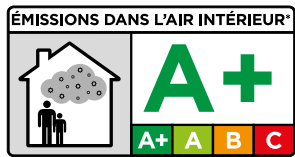




SOLIDONE

Hydraulic binder for fast drying screed (4 days*) with controlled shrinkage

- Floating screed walkable in 6 hours* and dry (humidity < 2%) in 4 days*
- Certainty of implementation time
- Applicable also for renovation of old ceramic floors
- Also for industrial environments subject to heavy or intense traffic
- Better workability
- No shrinkage



TECHNICAL FEATURES:

SOLIDONE is a hydraulic binder formulated with special high resistance cements and synthetic additives for the preparation of sub-bases exempt from shrinkage. Thanks to its composition, mixed at the work site with fine gravel and water, it permits the combining of adherent and floating screed (also heated) up to 10 centimeters in depth, suited to the laying of ceramic tiles after only 24* hours and wooden and resilient floors after only 4* days.

Professional use for interior and exteriors.



TECHNICAL
ASSISTANCE



INSURANCE
GUARANTEE



TECHNICAL
MEETINGS



PROFESSIONAL
USE

CONTRACT ITEM SPECIFICATIONS:

The cementitious screeds will be carried out with the use of a specific binder, with rapid drying and controlled shrinkage, which allow the delivery of ceramic tiles application after only 24 hours, as SOLIDONE by Benfer.

AREAS OF APPLICATION:

Preparation of adherent and float cementitious screeds, light foot bearing in 12* hours and dry (humidity at <2%) in 4* days. Applicable even on restoration on old ceramic floors or natural stones and for industrial areas with intense and heavy loading to bear.

DOSAGE:

- Civil use adherent and floating screed 220/250 kg/m³ of SOLIDONE, 1.700/1.800 kg/m³ of fine gravel 0-8 millimeters (see table on the last page), 110-130 liters/m³ of water, corresponding to one 20 kg sack of SOLIDONE, 130-140 kg of fine gravel 0-8 millimeters and 10-12 liters of water.
- Industrial and/or heavily trafficked adherent and floating screed 350 kg/m³ of SOLIDONE, 1.550/1.650 kg/m³ of fine gravel 0-8 millimeters (see table on the last page), 170-180 liters/m³ of water, corresponding to one 20 kg sack of SOLIDONE, 90-100 kg of fine gravel 0-8 millimeters and 10-12 liters of water.

METHOD OF USE:**SUBSTRATES PREPARATION:**

The sub-bases must be mounted and rigid, and invulnerable to elastic oscillations and vibrations 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. As aggregates, use only washed and dried fine quartz-silicon gravel, with a granulometric curve from 0 to 8 mm (see table on the last page), available on request. The adherent screed must have a minimum depth of 2 cm and a maximum of 10 cm and they require the preventative application of a binding grout prepared by carefully mixing SOLIDONE with CEMLATEX 600 in equal parts. On sub-bases in gesso or anhydrite, preventatively apply two coats of BENFERPRIM. 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 depth 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 house heating elements for hot water, it is necessary that the total depth is at least six centimeters 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:

Thoroughly mix one sack of SOLIDONE with 100-140 kg of fine gravel with a granulometric curve from 0 to 8 mm (see the table on the last page), and only afterwards mix with 10-12 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 60* minutes after mixing with the same technique as used for traditional screed. Once the leveling boards are prepared the mixture must be applied, compacted, propped and trowelled with care. It is very important that the layer of screed applied over any tubes is not inferior to 3 cm and that a zinc-coated metallic grill has been placed. Place dilation joints where necessary (available on request). If it is necessary to interrupt work for more than 24 hours, insert 30 cm long reinforcing iron sections approximately every 20-30 cm and when work starts again, apply a binding grout on the screed side prepared by mixing SOLIDONE with CEMLATEX 600 in equal parts. Avoid application in areas with strong air currents as much as possible, as well as in the presence of freezing temperatures.

IMPLEMENTATION:

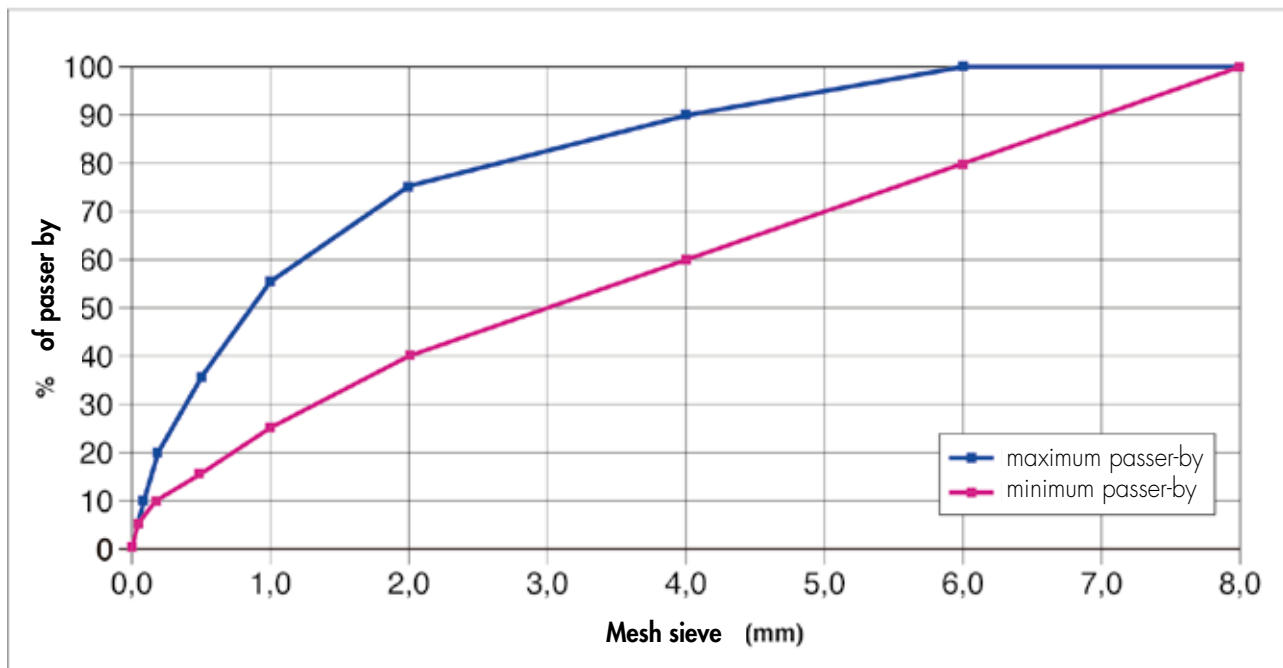
Approximately 6-10 hours after laying the screed, it is walkable and possible to smooth out. The laying of ceramic floors (residual humidity < 6%) can be executed after 24* hours, that of marble and stable natural stone (residual humidity <3%) after 48* hours using adhesives from the BENFERFLEX line with normal or rapid setting. For the laying of floors in wood or resilients (residual humidity < 2%) it is necessary to wait 4* 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 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 conductivity, and is therefore influenced by many different parameters, such as 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.

ADVICE:

- Always use fine gravel with the characteristics indicated in the table on the last page.
- Do not use on sub-bases that are subject to humidity seeping without providing an adequate barrier for the steam.
- Never 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).
- Do not apply to sub-bases in plaster or anhydrite without having preventatively applied two coats of BENFERPRIM.
- Always respect the recommended dosage for the intended type of application.
- The quantities of water are recommended based on the characteristics of the recommended aggregates (see the table on the last page), but they can vary based on the granulometry and humidity level of the fine gravel available at the work site.
- Once mixed with the dry fine gravel, it is necessary to immediately proceed with mixing water and application.



OPTIMUM AGGREGATE PARTICLE-SIZE GRAPH FOR SOLIDONE



CLEANING: Tools must be cleaned using water before the product begins to set.

CONSUMPTION: 2,5-3,5 kg/m²/cm thickness.

PACKAGING: SOLIDONE is packaged in poly-coated paper of 20 kg and in pallets of 1,000 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

Consistency:	Powder
Color:	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
Inflammability:	No
Apparent mass volume:	800 kg/m ³
Recommended dosage:	250-350 kg/m ³ with 1600-1750 kg/m ³ of fine gravel
Mixture ratio:	90-130 liters/m ³ of water according to the humidity level of the aggregates and the chosen dosage
Mixing time:	3-5 minutes*
Mixture consistency:	Humid soil*
Application temperature:	From + 5°C to + 35°C *
Life of the mixture:	60 minutes*
Min/ max thickness:	From 3 cm to 8 cm*
Light practicability on dry supports:	Approximately 6 hours*
Laying ceramic tiles:	24/36 hours* (subject to residual humidity check < 6%)
Laying marble and stable natural stone:	2/3 days* (subject to residual humidity check < 3%)
Laying wood and resilient:	4/7 days* (subject to residual humidity check < 2%)
Final hardening:	7/10 days*
Resistance to temperature:	From -30°C to + 90°C

* at +23°C, 50% relative humidity/mixed with aggregates, see technical data sheet

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.