

LIMELITE LIGHTWEIGHT SCREED FOR FLOORS AND ROOFS

DESCRIPTION

Limelite Lightweight Screed is a preblended, dry bagged cementitious, lightweight screeding mortar for weight reduction and thermal insulation on floors and roofs.

When used for flooring, the mix does not provide a wearing surface and must therefore be topped. The recommended specification for floors is a monolithic topping of 15mm minimum, 1:4 ready-mixed sand and cement screeding mortar. When used on roofs it can be laid to falls and is generally topped with sheathing felt and mastic asphalt.

COMPOSITION

Limelite Lightweight Screed is composed of Perlite Lightweight Aggregate, ordinary Portland cement, fine limestone, specially selected air entraining and foam stabilising agents. It is manufactured under controlled conditions to ensure consistent quality.

TYPICAL PERFORMANCE

Density: Typical test results	kg/m ³	
Limelite Lightweight Screed	800	
1:4 cement:sand Screed (for comparison)	2000-2200	
Appearance:	Fine Grey Powder	
Strength:	3.0 N/mm ² at 28 days (± 0.5%).	
Tests in accordance with BS 4551.		
Moisture content:	Air dried material less than 5% by volume.	
Moisture movement:	0.07% (approx.)	
Effect of moisture:	If the screed is subjected to running water once set it will become saturated but will not disintegrate or decompose.	
Thermal:	Oven Dry	Corrected to 3% moisture
Coefficient of Thermal Conductivity (k) W/m ² C	0.08 – 0.09	0.12 – 0.14

Thermal Resistance (R) at 50mm overall thickness m²C/W 0.36 - 0.42

The above figures are based on moisture contents by volume.

Effect of temperature:

High:

Limelite Lightweight Screed when set and dried will not start losing water until the temperature reaches at least 250°C.

Low:

Limelite Lightweight Screed is unaffected, either in unused powder form as supplied ex works or when set and dried, but avoid application at temperatures of approximately 3°C and below.

Fire protection:

Limelite Lightweight Screed is non-combustible as defined in BS 476 : Part 4, and can be designated Class O in accordance with the requirements of the National Building Regulations.

Effect of chemicals:

Do not introduce additives without prior consultation with the manufacturer.

Health:

All fresh cement based mortars are alkaline; precautions should be taken in handling to avoid excessive skin contact. Accidental splashes to the eyes should be washed thoroughly with clean water or an approved eye wash solution.

Compatibility:

Limelite Lightweight Screed is compatible with most building materials but should not be placed on a substrate containing traces of gypsum.

Durability:

When correctly laid and topped the screed will have an indefinite life.

Setting time:

Approximately 12 – 48 hours.

Drying time:

Like all cementitious materials, **Limelite Lightweight Screed** develops its drying shrinkage during the drying out period. It is not possible to state a precise period as this will depend greatly on the depth of the screed, and sub base, ventilation, and climate conditions.

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APPLICATIONS

Uses: For screeding floors or roofs where reduction and thermal insulation are primary considerations in either new work or the repair and renovation of existing structures.

Economics:

Coverage at 50mm thickness.

Limelite Lightweight Screed

= 30 square metres per tonne (approx)

1:4 cement:sand screed (for comparison)

= 9 square metres per tonne (approx).

SITework

Storage: Six months provided bags are unopened and are stored in dry, well ventilated conditions. (All bags are date stamped).

Preparation: Floors: The base must be clean and in particular free from lime, gypsum plaster, dust dirt, oil or grease. The base must be well wetted with clean water. Just before laying the screed a cement grout should be brushed into the surface. Care being taken that the grout neither forms deep pools nor sets before the screed is placed.

Roofs: Lay on a clean dry surface making provision for a 25mm movement joint around the perimeter and all other projections. Movement joints should be used when a system is carried through the structure.

Mixing: Always use clean water. Place the contents of the required number of sacks in a mixer and add the water slowly in order to avoid "balling up" and sticking to the walls of the mixer. Avoid leaving the material in the mixer for more than 5 minutes. Lay material immediately after mixing. As a guide 2-3 gallons of water is required per bag.

NB: Mix only full bags; part bags cannot be re-used.

Laying: Spread the screed over the floor area and work into the base. Compact the screed thoroughly and evenly all over. Avoid excessive trowelling which brings cement to the surface causing crazing and surface dust. Rake over the surface prior to topping monolithically.

Roofs: Spread the screed over the base and level to falls as required. Do not tamp/vibrate or trowel excessively. Provision may be made for the inclusion of ventilators in the roof.

Thicknesses: Limelite Lightweight Screeds should not be laid to thicknesses below 30mm without written recommendations from our Technical Department.

Curing: Screeds should be protected from damage after laying. Adequate curing is essential and screeds should be covered with protected sheeting, or suitable material for at least 3 days.

Do not use hot air blowers, underfloor heating, or other means of accelerating the drying in the early life of the screed.

Floors: Use either a cement:sand screed, Tarmac L.S.M. ready-mixed screed, Tarmac Truscreed, mastic asphalt (flooring grade).

NB: *Monolithic construction with 1:4 sand and cement is recommended, within 3 hours.*

Roofing: Use either a sheathing felt and mastic asphalt, three layer build up felt or any other recognised roof finish or system. On exposed sites use nails or a bitumen bonding agent to fix the first layer of felt to prevent uplift.

Caution: when topping a screed with an impervious material it will entrap any residual water. Adequate provision should be made, therefore, by the placing of vents or allowing the screed to dry completely prior to topping.

QUALITY CONTROL

All products are factory blended, tested and packaged to quality control procedures in accordance with BS EN ISO 9001 Series.

HEALTH AND SAFETY

See separate data sheet reference 84/5A.

PRICES & CONDITIONS OF TRADING

Prices will be quoted on application. All quotations given, orders placed and materials supplied are subject to Limited Conditions of Trading – copies available on request.

PACKAGING AND STORAGE

Limelite Lightweight Screed is available in 25kg sacks, palletised and shrinkwrapped.

Palletised **Limelite Lightweight Screed** should be stored in cool dry areas clear of the ground, sheeted or under cover and stacked not more than two pallets high.

The product should be used on a first in – first out basis.

Shelf life is minimum 3 months when properly stored but could be in excess of 6 months subject to temperature and humidity.

INFORMATION, PRICES & ORDERING

For ordering contact: 01283 550060.

Fax: 01283 550486.

For all other enquiries contact: 01283 554800.

NB: Please give not less than 48 hours notice.

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