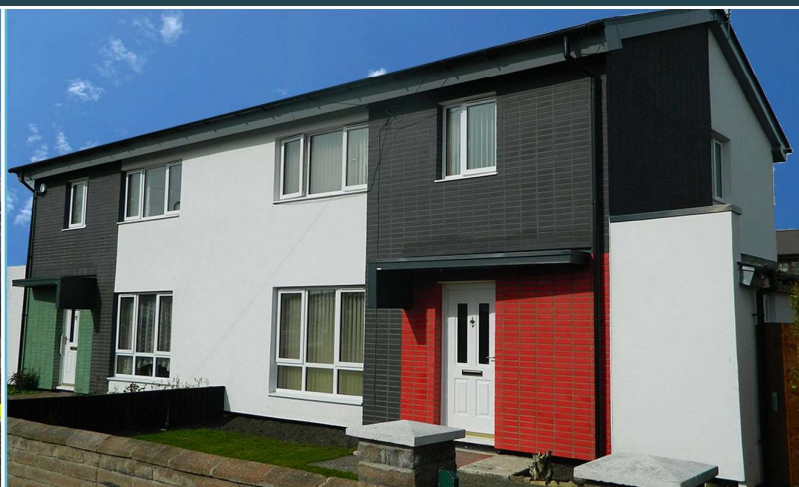


Project Specification - 17 Irish Street, Whitehaven



Project Specification

Project Name:	17 Irish Street, Whitehaven
System:	Wetherby HECK Silicone 'K' 1.5mm Render System
Substrate:	Existing Render on Masonry
System Finish:	WBS HECK Silicone 'K' 1.5mm Textured Finish
Technical Sales Manager:	Pat Stanley
Tel:	07703 974663
E-mail:	pat.stanley@wbs-ltd.co.uk
Technical Support Manager:	Matt Cawley
Tel:	07568 129677
E-mail:	matt.cawley@wbs-ltd.co.uk

WETHERBY BUILDING SYSTEMS

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Certificate Number 16512
ISO 9001
ISO 14001
ISO 45001

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WETHERBY SILICONE RENDER SPECIFICATION

M20

Plastered / Rendered / Roughcast Coatings

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GENERAL / SYSTEM REQUIREMENTS

120 SURVEY OF EXISTING WALLS

- Timing: Before starting work covered in this section.
- Objective: To confirm suitability for application of WBS Renders.
- Survey report: Submit, covering all relevant matters listed below:
 - The exact type of substrate and condition of the structural substrate.
 - A schedule of repairs and / or additional works necessary to ensure the substrate is suitable to receive the render system, to be completed prior to rendering.
 - A schedule of services, fixtures and fittings requiring removal to facilitate installation of the system.
 - Remove existing rainwater pipes and re-direct away from work surface whilst work proceeds. Ensure all rainwater from the roof area is carried away from the work area by means of temporary fixed rainwater goods.
 - Position and condition of DPC, ensuring it is correctly functioning.
 - Any damp in the substrate or frost damage which must be rectified prior to the render being applied.
 - Condition of any existing paint and removal if required.
 - Any other information considered relevant.

130 REMEDIAL WORK

- Remedial work shown to be necessary by survey: Employer's responsibility.

150 STRUCTURAL SUBSTRATE

- Description: Existing Render on Masonry.
- Preparation:
 - Treatment to Existing Sound Surfaces.
All repairs must be completed prior to rendering, ensuring the substrate is dry (no damp) and is in a suitable condition for the render application.
 - Remove any existing loose material and where required dub out the surface level, ready to receive the Wetherby render system. The existing walls are to be cleaned with a wire brush or pressure jet wash, to the satisfaction of the Contract Administrator, to remove any friable material, algae or lichen, and to provide a good key for Wetherby products. Treat areas of moss, algae and mould growth with WBS Biocidal Wash.
 - Dubbing Out
Where necessary dub out, using Wetherby Dubbing Render, any hollow / defective areas to leave a suitable surface for the application of the Wetherby renders. Maximum dubbing coat thickness: 16mm.
 - Biocidal Wash
Where required, apply one coat of Wetherby Biocidal Wash to the entire surface by roller or knapsack spray and allow to dry. Brush the surface to remove all signs of growth before rendering commences.
 - Contact Primer
Required on any painted substrate, dense / smooth substrates and blockwork with less than 7kN density to improve adhesion. Apply liberally and evenly by roller to give a uniform textured finish. Contact Primer must be left to cure for minimum 16 hours before commencing rendering.

Please refer to the Wetherby Render Only Rules Document (WF-RO-21) for further information.

160A EXTERNAL WALL RENDER SYSTEM

- **Manufacturer:**
Wetherby Building Systems Ltd.
1 Kid Glove Road
Golborne Enterprise Park
Golborne
Greater Manchester
WA3 3GS
Tel: 01942 717100
Fax: 01942 717101
Email: info@wbs-ltd.co.uk
Web: www.wbs-ltd.co.uk
- System Reference: **Wetherby HECK Silicone K 1.5mm Render System.**



- Reinforcement: WBS Alkali Resistant Scrim Cloth incorporated into top third of the WBS Heck K+A Scrim Adhesive.
 - Reinforcement Adhesive: WBS Heck K+A Scrim Adhesive.
- Mechanical Fixing: ISO 10/30 x 60mm.
 - Fixing to be installed through wet WBS Heck K+A Scrim Adhesive and WBS Alkali Resistant Scrim Cloth at a rate of 1 per m².
 - Painted substrates require 2 fixings installed through the mesh per m².
 - Fixing type, length and frequency subject to pull out tests.
- Movement Joints: As Per Drawings.
 - Movement Joint Ref: WBS MJ10 Movement Joint.
 - Movement joints must be used to replicate any structural movement joints in the existing substrate as per site survey / Structural Engineers report. A change in substrate will also require a movement joint.
- Decorative Finish.
 - Wetherby Primer: Solvent free pigmented bonding primer in a colour to match the finish coat.
 - Wetherby Finish Coat: Heck Silicone 'K' 1.5mm Textured Finish.
 - Colour: TBC.

- Beads / Trims / Accessories.
 - Full System Beads / Trims:
 - Wetherby Verge Trim: WBS 741/50 50mm Powder Coated Galv. Verge Trim.
 - Mechanical Fixing: WBS HIT 6/5 Hammerscrew Bead Fixing.
 - Wetherby Cills: Type TBC.
 - Aluminium Overcill Extenders (if required) – Option 1*
Wetherby Aluminium Overcills. All cills shall be site measured (ensuring a minimum 40mm overhang) and supplied with welded end caps to suit the application.
 - PVC Overcill Cappit Extenders (if required) – Option 2*
Wetherby PVC Overcills. All cills shall be site measured (ensuring a minimum 40mm overhang) and supplied with end caps to suit the application.
 - Aluminium Undercill Extenders (if required) – Option 3*
Wetherby Aluminium Undercill Ref: 731/25 50mm Aluminium Undercill.
NOTE: Contract Administrator to advise which option is preferred
 - Surface Render System Beads:
 - Wetherby Corner Bead Ref: WBS 3707 PVC Corner Bead.
 - Wetherby Render Bellcast Bead Ref: WBS B10 PVC Bellcast Bead.
 - Wetherby Render Stop Bead Ref: WBS RS10 PVC Stop Bead.
 - Wetherby Movement Joint Ref: WBS MJ10 PVC Movement Joint.
 - Wetherby APU Frame Seal Ref: WBS APU 37909 PVC Frame Seal.
- Accessories:
 - WBS Jointing Pieces.
 - WBS End Caps.
 - WBS Approved Silicone Sealant.

310 DESIGN

- Complete the detailed design of system and associated features shown on drawings:
Complete to meet requirements of this specification. Refer to Wetherby detail drawings.
- Please note all compliance needed to meet Building and Fire Regulations is the responsibility of the principle designer/ main contractor.
- Detailing of system junctions & ancillary items are to be agreed by all parties.

320 INTEGRITY

- Installation Requirements:
 - Weathertight under all anticipated conditions.
 - Capable of resisting all dead loads and design live loads, including impact and wind loads, and accommodating all thermal movements without damage.

330 IMPACT LOADING

- Impact Resistance of Finished Walls: Resistance to hard body impacts (3 joules to 10 joules) and to perforation.

340 WIND LOADING

- Design Wind Loads: The system shall be designed to withstand all design wind loads.

350 SUITABILITY OF SUBSTRATES

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

360 SAMPLES

- Procedure: Submit samples / examples of designated items for approval. Keep approved samples on site for the duration of the contract for inspection / comparison purposes.
- Designated items: Textured sample of Wetherby Silicone Finish.

370 UNIFORMITY OF COLOUR AND TEXTURE

- Type / proportion of constituent materials: Unchanged once samples of coatings have been approved.
- Supplies of materials: Sufficient to give consistent and uniform colour and texture.
- All materials shall be manufactured and supplied in accordance with BS EN ISO 9001: 2008.
- WBS renders and mortars are pre-blended during the manufacturing process by the supplier, although care should be taken to ensure colour uniformity between individual batches of material.

390 AVOIDANCE OF COLOUR SHADING

- To minimise the risk of variations in colour shade and to avoid dry line jointing, decorative finishes should be applied continuously without a break.
- Where breaks are unavoidable, they should be made where services or architectural features such as the lines of doors, windows, reveals or drainpipes help to conceal the position of the joint. Surface render beads can be used to provide a clean break in the render.
- Material sharing the same batch number should be used to complete an entire elevation where possible.
- Material with different batch numbers should be checked for colour consistency.

392 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.

395 DUBBING OUT FOR RENDERING

- General: Correct substrate inaccuracies.
- Thickness of any one coat (maximum): 16 mm.
 - Total thickness (maximum): 20 mm, otherwise obtain instructions.
- Application: Achieve firm bond. Allow each coat to set sufficiently before the next is applied. Comb surface of each coat.

410A INSTALLATION

- Installer: The system shall be installed by a specialist contractor approved for the project by Wetherby Building Systems.

415A SILICONE RENDER SYSTEM APPLICATION

Bellcast Bead

Securely fix Wetherby Bellcast bead at base of the system. Mechanically fix starter track at max. 300mm centres, 50mm from each end. The Bellcast bead may need bedding on Wetherby adhesive to ensure it is true to line and level.

Render Stop Bead

Securely fix Wetherby stop beads on a continuous bead of WBS Approved Silicone Sealant to the extent of the system and its abutment to untreated areas i.e. meter boxes, rising service supplies or any other untreated abutment. Stop beads are to be fixed at max. 300mm centres, 50mm from each end.

Verge Trim

Mechanically fix Verge Trim on Wetherby Sealing Tape at the top of the system, ensuring tape is fully compressed. Verge trims are to be fixed at max. 300mm centres, 50mm from each end. Apply WBS Approved Silicone Sealant to the top of the verge to ensure no water ingress is possible.

Cills

Securely fix cills, ensuring they are secure and provide a water tight detail to protect the render system. Apply WBS Approved Silicone Sealant where required.

PVC Movement Bead

Mechanically fix movement beads at agreed locations at 300mm centres and 50mm max from each end. Structural movement joints must be mirrored through the render system.

Existing Air Vents, Grilles etc.

Identify live or used air vents, grilles etc. and ensure they are not obstructed as work progresses.

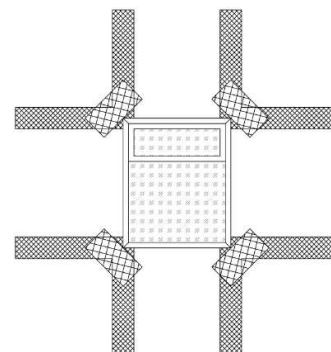
PVC Angle Bead

Fix by bedding into first pass of scrim adhesive, PVC angle beads with glassfibre mesh reference WBS 3707 to all external building corners, window / door jambs and heads.



Alkali Resistant Glassfibre Scrim Coat

Trowel apply a 6-8mm minimum coat of scrim adhesive to the entire wall surface. Lightly run a notched trowel through the scrim adhesive at a 45 degree angle to ensure the correct thickness of adhesive is applied. Bed WBS Alkali Resistant Scrim Cloth into top third of the wet adhesive, overlapping joints by 75mm minimum. The scrim cloth must be overlapped around building corners and returned into all reveals and heads. All beads must be fully scrimmed in. Install 200mm x 1000mm stress bandage to all corners of windows and doors with additional 250mm x 500mm minimum pieces of scrim cloth diagonally across corners of all wall openings. Install secondary fixings through the wet scrim adhesive and WBS Alkali Resistant Scrim Cloth whilst adhesive is wet. 100mm x 100mm scrim patches to be installed over each secondary fixing head. Finally smooth out scrim adhesive using a spatula.



Scrim Adhesive Coat (Second Application)

When initial layer of scrim adhesive has hardened, trowel apply a further 2-3mm coat of scrim adhesive ensuring all alkali resistant mesh is covered. Level the scrim adhesive using a spatula / damp sponge float to achieve a uniform flat and even surface ready to receive the WBS final finish.

Allow sufficient drying time before applying the Primer. Cold conditions and high humidity will result in the basecoat taking longer to dry / cure. The basecoat must be fully hardened with no signs of moisture visible. Moisture trapped in the basecoat can potentially damage the curing of the Primer / Silicone Render causing failure after completion of the system.

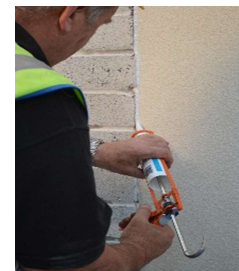
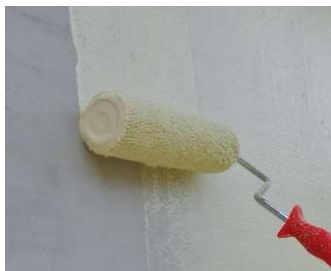
Silicone Primer

Apply Wetherby Primer with a brush or lamb's wool roller as per manufacturer's printed instructions. Allow Primer to fully dry, minimum 12 hours.

Silicone Render Finish

Mix and apply Wetherby Silicone Textured Finish strictly in accordance with the manufacturer's printed instructions. The top coat should be applied with a stainless steel trowel to the thickness of the grain and finished with a plastic float. Apply in a continuous application always working to a wet edge and in the same direction to ensure consistency of finish. Wherever possible, entire elevations should be completed in a single operation to avoid joint marks in the finish. This can often be achieved by working to natural breaks in the building or working to breaks in colour or texture.

Do not apply Wetherby Silicone Textured Finish with differing batch numbers on the same elevation. Care should be taken to avoid texture changes at different levels. Prior to setting, polish render with plastic float to give an even texture and remove all trowel marks.



Silicone Sealant

Gun apply a continuous bead of WBS Approved Silicone Sealant at points where the renders will butt up against other materials, e.g. window frames, door frames, eaves, fascia's, projecting wall vents, gas and electric meter boxes etc. ensuring water tightness. Surfaces must be clean and suitable for the application of the Silicone Sealant which must be installed as per manufacturers guidance.

Cleaning

Wipe clean all exposed PVC nosing, cills etc., at each work stage whilst render is still wet.

Application Videos

Wetherby have detailed application videos available online, please see <http://www.wbs-ltd.co.uk/videos/>.

420 ADVERSE WEATHER

- Materials / Surfaces: Do not use frozen materials and do not apply materials to frost bound substrates.
- Adhesives / Mortars / Renders: Do not apply when air temperature is at or below 5°C. Render products may be applied where temperatures are above 3°C on a rising thermometer and are forecast to stay above 5°C for an extended period on the same day.
- Adhesives / Mortars / Renders: Do not apply when relative humidity is equal to or greater than 90%.
- Do not apply materials when the air temperature or wall surface is in excess of 30°C without protection of the surface.
- Temperature of the work: Maintained above minimum level recommended by manufacturer until adhesive / mortar / render has fully hardened.
- Drying Times: Drying times of decorative finishes, particularly pre-mixed water based materials, may be greatly extended during periods of low temperature and / or high relative humidity 90% and above.
- Newly rendered surfaces: Protect newly rendered surfaces against rain, snow or other precipitation. Ensure that material is protected from frost, wash-offs etc.
- Application of renders, mortars or decorative finishes shall not be carried out on elevations where summer strength sunlight is hitting the area square on for prolonged periods without affording protection.
- Coatings damaged by rain or frost: Remove and replace.

440 ON SITE PULL OUT TESTS ON FIXING PINS

- Objective: To prove suitability of structural substrate and determine size and number of fixings required.

490 CONSTRUCTION / MOVEMENT JOINTS / SLIP JOINTS

- Location: As shown on drawings.
- Formation: Accurately to detail.
- Modifications to joint locations / design: Agree revisions before proceeding.
- All structural movement joints must be mirrored through the render system.

530 SEALANT JOINTS

- Sealant: WBS Approved Silicone Sealant.
- Joints: Formed in accordance with section Z22 and system manufacturer's recommendations using any necessary joint fillers, backing strips etc.
- Sealant should be regularly checked and replaced as required. Sealant is not covered as part of the Wetherby system warranty.

540 STORAGE OF MATERIALS

- Adequate dry weatherproof and ventilated storage shall be provided for materials.
- All materials shall be protected against frost.
- Cementitious products shall be stored off the floor.
- Renders to be stored in temperatures of at least 5°C.
- Materials should be protected from prolonged exposure to sunlight.

550 INSPECTION OF COMPLETED INSTALLATION

- Timing: As soon as possible after completion of the work and before removing scaffolding.
- Notice for inspection (minimum): 7 working days.
- Defects: Report immediately.

570 MATERIALS AND SITE CONDITIONS

- All materials shall be provided for the proper and efficient execution and completion of the works.
- Materials shall be mixed, applied and fixed in accordance with the relevant clauses of the specification and the manufacturer's instructions.
- A clean, fresh supply of water shall be provided for the works, via the management contractor.
- Suitable scaffolding that has a minimum gap of 300mm (all scaffold items) from the elevation surface in order to facilitate application requirements, shall be provided, erected, maintained and later removed for the proper and efficient execution and completion of the works.
- All necessary temporary supports for drains, water pipes, gas pipes, electrical cables and telephone cables shall be provided and maintained until the permanent supports are reinstated.
- Temporary flexible tubing shall be provided for the efficient discharge of rainwater from the buildings to protect the system during the progress of the works.

580 CLEANLINESS OF WORKS

- Protect all existing works, approaches and adjacent surfaces including windows and doors etc. using suitable sheeting, boards, covers etc.
- Remove all splashes, droppings etc. from completed works immediately and before drying takes place.

590 CONTROL OF POLLUTION

- All debris and rubbish arising from the works shall be removed off site from time to time to keep the site and works clean and tidy. All measures shall be taken to control the noise levels produced by the operatives on site to comply with the Control of Pollution Act. Precautions should be taken to prevent pollution of any river watercourse, reservoir, drainage or the like by the operatives on site.

600 MAINTENANCE

- An initial inspection should be made within 12 months and regularly thereafter to include:
 - visual inspection of the render for signs of damage. Cracks in the render exceeding 0.2 mm must be repaired. Impact damage must be repaired to prevent moisture ingress into the system.
 - visual inspection of architectural details designed to shed water to confirm that they are performing properly.
 - visual inspection to ensure that water is not leaking from external downpipes or gutters, as such leakage could stain or penetrate the rendering.
 - Sealant joints at window and door frames, etc which must be replaced as required. Sealant is not covered as part of the Wetherby warranty.
- Maintenance schedules must be created and maintained for the building, which should include any repairs undertaken and the replacement and resealing of joints (for example, between the insulation system and window and door frame).
- The render may become discoloured with time, the rate depending on the initial colour, the degree of exposure and atmospheric pollution, as well as the design and detailing of the wall. In common with traditional renders, discoloration by algae and lichens may occur in wet areas and can be removed simply with a biocidal wash.
- Damaged areas must be repaired using the appropriate components and procedures detailed in the Certificate holder's installation instructions and in accordance with BS EN 13914-1: 2005. Please see Wetherby O&M Manual and Wetherby Maintenance Information for further details.

Project Specification

Project Name: 17 Irish Street, Whitehaven

System: Wetherby HECK Silicone 'K' 1.5mm Render System
Substrate: New Blockwork
System Finish: WBS HECK Silicone 'K' 1.5mm Textured Finish

Technical Sales Manager: Pat Stanley
Tel: 07703 974663
E-mail: pat.stanley@wbs-ltd.co.uk

Technical Support Manager: Matt Cawley
Tel: 07568 129677
E-mail: matt.cawley@wbs-ltd.co.uk

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Certificate Number 16512
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nbsPlus**AUTODESK®
AUTOCAD® 2020**

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WETHERBY HECK SILICONE RENDER SPECIFICATION

M20

Plastered / Rendered / Roughcast Coatings

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This specification is valid for 6 months from issue date, due to the changing industry regulations and requirements.

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120 SURVEY OF EXISTING WALLS

- Timing: Before starting work covered in this section.
- Objective: To confirm suitability for application of WBS Renders.
- Survey report: Submit, covering all relevant matters listed below:
 - The form and condition of the structural substrate.
 - A schedule of repairs and / or additional works necessary to ensure the substrate is suitable to receive the render system.
 - A schedule of services, fixtures and fittings requiring removal to facilitate installation of the system.
 - Remove existing rainwater pipes and re-direct away from work surface whilst work proceeds. Ensure all rainwater from the roof area is carried away from the work area by means of temporary fixed rainwater goods.
 - Any other information considered relevant.

130 REMEDIAL WORK

- Remedial work shown to be necessary by survey: Employer's responsibility.

150 STRUCTURAL SUBSTRATE

- Description: New Blockwork.
- Preparation:
 - Treatment to Existing Sound Surfaces
Remove any existing loose material and where required dub out the surface level, ready to receive the Wetherby render system. The existing walls are to be cleaned with a wire brush or pressure jet wash, to the satisfaction of the Contract Administrator, to remove any friable material, algae or lichen, and to provide a good key for Wetherby products. Treat areas of moss, algae and mould growth with WBS Biocidal Wash. Dense smooth surfaces may require treating with WBS Stabilising Solution / Bonding Agent to ensure adequate adhesion of the renders.
 - Dubbing Out
Where necessary dub out, using Wetherby Dubbing Render, any hollow / defective areas to leave a suitable surface for the application of the Wetherby renders. Maximum dubbing coat thickness: 16mm.
 - Biocidal Wash
Where required, apply one coat of Wetherby Biocidal Wash to the entire surface by roller or knapsack spray and allow to dry. Brush the surface to remove all signs of growth before rendering commences.
 - Stabilising Solution
Where required, apply one coat of Wetherby Stabilising Solution to the entire surface by roller, ensuring uniform coverage and allow to dry.
 - Contact Primer
If required apply liberally and evenly by roller to give a uniform textured finish. Rendering over the Contact Primer should commence after 16 hours but within 3 days of application to ensure optimum adhesion.

160A EXTERNAL WALL RENDER SYSTEM

- **Manufacturer:**
Wetherby Building Systems Ltd.
1 Kid Glove Road
Golborne Enterprise Park
Golborne
Greater Manchester
WA3 3GS
Tel: 01942 717100
Fax: 01942 717101
Email: info@wbs-ltd.co.uk
Web: www.wbs-ltd.co.uk
- System Reference: **Wetherby HECK Silicone K 1.5mm Render System.**



- Reinforcement: WBS Alkali Resistant Scrim Cloth incorporated into top third of the Heck K+A Scrim Adhesive.
 - Reinforcement Adhesive: WBS Heck K+A Scrim Adhesive.
- Mechanical Fixing: N/A.
- Movement Joints: As Per Drawings.
 - Vertical Movement Joint Ref: WBS MJ10 Movement Joint.
 - Horizontal Movement Joint Ref: WBS back to back Stop Beads with WBS Silicone Sealant installed between to ensure long lasting durable seal.
 - Movement joints must be used to replicate any structural movement joints in the existing substrate as per site survey / Structural Engineers report.
- Decorative Finish.
 - Wetherby Primer: Solvent free pigmented bonding primer in a colour to match the finish coat.
 - Wetherby Finish Coat: HECK Silicone 'K' 1.5mm Textured Finish.
 - Colour: TBC.

- Additional Coating.
 - Wetherby Aspira Render Protector: Apply one clear coat of Aspira Render Protector.
- Beads / Trims / Accessories.
 - Full System Beads / Trims:
 - Wetherby Verge Trim: WBS 741/50 50mm Powder Coated Galv. Verge Trim.
 - Mechanical Fixing: WBS HIT 6/5 Hammerscrew Bead Fixing.
 - Wetherby Cills: Type TBC.
 - Aluminium Overcill Extenders (if required) – Option 1*
Wetherby Aluminium Overcills. All cills shall be site measured (ensuring a minimum 40mm overhang) and supplied with welded end caps to suit the application.
 - PVC Overcill Cappit Extenders (if required) – Option 2*
Wetherby PVC Overcills. All cills shall be site measured (ensuring a minimum 40mm overhang) and supplied with end caps to suit the application.
 - Aluminium Undercill Extenders (if required) – Option 3*
Wetherby Aluminium Undercill Ref: 731/25 50mm Aluminium Undercill.
NOTE: Contract Administrator to advise which option is preferred
 - Surface Render System Beads:
 - Wetherby Corner Bead Ref: WBS 3707 PVC Corner Bead.
 - Wetherby Render Bellcast Bead Ref: WBS B10 PVC Bellcast Bead.
 - Wetherby Render Stop Bead Ref: WBS RS10 PVC Stop Bead.
 - Wetherby Movement Joint Ref: WBS MJ10 PVC Movement Joint.
 - Wetherby APU Frame Seal Ref: WBS APU 37909 PVC Frame Seal.
- Accessories:
 - WBS Jointing Pieces.
 - WBS End Caps.
 - WBS Approved Silicone Sealant.

310 DESIGN

- Complete the detailed design of system and associated features shown on drawings:
Complete to meet requirements of this specification. Refer to Wetherby detail drawings.
- Please note all compliance needed to meet Building and Fire Regulations is the responsibility of the principle designer/ main contractor.
- Detailing of system junctions & ancillary items are to be agreed by all parties.

320 INTEGRITY

- Installation Requirements:
 - Weathertight under all anticipated conditions.
 - Capable of resisting all dead loads and design live loads, including impact and wind loads, and accommodating all thermal movements without damage.

330 IMPACT LOADING

- Impact Resistance of Finished Walls: Resistance to hard body impacts (3 joules to 10 joules) and to perforation.

340 WIND LOADING

- Design Wind Loads: The system shall be designed to withstand all design wind loads.

350 SUITABILITY OF SUBSTRATES

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

360 SAMPLES

- Procedure: Submit samples / examples of designated items for approval. Keep approved samples on site for the duration of the contract for inspection / comparison purposes.
- Designated items: Textured sample of Wetherby Heck Silicone Finish.

370 UNIFORMITY OF COLOUR AND TEXTURE

- Type / proportion of constituent materials: Unchanged once samples of coatings have been approved.
- Supplies of materials: Sufficient to give consistent and uniform colour and texture.
- All materials shall be manufactured and supplied in accordance with BS EN ISO 9001: 2008.
- WBS renders and mortars are pre-blended during the manufacturing process by the supplier, although care should be taken to ensure colour uniformity between individual batches of material.

390 AVOIDANCE OF COLOUR SHADING

- To minimise the risk of variations in colour shade and to avoid dry line jointing, decorative finishes should be applied continuously without a break.
- Where breaks are unavoidable, they should be made where services or architectural features such as the lines of doors, windows, reveals or drainpipes help to conceal the position of the joint. Surface render beads can be used to provide a clean break in the render.
- Material sharing the same batch number should be used to complete an entire elevation where possible.
- Material with different batch numbers should be checked for colour consistency.

392 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.

395 DUBBING OUT FOR RENDERING

- General: Correct substrate inaccuracies.
- Thickness of any one coat (maximum): 16 mm.
 - Total thickness (maximum): 20 mm, otherwise obtain instructions.
- Application: Achieve firm bond. Allow each coat to set sufficiently before the next is applied. Comb surface of each coat.

410A INSTALLATION

- Installer: The system shall be installed by a specialist contractor approved for the project by Wetherby Building Systems.

415A SILICONE RENDER SYSTEM APPLICATION

Bellcast Bead

Securely fix Wetherby Bellcast bead at base of the system. Mechanically fix starter track at max. 300mm centres, 50mm from each end. The Bellcast bead may need bedding on Wetherby adhesive to ensure it is true to line and level.

Render Stop Bead

Securely fix Wetherby stop beads on a continuous bead of WBS Approved Silicone Sealant to the extent of the system and its abutment to untreated areas i.e. meter boxes, rising service supplies or any other untreated abutment. Stop beads are to be fixed at max. 300mm centres, 50mm from each end.

Verge Trim

Mechanically fix Verge Trim on Wetherby Sealing Tape at the top of the system, ensuring tape is fully compressed. Verge trims are to be fixed at max. 300mm centres, 50mm from each end. Apply WBS Approved Silicone Sealant to the top of the verge to ensure no water ingress is possible.

Cills

Securely fix cills, ensuring they are secure and provide a water tight detail to protect the render system. Apply WBS Approved Silicone Sealant where required.

PVC Movement Bead

Mechanically fix movement beads at agreed locations at 300mm centres and 50mm max from each end. Structural movement joints must be mirrored through the render system.

Existing Air Vents, Grilles etc.

Identify live or used air vents, grilles etc. and ensure they are not obstructed as work progresses.

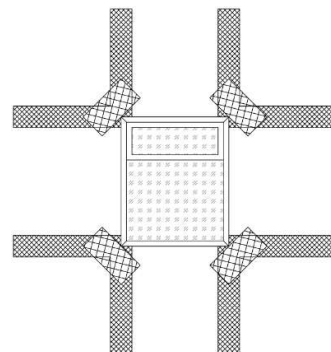
PVC Angle Bead

Fix by bedding into first pass of scrim adhesive, PVC angle beads with glassfibre mesh reference WBS 3707 to all external building corners, window / door jambs and heads.



Alkali Resistant Glassfibre Scrim Coat

Trowel apply a 6-8mm minimum coat of scrim adhesive to the entire wall surface. Lightly run a notched trowel through the scrim adhesive at a 45 degree angle to ensure the correct thickness of adhesive is applied. Bed WBS Alkali Resistant Scrim Cloth into top third of the wet adhesive, overlapping joints by 75mm minimum. The scrim cloth must be overlapped around building corners and returned into all reveals and heads. All beads must be fully scrimmed in. Install 200mm x 1000mm stress bandage to all corners of windows and doors with additional 250mm x 500mm minimum pieces of scrim cloth diagonally across corners of all wall openings. Finally smooth out scrim adhesive using a spatula.



Scrim Adhesive Coat (Second Application)

When initial layer of scrim adhesive has hardened, trowel apply a further 2-3mm coat of scrim adhesive ensuring all alkali resistant mesh is covered. Level the scrim adhesive using a spatula / damp sponge float to achieve a uniform flat and even surface ready to receive the WBS final finish.

Allow sufficient drying time before applying the Primer. Cold conditions and high humidity will result in the basecoat taking longer to dry / cure. The basecoat must be fully hardened with no signs of moisture visible. Moisture trapped in the basecoat can potentially damage the curing of the Primer / Silicone Render causing failure after completion of the system.

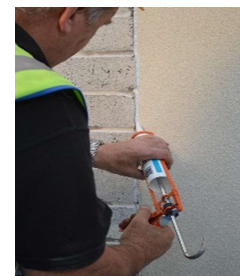
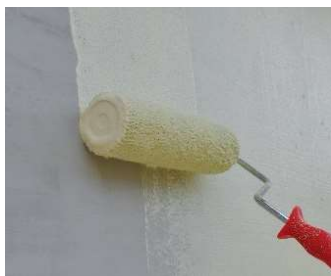
Silicone Primer

Apply Wetherby Primer with a brush or lamb's wool roller as per manufacturer's printed instructions. Allow Primer to fully dry, minimum 12 hours.

Silicone Render Finish

Mix and apply Wetherby Silicone Textured Finish strictly in accordance with the manufacturer's printed instructions. The top coat should be applied with a stainless steel trowel to the thickness of the grain and finished with a plastic float. Apply in a continuous application always working to a wet edge and in the same direction to ensure consistency of finish. Wherever possible, entire elevations should be completed in a single operation to avoid joint marks in the finish. This can often be achieved by working to natural breaks in the building or working to breaks in colour or texture.

Do not apply Wetherby Silicone Textured Finish with differing batch numbers on the same elevation. Care should be taken to avoid texture changes at different levels. Prior to setting, polish render with plastic float to give an even texture and remove all trowel marks.



Silicone Sealant

Gun apply a continuous bead of WBS Approved Silicone Sealant at points where the renders will butt up against other materials, e.g. window frames, door frames, eaves, fascia's, projecting wall vents, gas and electric meter boxes etc. ensuring water tightness.

Aspira Render Protector

Apply Wetherby Aspira Render Protector with a roller ensuring a full and even coverage, covering 100% of the substrate. The substrate must be fully dry and clean before application; ensuring morning dew is not present on the substrate. Cross hatch application is recommended to ensure all areas are fully treated. Do not dilute product and protect from rain for a minimum 12 hours after application to allow coating to fully dry.

Cleaning

Wipe clean all exposed PVC nosing, cills etc., at each work stage whilst render is still wet.

Application Videos

Wetherby have detailed application videos available online, please see <http://www.wbs-ltd.co.uk/videos/>.

420 ADVERSE WEATHER

- Materials / Surfaces: Do not use frozen materials and do not apply materials to frost bound substrates.
- Adhesives / Mortars / Renders: Do not apply when air temperature is at or below 5°C. Render products may be applied where temperatures are above 3°C on a rising thermometer and are forecast to stay above 5°C for an extended period on the same day.
- Adhesives / Mortars / Renders: Do not apply when relative humidity is equal to or greater than 90%.
- Do not apply materials when the air temperature or wall surface is in excess of 30°C without protection of the surface.
- Temperature of the work: Maintained above minimum level recommended by manufacturer until adhesive / mortar / render has fully hardened.
- Drying Times: Drying times of decorative finishes, particularly pre-mixed water based materials, may be greatly extended during periods of low temperature and / or high relative humidity 90% and above.
- Newly rendered surfaces: Protect newly rendered surfaces against rain, snow or other precipitation. Ensure that material is protected from frost, wash-offs etc.
- Application of renders, mortars or decorative finishes shall not be carried out on elevations where summer strength sunlight is hitting the area square on for prolonged periods without affording protection.
- Coatings damaged by rain or frost: Remove and replace.

440 ON SITE PULL OUT TESTS ON FIXING PINS

- Objective: To prove suitability of structural substrate and determine size and number of fixings required.

490 CONSTRUCTION / MOVEMENT JOINTS / SLIP JOINTS

- Location: As shown on drawings.
- Formation: Accurately to detail.
- Modifications to joint locations / design: Agree revisions before proceeding.
- All structural movement joints must be mirrored through the render system.

530 SEALANT JOINTS

- Sealant: WBS Approved Silicone Sealant.
- Joints: Formed in accordance with section Z22 and system manufacturer's recommendations using any necessary joint fillers, backing strips etc.
- Sealant should be regularly checked and replaced as required. Sealant is not covered as part of the Wetherby system warranty.

540 STORAGE OF MATERIALS

- Adequate dry weatherproof and ventilated storage shall be provided for materials.
- All materials shall be protected against frost.
- Cementitious products shall be stored off the floor.
- Renders to be stored in temperatures of at least 5°C.
- Materials should be protected from prolonged exposure to sunlight.

550 INSPECTION OF COMPLETED INSTALLATION

- Timing: As soon as possible after completion of the work and before removing scaffolding.
- Notice for inspection (minimum): 7 working days.
- Defects: Report immediately.

570 MATERIALS AND SITE CONDITIONS

- All materials shall be provided for the proper and efficient execution and completion of the works.
- Materials shall be mixed, applied and fixed in accordance with the relevant clauses of the specification and the manufacturer's instructions.
- A clean, fresh supply of water shall be provided for the works, via the management contractor.
- Suitable scaffolding that has a minimum gap of 300mm (all scaffold items) from the elevation surface in order to facilitate application requirements, shall be provided, erected, maintained and later removed for the proper and efficient execution and completion of the works.
- All necessary temporary supports for drains, water pipes, gas pipes, electrical cables and telephone cables shall be provided and maintained until the permanent supports are reinstated.
- Temporary flexible tubing shall be provided for the efficient discharge of rainwater from the buildings to protect the system during the progress of the works.

580 CLEANLINESS OF WORKS

- Protect all existing works, approaches and adjacent surfaces including windows and doors etc. using suitable sheeting, boards, covers etc.
- Remove all splashes, droppings etc. from completed works immediately and before drying takes place.

590 CONTROL OF POLLUTION

- All debris and rubbish arising from the works shall be removed off site from time to time to keep the site and works clean and tidy. All measures shall be taken to control the noise levels produced by the operatives on site to comply with the Control of Pollution Act. Precautions should be taken to prevent pollution of any river watercourse, reservoir, drainage or the like by the operatives on site.

600 MAINTENANCE

- An initial inspection should be made within 12 months and regularly thereafter to include:
 - visual inspection of the render for signs of damage. Cracks in the render exceeding 0.2 mm must be repaired. Impact damage must be repaired to prevent moisture ingress into the system.
 - visual inspection of architectural details designed to shed water to confirm that they are performing properly.
 - visual inspection to ensure that water is not leaking from external downpipes or gutters, as such leakage could stain or penetrate the rendering.
 - Sealant joints at window and door frames, etc which must be replaced as required. Sealant is not covered as part of the Wetherby warranty.
- Maintenance schedules must be created and maintained for the building, which should include any repairs undertaken and the replacement and resealing of joints (for example, between the insulation system and window and door frame).
- The render may become discoloured with time, the rate depending on the initial colour, the degree of exposure and atmospheric pollution, as well as the design and detailing of the wall. In common with traditional renders, discoloration by algae and lichens may occur in wet areas and can be removed simply with a biocidal wash.
- Damaged areas must be repaired using the appropriate components and procedures detailed in the Certificate holder's installation instructions and in accordance with BS EN 13914-1: 2005. Please see Wetherby O&M Manual and Wetherby Maintenance Information for further details.