

Render Solutions

System:
Client:
Applicator:
Project:
Date:

Author:

System Specification

System Specification

weberpral M

Scraped Finish

A one-coat through-coloured cementitious render, in a range of

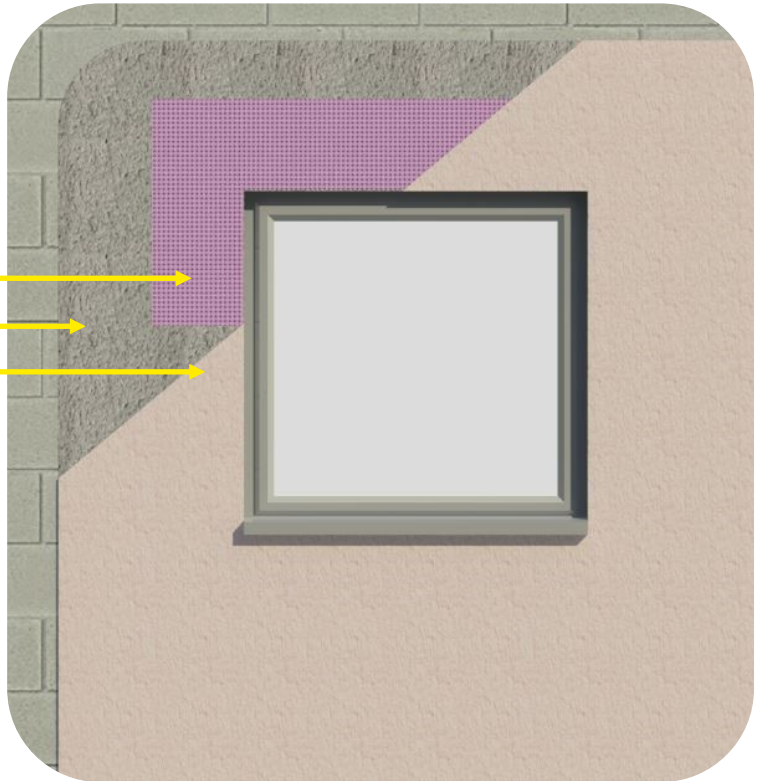
MATERIALS REQUIRED

weber standard meshcloth

weberend aid (If required)

weberpral M

The choice of substrate to receive a render finish is important to maximise bond and help reduce cracking. The main factors to consider when choosing a substrate to be rendered are: Strength, Suction and Key. Typically a medium-density 1350-1450kg/m³, 3.6-7.3kN general purpose, concrete block with a mortar cement:lime:sand ratio of 1:1:6 will satisfy these requirements. Industry Best Practice should be followed in regard movement control. The recommendations in BS5628 : Part 3 and BS EN 13914-1 should be observed.



FOR THE DESIGNER

weberpral M is scrape is a one-coat render, normally applied to a finished thickness of 15mm-25mm. The finished thickness depends on site exposure. **weberpral M** is a through-coloured mortar and is available in a range of colours. The scrape texture is achieved by scratching the surface using a nail float. This operation is carried out when the mortar is almost dry and removes the surface laitance to leave a coloured face with a light pitted texture. **weberend protect** is a surface treatment for protecting render from water and liquid ingress. Prevents ingress of most types of surface contamination, including water, oil and graffiti whilst maintaining the surface aesthetics and allowing the substrate to breathe. **weberpral** is available in 24 colours.

For the Estimator

weberend aid

weberpral M (15mm thickness)

weber CL150

weber mesh standard

weberend protect

4kg/m² in 25kg bags

21/kg/m² 25kg bags

0.1 litre/m² in 25 litre bottles

approx. 45m² a roll

5m² per litre (dependant on porosity)

Contractor's/clients design team need to ensure the system installed meets the building regulations requirements along with undertaking design liability for the building and its entirety including compliance with supplementary guidance. barriers

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M20 Plastered/Rendered/Roughcast/Dry Dash Coatings. One Coat Render Systems Ss_25_45_70_60

To be read with Preliminaries/General conditions.
TYPE [S] OF COATINGS.

160A WEBER PROPRIETARY ONE-COAT COLOUR RENDER SYSTEM:

- Project:
- Location: To specified wall areas as identified on architect's drawings or other Contract Documents
- Manufacturer: Saint-Gobain Weber
- Product reference: **weberpral M**
- Substrate - Masonry background
- Background: Masonry with a suitable strength and compatible with a 1:1:6 mortar mix could be confirmed by block manufacturer. The recommendations in BS528: Part 3 and BS EN 13914-1: 2016 should be observed. Refer to clause 509A
- Thickness:
- **15 to 25mm (finished).** 15mm finished thickness (min) to Sheltered/ Moderate and 20mm finished thickness (min) Severe as per BS EN13914-1: 2016. **Very severe** weather conditions minimum 20mm finished thickness (Assumptions based upon BS EN 13914 – 1: 2016) Refer to approved document C table 4
- Finish: **Scraped finish refer to clause 861A, Ashlar finish 861B, Roughcast finish 866A, Dry Dash 871A.**
- Colour
- Flatness: Comply to BS EN 1996 – 2: 2006 /BS5606: 1990
- Reaction to Fire: A1 – EN998-1, the product is classified as 'non-combustible' (as defined by the building regulations) as it contains less than 1% organic material and is therefore unrestricted by these regulations. This classification applies to the complete colour
- Water Absorption: W2 (EN998-1)
- Durability: (Adhesion after weathering cycles) $\geq 0.2 \text{ N/mm}^2$ (A, B, C) (EN998-1)
- Durability: (Water permeability after weathering cycles) $\leq 1 \text{ ml/cm}^2$ (EN998-1)
- Environmental: BBA Environmental profile certificate **EP 17/1005**
- BBA Certificate: 17/5464
- Accessories: Render only beads, if required by the system or product, or if specified, shall be of appropriate design, gauge and material as supplied by Weber. Beads to be located and fixed as detailed on Architect's drawings or Weber's bespoke/typical details (this may involve bedding RO beads in **weberend bead adhesive**). Structural, temporary or bead fixings shall be of suitable strength and durability approved and supplied by Weber. Where meshcloth is being incorporated as treatment to areas of potential high stress it shall be weber mesh cloth standard a standard duty, balanced, open weave, glass fibre meshcloth, coated for alkaline resistance, available in 1m x 50m rolls
- **Other Requirements:**
- Ensure movement joints coincide with the building, refer to clauses 647 & 650A
- **To achieve consistent colour, use same batch or alternatively blend mixed batches on site**
- For complementary concrete repair solutions refer to clause 321A and contact Saint-Gobain Weber
- Reduce maintenance cycle use **weberend protect** and Repair and maintenance guides are available upon request
- Change of colour and increased weather protection complimentary with the use of **webersil P**

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- Impact Resistance: Provides adequate resistance to impact damage and cracking in all normal circumstances. Where the product is exposed to severe impact (e.g. some industrial sites) or applied over existing background cracks, precautions may be required to reduce the risk of damage.
- Guarantees **will only be issued** if requested prior to project commencement. Weber's written instructions must be followed
- **Any non-Weber products used within the system will invalidate the guarantee and the performance cannot be supported.**

PREPERATION

- Substrate must provide suitable key / suction. The adequate use of movement joints will help reduce stress build up in the substrate and thus reduce the risk of cracking. Movement joints must continue through the render to the substrate
- All the major building components must be fitted. This includes copings, cappings and flashings, windows and doors, soffits and fascia's etc. The fittings must be detailed to protect the finished render from staining due to localised water run-off. Flue pipes, air bricks and weep holes should also be in final position prior to the application of render. Refer to clause 322A
- If required weber CL150 fungicidal wash to kill moss, algae or unseen spores/any organic growth.
- Application of **weberend aid** as a key coat to provide mechanical key using a hawk and trowel in a tight layer 2–3 mm thick to the substrate. Texture the surface using a well loaded roller. Apply no more than 2–3 m2 before texturing Ensure the final texture achieved is a deep heavy stipple finish with a minimum textured depth of 5–10 mm and leave to cure for 48 hours. Insufficient key will inhibit the render bond; this is particularly relevant on low suction substrates where capillary absorption is minimal.
- Fit render only base (drip), stop and corner beads, where required
- To reduce substrate cracks being visible Weber recommend incorporating **webermesh standard** (meshcloth) into the weberend aid key coat to typical stress points areas, such as above and below openings.

GENERAL REQUIREMENTS

290 KEY COAT TO BACKGROUND (IF APPLICABLE)

- Substrate: Suitable Masonry refer to data sheet/best practice/application guide
- Mix: weberend aid to provide mechanical key applied to substrate.
- Thickness: 3mm.
- Finish: Texture the surface using a well loaded roller.

300A SPECIFICATION VARIATION

- Any variation to this specification (or any Saint-Gobain Weber specification) must be agreed prior to commencement of works with Saint-Gobain Weber, who will amend and reissue the specification (and guarantee offer where applicable) in accordance with the agreed variation/s. Any other relevant or significant variations in the prevailing circumstances and construction method or build-up must also be notified in writing to Saint-Gobain Weber prior to commencement of works. Saint-Gobain Weber will not accept any liability for any costs associated with any consequential issues arising from unauthorised variations or un-notified changes in circumstances relating to the application or performance of Saint-Gobain Weber products or systems.

310A DESIGN

- Complete the detailed design of the system and associated features shown on the drawings to meet the requirements of this specification.

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320A INTEGRITY

- The installation must be weather tight under all anticipated conditions. Consult with Saint-Gobain Weber Technical for specific details and relating to particular conditions.
- The installation must be capable of resisting all dead loads and design live loads, including impact and wind loads, and accommodate all thermal movements without damage.

321A STRUCTURAL REPAIRS:

- All necessary repairs to the structure must be carried out by suitably qualified contractors and be complete prior to the application of Saint-Gobain Weber products and systems. Contact Saint-Gobain Weber 08703 330070 for complimentary technical mortars solutions and specifications.

322A WINDOW CILL PROJECTION:

- Where window frames incorporating window cills are to be provided by others, then the cill must project sufficiently beyond the outside line of the Saint-Gobain Weber render system to a recommended 40mm minimum.

403A SERVICES

- Contractor cannot remove or alter services and equipment (Including BT cables) and ensure that all services are maintained throughout contract. The appointed contractor must arrange removal of services/equipment prior to rendering and reinstallation after completion of rendering works.

404A PROTECTION

- All entrances, footpaths and balcony's **must** be fully protected during installation of Weber render systems. Footpaths need to be cleared at night to allow safe access and egress prior to departure. Windows/door screens (glazing) to be fully protected during operations. Frames/concrete to remain clean as work proceeds.
- Landscaping must be fully protected (polythene or similar) and environs kept clean along with mixing areas for materials fully protected.
- After removal of scaffold, all areas must have environs cleaned and rubbish removed within a one-week period.
- Gas flues to be fully protected during casting and cleaned on completion (Contractor to forward method statement prior to starting work) as clauses 420A and 514.

407A EXISTING WINDOWS

- Contractor must check all floor windows/balcony doors prior to starting work on application and on completion, that they will open when work is complete.

411A INSTALLATION

- To be carried out by a contractor recommended by the system manufacturer. Reference should be made to project specification, method statement, drawings and all other relevant literature. Contact Saint-Gobain Weber for appropriate list of recommended contractors.
- All rendering must be in accordance with the relevant recommendations of BS 13914-1: 2005 Design, Preparation & Application of External Rendering & Internal Plastering, BS 8000: Code of Practice for Plastering and Rendering, and Saint-Gobain Weber's printed instructions. All Saint-Gobain Weber masonry paints and decorative finishes must be applied to dry backgrounds, strictly in accordance with Saint-Gobain Weber instructions.

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419A CONTROL SITE SAMPLE(S)

- Prior to work commencing the appointed sub-contractor shall prepare on site a sample panel, incorporating each of the approved products refer to 160A, of suitable area and representative of the quality of workmanship which can be achieved. Sample panel to be on site in approved location throughout the contract for inspection/comparison purposes.

420A GAS FLUES

- All existing gas flues penetrating the fabric, **must** be checked by a Gas safe heating engineer prior to works starting and a full report issued for the works to be carried out. Any flues that require alteration or are not meeting the required standard to be reported immediately. Landlord/Home owner gas safety record must be issued (CP12) prior to main works commencing and on completion of works. Contractor must contact residents where gas flues extend through the external wall and agree time for boiler to be switched off by contractor during casting (protect flue during casting, clean flue on completion). Contractor must arrange access to check system and switch boiler back on (could be outside of normal working hours and needs to be allowed for within the contractor's costs).

421A HEALTH & SAFETY

- It is strictly the contractor's responsibility to ensure that all works are executed in accordance with current health and safety legislation. Guidance must be taken from relevant and current HSE publications.
- Scaffolding safety, the location of rubbish skips, access ladders etc. must be agreed with the client/principal contractor/ principal designer and be in accordance with current Health and Safety regulations.
- The use of all Saint-Gobain Weber materials must be in accordance with relevant Product and Safety Data Sheets which are available at www.uk.weber

422A SCAFFOLDING

- Wherever possible independent scaffolding should be used to avoid the need to subsequently make good putlog holes and other breaks in the work. Where the scaffolding is required to be tied back to the building it is normal to recommend "boxouts" to reduce the incidence of patches left by putlogs and to provide access points for future scaffolding required for maintenance inspection and repairs. The scaffolding must be arranged to enable good access to be obtained to the whole of the face of the building. Sufficient clearance for working is required between the scaffolding and the finished surface of the render (allowance must be included for the thickness of the finished system on the face of the building). Adequate consideration should be taken to prevent following trades or removal of scaffolding from soiling or damaging to finished render system.

423A UNIFORMITY OF COLOUR AND TEXTURE

- Ensure that supplies of materials are sufficient to give consistent and uniform colour and texture. To minimise variations in colour use materials from the same batch, avoid dry jointing and continuous surfaces must be completed without breaks. Programming of work to coincide with elevation breaks, stoppages and weather.

425A PROGRAMMING THE WORK

- It must be ensured that the work is programmed to be carried out during suitable weather conditions, taking into consideration seasonal variations and allow sufficient time in the programme for stoppages due to inclement weather.

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MATERIALS AND MAKING OF MORTAR

429A SITE STORAGE

- Site storage and protection of Saint-Gobain Weber materials must be in accordance with the manufacturer's instructions.

449A ADMIXTURES

- Do not use admixtures of any type with proprietary mixes unless otherwise instructed by Saint-Gobain Weber.

451A CLEANLINESS/PROTECTION

- Protect thoroughly all existing work, windows and approaches using suitable boards, sheets, etc. Clean off all droppings on to finished work immediately. Protection of all fenestrations and fixtures and fittings must be accounted for on all Saint-Gobain Weber products including all pigmented primers, bonding agents and fungicidal washes.

459A CONTAMINATION

- Do not allow contamination of one type of material by another, or by any set material.
- Only use clean cold water and mix in non-contaminated mixing tubs. Ensure only full bags are used when mixing.

461A INITIAL SET

- Do not use mixes after initial set has taken place. Do not retemper or reconstitute mixes.

481A CURING

- Take all necessary precautions to prevent newly rendered surfaces from drying out too rapidly.

492A MESH REINFORCEMENT

- Manufacturer/ Supplier: weber standard mesh cloth.
- Product reference: As above.
- Proportions (approximate): 1000mm x 50,000mm to be applied at typical points of stress
- Condition: As new and stored correctly
- Distribution: Above and below openings by a minimum 500mm above and 200mm past embedded within the key coat or alternatively mid thickness of the applied render (not in contact with the wall).

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495A MIXING (HAND APPLIED)

- Render mortars (site-made):
- Batching: By volume. Use clean and accurate measurement of water. To ensure continuity of batch numbers to complete panels, elevations and those visibly adjacent where this is not possible materials batches should be intermixed by volume.
- Mix proportions: 5.5 litres of water per bag and gradually add contents of the bag and mix thoroughly using a suitable drill and whisk.
- **weberpral**: Mix thoroughly for 5 – 10 minutes and do not over mix.
- Mixes: Of uniform consistence and free from lumps. Do not retemper or reconstitute mixes.
- Contamination: Prevent intermixing with other materials.
- Mixing for weberpral products are as follows: Render pump when mixing the following should be considered: Use only materials directed in correct quantity. Discard suspect materials, which are damp or contaminated. Add proportion of gauging liquid first to prevent clogging the mixer. Don't over mix. Only mix sufficiently to combine materials - then use immediately. Once material has been mixed do not attempt to re-temper it to a workable consistency by adding more water.

495B MIXING (MACHINE APPLIED)

- Render mortars (site-made):
- Batching: By volume. Use clean and accurate measurement of water. To ensure continuity of batch numbers to complete panels, elevations and those visibly adjacent where this is not possible materials batches should be intermixed by volume.
- Mix proportions: 5.5 litres of water per bag and gradually add contents of the bag and mix thoroughly using a suitable batch or continuous spray render machine/pump.
- **weberpral**: Mix thoroughly for 5 – 10 minutes and do not over mix.
- 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 coatings on frozen or frost bound substrates.
- External work: Avoid when air temperature is at or below 5°C and falling or below 5°C and rising. Maintain temperature of work above freezing until coatings have fully hardened. Do not apply if there is any likelihood of frost within a 24-hour period.

497A HOT WEATHER

- General: Do not use in full sunlight or in temperatures above 35°C.
- External work: In warm conditions the cooling of the substrate may be in order prior to work commencing. Likewise, in warm dry periods curing of the freshly applied mortar may be required over a 72-hour period by controlled mist spraying with clean water to ensure hydration.
- Internal work: As above curing of the render may be required.

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497B ADVERSE WEATHER

- Application of the system renders and paints must not be carried out in inclement weather conditions as described in BS 13914 & BS 6150 respectively. Do not use frozen materials and do not apply materials to frost bound surfaces. In sunny weather work should commence on the shady side of the building and be continued round following the sun to prevent the rendering drying out too rapidly. Saint-Gobain Weber renders and adhesives must not be applied in rain, fog or mist, at temperatures below 5°C or above 30°C and or if exposure to frost, mist or rain is likely to occur during drying. Maintain temperature of the work above 5°C until adhesive/mortar/render has fully hardened.
- Protect newly rendered surfaces against rain and snow by covering when precipitation occurs. Replace coatings damaged by rain or frost. Care must be taken to programme works to avoid the use of darker render colours to reduce the risk of lime bloom in winter months or within adverse weather conditions. Where extreme and or excessive weather conditions persist, provision must be given for extensions to work periods within the main contract documents. Refer to Saint-Gobain Weber technical services for further assistance.

499A INSPECTION OF COMPLETED INSTALLATION

- As soon as possible after completion of the work and before removing scaffolding, carry out an inspection to identify any defects and report immediately.

PREPARING SUBSTRATES

509A BACKGROUNDS GENERAL

- The substrate should be constructed of durable and moderately strong materials specifically designed to receive modern renders. All substrates should be clean, suitably dry, sound and free from anything that may interfere with the adhesion, such as oil, grease, organic matters and soluble salts.
- Blockwork should have an open texture or a designed key for rendering. Relying on the raking of mortar joints is not sufficient to provide adequate key alone. Smooth dense blocks with little mechanical key should have the key enhanced by an application of **weberend aid** stipple coat. It is important that the block chosen for the scheme is suitable to receive external cement render. Contact block manufacturer for guidance on the suitability of the blocks to receive render along with advice on the correct bedding mortar mix appropriate to the construction. The **weberpral** products have similar characteristics to those of a 1:1:6 cement: lime: sand mix. In our experience a general-purpose medium density concrete block will generally meet the criteria as detailed in this section.
- Brickwork: Provide sufficient key, new brickwork should be laid with the mortar joint recessed 10 – 12mm by width and depth squarely. Existing brickwork will require the joints raking back to the above dimensions. If the joint is too hard, the key should be provided through using a stipple coat of weberend aid. Bricks with a water absorption of less than 7% will require an application of weberend aid regardless of the joints being raked to ensure a good bond of the render due to the lack of suction and key provided by the brick face.
- Some common bricks may contain deleterious sulphate salts. If possible, advice should be sought from the brick manufacturer regarding their use as a substrate for rendering in that location, particularly in high exposure or potentially damp areas. An application of weberend-aid will deter sulphates from crystallising and impairing the bond of the render.
- Concrete: coated with weberend aid stipple coat to provide satisfactory key. No-fines concrete will provide a satisfactory key.

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510A SUITABILITY OF SUBSTRATES

- Soundness: Free from loose areas, cracks and gaps. Before preparation or applications of coatings ensure that: Backgrounds are structurally sound and secure, adequately true and level, free from contamination and loose areas, reasonably dry and in a suitable condition to receive specified coatings.
- The treatment of backgrounds is subject to remedial survey, clauses 160A and full Saint-Gobain Weber recommendations. All cutting, chasing, fixing of concealed conduits, service outlets and the like, and making good of the background is completed.
- Cutting, chasing, making good, fixing of conduits and services outlets and the like: Completed.
- All necessary repairs to the structure should be carried out by suitably qualified contractors and be complete prior to the application of Saint-Gobain Weber products and systems. Remove all television aerials, brackets, lights or tenant's fittings from work surfaces. Disconnect, make safe and carefully remove all live or used cables etc, to be replaced on completion.
- Tolerances: Permitting specified flatness/ regularity of finished coatings.
- Cleanliness: Free from dirt, dust, efflorescence and mould, and other contaminants incompatible with renders. weber CL150 biocidal wash to be applied where algae is visible. Drench the affected area with undiluted weber CL150 using a brush or sprayer. Leave the area for 48 hours to ensure the product as killed all the algae and then wash the area using a pressurised washer with a fanned water jet.
- Strength – the substrate, including joints, must be stronger than the render and should be able to adequately support and restrain it.
- Suction – good adhesion of a render is dependent on good porosity of the substrate. If the suction is too high the render will not hydrate sufficiently. If it is too little there will not be a good bond.
- Texture – to ensure a good bond the substrate should have an open texture, otherwise **weberend aid** will need to be used.
- Typically, a medium-density ($1350\text{--}1450\text{kg/m}^3$, $3.6\text{--}7.3\text{kN}$), general purpose, concrete block with a mortar cement: lime: sand ratio of 1:1:6 will satisfy these requirements.

511A PREPARATION OF BACKGROUNDS

- Substrates to receive render must be clean, sound and dry. The construction must be free from oil contamination, dust, fungal growth, crystallised salts and any other factors that may impair the adhesion of the applied system or form a weak intermediate layer. Fungal or algae growth can be removed using a wash of **weber CL150**.

512A LINE AND LEVEL OF BUILDING

- The background construction should be sufficiently true, in line and plumb to accommodate the product specified and its constraints. The render alone should not be used to correct gross irregularities. As a guide, the maximum that can be achieved is a correction of a deviation of 5mm underneath a 2m straight edge placed anywhere on the surface of the substrate.

514 PREPARATION: EXISTING SERVICES, ETC

- Disconnect, make safe and carefully remove all live or used cables etc., to be replaced on completion. Remove all television aerials, brackets, lights or tenant's fittings from work surfaces and replace upon completion (by main contractor). All existing rainwater and waste disposal fittings to be redirected away from the substrate and Saint-Gobain Weber Render surface whilst works proceed. Replace and refit upon completion of work taking into consideration the thickness of the Saint-Gobain Weber render system. Mechanical fixing of rainwater goods to follow Saint-Gobain Weber technical manual recommendations. All gas and balance and mechanical flues to be extended to anticipated line of system in accordance with British Gas recommendation.

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538A KEY COAT (IF APPLICABLE)

- Materials: **weberend aid**: (polymer modified cement and sand mix which includes an integral bonding agent)
- Mix proportions (**weberend aid**: water): 3:1.
- Consistency: Thick slurry, well mixed.
- Application: By trowel or spray to form a continuous 2 – 3mm coat and then textured with a well loaded roller to form a depth of texture of 5 – 10mm.
- Curing: Controlled to achieve a firm bond to substrate and allow 2 – 3 days before rendering.
- If the substrate cannot provide sufficient support to the rendering, as in the case of smooth concrete, high-density concrete blockwork, engineering brick etc., then a weberend-aid stipple coat should be used. Using a hawk and trowel apply **weberend aid** to a thickness of 2-3mm. Apply no more than 2-3 square metres before producing a deep texture with well loaded roller or brush. Allow to cure for a minimum period of 24 hours.

541 BONDING AGENT APPLICATION

- General: Not applicable

556A REMOVING ALL EXISTING RENDER

- Location and extent: Agree, at least on a provisional basis, before work commences.
- Minimize extent of removal and renewal.
- Render for removal: Detached, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged.
- Cracks: All crack should be professionally assessed for risk of further movement and repaired following a suitable specification.

557A REMOVING DEFECTIVE EXISTING RENDER

- Render for removal: Detached, hollow, soft, friable, badly cracked, affected by efflorescence or otherwise damaged. Removing defective render: Cut out to regular rectangular areas with straight edges. Horizontal and vertical edges: Square cut or slightly undercut. Bottom edges to external render: Do not undercut. Render with imitation joints: Cut back to joint lines. Cracks: Fine hairline cracking/ crazing: Leave. Other cracks: Cut out to a width of 75 mm (minimum). Dust and loose material: Remove from exposed substrates and edges.

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BEADS/ JOINTS

636 PROFILLED BEADS/ STOPS

- Standard: In accordance with BS EN 13914-1.

640A BEADS/ STOPS GENERALLY

- Location: External angles and stop ends, except where specified otherwise.
- 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.
- Provide beads/stops at all external angles and stop ends except where specified otherwise. Where uneven dub out the substrate in line of new base bead sufficient to provide flat surface ready to receive render beads to be mechanically fixed in true line and level. Cut neatly, form mitres at return angles and remove sharp edges, swarf and other potentially dangerous projections. Fix securely, using the longest possible lengths, plumb, square and true to line and level, ensuring full contact of wings with background.
- After coatings have been applied, remove coating material while still wet from surfaces of beads/stops, which are to be exposed to view.

646A CRACK CONTROL AT JUNCTIONS BETWEEN DISSIMILAR SOLID SUBSTRATES

- Locations: Where defined movement joints are not required, such as dissimilar that are under compression on a horizontal plane and no risk of movement a standard weber meshcloth can be used.
- Width of installation across face of dissimilar substrates material with weber meshcloth by 200mm each side of the junction.
- Where the render is to be continued over joints between dissimilar solid backgrounds which are in the same plane and rigidly bonded or tied together, all junctions to have a movement joint.

647 CONSTRUCTION/MOVEMENT JOINTS

- Form joints accurately to detail and in locations shown on the architectural drawings. If modifications to any joint location or design are necessary on site, agree revisions with the design team before proceeding. All movement joints to be designed and installed in accordance with relevant Saint-Gobain Weber written recommendations.

650A MOVEMENT JOINTS

- Form joints in coatings to coincide with structural movement joints in background using movement joint bead (reference as per clause 636). Ensure that joints extend through coating to background. All movement joints to be designed and installed in accordance with Saint-Gobain Weber recommendations. Guidance on the placement of movement joints should be gained from the specified block manufacturer and used in conjunction with the BS 5628-3 Code of Practice for Use of Masonry and BS 6093 Code of Practice for Design of Joints and Jointing in Building Construction. The guidance given in these standards is that joints should usually be included at 6m intervals and 3m from corners, however, this will vary depending upon the type of construction and the strength of the brick or block.

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EXTERNAL RENDERING

810A APPLICATION GENERALLY

- Application of render: Firmly and in one continuous operation maintaining a flowing edge between angles and joints. Achieve good adhesion.
- Appearance of finished surfaces: Even and consistent working method is maintained across all panels receiving render. 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.

810B APPLICATION GENERALLY

- It is important to have a suitable number of operatives in proportion to the panel size to maintain a flowing wet edge when applying material across the entire panel. Use of a render pump will increase speed of application/productivity along with maintaining a more consistent output compared to traditional manual application. However, with renders that require manual finishing techniques, e.g. scraped textures and Ashlar, it is important to consider how the area can be finished within the open time of the product. Size of application areas should be aligned to the resources available to finish them. Consideration should be given to ensure that the rendered work can be completed in a progressive sequence. This will help to avoid long delays between finishing dates, which in itself may contribute to differences in appearance between the panels. Any changes in application procedure, due to differences in climatic conditions for example, can result in shade variation between rendered bays. Whenever possible the panels should be finished on an external angle.
- weberpral renders are full thickness renders applied in either one or two passes designed to hydrate together as one monolithic coat. The thickness of the passes is determined by the method of finishing and upon the chosen means of application. As an example; for a 15 mm finished thickness, a single 18mm pass can be applied with a machine in one application. By hand, this same thickness would be achieved by the application of two 9mm passes (on average). The initial pass in this instance would normally be allowed to gel prior to the second pass. In areas of high stress (i.e. around a door or window opening) the reinforcement mesh can be added into the fresh initial pass. It is important to ensure a finished monolithic render application; the second pass is generally applied within an hour of the initial pass (may alter depending on conditions). To avoid exposing the interface between the two passes during the finishing process with either application method, the final pass for scraped finishes must not be less than 8mm. Exposing the cement rich interface between the passes produces a 'halo' effect, which is only exaggerated by further scraping.

820 DUBBING OUT FOR RENDERING

- General: Correct substrate inaccuracies however the render should not be used to resolve gross irregularities in the construction.
- Thickness of any one coat (maximum): 25 mm in isolated patches up to 30mm.
- Total thickness (maximum): 25 mm, otherwise obtain instructions.

831A REINFORCEMENT

- The mesh should be cut into strips that will extend past the junction of dissimilar materials or point of weakness by 200 - 500mm and pressed evenly into freshly applied render with a trowel or spatula, ensuring that it is not in direct contact with the substrate, and then overlaid with further render to encapsulate the mesh. If using a **weberend aid** stipple coat it is better embedded in this application.

It is the design team overall responsibility to ensure the proposed Weber system is suitable for the building in question. Our liability is to ensure that system performs as stated within our literature & based upon installation to our recommendations.

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861A SCRAPED FINISH

- Finish: Scraped to expose aggregate and achieve an even texture.
- To achieve a flat level finish, passes of material should be applied in even thickness and levelled with a straight edge of suitable length. Regardless of the method of application (machine or hand) it is recommended that Weber levelling tools be used as part of the process. Specialist Weber serrated edges for levelling pral materials tend to be easier to handle and help to remove air pockets trapped in the wet render during application, particularly from hand application. The applied material should be ruled level and flattened with a spatula to allow for finishing. This should be done during application whilst the material is still workable. It is important to avoid over troweling of cement renders, as this will bring an excessive amount of cement laitance to the surface. This can create a harder surface to scrape when working with pral renders. Remove all trowel marks, and after partial take-up, scrape back 2-3mm to develop the final colour and texture required.

861B ASHLAR FINISH

- Finish: Scraped to expose aggregate and achieve an even texture.
- Mix and apply **weberpral M** to specified thickness - this will be 3mm more than finished thickness. Rule off with a straight edge to achieve satisfactory in-plane surface. Remove all trowel marks, and after partial take-up, scrape back 2-3mm to develop the final colour and texture required. 15mm minimum thickness must be achieved after ashlar cut - e.g. 10mm deep cut requires overall finished thickness of 25mm.

866A ROUGHCAST FINISH

- Finish: Left as cast with an even thickness and texture.
- The initial basecoat should be applied by machine at a thickness relevant to the exposure rating. Additionally, any variances in suction of the substrate should be unified particularly between the mortar joint and the block. The base coat should be ruled level and flat and then allowed to pick up for a period of between 1 and 2 hours before application of the second pass. The second pass, applied by render pump gives the textured finish to the desired effect. Various textures can be achieved from a Tyrolean fine finish through to a heavy roughcast effect. The process of achieving these textures is by lowering the pressure of the render pump for heavier textures and speeding up for finer finishes. Additionally the nozzle size of the spray gun can be varied to assist in these textures. A consistent texture is normally produced by moving the spray gun with a circular action, maintaining a regular distance and orientation between the nozzle end and the render panel. During the application of this pass a flowing edge must be maintained and thought should be given regarding potential obstructions when applying texture (design of scaffolding). The less number of interruptions to this operation will allow for the best finish.

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871A DRY DASH FINISH

- Coarse aggregate: To BS EN 12620. Well washed.
- size: 6mm.
- Type: weber dash.
- Application and finishing: Achieve firm adhesion to an even overall appearance. After throwing aggregate tap particles lightly into coating.
- Mix and apply **weberpral M** by render pump or traditional methods in the usual manner. For 15mm render thickness apply an initial pass to a nominal 10mm, rule level. When sufficiently hard but still green typically between 1 & 16 hours later depending upon climatic conditions and suction provided by the substrate apply a secondary butter/dash receiver coat 5mm in thickness. (Please note for a 20mm finished thickness apply a 15 mm initial pass, followed by 5mm under the same guidance). Attempting to dash into a full thickness of render, not applied in layers may lead to slumping and loss of the aggregate into the render. A flowing edge must be maintained to the render which must not be allowed to skin over before the stone is applied. On completion aggregate should be lightly tamped into the render with a wood or plastic float to ensure that a good bond is obtained. All aggregate should be washed and reasonably dry. The optimum size of aggregate is between 4 – 8mm.

880 CURING AND DRYING

- General: Prevent premature setting 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): As render manufacturer's recommendations.
- 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.

881A CURING AND DRYING

- Do not apply: If frost is forecast within 24 hours of use. In damp/wet conditions. In temperatures below 5°C or above 30°C On elevations in direct sunlight or where the substrate is hot. Curing with a fine spray of clean water may be necessary during rapid drying conditions. In hot climates, curing as above is essential for 3-5 days after application.

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