

M20 PLASTERED/ RENDERED/ ROUGHCAST COATINGS

rev * 10.08.15 For Billing

rev A 10.9.15 For Billing; clauses 110, 115, 280, 418, 634, 635, 653, 856 revised; revisions marked in bold or struck through.

Rev B 21.09.15 For TENDER

To be read with Preliminaries/General conditions.

TYPE(S) OF COATING

110 PROPRIETARY CEMENT-GUAGED EXTERNAL RENDER SYSTEM

- Substrate: Blockwork.
 - Preparation: weber.rend aid.
- Manufacturer: Saint-Gobain Weber.
- Undercoats:
 - Product reference: weber.rend OCR.
 - Thickness (excluding dubbing out and keys): 16 mm.
 - Finish: Wood floated and sponged suited to receive final coat.
- Final coat:
 - Product reference: weber.cem fairing coat.
 - Thickness : 1 - 3 mm.
 - Finish: Smooth, steel floated.
- Accessories: Beads, stops, movement joints as clauses 635, 653.
- Other requirements:
 - Finish to match control sample as clause 418.
 - Decorative build-ups and profiles as indicated on drawings.
 - Forming radiussed external corners and changes in profile without beads as Indicated on drawings.
 - Preparation and application in accordance with manufacturer's recommendations.
 - Pressed aluminium drip trims, 2 mm thick, as shown on drawings, with 0.7 mm thick welded-on butt straps under joints, polyester powder coated to section Z31; allow for any two RAL Classic colours, 30% gloss, to be selected by the architect.

115 PROPRIETARY CEMENT-GUAGED EXTERNAL RENDER ON RIBLATH

- Substrate: In-situ concrete
 - Preparation: Riblath as section M30
- Manufacturer: Saint-Gobain Weber.
- Undercoats:
 - Product reference: weber.rend OCR.
 - Thickness (excluding dubbing out and keys): 16 mm.
 - Finish: Wood floated and sponged suited to receive final coat.
- Final coat:
 - Product reference: weber.cem fairing coat.
 - Thickness : 1 - 3 mm.
 - Finish: Smooth, steel floated.
- Accessories: Beads, stops, movement joints as clauses 635, 653.
- Other requirements:
 - Finish to match control sample as clause 418.
 - Preparation and application in accordance with manufacturer's

recommendations.

200 GYPSUM PLASTER ON CEMENT GAUGED UNDERCOATS

- Substrate: Blockwork, brickwork
 - Preparation:
 - To brickwork: Recessed joints or spatterdash key.
 - To blockwork: Spatterdash key.
- Undercoats:
 - Mix: Group 3 mortar
 - Thickness (excluding dubbing out and keys): 16 mm (two coats)
- Final coat: Gypsum plaster to BS EN 13279-1
 - Manufacturer: British Gypsum or other manufacturer's product of matching appearance and technical characteristics, subject to agreement
 - Product reference: Thistle Multi-Finish
 - Thickness: 2-3 mm
 - Finish: Smooth
- Accessories:
 - Beads, stops as clause 634.

280 GYPSUM PLASTER SKIM

- Substrate: Shuttered concrete.
 - Preparation: Bonding agent (type recommended by plaster manufacturer):
- Final coat: Gypsum plaster to BS EN 13279-1.
 - Manufacturer: British Gypsum or other manufacturer's product of matching appearance and technical characteristics, subject to agreement.
 - Product reference: Thistle Multi-finish.
 - Thickness: 2-3 mm.
 - Finish: Smooth.

GENERAL

418 CONTROL SAMPLE

- Complete sample areas, being part of the finished work, in locations as follows:
 - Refer to drawing CSD 240.

421 SCAFFOLDING

- General: Prevent putlog holes and other breaks in coatings

MATERIALS AND MAKING OF MORTAR

430 READY-TO-USE CEMENT GAUGED MORTARS

- Time and temperature limitations: Use within limits prescribed by mortar manufacturer.
 - Retempering: restore workability with water only within prescribed time limits.

438 CEMENTS FOR MORTARS

- Cement: To BS EN 197-1.
 - Types: Portland cement, CEM 1.
 - Portland slag cement, CEM II.

- Portland fly ash cement, CEM II.
 - Strength class: 32.5, 42.5 or 52.5.
 - White cement: To BS EN 197-1.
 - Type: Portland cement, CEM I
 - Strength class: 52.5
 - Sulfate-resisting Portland cement: To BS EN 197-1.
 - Strength class: 42.5
 - Masonry cement: To BS EN 998-1 and Kitemarked.
- 440 SAND FOR CEMENT-GAUGED MORTARS
- Standard: To BS EN 13139
 - Grading: 0/2 or 0/4 (CP or MP); category 2 fines
 - Colour and texture: Consistent. Obtain from one source
- 443 LIME FOR CEMENT-GAUGED MORTARS
- Standard: To BS EN 459-1
 - Types: CL 90S.
- 445 PIGMENT FOR COLOURED MORTARS
- Standard: To BS EN 12878
- 449 ADMIXTURES FOR CEMENT GAUGED MORTARS
- Suitable admixtures: Select from:
 - Air entraining (plasticizing) admixtures: To BS EN 934-2 and compatible with other mortar constituents
 - Other admixtures: Submit proposals
 - Prohibited admixtures Calcium chloride and any admixture containing calcium chloride
- 450 CHLORIDE CONTENT OF MORTARS
- Content (maximum); 0.1% by dry mass
- 495 MIXING
- Render mortars (site-made):
 - Batching: By volume. Use clean and accurate gauge boxes or buckets
 - Mix proportions: Based on damp sand. Adjust for dry sand
 - Lime:sand: Mix thoroughly. Allow to stand, without drying out, for at least 16 hours before using
 - Mixes: Of uniform consistence and free from lumps. Do not retemper or reconstitute mixes
 - Contamination: Prevent intermixing with other materials
- 497 COLD WEATHER
- General: Do not use frozen materials or apply coating on frozen or frost bound substrates
 - External work: Avoid when air temperature is at or below 5°C and falling or below 3°C and rising. Maintain temperature of work above freezing until coatings have fully hardened
 - Internal work: Take precautions to enable internal coating work to proceed without detriment when air temperature is below 3°C

PREPARING SUBSTRATES

510 SUITABILITY OF SUBSTRATES

- Soundness: free from loose areas and significant cracks and gaps
- Cutting, chasing, making good, fixing of conduits and services outlets and the like: Completed
- Tolerances: Permitting specified flatness/ regularity of finished coatings
- Cleanliness: Free from dirt, dust, efflorescence and mould, and other contaminants incompatible with coatings

536 SPATTERDASH KEY

- Materials:
 - Cement: To BS EN 197-1
 - Sand: Clean, coarse.
- Mix proportions (cement:sand): 1:1.5-2.
- Consistency: Thick slurry, well stirred.
- Application: Throw onto dampened background and leave rough.
 - Thickness: 3 – 5 mm.
- Curing: Controlled to achieve a firm bond to substrate.

541 BONDING AGENT APPLICATION

- General: Apply evenly to substrate to achieve effective bond of plaster/ render coat. Protect adjacent surfaces

BACKINGS/ BEADS/ JOINTS

624 DAMP PROOF LATHING

- Manufacturer: Expamet Building Products (tel: 01429 866611)
 - Product reference:
Internally: BB 265
Externally: As section M30
- Fixing and sealing accessories: As recommended by damp proof lathing manufacturer
- Fixing: Secure and firm to provide a continuous, keyed backing for coatings
- Joints between lathing sheets and junctions with services, windows and other openings: prevent penetration and bridging of cavity by coatings
- Ventilation gaps: Not required.

634 BEADS/ STOPS INTERNALLY

- Manufacturer: Expamet Building Products
 - Product references:
External corners: Corner Bead 558.
At abutments with other materials: Feature Bead (Abutting) 579.
Around timber doors/screens/skirtings/linings: Feature Bead (Engaging) 580.
- Material: Galvanised steel, polyester powder coated as section Z31. Allow for any three RAL Classic colours to be selected by the architect.

635 BEADS/ STOPS EXTERNALLY

- Manufacturer: Expamet Building Products

- Product references:

External corners: Corner Bead 545 (only where indicated on drawings).

At abutments with other materials and also as indicated on drawings: Stop Bead 511.

At bottom edges: Bell Stop Bead 508.

- Material: Stainless Steel.

640 BEADS/ STOPS GENERALLY

- Location: All external angles and stop ends (except where specified otherwise) and also as shown on drawings
- Corners: Neat mitres at return angles
- Fixing: Secure, using longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with substrate
 - Beads/ stops for external render: Fix mechanically
- Finishing: After coatings have been applied remove surplus material, while still wet, from surfaces of beads/ stops exposed to view

646 CRACK CONTROL AT JUNCTIONS BETWEEN DISSIMILAR SOLID SUBSTRATES

- Locations: Where defined movement joints are not required. Where dissimilar solid substrate materials are in same plane and rigidly bonded or tied together
- Crack control materials:
 - Isolating layer: Building paper to BS 1521
 - Metal lathing: As clause 624
- Installation: Fix metal lathing over isolating layer. Stagger fixings along both edges of lathing.
- Width if installation over single junctions:
 - Isolating layer: 150 mm
 - Lathing: 300 mm
- Width of installation across face of dissimilar substrate material (column, beam, etc. with face width not greater than 450 mm)
 - Isolating layer: 25 mm (minimum) beyond junctions with adjacent substrate
 - Lathing: 100 mm (minimum) beyond edges of isolating layer

653 SEALANT MOVEMENT JOINTS WITH STOP BEAD EDGINGS EXTERNALLY

- Stop beads: As clause 635, Expamet ref. 511.
- Installation: Centred over joint in substrate.
 - Joint width: 6 mm.
 - Fixing: Plugs and stainless steel screws and washers.
- Sealant (paintable):
 - Manufacturer: Adshead Ratcliffe.
 - Product reference: Arbomeric MP20.
 - Colour: White.
 - Preparation and application: As section Z22; allow to fully cure prior to painting.

673 PLASTERING OVER CONDUITS/ SERVICE CHASES

- General: Prevent cracking over conduits and other services
- Services chased into substrate: Isolate from coating by covering with galvanized metal lathing, fixed at staggered centres along both edges

INTERNAL PLASTERING

710 APPLICATION GENERALLY

- Application of coatings: Firmly and in one continuous operation between angles and joints. Achieve good adhesion.
- Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing.
 - Accuracy: Finish to a true plane, to correct line and level, with angles and corners to a right angle unless specified otherwise, and with walls and reveals plumb and square
- Drying out: prevent excessively rapid or localised drying out.

715 FLATNESS/ SURFACE REGULARITY

- Sudden irregularities: Not permitted
- Deviation of plaster surface: Measure from underside of a straight edge placed anywhere on the surface
 - Permissible deviation (maximum) for plaster not less than 13 mm thick: 3 mm in any consecutive length of 1800 mm.

718 JUNCTION OF NEW PLASTERWORK WITH EXISTING

- New plasterwork: Finish flush with original face of existing plasterwork to form a seamless junction.

720 DUBBING OUT

- General: Correct substrate inaccuracies
- New smooth, dense concrete and similar surfaces: Dubbing out prohibited unless total plaster thickness is within range recommended by plaster manufacturer
- Thickness of any one coat (maximum): 10 mm
- Mix: As undercoat
- Application: Achieve firm bond. Allow each coat to set sufficiently before the next is applied. Cross scratch surface of each coat.

725 UNDERCOATS GENERALLY

- General: Rule to an even surface. Cross scratch to provide a key for the next coat
- Undercoats on metal lathing: Work well into interstices to obtain maximum key
- Undercoats gauged with Portland cement: Do not apply next coat until drying shrinkage is substantially complete.

777 SMOOTH FINISH

- Appearance: A tight, matt, smooth surface with no hollows, abrupt changes of level or trowel marks. Avoid water brush, excessive trowelling and over-polishing.

EXTERNAL RENDERING

810 APPLICATION GENERALLY

- Application of coatings: Firmly and in one continuous operation between angles and joints. Achieve good adhesion.
- Appearance of finished surfaces: Even and consistent. Free from rippling, hollows, ridges, cracks and crazing

- Accuracy: Finish to a true plane, to correct line and level with angles and corners to a right angle unless specified otherwise, and with walls and reveals plumb and square.
 - Drying: Prevent excessively rapid or localized drying out
- 815 FLATNESS/ SURFACE REGULARITY OF RENDERING TO RECEIVE CERAMIC TILES
- Sudden irregularities: Not permitted
 - Deviation of render surface: Measure from underside of a 2 m straight edge placed anywhere on surface
 - Permissible deviation (maximum): 3 mm
- 820 DUBBING OUT RENDERING
- General: Correct substrate inaccuracies
 - Thickness of any one coat (maximum): 16 mm
 - Total thickness (maximum): 20 mm, otherwise obtain instructions
 - Mix: As undercoat
 - Application: Achieve firm bond. Allow each coat to set sufficiently before the next is applied. Comb surface of each coat.
- 830 ANCHORED MESH REINFORCEMENT
- Application of first undercoat: Through and round mesh to fully bond with solid substrate
- 840 UNDERCOATS GENERALLY
- General: Rule to an even surface. Comb to provide a key for the next coat. Do not penetrate the coat
 - Undercoats on metal lathing: Work well into interstices to obtain maximum key.
- 856 FINAL COAT –FLOATED FINISH
- Finish: Even texture, free from laitance and trowel/float marks.
- 880 CURING AND DRYING
- General: Prevent premature setting out and uneven drying of each coat
 - Curing coatings: Keep each coat damp by covering with polyethylene sheet and/ or spraying with water
 - Curing period (minimum): 4 days
 - 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: Protect from frost and rain.