

SOLIDONE RAPIDO

Rapid setting pre-blended mortar for fast drying screed (4 hours*) with controlled shrinkage

- Dry (humidity < 2%), in 4 hours*
- Walkable in 2 hours*
- Thickness from 2 to 8 cm
- For fixed or floating screed (even heated)
- (





TECHNICAL FEATURES:

SOLIDONE RAPIDO is a mixture of special high resistance cements, synthetic additives and selected aggregates for the preparation of screed exempt from shrinkage, classified according to EN13813 CT C60-F10 A1fl.

Thanks to its composition, mixed at the work site with water, allows the construction of adherent and floating screed (even heated) up to 8 centimeters thick, suited to receive the laying of ceramic tiles after only 3 hours* and of wooden and resilient floors after only 4 hours*. For interior and exterior. Professional use.

AREAS OF APPLICATION:

Preparation of mortars of adherent and floating (even heated), concrete walkable in 2* hours and dry in 4* hours. Applicable also for renovation of old ceramic or natural stone floors for industrial environments subject to heavy or intense traffic.

* 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 premixed product, rapid drying and controlled shrinkage, easy for coating with ceramic floors after only 3 hours and wooden floors after 4* hours, classified according to EN 13813 as CT C60-F10 A1 fl, as SOLIDONE RAPIDO by Benfer.



TECHNICAL ASSISTANCE



INSURANCE GUARANTEE



TECHNICAL MEETINGS



PROFESSIONAL USE



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 2 cm and a maximum of 8 cm and they require the preventative application of a binding mortar prepared by carefully mixing SOLIDONE RAPIDO 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.

MIXTURE PREPARATION:

Thoroughly mix one sack of SOLIDONE RAPIDO with 1,60-1,65 liters of water using an appropriate mechanical mixer for at least 3-4 minutes, until the mixture has a consistency similar to humid soil.

PRODUCT APPLICATION:

The mortar must be used in the 30 * 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 (available on request).

In case of necessary stop from working for more than 2 hours take care of insert in screeds iron pieces of reinforcing rods, with length of 30 centimeters every 20-30 centimeters approximately and, starting to work again, take care of applying on screed's side a coupling substance, prepared by mixing accurately SOLIDONE RAPIDO with CEMLATEX 600 in equal parts in volume. When possible, avoid to proceed with the application in presence of high air flows or when there is a possibility of frost.

In industrial environments or where necessary, and generally those over 3,5 cm in depth, immerse an electro-welded network 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.



FULL SERVICE:

Approximately 90 minutes* after laying the screed, it is walkable. The laying of ceramic floors (residual humidity < 6%) can be executed after 3* hours, that of marble and stable natural stone (residual humidity <3%) after 4 hours* 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 4* hours.

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 RAPIDO 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 subbase
- 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 FULL SERVICE).



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

CONSUMPTION: The consumption of SOLIDONE RAPIDO is 14-16 kg/m² for every centimeter of depth.

PACKAGING: SOLIDONE RAPIDO is packaged in poly-coated paper of 25 kg and in 1000 kg Europallet.

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:

Storage and Duration: Danger of harm:

Flammability:

Apparent mass volume:

Mixture ratio: Mixing time: Mixture consistency: Mass volume of paste: Application temperature:

Pot life: Thickness:

Maximum grain size: Traversable on dry substrate:

Ceramic tiles laying:

Marble and stable natural stone laying:

Wood and resilient laying:

Final hardening:

Compression strength after 24 hours, 7 and 28 days:

Flexural strength after 24 hours, 7 and 28 days:

Temperature resistance:

CT C60 - F10 A1 fl Premixed powder

Grey

12 months in the original closed package in a cool dry place Possible irritation of the eyes and skin upon contact due to the

cement content

No

 $1.600 \, \text{kg/m}^3$

1,6-1,65 liters of water per 25 kg bag

3-5 min Humid soil $2100 \, \text{kg/m}^3$

From $+5^{\circ}\text{C}$ to $+35^{\circ}\text{C}$

30 minutes From 2 cm to 8 cm

4 mm 2 hours

After 3 hours (subject to residual humidity check <6%) After 4 hours (subject to residual humidity check <3%) After 4 hours* (subject to residual humidity check <2%)

3 days

30 N/mm², 40 N/mm², 60 N/mm² $6\ N/mm^2, 7\ N/mm^2, 10\ N/mm^2$ From -30°C to +90°C

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.



^{*} at 23°C and 50% relative humidity, Data referred to a floating screed 4 cm thick, ventilated area.