WETHERBY
Wall Systems
Part of ROCKWOOL Group

O&M Manual



Masonry

Stone Wool

Dash



High Rise

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This document is a Technical O&M Manual for the Masonry Stone Wool Spar Dash EWI System.

For general homeowner guidance, please see our Homeowners Maintenance Guide.

1.0 Wetherby Insulated Spar Dash Render System Information

Wetherby Spar Dash finishes are through coloured renders used as a finish coat over a polymer modified base coat. The HECK K+A Scrim Adhesive base coat is applied to a nominal 4mm thickness with Alkali Resistant Reinforcing Scrim Cloth bedded to provide further strength and anti-crack protection. The base coat is keyed ready to accept the final finish. The Wetherby Dash Receiver is then applied to a nominal 8mm thickness and the Wetherby Spar Dash Aggregate is thrown into the receiver to provide the desired finish.



Wetherby Insulated Spar Dash Render EWI System

- Wetherby Insulation Bedding Adhesive (where required)
- Wetherby Stone Wool Insulation
- Mechanical Fixings
- HECK K+A Scrim Adhesive @ 4-6mm
- Alkali Resistant Reinforcing Scrim Cloth
- Wetherby Dash Receiver (WS)
- Wetherby Dash Aggregate (WS)

Wetherby Spar Dash Render Finishes - Examples



1.1 Introduction – High Rise

The Wetherby High Rise Operations & Maintenance Manual provides information and guidance for the insulated spar dash render system when installed on high rise projects. Following this document guidelines will help ensure the longevity and performance of the EWI system, and allows the warranty provided for the project to remain in place upon completion of any maintenance or repair works that may be required.

Requirements

1.Any works or maintenance inspections that are carried out in accordance with this document must be completed by a recognised contractor, who are currently trained and carded by Wetherby.

2.All works or maintenance inspections that are carried out must be fully documented, including photographs and maintenance/repair reports completed at each stage of the process.

3.All repair works that are required to the Wetherby EWI system must be completed using only Wetherby materials and installed in line with section 5.0 in this document to ensure that the warranty for the project remains valid.

High Rise Maintenance Requirements

The below maintenance schedule must be strictly adhered to as a minimum to for all high rise projects to ensure the longevity and performance of the system. If the below maintenance schedule is not adhered to, the Wetherby warranty may become invalid. Project specific maintenance schedules should be provided with additional maintenance requirements.

- An initial inspection should be made within 12 months and regularly thereafter to include:
- Visual inspection of the render for signs of damage. Any cracks in the render exceeding 0.2 mm must be repaired.
- Examination of the silicone sealant around openings, service entry points and at any system terminations.
- 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; such leakage could cause damage to the rendering.

- Please note, this document must be read in conjunction with the 'Wetherby High Rise Maintenance Information' document.
- A project specific maintenance schedule should be agreed with the client specifically for this project.



2.0 Aftercare and Maintenance

2.1 Silicone Sealant

Wetherby specify a high quality, long lasting sealant to help protect the EWI systems from water ingress.

Periodic inspections must be carried out to ensure silicone sealant is in good condition, is working as intended and no water ingress can occur at junctions. During periodic inspections, should any damaged or defective sealant be observed this, should be removed and be reinstated as soon as possible with the Wetherby approved sealant to ensure the integrity of the system is maintained.

Where the existing Silicone Sealant begins to deteriorate, this should be fully removed and replaced to ensure watertightness and durability of the system.

2.2 Garden and Plant Consideration

Keep garden soil levels as far below the system as possible as soil splashing will discolour the base of the system over time. Plants, trees and creepers can cause staining of render finishes and care should be taken in the positioning of them. Climbing plants, provided they have the properly fixed trellis, will not cause any damage to the system, however some staining may be caused.

2.3 General Considerations

Metal objects should be kept away from the insulated render system and not leaned up against the system. Rust staining can soon discolour the finish and damage the system, particularly on lightly coloured system finishes.

Dripping overflows and splashes from leaking gutters and down-pipes can soon mark and stain the spar dash finish. Such leaks should be repaired as soon as possible to prevent water staining.

Exhaust emissions from vehicles can leave unsightly black marks on the render system and care should be taken when parking vehicles close to the rendered area.

Care should be taken when handling heavy objects, for example dustbins, near the render system. Although the system is resistant to damage, these types of objects particularly near corners can cause damage, which is visually undesirable although easily repairable.

2.4 Damage to the System

Any damage to the EWI system must be repaired immediately as per the information in this document. Any cracks exceeding 0.2mm must be investigated to assess the cause and repaired as appropriate. Damage to the topcoat should be repaired in a short time frame to prevent further damage to the area. Damage to the basecoat and insulation will require immediate repair to prevent water ingress into the system. Please see Section 5 of this document for further information on repair procedures.

3.0 Additions to the EWI System

3.1 Detailing of Additions

Carefully choose any further additions to the property that are to be added after the insulated render system is complete. Drain-off from poorly designed or poorly installed items such as canopies, lights, alarm boxes, hanging baskets, etc will stain render finishes. Water should always be channelled away from the render surface and not allowed to streak down the render face or pool against the render. Additions creating a flat ledge are advised against as water and dirt will splash up and soak the render, creating staining and possibly damage to the render finish.

3.2 Fixtures and Fittings

Wetherby advise fixtures & fittings are installed in one of the following ways...

1) Drill out holes to the approximate size through the system back into the existing substrate and clean out any loose material. Insert Wetherby SWI-FIX tension spacers at the relevant fixing points. The fixtures may then be installed as normal but should be evenly tightened against the spacers and not the render system. Wetherby approved Silicone Sealant must be neatly applied around the spacers to ensure water penetration is prevented.

2) Install specialist insulation fixings through the EWI system into the main substrate as per manufacturer's instructions, drill a suitably sized hole and clean out the area. Install the fixing ensuring the thermal barrier is flush with the spar dash render finish.

   Screw in the fixing and seal using Wetherby approved Silicone Sealant where required. Mount the fixture and hand tighten the screw. (Wetherby approved fixings must be used, please contact the technical department for further information).

3.3 Satellite Dish Installation

If fitting a satellite dish to completed areas of the external wall insulation system, please use the fixing method as above (section 3.2) ensuring the dish is securely fixed back to the substrate and movement is restricted. Specialist SWIFIX spacers and appropriate fixings are available from Wetherby. All fixings must be suitably sealed with Wetherby approved Silicone Sealant.

3.4 Addition of Metalwork

Any metalwork to be added to the building such as clothes line hooks, should be well painted or otherwise protected if they are made from a ferrous metal. Attachment to the building should be made with fixings which penetrate through the system and into the substrate, for example sleeved bolts or extended length fixings. These should be sealed at their abutment with the system using Wetherby approved Silicone Sealant.

3.5 Pipes and Vents

Any additional pipes or vents which penetrate the system should be passed through holes in the insulated dash render (max. 5mm larger than the pipe diameter), finishing proud of the render system. Wetherby Approved Silicone Sealant can then be used to seal between the pipes and system ensuring water penetration is prevented. When coring out the system to install pipes and vents, a pilot hole should be drilled in to out, and then a full core hole drilled out to in, to reduce damage to the system as much as possible.

3.6 Replacement of Existing Windows

Where doors or windows are to be replaced after installation of the system, it is always the preferred option to replace internally to minimize damage to the EWI. Care must be taken not to damage the system in the reveals on removal or replacement and the new door / window will need to be resealed against the system, potentially involving patching in the render but always using Wetherby Approved Silicone Sealant to ensure long term water tightness. Any damage to the insulated render system should be repaired in line with Wetherby guidance.

3.7 Addition of New Doors / Windows

Where new doors, windows or other openings are to be cut into the structure, the system must be layered back by a minimum of 150mm per layer of material away from the opening. New Wetherby materials should be applied in sequence neatly back to the new fitment or opening. See the Wetherby Patch Repair guide (Section 5.0) for further information.

3.8 Canopies, Outhouses and Lean-Tos

Any additions to the property to be fixed to the EWI system, for example canopies, outhouses or lean-tos, should be sealed where it abuts the system using Wetherby approved Silicone Sealant. Water penetration into the system must be prevented at all times. Appropriate fixing methods should be used as per Wetherby guidance. The Wetherby Detailing of Additions guidance (Section 3.1) at the start of this section should be followed, following advice on water runoff and staining.

3.9 Extensions and Conservatories

Any additions requiring the EWI system to be cut back should be completed by layering back each layer of material by a minimum of 150mm per layer. Please see the Wetherby Patch Repair guide (Section 5.0) for further information. The system will need to be re-sealed against the new substrate or completed with use of a stop bead to fully seal the system. The roof abutment must be completed as per Wetherby standard detail drawings, please contact the Wetherby Technical department for further information.

4.0 Ground Source Heat Pumps

Where a Ground Source Heat Pump is installed to a home incorporating a Wetherby EWI system:

1 – Fix correctly – as per Fixtures and Fittings (section 3.2)
2 – Core hole – a pilot hole should be drilled in to out, and then a full core hole drilled out to in (section 3.5)
2 – Fully seal – Wetherby Seal Tape and approved Silicone Sealant should be used to seal between pipes and EWI system, ensuring the EWI system remains fully watertight (section 3.5)



5.0 General Maintenance and Cleaning of the Dash System

5.1 Pressure Washing

Where staining has occurred, a pressure wash can be used to clean the face of the system. The pressure washer should be set at 100bar maximum and used no closer than 1 metre away from the render to ensure the surface is not damaged during the cleaning process. A sample panel should always be completed first to assess the impact and potential damage from pressure washing.

5.2 Dust Marks / Minor Aesthetically Damaged Areas

Mild soapy water may remove small areas of cement dust, soil, scuff marks etc., however it must be stressed that this action may also worsen the problem. Care should be taken not to disturb the aggregate. A small test panel should always be completed first.

5.3 Indentations and Damaged Dash Receiver

Areas where spar dash finish has been damaged resulting in indentations to the system, the damaged area of dash receiver will need to be removed / scrapped back. The area should be cleaned and any loose material removed. The dish receiver should then be patched in flush with the existing dash receiver and aggregate cast to match existing. Patching will be noticeable but likely to weather in over time.

Where larger areas of damage have occurred, the whole area may need to be re-coated with Wetherby Over-Dashing Mortar. This will ensure the render returns to as good as new.

Please contact Wetherby Technical Department for further information.

6.0 Patch Repair

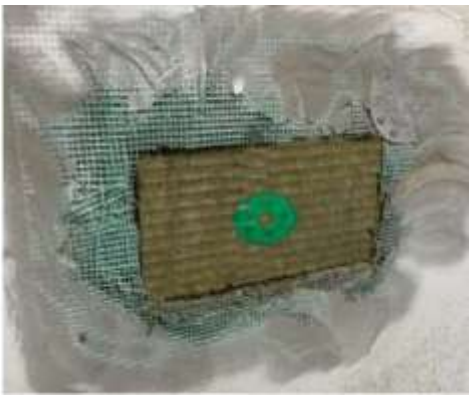
Records and photographs should be kept of damaged areas and the various stages of the repair process.
Repairs should be completed by a Wetherby recognised contactor.





1. Remove Wetherby Dash Receiver topcoat around the damaged area, grinding back to a minimum of 150mm from the exposed insulation, taking care not to disturb the alkali resistant reinforcing mesh.
2. Carefully cut out damaged insulation in a neat square/rectangle ready for new insulation to be cut and inserted.
3. Cut off any mechanical fixings level with the original structure. Remove any bedding adhesive from the substrate and clean area ready to receive new product.





3. Insert insulation tight and flush against existing insulation. Apply bedding adhesive to the board where originally used in the initial installation.
4. Insert fixings ensuring the board is securely held in place. Fill any gaps around the insulation larger than 2mm with Stone Wool slithers, ensuring no gaps.
5. A minimum ratio of 8 fixings per m² must be used (at 300mm centres around openings & external corners).
6. Remove any remaining topcoat around the damaged area to expose the basecoat. A sander may be used to complete this neatly and ensure a flat uniform area. Care should be taken not to disturb the existing reinforcing mesh.





5. Cut Wetherby Alkali Resistant Mesh to suit the patch, ensuring the mesh laps onto the existing exposed basecoat.
6. Apply Wetherby Scrim Adhesive to the area, lapping a tight coat onto the existing exposed basecoat.
7. Bed the Wetherby Alkali Resistant Mesh into the basecoat as normal, again ensuring this is lapped onto the existing basecoat and mesh.







8. Lightly scratch basecoat to leav a key for the dash receiver. Allow basecoat to fully dry.
9. Wet existing dash receiver around the patch before applying the new dash receiver.
10. Apply Wetherby dash receiver to area, bringing it flush with the existing dash receiver..





11. Feather in dash receiver to meet existing finish, a paint brush may be used to complete this accurately and to feather out excess dash receiver.
12. Cast Wetherby Spar Dash Aggregate into the patched area to match the existing aggregate.
13. Spar dash aggregate may be pushed into dash receiver using the back of a dashing trowel to match the existing finish.



Patching the spar dash render may be noticeable in the short term but should be left to weather in prior to assessing repair.

Failure to action the repair to the EWI system in event of damage, water ingress or failure of sealant in accordance with this manual may result in the system guarantee becoming invalid. Should you have any queries regarding the above items, please contact the Wetherby Technical Department

7.0 Wetherby System Products

Wetherby Wall System products and ancillary items can be purchased through our trade counter, please contact:

Telephone: 0800 1978821
Email: tradecounterhq@wall-systems.co.uk

Each Wetherby trade counter provides a bespoke collection service and offers a wide range of leading branded products along with experienced members of staff who are on hand to help guide you when choosing the right materials for the job.



7.1 Wetherby SWI-FIX Spacers



Having invested in external wall insulation to enhance a property, it is important to ensure guarantees are protected through the correct installation of fixtures and fittings. Any items installed must not damage or crush the EWI system or allow water ingress into the system.

The Wetherby SWI-FIX products are an easy solution for fixtures such as hanging baskets, external lights, hose reels, satellite dishes, alarms, etc.

Installation Guide:



Start with SWI-FIX



Mark the wall



Drill 16mm hole



Measure depth to substructure



Cut tube to length



Place rubber & insert tube



Insert plug, screw & fix through EWI



Installation complete

7.2 Wetherby Biocidal Wash

A highly effective biocidal solution which effectively removes algae, mould and lichen.

Wetherby Biocidal Wash is suitable for a range of substrate materials including: Brick, tile, concrete, stone and cladding. As well as a silicone, acrylic, mineral and polymer modified render finishes.

An environmentally friendly cleaning solution, safe to plants, animals and humans.

- Kills Algae, mould and lichen
- Leaves residual protection
- No rinsing required
- Environmentally friendly option







Although many render incorporate algae resistant properties, substrates can eventually become susceptible to micro-organisms which located in very green or damp areas.

Wetherby biocidal Wash contains a patented mix of bodies which can be used to treat affected render systems and substrates.



Application: Apply by brush, roller or back-pack sprayer.

Note that substrate must be completely dry before application.
(Please contact Technical for further information)

Available as a 5 litre concentrate with coverage of approx.500m².

**Based on Silicone or Acrylic Render at a dilution rate of 9:1*

Porous surfaces or reduced dilution will decrease coverage

**More than x1 application may be required. For severe areas of algae, jet washing may be required. Contact Wetherby for further information.*

8.0 Wetherby Contact Information

Technical Department

For technical queries on the operations and maintenance of the Wetherby Stone Wool Spar Dash Render System please contact our technical department on the details below:

Technical Helpline: Tel: 0800 107 3299 E-mail: technical@wall-systems.co.uk

Trade Counter

For Wetherby products contact our trade counter on the details below:

Telephone: 01942 528354 Email: tradecounter@wall-systems.co.uk



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