BondBryan:Fairhursts

SPECIFICATION

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Plastered/ rendered/ roughcast coatings

Types of coating

340 Nonhydraulic lime:sand plaster

1. Description: For replace after removed defective and damp affected plaster area
2. Substrate: Existing brickwork Existing stonework
   2.1. Preparation: All existing dense cementitious or gypsum plasters to be carefully removed by hand tools.
3. Undercoats
   3.1. Mix: 2:5 lime putty:sand
      3.1.1.Sand: To BS EN 13139, grading to approval
   3.2. Thickness (excluding dubbing out and keys): First undercoat 8–10 mm. Second undercoat 6–8 mm
4. Final coat
   4.1. Mix: 1:1 lime: Marble dust
   4.2. Lime putty: As for undercoats.
      4.2.1.Sand: To BS EN 13139, grading to approval
   4.3. Thickness: As existing
   4.4. Finish: Trowelled smooth

General

413 Samples

1. General: Provide representative samples of the following: Stippled plaster, 1 m² panel.

Materials and marking of mortar

481 Ready prepared lime putty

1. Type: Slaked directly from CL 90 quicklime to BS EN 459-1, using an excess of water.
   1.1. Maturation: In pits/ containers that allow excess water to drain away.
   1.2. Density of matured lime putty: 1.3-1.4 kg/L.
2. Maturation period before use (minimum): 90 days.
3. Storage: Prevent drying out or wetting: Protect from frost.

491 Pozzolanic additives for nonhydraulic lime:sand mortars

1. Manufacturer/ Supplier: Submit proposals
2. Mixing: Mix thoroughly into mortar during knocking up.

497 Cold weather

1. General: Do not use frozen materials or apply coatings on frozen or frost bound substrates.
2. 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.
3. 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

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

527 Raking out for key

1. Joints in existing masonry: Rake out to a depth of 13 mm (minimum).
   1.1. Dust and debris: Remove from joints.

541 Bonding agent application

1. General: Apply evenly to substrate to achieve effective bond of plaster/ render coat. Protect adjacent joinery and other surfaces.

551 Removal and renewal of existing plaster/ render

1. Location and extent: Agree, at least on a provisional basis, before work commences. Minimize extent of removal and renewal.

556 Removing defective existing render

1. Render for removal: Detached, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged.
2. Removing defective render: Cut out to regular rectangular areas with straight edges. no mechanical chisels arrow.
   2.1. Horizontal and vertical edges: Square cut or slightly undercut.
   2.2. Bottom edges to external render: Do not undercut.
   2.3. Render with imitation joints: Cut back to joint lines.
3. Cracks
   3.1. Fine hairline cracking/ crazing: Leave.
   3.2. Other cracks: Obtain instructions
4. Dust and loose material: Remove from exposed substrates and edges.

568 Existing damp affected plaster/ render

1. Plaster affected by rising damp: Remove to a height of 300 mm above highest point reached by damp or 1 m above dpc, whichever is higher.
2. Perished and salt contaminated masonry
   2.1. Mortar joints: Rake out.
   2.2. Masonry units: Submit proposals.
3. Faults in substrate (structural deficiencies, additional sources of damp, etc.): Submit proposals.
4. Drying out substrates: Establish drying conditions. Leave walls to dry for as long as possible before plastering.
5. Dust and loose material: Remove from exposed substrates and edges.

584 Record castings

1. Timing: Make castings before commencing repair work, to enable accurate reproductions to be made.
2. Items for casting: Obtain instructions
3. Identification: Mark clearly to identify original location.

Backings/ beads/ joints

624 Damp proof lathing

1. Manufacturer: Submit proposals
   1.1. Product reference: Submit proposals
2. Fixing and sealing accessories: As recommended by damp proof lathing manufacturer.
3. Fixing: Secure and firm to provide a continuous, keyed backing for coatings.
4. Joints between lathing sheets and junctions with services, windows and other openings: Prevent penetration and bridging of cavity by coatings.
5. Ventilation gaps
   5.1. Bottom of lath: 25 mm (minimum)
   5.2. Top of lath: 5 mm (minimum)
   5.3. Accessories: Preformed slotted stop beads

630 Beads/ stops for internal use

1. Standard: In accordance with BS EN 13914-2, Table 2.
2. Material: Galvanized steel to BS EN 13658-1

640 Beads/ stops generally

1. Location: External angles and stop ends except where specified otherwise.
2. Corners: Neat mitres at return angles.
3. Fixing: Secure, using longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with substrate.
   3.1. Beads/ stops for external render: Fix mechanically.
4. 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

1. Locations: Where defined movement joints are not required. Where dissimilar solid substrate materials are in same plane and rigidly bonded or tied together.
2. Crack control materials
   2.1. Isolating layer: Building paper to BS 1521.
   2.2. Metal lathing: Internally: Galvanized steel plain expanded metal with spacers
3. Installation: Fix metal lathing over isolating layer. Stagger fixings along both edges of lathing.
4. Width of installation over single junctions
   4.1. Isolating layer: 150 mm.
   4.2. Lathing: 300 mm.
5. Width of installation across face of dissimilar substrate material (column, beam, etc. with face width not greater than 450 mm)
   5.1. Isolating layer: 25 mm (minimum) beyond junctions with adjacent substrate.
   5.2. Lathing: 100 mm (minimum) beyond edges of isolating layer.

Mouldings/ decorative plasterwork - Not Used

Internal plastering

710 Application generally

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

2.1. 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.
3. Drying out: Prevent excessively rapid or localized drying out.

715 Flatness/ surface regularity

1. Sudden irregularities: Not permitted.
2. Deviation of plaster surface: Measure from underside of a straight edge placed anywhere on surface.
   2.1. 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

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

720 Dubbing out

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

725 Undercoats generally

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

742 Thin coat plaster

1. Preparation for plasters less than 2 mm thick: Fill holes, scratches and voids with finishing plaster.

747 Projection plaster

1. Application: Evenly and in one continuous operation between angles and joints.
2. Finish: A level open textured surface before finishing manually.

777 Smooth finish

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

788 Nonhydraulic lime plaster undercoats

1. Suction control: Dampen substrate.
2. Application: Apply firmly. Trowel to an even surface. Consolidate/ scour as necessary to control shrinkage. Cross scratch to provide an undercut key for the next coat. Do not penetrate through the coat.
   2.1. Key for final coats: Lightly scratch using a wood 'devil' float.
3. Curing coatings: Keep damp by light spraying with water until coating is sufficiently firm.

789 Three layer nonhydraulic lime plaster final coat

1. Suction control: Dampen undercoat.
2. Application
   2.1. First layer: Use steel trowel.
   2.2. Second layer: Use wood float in the opposite direction to the first layer.
   2.3. Third layer: Use a steel trowel in the same direction as second layer.
3. Consolidation/ scouring: As necessary to control shrinkage. Use a wood cross grain float.
4. Finishing: Dampen with a stock brush. Polish with a steel trowel. Finish with a damp stock brush.
5. Drying: Keep damp by light spraying with water until coating is sufficiently firm.

External rendering - Not Used

Ω End of Section

‘More than design’