



Lightweight mortar
for thermal-acoustic
insulated screeds



konstruktive · Leidenschaft



Strada Spartafino, 2
12016 Peveragno (CN)



ph. +39 0171 38.38.00
Fax +39 0171 33.93.95



info@vimark.com
www.vimark.com



PRODUCT DESCRIPTION

SOTTOFONDO LEGGERO is a highly insulating premixed mortar for lightweight screeds, flat and sloping floors, balconies, attics, etc.

The product is designed to lighten the structure, decreasing the weight by approx. 88% in comparison to traditional screeds or concrete, and to thermally and acoustically insulate the different kind of substrates within new or existing buildings.

The product is ideal for a one-layer foundation before laying ceramic tiles glued with specific adhesives.

COMPOSITION

SOTTOFONDO LEGGERO is a powder formula based on special hydraulic binders, perfectly spherical virgin expandable polystyrene beads (eps) with controlled particle size and specific additives that improve the workability and product performance.

MIXING AND APPLICATION

SUBSTRATE PREPARATION

The substrates must be healthy, stable, free from dust and unstable parts. The surfaces must be dry and free from any rising damp. Remove any cement residues, release agents, oils, dust, grease, dry or crumbling parts by power washing or sandblasting and moisten the prepared substrates with clean water before applying product.

Before applying the lightweight screed, it is necessary to isolate the vertical elements (walls, doorframes, pipes, etc.) from the flooring by applying **COMPRIMIBILE PERIMETRALE** strips for the entire thickness of the screed.

Proceed with saw cuts as with a traditional concrete screed at doorways, recesses, corners and edges, wall openings or in the case of raised continuous surfaces every 25 m² or maximum 8 meters.

MIXING

The **SOTTOFONDO LEGGERO** is easy to apply and can be pumped at long distances and elevated heights. The lightweight mortar is used as a traditional screed to gain a flat surface. Mix and pump with a mixing machine for screeds or with a cement mixer.

For application by hand, mix the product with approx. 10.0-11.0 litres of clean water per bag of 70 litres in a mixer. Add the correct quantity of water in the mixer and then add the powder product. Mix for about 2'-3' minutes, until the mixture is smooth and free of lumps. Apply the product with a trowel like a traditional screed.

The prepared product is usable for 30' minutes. To apply by mechanical projection, set up the plaster machine with a large helical blade mixer of a rotor/stator group specific for lightweight products.

Apply the lightweight mortar as a traditional screed using the necessary tools such as a rake, shovel, screed bar etc. Smooth the plaster layer with an aluminium screed bar and check the thickness applied. Level the product using a screed bar.

FLOATING SCREED

For floating screeds, apply over the entire bearing surface, a layer of vapour barrier consisting of a film of micro-perforated polyethylene (PE) or a thin acoustic under layer (SCAM), to improve the sound absorption of the support and reduce the sound impact. Do not use other products such as sheets, rolls or bulk products. Check that the PE film or





SCAM is applied perfectly to the support and in the corners, avoiding the formation of air bubbles between the substrate and the barrier. Proceed to apply the lightweight mortar to the entire surface prepared.

UNDERFLOOR HEATING

It is not possible to cover underfloor heating with **SOTTOFONDO LEGGERO**, the product would prevent proper heat circulation but applied under the heating it creates a very efficient system.

INDICATIVE AMOUNTS REQUIRED

10.0 kg per m² per cm of thickness.

COLOUR

Grey.

PACKAGING

70 litres bags on disposable pallet (40 bags) protected by waterproof plastic wrap.

STORAGE

6 months in original intact packaging and stored in a dry place.

RECOMMENDATIONS

Do not apply with temperatures below + 5°C or above + 30°C or in the presence of strong wind or direct sunlight. Avoid applying on dusty, unstable and inconsistent surfaces. Read instructions carefully before adding water. Too much water may cause the leaching of the binders from the expanded polystyrene beads, extend drying times and reduce the mechanical resistance of the product. Do not apply the product in thicknesses inferior of 50 mm. All screed coatings may be applied. Do not wet the applied screed and protect the surface from direct sunlight, rain and frost for the first 24 hours. Protect the freshly applied product from traffic by placing walking planks. When applying ceramic tiles directly, use powdered adhesives such as **MASTERFLEX**, **MASTERLIGHT** or **MASTERPLUS**.

PRODUCT DATA

Appearance	powder	
Colour	grey	
Powder volume mass	~ 300 kg/m ³	EN 1015-10
Maximum aggregate size	≤ 2,0 mm	

APPLICATION DATA

Water content of mix	14-16%
Mixing ratio	1 bag + 10.0-11.0 l of water
Minimum application temperature	+ 5°C
Maximum application temperature	+ 30°C
Pot life mixture	~ 30' minutes
Minimum application thickness	50.0 mm
Residual moisture after 28 days	< 2.0%
Time before laying ceramic flooring*	≥ 4 days
Time before laying parquet flooring*	≥ 7 days

* before laying the coatings always test the residual humidity using a Calcium Carbide hygrometer.





**PERFORMANCE
DATA**

<i>Compressive strength</i>	≥ 1.5 N/mm ²	EN 13892-2
<i>Flexural strength</i>	≥ 0.5 N/mm ²	EN 13892-2
<i>Reaction to fire</i>	A2 s1 d0 Class	EN 13501-1
<i>Böhme abrasive strength</i>	NPD	EN 13892-3
<i>Release of corrosive substances</i>	CT	EN 13892-2
<i>Water permeability</i>	NPD	EN 1062-3
<i>Vapour permeability</i>	NPD	EN 12086
<i>Sound insulation</i>	NPD	EN ISO 140-6
<i>Sound adsorption</i>	NPD	EN 12354-6
<i>Thermal resistance</i>	NPD	EN 12524
<i>Chemical resistance</i>	NPD	EN 13529
<i>Thermal conductivity</i>	0.080 W/mK	EN 12667
<i>Sound absorption</i>	21.5 dB (with SCAM)	

REMARKS

Product for professional use. The data and instructions in this data sheet are based on our best practical and laboratory experience. They refer to laboratory tests and should be considered indicative. In view of the different conditions of use and application, which depend on factors over which Vimark has no control (type of surface, environmental conditions, technical indications for fixing, etc.), those who use the product are responsible for ascertaining whether or not it is suitable for the intended purpose. Thus our warranty obligation merely covers the quality and fade-free characteristics of the actual product, and exclusively in relation to the aforementioned data. Vimark reserves the right to make technical modifications without prior notice. This technical data sheet voids and substitutes all previous editions. Updates will be published on the web site www.vimark.com.

