LIGHTWEIGHT THERMAL INSULATING SCREED

SUPERLIGHT AGGREGATES

FOR THE MANUFACTURE OF LIGHTWEIGHT THERMAL INSULATING MORTARS

POLITERM BLU

SUPERLIGHT AGGREGATES FOR THE MANUFACTURE OF LIGHTWEIGHT THERMAL INSULATING MORTARS
The complete range of superlight and high thermal insulating aggregates based on pre-coated virgin EPS beads with controlled density. Each bead is coated at production stage with EIA additive. This enables perfect mixing with the water and cement producing an homogenous distribution of beads preventing beads surfacing or bonding together.

WHY CHOOSE POLITERM BLU

THERMAL EFFICIENCY
> Low thermal conductivity $\lambda$.
> Ideal for use beneath underfloor heating UFH.

SPEED OF INSTALLATION
> A single layer instead of the multiple layer build up of traditional insulated concrete slabs.
> 1 m$^3$ can be mixed, pumped and placed in under 5 minutes.

EASY TO PLACE
> Lightweight. Fast and easy to place, spread level and finish.

REDUCED MATERIAL WASTAGE
> Mix, pump and place on site. Make just enough material to suit requirements. No waste concrete to be disposed of. No large wasted insulation board off cuts left around site.

RAPID CURING
> Cures at the rate of 1 cm. thickness per day.
> 10 times as fast as traditional screeds allowing trafficking and finishes to be applied much earlier.

LIGHTWEIGHT
> With design mix densities between 215 and 365 kg/m$^3$ it is ideal for use in intertenancy floor slabs, balconies and flat roofs. Can be laid to falls.

CE MARKING
> From January 1st 2014.

COMPLIANT WITH BS EN 16025-1:2013
> Thermal and/or sound insulating products in building construction. Bound EPS ballasting. Requirements for factory premixed EPS dry plaster (British Standard).

PRODUCT WITH LOW environmental impact
little energy for production and transport, a lot of energy saved, thanks to its thermal performances!

MAXIMUM SPEED AND EASE

TECHNICAL DATA:

<table>
<thead>
<tr>
<th>CEMENT CONTENT Kg/m$^3$</th>
<th>THERMAL CONDUCTIVITY $\lambda$, W/mK</th>
<th>COEFFICIENT</th>
<th>SCREED THICKNESSES mm.</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
<td>0,065</td>
<td>0,61</td>
<td>215 ca.</td>
</tr>
<tr>
<td>250</td>
<td>0,067</td>
<td>0,60</td>
<td>265 ca.</td>
</tr>
<tr>
<td>300</td>
<td>0,080</td>
<td>0,50</td>
<td>315 ca.</td>
</tr>
<tr>
<td>350</td>
<td>0,103</td>
<td>0,39</td>
<td>365 ca.</td>
</tr>
</tbody>
</table>

CEMENT CONTENT Kg/m$^3$ (Technical features absolute)

Density after 28 days Kg/m$^3$
215 ca. 265 ca. 315 ca. 365 ca.
Thermal conductivity $\lambda$, W/mK
0,065 0,067 0,080 0,103
Compressive strength N/mm$^2$
0,69 0,63 0,68 0,78
Shrinkage (NBN) mm/m
0,427 n.d. 0,352 0,270
Fire reactivity class
A2 UNI EN 13501-1
Smoke production class
s1 UNI EN 13501-1
Observation of drops or inhaled particles
a0 UNI EN 13501-1

COMPARATIVE FLOOR THICKNESSES FOR 0.25 W/m$^2$K U VALUE

The next diagram shows the EPS insulation required to achieve a U Value of 0.25 W/m$^2$K for a ground bearing floor slab with a P/A ratio of 0.4 and the alternative Politerm Blu screed. Both solutions are 140 mm. thick.

Lower P/A ratios as typified in terraced houses and semi detached require lesser thicknesses of Politerm Blu screeds compared with conventional screeds.

The immediate advantages of the Politerm Blue screed are:
- Sub base preparation. The base needs to be perfectly flat in conventional build ups to ensure there are no voids beneath the rigid insulation boards.
- Politerm Blu screed is poured directly onto the dpm and takes up any unevenness.
- Insulation boards need to be measured and cut to size ensuring minimal gaps between boards. The off cuts contribute to project waste and costs.
- The exact amount of Politerm Blu screed required is pumped directly onto the dpm.

A slip sheet is required over the insulation boards to prevent the screed or concrete mix getting around and between the insulation boards.
Not required using Politerm Blu.
A movement joint is required around the slab perimeter to allow for expansion and contraction.
Shrinkage/expansion is minimal in a Politerm Blu screed.
The conventional screed above (65mm thick) will take 65 days to cure.
The Politerm Blu screed will cure in just 14 days.
POLITERM® BLU MAIN APPLICATIONS FIELDS

Internal and external.

INTERMEDIATE LAYER / FILLING (on floors and/or basement):

- System levelling.
- Under sand + cement screeds.
- Under self-levelling screeds.
- Under floor radiating heating (also with direct laying of the coils).
- Vaulted floor levelling.
- Under industrial flooring.
- Under driveable asphalt mantles.
- In-between wall thermally insulating layer.

SINGLE-LAYER SCREEDS (on the floor and/or basement) direct application of:

- Ceramic, stoneware, clinker and pre-polished marble floor coverings and laying of floating parquets.
- Parquets, after applying a thin-bed compound.
- Flexible flooring after application of thin-bed smoothing compound.
- And also:
  - Gradient formation for terraces.

 And also:
- System levelling.
- Under sand + cement screeds.
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- Under floor radiating heating (also with direct laying of the coils).
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BUILDING ELEMENTS

- Blocks.
- Pre-casted walls.

ROOFING

- Pitched roofs.
- Flat roofs with or without gradient formation.
- Vaulted roofs.
- Corrugated sheet iron.
- Asbestos cement fibres (encapsulation).
- Also with direct application of waterproofing membrane.

The screeds prepared with the products POLITERM BLU are perfectly stable. Therefore they are the ideal laying surface for any type of sound insulation, guaranteeing their technical performances along the time.

PRODUCTS WITH LOW environmental impact

SPEND LESS ... AND ALSO PROTECT THE ENVIRONMENT!

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call now!