thoroughly to a uniform consistency and appearance using suitable mechanical or manual means or, for proprietary mixes, as recommended by the manufacturer.
- Do not over mix gypsum plasters or cement gauged mixes containing air entraining admixtures.

458 CONTAMINATION: Do not allow contamination of one type of material by another, or by any set material.

461 INITIAL SET: Do not use mixes after initial set has taken place. Do not retemper or reconstitute mixes, unless permitted by the manufacturer of proprietary mixes.

466 SCAFFOLDING: Use independent scaffolding to avoid putlog holes and other breaks in coatings.

469 CLEANLINESS: Protect thoroughly all existing work and approaches using suitable boards, sheets, etc. Clean off all droppings on to finished work immediately.

474 COLD WEATHER:

- Do not carry out external work when air temperature is below 3°C and falling or below 1°C and rising.
- Take all necessary precautions to enable internal coating work to proceed without damage when air temperature is below 3°C.
- Do not use frozen materials and do not apply coatings to frozen or frost bound backgrounds.



Baumit Specification – Baumit SilikonTop on to sand and cement Backgrounds.

Revised Jan 2013

PREPARING BACKGROUNDS

507 ACCEPTANCE OF BACKGROUNDS: Before preparation or application of coatings ensure that:

- Backgrounds are secure, adequately true and level to achieve specified tolerances, free from contamination and loose areas, reasonably dry and in a suitable condition to receive specified coatings.
- All cutting, chasing, fixing of concealed conduits, service outlets and the like, and making good of the background, is completed.

511 PREPARATION GENERALLY:

- Remove efflorescence, dust and other loose material by thoroughly dry brushing.
- Remove all traces of paint, grease, dirt and other materials incompatible with coating by scrubbing with water containing detergent and washing off with plenty of clean water. Allow to dry before applying coatings unless specified otherwise.

515 KEYING/BONDING: Prepare backgrounds as specified for the type of coating to be applied. Methods other than those specified may be submitted for approval.

518 IN SITU CONCRETE SURFACES: Scrub with water containing detergent to ensure complete removal of mould oil, surface retarders and other materials incompatible with coating. Rinse with clean water and allow to dry unless specified otherwise.

536 SPATTERDASH KEYING MIX:

- 1 part Portland cement.
- 1½-2 parts clean sharp, coarse sand.
- Mix to a thick slurry and keep well stirred.
- Throw onto previously dampened surface to a thickness of 3-5 mm and leave rough. Keep damp with fine waterspray or by covering with polyethylene until set. Allow to dry out slowly and harden before applying undercoat.

538 STIPPLE KEYING MIX:

- 1 part ordinary Portland cement.
- 1½-2 parts clean sharp, coarse sand.
- Bonding agent: Contractor's choice in mixing water to proportions recommended by manufacturer.
- Mix to a thick slurry and keep well stirred.
- Vigorously brush on to surface then immediately stipple with a banister brush to form a deep close textured key. Keep damp with fine water spray until set. Allow to dry out slowly and harden before applying undercoat.

541 BONDING AGENT:

- Type: PVAC bonding agent if recommended by manufacturer
- Dilute to manufacturer's recommendations.
- Apply subsequent plaster/render coating whilst bonding agent is still tacky to ensure a good bond.



Baumit Specification – Baumit SilikonTop on to sand and cement Backgrounds.

Revised Jan 2013

715 ACCURACY : of plaster 13 mm thick or more: The variation in gap under 1.8 m straight edge (with feet) placed anywhere on the surface to be not more than 3 mm.

720 DUBBING OUT: If necessary to correct background inaccuracies, dub out in thicknesses of not more than 10 mm in same mix as first coat. Allow each coat to set sufficiently before the next is applied.

Cross scratch surface of each dubbing out coat.

721 DUBBING OUT will not be permitted on smooth dense concrete surfaces except as recommended by the plaster manufacturer.

726 METAL MESH LATHING: Work undercoat well into interstices to obtain maximum key.

731 UNDERCOATS GENERALLY: Apply firmly, rule to an even surface and cross scratch each coat to provide a key for the next coat.

777 SMOOTH FINISH: Trowel or float to produce a tight, matt, smooth surface with no hollows, abrupt changes of level or trowel marks. Do not use water brush and avoid excessive troweling and over polishing.