



ENVIROWALL LIMITED NBS SPECIFICATION: ENVIROWALL EXTERNAL WALL INSULATION SYSTEM TO MASONRY WITH SCRATCH OR FLOATED THROUGH COLOUR MINERAL FINISH

M21 EXTERNAL RENDER SYSTEM

To be read with Preliminaries/General conditions.

SYSTEM SUPPLIER:- Envirowall Ltd., Orchard House, Aire Valley Business Centre, Keighley, Yorkshire, BD21 3DU Tel.01535 661633 Fax.01535 661933 email info@envirowall.co.uk web. www.envirowall.co.uk.

TYPE(S) OF COATING

101 Envirowall Insulation System to masonry with scratch or floated through colour Mineral finish.

1. MATERIAL and COMPONENTS

ADHESIVE MORTAR – Envirowall Granol G adhesive **Ref.GRBC101**.

INSULATION – Envirowall Polystyrene **Ref.PSE_ _ _ (select insulation thickness)**, Mineral wool **Ref.RMD_ _ _ (select insulation thickness)** or Phenolic **Ref.PPL_ _ _ (select insulation thickness)** insulation thickness to meet specified U-Value.

FIXINGS – Envirowall TID or TDK dependant on result of pull out tests. Length of fixing dependant on insulation thickness and ensuring 40mm embedment.

BASE COAT - Envirowall Granol –G Highly Polymer modified base coat, **Ref.GRBC101**

TOP COAT –Envirowall Granicem Mineral render **Ref.GRTC103** applied depending on background and number of coats or Granicem applied minimum 8-10mm thick.

PROFILES – Envirowall powder coated galvanised with plastic nosing.

1.1 PROTECTION: All doors, windows, frames, fascias and other areas of the existing structure not forming part of this section of the works shall be fully protected by means of masking tape and polythene sheet or other acceptable alternative means.

All areas of existing paths and paved areas and landscaped works shall be adequately covered to avoid damage by all external Insulation works including scaffolding erected in connection therewith.

Any damage caused by the specialist External Insulation installer to the existing surface of the windows, and/or the paved and landscaped areas during the execution of the works shall be made good, cleaned off or replaced entirely at his expense, to

1.2 DRAWINGS: The installation shall be carried out to the specification that follows, detailed in accordance with the Architects drawings as appropriate.

SYSTEM INSTALLATION

SURFACE PREPARATION:

- 1.3 BASE BEAD:** Powder coated base beads with pvc nose, **Ref ETBB_ _ _ (select insulation thickness)** shall be fitted immediately above the dpc. Care must be taken to ensure a true horizontal line is maintained. The bead shall be carefully cut and formed into door reveals.
- 1.4 INSULATION FIXING:** insulation boards, **Ref.(select insulation type)** shall be fitted starting from the base bead, vertical joints shall be staggered and no cut boards less than 200mm wide shall be used. Sheets together with all necessary standard accessories and fixings shall be fixed strictly in accordance with the Envirowall standard installation procedure. Fixing generally shall consist of one anchor in the centre of each board and one in each corner (a total of five anchors per board). Extra fixings are required round openings such as doors and windows, and at external corners. Please refer to the Envirowall fixing pattern drawing for further detail. Expansion beads required shall be fitted after first cutting through the insulation to the substructure, prior to fixing the reinforcement. Any further beads such as corner angles, must be fitted **after** the reinforcement base coat is applied in order to maintain the full strength of the reinforcement at vulnerable areas.
- 1.5 EXPANSION BEADS:** Powder coated expansion beads with pvc nose, **Ref.FSEX_ _ _ (select insulation thickness)** shall be fitted as indicated on the drawings, after first cutting through the insulation as described above.
- 1.6 RENDER WORK:** All work shall be carried out in strict accordance with B.S.5262 and B.S.8000 Part 10.
- The renders are to be pre-bagged, with water only added on site, and mixed strictly in accordance with the manufacturer's instructions. **No other additives are necessary or permitted.**
- 1.7 BASE COAT/SCRIM ADHESIVE:** Envirowall Granol G **Ref.GRBC101** shall be applied and reinforcement mesh **Ref.EM1** trowelled in with all joints overlapped by 100mm. Extra patches approximately 200mm by 600mm shall be applied diagonally at each corner of openings such as windows, doors and balanced flue outlets.
- 1.8 TOP COAT -** Through colour Granicem Mineral render **Ref.GRTC103** should be applied as the finish coat to a flat floated or scratched finish in strict accordance with Envirowall's application instructions.
- 1.9 SEALANTS:** On completion of the base coat render application a 5mm bead of sealant **Ref FC140** must be applied to all junctions of the insulation render system and other buildings materials such as window and door frames, eaves and wall vents.

All work shall be undertaken by an Envirowall approved contractor.

- 2. PLANTS AND SHRUBS:** Where practical, and in consultation with the occupants, all plants and shrubs shall be carefully pulled away from the walls and netted to allow the work to proceed, and reinstated on completion.

2.1 TEMPORARY WORKS: During the progress of the external insulation works temporary diversions to the existing gutters (after temporary removal of the rainwater pipes) must be provided and maintained, such diversions shall be to the architects satisfaction and must not impede the erection of the scaffolding or the progress of the works.

2.2 STORAGE AND HANDLING: Care shall be taken in off-loading, storage, hoisting and placing in the final fixed positions of panels, fittings and fixtures. The Contractor must ensure adequate and proper protection to all materials in storage.

Any damage suffered to the panels, fittings and fixtures whilst on site shall be the responsibility of the contractor.

2.3 INCLEMENT WEATHER: All work shall be executed with due regard to the prevailing/anticipated weather conditions.

External rendering shall not be carried out during frosty weather or if the temperature falls below 3°C (unless sheeted protection and heating is provided) or if the substrate is frozen or there is a risk of frost damage before the render has had its initial set.

In hot and windy weather rendering should be carried on elevations which have received the sun. If this is impractical, spraying with water or hanging a protective sheet over the work should be carried out to prevent premature curing.

2.4 INSPECTION: All work shall be subject to regular inspection and acceptance by the Architect or his representative, and by the manufacturer's technical representatives.

All work to be executed in compliance with the employer's requirements, good practice and in strict accordance with the systems instructions.

Any work failing to comply with any of the above shall be taken down and refixed, at the contractors own expense, to comply with any of the above.

2.5 REMOVAL OF RUBBISH: Remove and dispose of all debris, surplus material and redundant protective material during the course of the work.

2.6 PREPARATORY WORK: Prior to the installation it is essential that on-site investigation and tests be carried out to determine the type and quantity of anchors that are used. Results of these tests shall be made available to the architect, the Main Contractor and the system designer.

2.7 DUBBING OUT: Where necessary, existing walls which are to receive the Envirowall insulated render system shall be dubbed out using dubbing mortar Ref **FC101**.

2.8 EXTERNAL PLUMBING: Modification of overflows and other similar pipework shall be made to accommodate the new overall thickness of the system.

Repairs to major defects and cracks in the surface of the existing structure are deemed to have been carried out prior to the application of the Envirowall system.

2.9 PROTECTION AND CLEANING

Installation of Envirowall materials in the UK shall be performed by Envirowall approved contractor. Under no circumstances shall any of the Envirowall products be altered with any additives, except for small amounts of clean water as directed on the label.

All renders described should never be applied if ambient and surface temperatures cannot be kept above +3°C for mineral products, +5°C for acrylic and silicone products. Prior to installation, the wall shall be free of residual moisture. The stored material should be protected from frost and strong sunlight.

Most Envirowall products are water based, therefore, the normal conditions for working in winter and during periods of inclement weather should be respected during and after application. Please refer to the Envirowalls winter working policy for advice on protection of finishes.

It is recommended when working with highly pigmented renders to mask or protect other building elements such as windows, sills, etc. Any spilled or dropped materials may be removed from most surfaces with a wet sponge or cloth before the material has dried out. Renders which have been allowed to partially dry may be removed by using a soap solution to soften the render and warm water to clean the surface. Absorbent surfaces such as concrete, brick, etc. maybe affected by the pigments of the render and where spillage is likely then these surfaces should be protected with appropriate covering material.