

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 90 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

Field Of Application

LiteFlo® is suitable for floors in homes, offices, public buildings and places exposed to similar loads. 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.

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. Indoor and floor temperature should exceed +10°C during and after application and for one week post application.

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. The surface substrate strength must be at least 0.5 N/mm².

Dry and very porous substrates must be treated twice. If LiteFlo® is to be applied on plastic sheeting or as a floating floor, a gap of minimum 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 20 minutes. A suitable mixing pump i.e. Putzmeister SP11 should be used for large areas. The ideal mixing temperature is between 10 - 20 °C.

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).

Safety

Caution. This product contains cement, which becomes alkaline when wet and may cause skin irritation. Use goggles, gloves and protecting cream. Avoid prolonged contact with skin. Avoid inhaling the dust. Wash affected area with warm water and soap. Wash eyes thoroughly and consult a physician. Do not ingest. See Health and Safety Data Sheet for further information.

Precautionary Statements

- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H335 May cause respiratory irritation.
- P101 If medical advice is needed, have product container or label at hand.
- P102 Keep out of reach of children.
- P103 Read label before use.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P264 Wash thoroughly after handling.
- P271 Use only outdoors or in a well-ventilated area.
- 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 or doctor/physician.

Disposal Considerations

13.1 Waste treatment methods: Must not be disposed together with household garbage. Do not allow product to reach sewage system. Uncleaned packaging: Disposal must be made according to official regulations. Recommended cleansing agents: Water, if necessary together with cleansing agents.

Technical Information

Screed Specification EN 13813: 2002	
Maximum Thickness	90mm
Minimum Thickness	Bonded: 20mm Unbonded: 30mm Domestic: 35mm Commercial: 40mm Over Underfloor heating Pipes: 25mm (BS 8204-7)
Use (External Use)	No
Use (Internal Use)	Yes
Compressive Strength (28 days)	C20
Flexural Strength (28 days)	F4
Tensile Adhesion	> 1.5 N/mm ²
Shrinkage (28 days)	< 0.1 %
Flow Rate	220 – 260mm
Hardening Time (before foot traffic)	6 - 8 hours
Hardening Time	Final Covering: 2 – 6 weeks dependent on thickness and drying conditions
Recommend water content	9 - 10 L per 27kg bag
Pot life	Maximum 40 minutes depending on ambient conditions
Reaction To Fire	A1 Non Combustible
Thermal Conductivity	< 0.40 W/mK
Yield	1.08 kg/mm/m ²
Fresh (Wet) Density	1,500 kg/m ³
Hardened Dry Density	1,300 kg/m ³
pH Value	> 7.0
Packaging	27kg bags or site silos
Storage	12 months under dry conditions



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EN 13813
CA - C20 - F4

Reaction to Fire **A1**

