RENDER

TRADE SPECIFICATION

GENERAL

a) **BDW Trading Limited**
Barratt Homes and David Wilson Homes are all trading names of BDW Trading Limited "the Company".

b) **Clearing**
The Contractor is responsible for clearing up and removing waste materials resulting from executing his trade process.

The Contractors attention is particularly drawn to the sections below which, state where waste materials must be removed as work progresses, ensuring that all waste materials have been removed following the completion of the works and taken to waste segregation area for sorting by subcontractor.

Failure to comply with this requirement resulting in the Company's labour performing this task will result in contra charges.

c) **Contract Conditions**
The Contractors attention is drawn to the Company's Conditions of Contract and General Terms.

d) **Defective Workmanship**
All defects arising from poor workmanship by Contractors or, by the Contractor not carrying out the Works in accordance with this Trade Specification, are to be remedied by the Contractor at no cost to the Company.

Failure by the Contractor to carry out this contractual obligation resulting in an alternative Contractor being instructed to carry out such remedial work, will incur the Contractor with the cost thereof.

e) **Group Suppliers**

Only the following manufacturer's products are permitted for use by the Contractor unless agreed otherwise at the time of tendering:

For all render materials:

Weber
Saint Gobain Weber Limited
Dickens House
Enterprise Way
Flitwick
Bedford
MK45 5BY

Tel: 01525 718877
Contact: Padraig Barry

Contact: Daniel Gay – North & South

Tel : 07525 672583

f) **Health & Safety**

All operatives are to be inducted on site in accordance with Barratt Health and Safety Policy.

It is the responsibility of the contractor to provide their own PPE Equipment which must be worn at all times while on site.

All operatives are to be in possession of a valid CSCS Card.

No 240v tools are allowed on site.

The Contractor MUST provide relevant Health and Safety, Plumbing Risk Assessments, Method Statement and relevant COSHH sheets.

The use of suitable gloves should be considered to protect against Dermatitis and burns to the hands from contact with cement and cement based products.

External rendering work must always take place off a level working platform.

Manual Handling Assessments shall be provided when requested.

The Contractor must not, at any time, interfere with scaffolding.

The Contractor must always ensure loading bay gates are in the shut position when not in use.

g) **Materials**

It is the Contractors responsibility for checking materials delivered directly to site for any damage, colour variation and correct quantities prior to unloading. Should significant quantities of damaged materials be identified, these must be reported to the supplier before accepting the consignment.

The Contractor is responsible for unloading, protecting and safe storing all of their own materials to avoid damage and surface contamination.

The Contractor must ensure that all materials are satisfactory for use and have not been subject to deterioration and confirm to the relevant BSS, if applicable or Agrément Certificates, NHBC and Local Authority requirements. Failure resulting from the Contractor using unsuitable or damaged materials will result in the Contractor being liable for any costs in rectifying the same.

h) **Manufacturers Products**

The Contractor must make themselves aware of Manufacturer's products and fixing instructions at the tendering stage as no claim for want of knowledge will be entertained. All technical issues must be resolved before work commences on site.

i) **Site Condition**

The Contractor is to examine the drawings, visit the site in order to ascertain position of site office, compound, electricity and water supplies.

Accessibility may vary depending on the location, weather conditions and such like. These factors must be taken into consideration at tender stage as no claims will be entertained for additional costs due to adverse site conditions.

j) **Sub-Contractor**

The Contractor must not further sub-contract any part of the Works to another Contractor without the prior knowledge and written approval of the Company.

It is essential that the Contractor liaises with all other trades associated with the Works to ensure the sub-structure is installed correctly and appropriately prior to work being carried out, including but not limited to:

Bricklayer

To ensure substrate for applying render to is straight, level, clean and free from deleterious materials.

Scaffolder

To ensure all working platforms are provided and installed correctly, prior to the commencement of the Works.

1. QUOTATION

1.1 A lump sum fully inclusive (labour, plant and materials) fixed price quotation for the rendering works in accordance with the enclosed drawings; this scope of works and the enquiry documents is required.

1.2 Contractors are deemed to have priced in accordance with current codes of practice, especially BS5262 Code of Practice for External Renderings and BS5628-3: Code of Practice for use of masonry, good standards of workmanship, with particular reference to NHBC "Buildmark" Local Authority requirements and British Gypsum guidelines

1.3 Tenderers should include for unloading, stacking, protection, distributing and fixing all materials in accordance with the latest Codes of Practice (see 2).

1.4 Tenderers are to satisfy themselves that the materials used are of satisfactory quality and have not deteriorated due to site storage as failure resulting from either bad workmanship or faulty materials will be the responsibility of the Contractor. The Contractor shall either make good the defects at his own expense or reimburse the Company the cost of employing an alternative Contractor to carry out such work should the tenderer fail in his contractual responsibilities.

1.5 Allowance should be made for complying with Safe Working Procedures as laid down by the Staturory Authority and/or Controlling Body relevant to particular operations.

2. STORAGE

2.1 Dry bagged factory batched products must be stored off the ground and protected from the weather. Products that are 'shrink wrapped' on pallets are done so to provide stability during transportation and must not be relied upon to protect materials against wet weather. Materials stored incorrectly and made damp must not be used.

3. MATERIAL

3.1 Where the material specified is a stone-dashed, cement-based render, the external surfaces block/brickwork are to be covered with 2 coats of Saint Gobain **Weberrend PUC / PTC** or **TTC** cement-based render together with Weber triple strength medusa water repellent admixture – mixed in a dry state with the cement and aggregates, finished with Weber decorative dry-dash aggregate, smooth using a float or sponge. Where a coloured finish is specified **Weber PR310** primer and synthetic texture is to be applied in accordance with the manufacturer's installation instructions. Allowances to be made for all necessary preparation works and external angles, arises etc.

3.2 Where the material specified is a through-colour render, the external surfaces block/brickwork are to be covered with Saint Gobain **Weber Pral Monocouche** render with 'Stone Ashlar' finish decorative tool jointing. The material required for complete and adjoining panels should all be from the same batch number or be thoroughly dry mixed together before use.

3.3 Any water used for mixing of renders should be clean and free from contaminants. (i.e. potable).

4. APPLICATION

4.1 Where spray roughcast application is specified, depending on the required finished thickness, a first pass is spray applied to a minimum thickness of 10 mm and ruled level. A second texture pass is applied between 1 and 2 hours after the first to form a single monolithic coat with a minimum thickness of 15 mm. Total finished thickness should be between 15 and 25 mm.

4.2 Scraped finish application of renders is to be in a one or two-pass operation to a minimum thickness of 18 mm, or to a maximum thickness of 28 mm. Noting that, 2 – 3 mm will be removed by the scraping process to give a finished thickness of minimum 15 mm, maximum 25 mm. Render should then be ruled level and allowed to harden for between 5 and 16 hours. Longer hardening periods may be necessary depending on weather and substrate conditions.

4.3 Dry-dash finish renders are to be applied in minimum of two layers by render pump or trowel application. For 15 mm 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 5 mm in thickness. Where a 20 mm finished thickness is required, apply a 15 mm initial pass, followed by 5 mm under the same guidance. Dry-dash finish must not be applied to the full thickness of render in one single application as the 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 – 8 mm.

4.4 Apply Weber. pral Monocouche in two passes to an initial thickness of between 20 mm and 28 mm to allow for an Ashlar recess from 2 mm deep up to a maximum of 10 mm. Ensure a minimum of 15 mm thickness is maintained at the base of the recess for sheltered to moderate exposure. Rule level and spatula flat. When the material is still green, scrape the surface as detailed in the manufacture's guidance notes for scraped finish. Immediately after scraping, mark out and cut the Ashlar effect using Weber Ashlar tools to produce the desired profile. Thoroughly brush down the surface of the render using a soft bristle brush. Weber.pral Monocouche will set and gain hardness in a similar manner to conventional renders.

5. WEATHER CONSTRAINTS

5.1 The drying conditions must be considered prior to the application of all external renders. Temperatures should be taken in the area of work and regularly monitored.

5.2 Protection from unfavourable weather conditions should always be provided during application and early age curing.

5.3 Cold weather application.

5.3.1 In cold weather, cementitious materials must only be used if the temperature is 5° Celsius and rising.

5.3.2 If frost is forecasted, work should cease to allow time for the applied material to set sufficiently to prevent frost damage.

5.3.3 Drying conditions will vary according to wind, temperature and humidity and may take several hours.

5.3.4 Any areas suspected of damage by frost should be inspected as soon as possible after the surface has thawed.

5.4 Hot weather application.

5.4.1 Application should be avoided where temperatures exceed 30° Celsius.

5.4.2 Avoid working on elevations subject to direct sunlight or walls, which will become sunny during the application. Apply material preferably after direct sunlight has passed elevation/panel.

5.4.3 Too-rapid dehydration will cause a cementitious material to fail. When rendering use water spray to damp-down walls thoroughly prior to application to control suction, and shade from direct sunlight.

5.5 Wet weather application

5.5.1 Application should not be made in wet weather or if rainfall is forecasted unless full protection from the rain can be maintained during the drying process.

5.5.2 Do not allow rain to strike newly applied material, particularly if strong colours have been chosen for rendering.

5.5.3 Render must not be applied to saturated background materials as will impair the bond strength and may also cause lime bloom (efflorescence) to occur.

5.5.4 The sorptivity (suction property) of the background is critical and if there is doubt as to the amount of water in the substrate, sample panels should be carried out on trial areas to determine the effect on the render.

5.6 Backgrounds containing an excessive amount of water are more likely to give problems where work has been stopped for a period due to inclement weather.

6. SUBSTRATES

6.1 The substrate (material to which the render is to be applied) must be assessed prior to application to ensure it is constructed of durable and moderately strong materials specifically designed to receive the render. The substrate must have a good mechanical key suitable for rendering. It must be clean, suitably dry, sound and free from anything that may interfere with the adhesion, such as oil, grease, organic matters and soluble salts so that renderings adhere correctly.

6.2 Where rendering is to be applied to smooth dense concrete block (refer to working drawings), the application of **Weberend aid** must be used to provide an artificial key prior to application of finished render. The application should be no greater than 2-3 square metres before producing a deep texture with well loaded roller or brush.

6.3 Where rendering is to be applied to a lower density block, suction control can be achieved by spraying the wall with an even mist of clean water prior to rendering. Care must be taken in applying the mist coat in a controlled manner to avoid saturation of the blockwork. Excessive watering will increase drying shrinkage and can induce cracking in the block. Any such cracking is likely to be reflected in applied materials.

7. MOVEMENT JOINTS

7.1 Construction should be divided into appropriate panels separated by suitable movement joints.

7.2 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 6 m intervals and 3 m from corners, however, this will vary depending upon the type of construction and the strength of the brick or block substrate.

7.3 The exact spacing of joints can generally be adjusted by the use of mortar bedding joint reinforcement. The amount and positioning of this reinforcement should be detailed in conjunction with the block manufacturer.

7.4 Render must not be applied over movement joints, damp-proof courses, weep holes or air vents in accordance with BS 5262.

8. CRACK RESISTANCE

8.1 The Contractor is to include within the price an allowance for applications of an alkali resistant fibre mesh, in the render in areas of typical stress points in the construction, i.e. above and below all openings such as windows and doors and at horizontal junctions of dissimilar substrates e.g. ring beams.

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

9. CONSTRUCTION NOTES

9.1 The Contractor must satisfy themselves that the background construction is 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 in the construction alignment. The Company will not entertain any claim for additional material used unless prior written instruction has been provided by the Company's Quantity Surveyor.

9.2 The Contractor should satisfy themselves that the constructed substrate has been allowed to cure properly before the application of any render materials. If the substrate is not fully cured, creep and shrinkage of the background can occur. It is recommended that the substrate be allowed to cure for at least 28 days prior to the application of render. The Company will not entertain any claim for remedial works where application has been made to an area of freshly constructed substrate.

9.3 The substrate should also be tested to identify its initial suction. This can only be done by the visual inspection of water applied to the surface. Ideally the substrate should slowly draw the water into the surface leaving a wet residue.

9.3.1 If the test reveals the suction to be high (i.e. water disappears at a rapid rate leaving an apparently dry surface) then the substrate should be dampened evenly with a light spray of clean water, re-tested and the process repeated until the correct suction is achieved. During this process, over wetting must be avoided to prevent impairing the bond of the render and possible increases in drying shrinkage in the construction due to saturation.

9.3.2 If the test reveals the suction to be poor (i.e. water readily runs from the surface without drawing in) then the substrate is too damp and it should be protected and allowed to dry until the test procedure reflects the required suction.

9.4 BS5262 defines categories of exposure, which are calculated against the driving rain index. These fall into the three ranges of sheltered, moderate and severe. For sheltered and moderate exposures a minimum finished application of 15mm render coat at the lowest point is necessary to provide the correct level of weather protection. For severe exposure the render thickness should be increased to a minimum finished thickness of 20mm. The maximum finished thickness for should not exceed 25mm unless forming feature bands, keystones or quoins.

9.5 Ashlar finished work should reflect the above thicknesses at the lowest point of the render detail, for example a 25mm application with a 10mm recessed Ashlar would be suitable for a sheltered/moderate exposure and a 5mm cut would maintain protection for a severe exposure.

9.6 The Contractor is required to mask around the area of application to provide protection to adjacent surfaces and to give clean straight edges. It should be removed immediately after finishing. During this process consideration should be given to the protection of glass and aluminum surfaces, any render splashes must be removed immediately and with a suitable product to prevent surface etching.

10. ARCHITECTURAL DETAILING

10.1 Careful consideration should be made to the application at the base of walls to prevent bridging the damp proof course (DPC). A bell cast feature is to be provided to assist the shedding of water and providing a drip. A minimum of 150mm should be allowed between the base of the render and ground level.

10.2 Angles in floated, scraped and spray textured finishes can be formed by splayed timber rules that are temporarily fixed during application. This method is a necessity when an Ashlar render finish. Profiled beads are not permitted, as these will interfere with the continuity of the Ashlar joint. Proprietary Y-section plastic beads are also permissible in forming angles on scraped renders after traditional methods, by promoting an even thickness of render right up to the corner point.

10.3 Movement Joints in Ashlar are to be created using a “greased” temporary batten applied to the fresh rendering. The formed joint is then to be filled with a suitable elastomeric sealant after rendering has cured. In all other finishes, the use of a proprietary sealed movement bead is acceptable. These can be obtained in either plastic or stainless steel depending on the finish specified on the working drawing.

10.4 The formation of “Stop Beads” and “Bellcast Beads” on Ashlar finishes can be made by using temporary timber battens. For all other finishes, the use of proprietary beads in stainless steel or plastic should be used to form vertical render stop details and a bellcast bead used for horizontal details.

10.5 Where Ashlar detailing is specified, ensure that:

10.5.1 The applied material should be ruled level and flattened with a spatula to allow for finishing. This is to be completed during application whilst the material is still workable. It is important to avoid over toweling of cement renders, as this will bring an excessive amount of cement laitance to the surface.

10.5.2 The point of material set is kept consistent throughout the works to avoid colour variation and become evident in the finished work.

10.5.3 During the finishing, undulations (high points) created during application must be removed with the appropriate scraping tool.

10.5.4 The surface is thoroughly scraped within the required timescale, as recommended by the product manufacturer.

10.5.5 Render is to be applied to a flat level finish.

10.5.6 Following the scraping process the finished work should be brushed down with a soft bristled broom head to remove any free dust and highlight any ‘misses’ in the scraping, which can and must be remedied at this point.

10.6 Where spray textured detailing such as “Roughcast” are specified, ensure that:

10.6.1 An initial basecoat is applied by machine at a thickness relevant to the exposure rating.

10.6.2 Any variances in suction of the substrate should be unified particularly between the mortar joint and the block. The basecoat 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 to create the specified finish effect.

RENDER

TRADE SPECIFICATION AGREEMENT

This Specification Agreement relates specifically to the Company's development at

…… .

I confirm that I have read and understood the foregoing Specification and that my prices include for all items contained therein and will "Remain Fixed" for a period of:..... as outlined in the Enquiry letter.

SIGNED: …….

FOR AND ON BEHALF OF:

……..

DATE: …….

N.B. The contractor is to sign this Agreement and return it with his Quotation. Any prices received without this Agreement will be excluded from consideration.

Revised:
Rev – 30 April 2007
Rev A – 3 January 2008
Rev B – 30 September 2008
Rev C – 9 April 2009
Rev D – 1 August 2010
Rev E – 1 September 2012
Rev F – 1 February 2015
Rev G – 1 July 2016
Rev H - 1 July 2017