

# **Operations and Maintenance Manual**

Masonry - Stone Wool & Brick Slip System



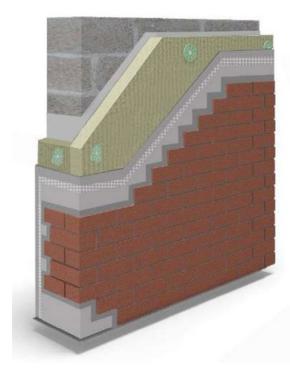
# Operations and Maintenance Manual - Content

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#### 1.0 Wetherby Insulated Brick Slip System Information

The Wetherby Insulated Brick Slip system is a unique lightweight cladding system providing a real brick finish.

The system comprises of mechanically fixed insulation boards which are coated in a strong impact resistant basecoat with embedded glass fibre mesh to provide a durable and stable substrate for the slips to adhere to. Brick slip adhesive is used to wet fix each slip to the basecoat before pointing mortar is applied in the desired colour and style.



#### Wetherby Insulated Brick Slip System

- Masonry Substrate
- Wetherby Insulation Bedding Adhesive.
- WBS Stone Wool Insulation Board
- WBS Scrim Adhesive 4-6mm
- WBS Alkali Resistant Reinforcement Mesh bedded into the scrim adhesive
- WBS Brick Slip Adhesive
- WBS Brick Slips
- WBS Pointing Mortar

#### Introduction

The Wetherby High Rise Operations & Maintenance Manual provides information and guidance for the insulated brick slip system when installed on high rise projects. Following this documents guidelines will help to 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 repairs 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 either 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

#### 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 WBS approved sealant to ensure the integrity of the system is maintained.

#### 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 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 brick slip system and not leaned up against the system. Rust staining can soon discolour the finish and damage the system.

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

Care should be taken when handling heavy objects, for example dustbins, near the brick slip system. Although the system is highly resistant to damage, these types of objects particularly near corners can cause some 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 in slips or pointing mortar exceeding 0.2mm must be investigated to assess the cause and repaired as appropriate. Damage to the brick slips 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 4 & 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 brick slip system is complete. Drain-off from poorly designed or poorly installed items such as canopies, lights, alarm boxes, hanging baskets, etc., will stain the substrate. Water should always be channelled away from the brick slip surface and not allowed to streak down the system face or pool against the system. Additions creating a flat ledge are advised against as water and dirt will splash up and soak the area, creating staining and possibly damage to the system.

#### 3.2 Fixtures and Fittings

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

- Drill out approximately sized holes through the system back into the existing substrate and clean out any loose material. Insert 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 brick slip system. Wetherby Silicone Sealant must be neatly applied around the spacers to ensure water penetration is prevented.
- 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 brick slip finish. Screw in the fixing and seal using Wetherby 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 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 Silicone Sealant.

#### 3.5 Pipes and Vents

Any additional pipes or vents which penetrate the system should be passed through holes in the insulated brick slips (max. 5mm larger than the pipe diameter), finishing proud of the brick slip system. Wetherby Silicone Sealant can then be used to seal between the pipes and brick slips ensuring water penetration is prevented.

#### 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 and brick slips. 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 basecoat and replacing brick slips / pistols, but always using Wetherby Silicone Sealant to ensure long term water tightness. Any damage to the insulated brick slip 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 for the basecoat and a further full brick slip, away from the opening. New WBS 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 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) should be followed, taking advice on water runoff and stain prevention.

#### 3.9 Extensions and Conservatories

Any additions requiring the EWI system to be cut back should be completed by layering back the system by aminimum of 150mm for the basecoat and a further full brick slip. 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 detail drawings, please contact the Wetherby Technical department for further information.

#### 4.0 General Maintenance and Cleaning

#### 4.1 Pressure Washing

Where staining has occurred, a pressure wash can be used to clean the face of the EpsiBrick 15 system. The pressure washer should be set at 100 bar maximum and used no closer than 1 meter from the brick slips to ensure the brick slips and pointing mortar are not damaged during the cleaning process. A sample panel should always be completed first to assess the impact and potential damage from pressure washing.

#### 4.2 Small Dust Marks / Minor Aesthetically Damaged Areas

Mild soapy water and a soft brush may remove small areas of cement dust, soil, scuff marks etc., however it must be stressed that this action may also worsen the problem. A small test panel should always be completed first.

#### 4.3 Mortar Marks

Mortar can be removed from the brick slips using a mild brick acid wash. The mortar should firstly be removed as far as possible and then brick acid wash applied, as per the manufacturer's instructions, to the brick face. The acid wash should not be applied to the pointing mortar and these areas should be protected as far as possible when cleaning the brick slips. Always complete a test panel before applying brick acid wash to larger areas to ensure there is no colour change to the brick slips. Please contact Wetherby Technical for further information.

#### 4.4 Damaged Brick Slips

Where isolated brick slips have been damaged or removed, slips may be replaced as long as the basecoat and mesh is not damaged in anyway. Brick slips can simply be adhesively fixed using WBS Brick Slip Adhesive and pointed in as normal. Where the basecoat has been damaged please refer to the Patch Repair section of this document (Section 5.0).

#### 4.5 Severe System Damage

In areas where the basecoat and insulation has been damaged and brick slips have been removed / broken, please refer to the Patch Repair of the EpsiBrick 15 System section of this document for full patch repair guidance (Section 5.0).

5.0 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. Example damage to system.
- 2. Remove all full brick slips required to fully expose damaged basecoat and insulation, ensuring enough room is left for basecoat to be properly patched in.





- 3. Clean area and remove all remaining brick slip adhesive
- 4. Carefully cut out damaged insulation in a neat square / rectangle ready for new insulation to be cut and inserted.

#### **Patch Repair**





- 5. 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.
- Cut insulation and install to fit tightly against existing insulation, using bedding adhesive where required, as per the existing system. Drill and install Wetherby approved fixings ensuring the board is securely held and supported. A minimum ratio of 8 fixings per m2 must be used.



- 7. Fill any gaps around the insulation that are larger than 2mm with Stone Wool insulation slithers before applying Wetherby Scrim Adhesive. Cut Stone Wool insulation slithers level with insulation.
  - Cut Wetherby Alkali Resistant Mesh to suit the patch, ensuring the mesh laps onto the existing exposed
- 8. basecoat.

#### **Patch Repair**





- Apply Wetherby Scrim Adhesive to the insulation board to bring adhesive flush with existing WBS Scrim Adhesive.
- Lap onto existing WBS Scrim Adhesive with a 1-2mm tight coat of adhesive.





- 11. Bed Wetherby Alkali Resistant Mesh into scrim adhesive ensuring this is lapped over the existing WBS Scrim Adhesive and finish smooth. WBS scrim cloth must be encapsulated within the scrim adhesive and not be visible.
  - Lightly scratch WBS Scrim Adhesive to leave a key for the WBS Brick Slip Adhesive.

12.

#### **Patch Repair**





- 13. Apply WBS Brick Slip Adhesive to the back of each brick slip ensuring a full bed of adhesive. Position slips in place
- 14. leaving a consistent joint as per existing slips. Spacers are advised to hold the slip in place whilst the adhesive sets.





- 15. Allow slips to fully set before removing spacers. Point in slips with WBS Pointing Mortar using a pointing gun or
- 16. piping bag. Take care not to apply mortar to the brick slip face asit is extremely difficult to remove.

#### **Patch Repair**





- 17. Shape mortar to the desired joint type using a pointing trowel.
- 18. Once WBS Pointing Mortar has set, brush down surface to remove all loose material.

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.

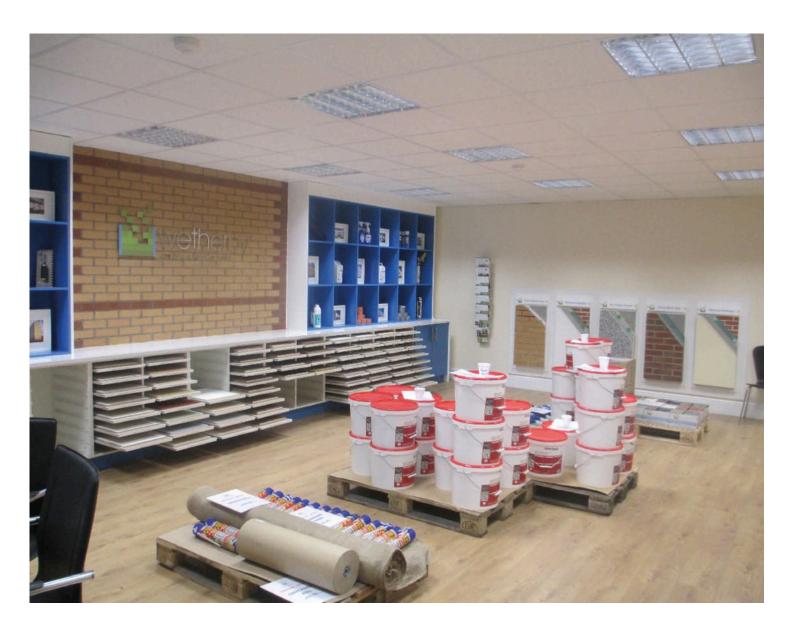
N.B. Patching the brick slip system may be noticeable in the short term due to the degree of weathering each slip has endured and slight colour variances in the pointing mortar. Brick slips should be left to weather in prior to assessing repair.

#### **6.0 Wetherby System Products**

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

Telephone: 01942 528354 Email: tradecounterhq@wbs-ltd.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.



#### **6.1 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.

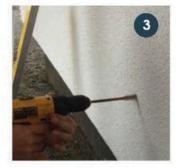
#### Installation Guide:



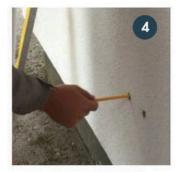
Start with SWI-FIX



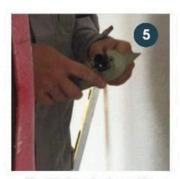
Mark the wall



Drill 16mm hole



Measure depth to substructure



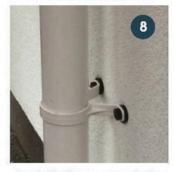
Cut tube to length



Place rubber & insert tube



Insert plug, screw & fix through EWI



Installation complete

### 8.0 Wetherby Contact Information

#### **Technical Department**

For technical queries on the operations and maintenance of the WBS Insulated mineral render System please contact our technical department on the details below:

Technical Helpline: Tel: 08458 382380 E-mail: info@wbs-ltd.co.uk

#### **Trade Counter**

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

Telephone: 01942 528354 Email: tradecounterhq@wbs-ltd.co.uk



Wetherby Building Systems Limited \*Main Depot
1 Kid Glove Road
Golborne Enterprise Park
Golborne
Greater Manchester
WA3 3GS
Opening Hours: 07:30 - 16:30
Main Tel: 01942 717100
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Distribution Depot (Scotland)
62 Hydepark Street
Glasgow
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G3 8BW
Opening Hours:
Monday - Thursday: 07:30 - 16:30
Friday: 07:30 - 14:30
Tel: 0141 221 8115

Fax: 0141 847 0767



Distribution Depot (South Wales) Unit 17A Brynmenyn Industrial Estate Millers Avenue Bridgend CF32 9TD Opening Hours: 07:30 - 16:30

Tel: 08450 946397 Fax: 08450 946398