PROJECT : **SAMPLE**

PREPARED FOR : **SAMPLE**

PACKAGE : **FOAMGLAS & UNILIT NHL LIME RENDER**

APPLICATION : **FOAMGLAS® W+F® SLAB & UNILIT RENDER**

## UNILIT® NHL LIME RENDER ON FOAMGLAS® CELLULAR GLASS INSULATION

### 430 THERMAL PROPERTIES

The type and thickness of the insulation and any integral or separate overlay are to be determined by the contractor and must be sufficient to ensure that:
The thermal transmittance of the wall is not more than ----- W/m² ℃ for the life of the building.
The base is suitably even, stable and robust to receive the covering.

### 450 VAPOUR CONTROL LAYER

Cellular Glass systems do not require a vapour control layer or breather membrane.

### 776 WALL INSULATION

Materials: Cellular Glass
Manufacturer: Pittsburgh Corning (United Kingdom) Limited Supplier: Telling Lime Products Limited,7The Dell, Enterprise Drive, Four Ashes, Wolverhampton, WV10 7DF. Tel: 01902 797 700. Fax: 01902 797 720. Email: info@telling.co.uk Web: www.telling.co.uk
Thermal conductivity for the life of the building: k=0.038 W/mK to EN 13167(Annex A) as fractile 90/90.
Density: 105kg/m³
Compressive strength: 350 kN/m²
Vapour Resistivity: a min of 10,000Mns/GM (BS 5250-1989 Appendix B)
Dimensional Stability: Co efficient of expansion $9x10^{-6}$/K
Fire: Incombustible (AO – Euro Class A[1])
**Guarantee**: Insulation manufacturer to guarantee material will **not absorb moisture from either internal or external environment** and will **retain** original **thermal efficiency** for a minimum of **20 years.**
Size: 600mm x 450mm
Thickness: 100mm

**ATTACHMENT OF WALL INSULATION**

Install Cellular Glass slabs vertically on the outer skin of the concrete block substrate in parallel courses with staggered joints.

A timber batten or steel angle laid horizontally true and level should be fixed temporarily to provide a starting line and to prevent movement before the adhesive has hardened. This may be fixed permanently if required.

The cellular glass slabs to be adhered to the surface using an adhesive PC164, which complies with the specifications of the cellular glass manufacturer. PC 164 is applied over the whole surface of the slab material using a 10mm notched spreader.

**780 VAPOUR CONTROL LAYER**

Cellular glass is completely impervious to water and water vapour.

**785 BREATHER MEMBRANE**

Cellular glass is completely impervious to water and water vapour.

**M20 330 UNILIT RENDER FINISH TO FOAMGLAS INSULATION BOARDS**

**Render manufacturer:** Telling Lime Products Limited, 7 The Dell, Enterprise Drive, Four Ashes, Wolverhampton, WV10 7DF. Tel: 01902 797 700. Fax: 01902 797 720. Email: info@telling.co.uk Web: www.telling.co.uk

**Preparation:** The substrate must be clean and free of all traces of oil and grease. When the substrate has been treated with an impregnating product (silicones or similar) it is recommended to consult the supplier or manufacturer. Apply directly to either a dry or damp substrate. If the substrate is too dry, dampen down the surface prior to overcoating.

**Basecoat:** Unilit 15/P2 with *LIMETICS® 150* Glass Fibre Mesh Reinforcement - to Foamglas insulation boards

**Basecoat Thickness:** Unilit 15 P2: 4 – 5mm nominal thickness

**Basecoat Application:** Mix Unilit 15 P2 with clean water - 4.5 to 5.25 litres of water to 30kg of powder depending on the temperature and substrate. Mixing is undertaken with a slow speed electric paddle for a period of 3 to 5 minutes. Depending on thickness and any levelling out required apply keying, priming or levelling coat of Unilit 15/P2 in a nominal 4 – 5mm layer (maximum 8 mm layer) by 10mm notched trowel, and bring to a level surface with a float. Following the application of the base coat a glass fibre mesh *LIMETICS® 150* is embedded within the base coat (position 2/3 of the thickness away from the substrate) to cover the complete surface. Successive sheets of glass fibre mesh should overlap by at least 100 mm. Additional mesh reinforcement is required around all openings, across zones where suspended floors intersect walls and where panels are applied over different substrates, along continuous straight panel joints and over repaired areas.

**Undercoats:** Premixed natural hydraulic lime mortar

**Product reference:** Unilit 65M.

**Thickness (excluding dubbing out):** 4 – 5mm nominal thickness

**Application:** Mix Unilit 65M with clean water - 4.5 to 5.25 litres of water to 30kg of powder depending on the temperature and substrate. Mixing is undertaken with a slow speed electric paddle for a period of 3 to 5 minutes. After 1 – 2 days (or sooner in good weather conditions) apply a second 4 – 5mm layer of Unilit 65M by steel trowel to a completely level surface and finish with open texture for the application of following layers.

**Fine Finish coat:** Premixed natural hydraulic lime finishing mortar.

**Product reference:** Unilit 65F

**Thickness:** 3-4 mm overall, 2 x 2mm layers (wet on wet)

**Application:** Mix Unilit 65F with clean water - 4.5 to 5.25 litres of water to 30kg of powder depending on the temperature and substrate. Mixing is undertaken with a slow speed electric paddle for a period of 3 to 5 minutes. After 3 – 4 days (or sooner in good weather conditions) apply Unilit 65F manually or mechanically to a dry or damp substrate in 2 layers of 2mm (wet on wet).

**Finish:** Depending on product and desired finish - trowelled, wood floated, sponged.

**Note:** To be applied in accordance with the manufacturers recommendations - full details are available from Telling. Do not apply in temperatures below 5°C or above 40°C. The mortar remains workable for 2 hours and dries in 24-48 hours. Protect from frost for 48 to 72 hours.