

SOLIDONE FLUIDO

Self-levelling - Rapid setting cement based mortar for screed with fluid consistency

- Fluid cement based screed from 0,8 cm to 8 cm of thickness adherent or floating
- For floating screed, fluid
- For every kind of floor
- Walkable in 24 hours*
- Ready for tiles in 4 days*
- For floating screeds (even heated screeds)
- Easy to apply and cost saving thanks to its fluid consistency
- The long workability time (60 minutes*), allows the application without pump
- Reinforcement mesh not necessary can be worked with mixing machine, pump or cement mixer
- Internal use
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TECHNICAL FEATURES:

SOLIDONE FLUIDO is a mixture of special cements, synthetic additives and selected aggregates for the preparation of screed exempt from shrinkage, classified according to EN 13813, such as CT C30 – F5 A1 fl.

Thanks to its composition, mixed at the work site with water, it becomes a fluid mortar and allows the fast and safe construction of floating screed (even heated) from 0,8 to 8 centimeters thickness, suitable to receiving the laying of ceramic tiles after only 4* days and wooden and resilient floors after only 20* days, with little manpower. Important characteristics are the absence of fissures even when applied in varying thickness (on heating systems). Also, it is very profitable to use it as self-levelling from 8 mm to 8 cm of thickness. Important features are the lack of holes and cracks, even in application of different thickness (on technical machines). It can be mixed with traditional mixing machines/pump or a cement mixer. Light foot traffic after 14 hours* and ready for ceramic floor application after 4 days*. For interiors. Professional use.

* at 23°C and 50% relative humidity, Data referred to a floating screed 5-6 cm thick, ventilated area.

CONTRACT ITEM SPECIFICATIONS: The cementitious screeds will be created with a premixaed product, rapid drying and controlled shrinkage, easy for coating with ceramic floors after only 4 days and wooden floors after 20* days, classified according to EN 13813 as CT C30-F5 A1 fl, as SOLIDONE FLUIDO by Benfer.





AREAS OF APPLICATION:

Preparation of mortars of adherent and floating (even heated), concrete walkable in 14* hours and dry in 4* days. Applicable also for renovation of old ceramic or natural stone floors for industrial environments subject to heavy or intense traffic. As self-levelling from 8 mm to 8 cm of thickness. *at 23°C and 50% relative humidity, Data referred to a floating screed 5-6 cm thick, ventilated area

METHOD OF USE: SUBSTRATES PREPARATION:

The substrates must be mounted and rigid, and invulnerable to move except to elastic oscillations and vibrations typical of the structure. They must also have completed their shrinkage phase and they must be perfectly dry, clean and free of oils. Avoid the use of sub-bases subject to humidity seeping. The adherent screed must have a minimum thickness of minimum 3 cm and a maximum of 8 cm and they require the preventative application of a binding mortar prepared by carefully mixing SOLIDONE FLUIDO with CEMLATEX 600 in equal parts in volume. In case of application as thin coat of self-levelling, starting from 8 mm of thickness, the product must be laid on a wet coat of primer STARPRIM. On sub-bases in gypsum or anhydrite, preventatively apply two coats of BENFERPRIM or STARPRIM. In industrial environments or where necessary, and generally those over 3,5 cm in depth, immerse an electro-welded network with spans of 10-20 cm into the screed and place dilation joints where necessary. The floating screed must have a minimum thickness of 4 cm and it must be divided using appropriately thick sheets of polyethylene overlapping for at least 30 cm and turned towards the walls for at least 10 cm, thus acting as a steam barrier.

In case the screed must include house heating elements for hot water, it is necessary that the total depth is at least six centimeters and at least the three centimeters above the tubes. The tubes to be placed in the screed must then be covered with a flexible metallic grill. Always provide for the setting of a perimeter joint in compressible material with a depth of at least 8-10 mm to be positioned in correspondence to possible columns.

MIXTURE PREPARATION: SOLIDONE FLUIDO can be mixed with traditional mixers /pump or a cement mixer. Thoroughly mix one sack of 25 kg of SOLIDONE FLUIDO with 3,75-4,00 liters of water using an appropriate mechanical mixer for at least 3-5 minutes, until the mixture has a consistency similar to humid soil. Respect the dosage of water because an excess of water may cause a reduced superficial resistance of the screed.

PRODUCT APPLICATION: The mortar must be used in the 60* minutes after mixing with the same technique as used for traditional screed. Once the levelling borders are prepared the mixture must be applied homogeneously, levelled with suitable levelling bars with two orthogonal movements. It is very important that the layer of screed applied over any tubes is not inferior to 3 centimetres and that a zinc-coated metallic grill has been placed. Place dilation joints where necessary and when the project needs them. They necessary in areas with a surface over 40 m² and near the doorways. Avoid application in areas with strong air currents as much as possible, as well as in the presence of freezing temperatures.

FULL SERVICE:

Approximately 14 hours* after laying the screed, it is walkable. The laying of ceramic floors (residual humidity < 4%) can be executed after 4* days, that of marble and stable natural stone (residual humidity <3%) after 8-10 days* using adhesives from the BENFERFLEX with normal or rapid setting.



For the laying of wooden floors or resilients (residual humidity < 2%) it is necessary to wait at least 20* days. In all cases it is indispensable to verify the residual humidity level in the screed using a carbide hygrometer before proceeding with the laying of floors. Measurement of the residual humidity level in SOLIDONE FLUIDO screed must be performed with a carbide hygrometer in several different sample areas of the screed with a reading after at least 2 minutes from the breaking of the vial. Normal electrical hygrometers do not always provide reliable results in these cases. The electric hygrometer (very suitable for measuring humidity levels in wooden floors) measures humidity in screed by its electric conductibility, and is therefore influenced by many different parameters, such as, for example, the presence of metallic netting, tubes, high saline contents, special additives, hygroscopic materials and water that has been chemically semi-transformed into stable salts, which are not harmful for installation. The same water is also detected by the carbide hygrometer, but only following a waiting period of more than 2 minutes, such as 30 minutes, for example.

*at 23°C and 50% relative humidity, Data referred to a floating screed 5-6 cm thick, ventilated area

ADVICE:

- Do not use on sub-bases that are subject to humidity seeping without providing an adequate barrier for the steam.
- Do not apply to sub-bases in gesso or anhydrite without having preventatively applied two coats of BENFERPRIM or STARPRIM.
- Do not ever add water to re-mix the mortar when it begins to grip, and dispose of it immediately.
- For the creation of screed with a depth of more than 4 cm, it is always recommended to preventatively apply a layer of polyethylene sheets with a dividing and steam barrier function, as this will improve the quality of the application by impeding humidity seeping from the sub-base.
- Place dilation joints where necessary.
- In all cases it is indispensable to verify the residual humidity level in the screed using a carbide hygrometer before proceeding to the laying of wooden or resilient floors (see implementation).







CLEANING: Use water to clean the tools before the product begins to set.

CONSUMPTION: The consumption of SOLIDONE FLUIDO is $16-17 \text{ kg/m}^2$ for every centimeter of depth.

PACKAGING: SOLIDONE FLUIDO is packaged in poly-coated paper of 25 kg and in pallets of 1200 kg.

STORAGE: In its original closed package in a dry cool place.

SHELF LIFE: 12 months from the date listed on the package.

PRODUCT TECHNICAL DATA

Classification EN 13813: Consistency: Colour:	CT C30 – F5 A1 fl Premixed powder Grey
Storage and Duration:	12 months in the original closed package in a cool dry place
Danger of harm:	Possible irritation of the eyes and skin upon contact due to the
0	cement content
Flammability:	No
Apparent mass volume:	1.500 kg/m³
Mixture ratio:	3,75-4,00 liters of water per 25 kg bag
Mixing time:	3-5 min
Mixture consistency:	Very fluid mortar
Mass volume of paste:	1900 kg/m³
Application temperature:	From $+ 5^{\circ}C$ to $+ 35^{\circ}C$
Pot life:	60 minutes
Thickness:	From 0,8 cm to 8 cm
Maximum grain size:	4 mm
Traversable on dry substrate:	Approximately 14 hours
Ceramic tiles laying:	After 4 days (subject to residual humidity check <6%)
Marble and stable natural stone laying: Wood and resilient laying:	After 8-10 days (subject to residual humidity check <3%) After 20 days* (subject to residual humidity check <2%)
Final hardening:	28 days
Compression strength after	
24 hours, 7 and 28 days:	4 N/mm², 10 N/mm², 30 N/mm²
Flexural strength after 24 hours, 7 and 28 days:	2 N/mm^2 , 3 N/mm^2 , 5 N/mm^2
Temperature resistance:	From -30° C to $+90^{\circ}$ C

* at 23°C and 50% relative humidity, Data referred to a floating screed 5-6 cm thick, ventilated area.

PLEASE NOTE: The information given in this chart is based on our best experience and indicative only. It must in any event be verified by the end user, who assumes all liabilities deriving from utilization of the product.

