**SMET LiteFlo® Lightweight Flowing Screed**

SMET LiteFlo® Lightweight (Alpha Hemihydrate) Flowing Screed is a factory produced, pumpable, high-quality screed material based on calcium sulphate. It's supplied to site in pre-mixed 27kg bags or site silos. LiteFlo® is designed for application at thicknesses of between 20 and 70 mm, complies with EN 13813: 2002 and is CE marked.

- Lightweight - high yield, 43kg per m² @ 40mm
- 30% weight reduction compared to normal CA screed
- Ideal for application in high-rise buildings & over timber suspended floors
- Smooth Laitance Free Finish
- Pumpable
- Full Encapsulation of pipes and services
- CE Marked
- EN 13813: 2002
- Available in 27kg bags or site silos

**Field Of Application**

LiteFlo® is suitable for floors in homes, offices, public buildings and places exposed to similar loads. Due to its low bulk density, this product is ideally suited for renovation work in old buildings, over timber suspended floors and in high-rise buildings and apartment blocks. LiteFlo® may be applied as a levelling screed directly onto a load bearing floor; unbonded on a separating barrier (polythene), or as a floating floor and can be used in conjunction with underfloor heating or cavity floors. When using LiteFlo® in combination with underfloor heating, it should be noted that LiteFlo® has a low thermal conductivity. The fully dried LiteFlo® screed should be covered with a floor finish such as tiles, linoleum, wood, parquet, cork or carpet. If a cement based adhesive or smoothing compound is required, the surface of the screed must first be sealed using an appropriate acrylic primer/sealer. This product is not suitable for wet rooms.

**Working Instructions**

Light ventilation in the work area is necessary, but windows and openings must be closed sufficiently to avoid draughts, during and after application for at least two days. Do not use if the substrate or air temperature is below +5 °C or is above +35 °C.

**Substrate**

LiteFlo® Lightweight Flowing Screed is designed for use as a bonded thick levelling screed on concrete, as a floating screed over thermal or acoustic insulation, or as an unbonded screed on top of a plastic membrane.

**Preparation and Priming**

The substrate should be clean, dry, free of dust, grease and other impurities or contaminants that might prevent adhesion. If it is a large area, the surface should be treated by mechanical preparation by grinding or shot blasting. For bonded screeds, the substrate must be dry and should be primed with a suitable primer. If LiteFlo® is to be applied on plastic sheeting or as a floating floor, 8mm should be formed around the perimeter (walls, columns, etc).

**Mixing**

LiteFlo® should be mixed with clean water. Mixing time, if using a hand held mixer, is 2 minutes. Do not mix more material than can be laid in 30 minutes. A suitable mixing pump i.e. Putzmeister SP11 should be used for large areas. Do not mix in other materials.

**Application**

Pumping should be carried out in sections so that a wet edge is maintained. A wide steel tampering bar should be used to assist the levelling process. When applied bonded, the minimum thickness of LiteFlo® should be 20mm; over underfloor heating this should be a minimum of 25mm over the pipes (35mm over insulation board). Observe and regularly check the flow rate 24 - 26 cm (Hägermann cone). All relevant standards, guidelines and recommendations apply; workmanship must comply with good practice.

**Storage**

6 months under dry, protected conditions.

**Disposal Considerations**

Waste treatment methods. Recommendation: Smaller quantities can be disposed of with household waste. European waste catalogue 17 08 02. Uncleaned packaging: Recommendation: Disposal must be made according to official regulations. Recommended cleansing agents: Water, if necessary together with cleansing agents.

**Safety**

Technical Information

Screed Specification CA-C20-F4 as per EN 13813

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
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<tbody>
<tr>
<td>Maximum Thickness</td>
<td>70mm</td>
</tr>
<tr>
<td>Minimum Thickness Bonded</td>
<td>20mm</td>
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<tr>
<td>Minimum Thickness Unbonded</td>
<td>30mm</td>
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<tr>
<td>Domestic</td>
<td>35mm</td>
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<tr>
<td>Commercial</td>
<td>40mm</td>
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<tr>
<td>Over Underfloor heating Pipes</td>
<td>25mm (BS 8204-7)</td>
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<tr>
<td>Use</td>
<td>Internal only</td>
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<tr>
<td>Compressive Strength (28 days)</td>
<td>≥ 20.0 N/mm²</td>
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<tr>
<td>Flexural Strength (28 days)</td>
<td>≥ 4.0 N/mm²</td>
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<tr>
<td>Tensile Adhesion</td>
<td>&gt; 1.5 N/mm²</td>
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<tr>
<td>Flow Rate</td>
<td>240 – 260mm (slump flow - Hägermann cone)</td>
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<tr>
<td>Hardening Times (Light foot traffic)</td>
<td>After approx.12 hours; can be partially loaded after approx. 7 days</td>
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<tr>
<td>Hardening Time</td>
<td>Final Covering: approx. 2 – 6 weeks dependent on thickness and drying conditions on site</td>
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<tr>
<td>Recommend water demand</td>
<td>8 – 9 l per 27kg bag</td>
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<tr>
<td>Working Life</td>
<td>45 - 60 minutes depending on ambient conditions</td>
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<tr>
<td>Thermal Conductivity (tabular value)</td>
<td>λR = 0.40 W/mK</td>
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<tr>
<td>Yield</td>
<td>1.08 kg/mm/m²</td>
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<tr>
<td>Fresh (Wet) Density</td>
<td>1,500 kg/m³</td>
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<tr>
<td>Hardened (Dry) Density</td>
<td>1,300 kg/m³</td>
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</table>

Hazard Statements
H315 Causes skin irritation.
H318 Causes serious eye damage.

Precautionary Statements
P101 If medical advice is needed, have product container or label at hand.

P103 Read label before use.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a POISON CENTER/doctor.

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EN 13813 :2002
EN 13813 CA – C20 – F4
Calcium Sulphate screed material for use internally in buildings

Reaction to fire A1
Release of corrosive substances CA
pH value > 7
Water permeability NPD
Water vapour permeability NPD
Thermal Conductivity < 0.4 W/m°K
Compressive strength C20
Flexural strength F4

NPD = No Performance Determined