



# MEGAKOLL FLEX S1 white-grey



## THE PRODUCT

MEGAKOLL FLEX S1 is an adhesive composed of high-strength cement, selected mineral aggregates, synthetic resins and specific additives, characterized by excellent workability, high flexibility, high performance, extended open time and zero vertical slip. MEGAKOLL FLEX S1 is class C2TE according to the EN 12004 regulation: cementitious adhesive (C) improved with additional features (2), zero vertical slip (T), extended open time (E). MEGAKOLL FLEX S1 is a deformable adhesive of class s1 according to the standard EN 12002.



CE UNI EN 12004  
UNI EN 12002

## FEATURES

MEGAKOLL FLEX S1 is used for indoor and outdoor installations, both on walls and floors, of ceramic tiles, terracotta, clinker, ceramic glass and marble tiles, simple fired tiles and all low-porosity materials, natural stones not subject to the deformation or staining due to water absorption. It is indicated to lay on traditional supports such as plasters, cementations screeds or made with MEGAPREM M240S or MEGAPREM M240SS, even subjected to high stresses due to static loads, prefabricated or cast concrete, overlapping existing ceramic floors or tiles, to lay on heating floors, to lay on floors subject to heavy traffic. It is indicated to glue on anhydrite screeds and plaster supports, apply PRIMER P16 beforehand; it can also be used for plasterboard as lay as it is rigidly supported, for bonding points of sound-absorbing panels and insulating materials, such as polystyrene and expanded polyurethane, glass or rock wool, cork. Do not use on metal, wood, resilient and plastic materials.

### PREPARATION OF THE SUBSTRATE

The substrates must be seasoned, mechanically resistant, stable, dry and free from rising damp, planar, free from incoherent parts, dust and greasy substances, old paints and any other material that could compromise the perfect adhesion of the glue.

New cementitious substrates must have already completed the hygroscopic shrinkage, at least two weeks for plasters and one month for screeds, unless they are made with fast-drying products. Plaster substrates and anhydrite screeds must have a percentage of residual humidity less than 0.5% and be pretreated with PRIMER P16.

For very porous, highly absorbent and chalking surfaces, it is recommended the use of the consolidating PRIMER P18 to decrease the absorption of the base and improve the application of the adhesive.

## WORKING

Pour a 25 kg bag of MEGAKOLL FLEX S1 with about 6,5 – 7 liters of water into a clean container and mix with a trowel or drill at low speed (about 400 rpm) until a homogeneous and lump-free mixture is obtained. Let the product stand for 5-10 minutes, stirring briefly before using. This mixture lasts over 6 hours. The water indicated on the bag is indicative and varies slightly between MEGAKOLL FLEX S1 grey and white one. The use of larger quantities of water does not improve the workability of the adhesive, it can cause thickness drops during drying and help to reduce adhesion, resistance to compression and cutting. Apply on the support a first thin layer of adhesive with the spatula from the smooth side to ensure good adhesion and adjust the water assortment then spread with a notched trowel the amount of adhesive needed to ensure complete wetting of the tile back. Tiles should be laid by applying good pressure to ensure contact with the adhesive. Check carefully that the adhesive laid on the tile is always fresh and has not formed the surface film. If it had formed, go over the adhesive with the notched trowel. Unfavorable weather conditions, such as strong sunshine or excessive ventilation, can reduce significantly processing times. In this case moisten the substrate before applying the adhesive, to lengthen the open time. For large formats, for outdoor installations or in very humid environments subject to intense traffic, for floors to be sanded on site or subject to heavy loads, it is necessary to spread the adhesive also on the back of the tiles. This to prevent gaps that could cause breakages or detachments due to the pressure of concentrated loads or to the action of the frost. The execution of the joints can be carried out after about 6 hours for the coverings and after about 24 hours for the floors. The surface can be put into service after about 14 days, depending on the environmental conditions.



## SPECIFICATIONS ITEMS

Laying of floors and walls with class C2TE-S1 cement based adhesive according to EN 12004 and EN 12002, with high resistance and excellent flexibility, no vertical slip and extended open time, composed of high-strength cement, selected mineral aggregates, synthetic resins and specific additives. This adhesive will be suitable for laying ceramic tiles, porcelain stoneware, marble and natural stones on traditional and overlapping surfaces on existing floors. For the application a suitable notched trowel will be used. The supports must be seasoned, stable and free from dust. Provide for perimeter joints and fraction joints and always respect the structural expansion joints and the string course joints that may be present. For large formats, for outdoor installation or in a very humid environments, for environment subject to heavy traffic, for floors to be sanded on site or subject to heavy loads, it is necessary to spread the adhesive also on the back of the tiles.

## SUPPLY AND STORAGE

MEGAKOLL FLEX S1 is supplied white and grey in 25 kg polythene paper bags on pallets, protected with an extensible hood. It is recommended to keep the product in a dry and sheltered place. In the original closed bags it is kept for at least 3 months (GREY) and 12 months (WHITE).



# MEGAKOLL FLEX S1

FOR PROFESSIONALS	
Deformability	≥ 2,5 mm class S1
Composition of the aggregates	CARBONATE AND SILICEOUS
Mixing water	26 - 28 %
Colour	White or grey
Yield	2,5 - 4 kg/m <sup>2</sup>
Granulometry	< 0,6 mm
Apparent density	1,26 g/cm <sup>3</sup>
Reaction to fire	Class A1
Maximum laying thickness	10 mm
Mixture life	over 6 hours
Open time	> 30 minutes
Recording time	≥ 45 minutes
Execution of wall joints	6 hours
Execution of floor joints	24 hours
Transitability	24 hours
Commissioning	14 days
Initial adhesion after 28 dys	≥ 1,0 N/mm <sup>2</sup>
Adhesion after heat	≥ 1,0 N/mm <sup>2</sup>
Adhesion after immersion in water	≥ 1,0 N/mm <sup>2</sup>
Adhesion after freeze and trow cycles	≥ 1,0 N/mm <sup>2</sup>
Vertical sliding	null
Operating temperature	From - 30 °C to + 90 °C
Application temperature	From + 5 °C to + 35 °C

The times indicated , 23 c° and 50 % ur, are longer at lower temperature and shorter at higher temperatures.

WARNING: the above indications and prescriptions correspond to our experience and are to be considered purely indicative. In addition , they must be confirmed by exhaustive and practical applications; therefore, before using the product, who intends to use , has to establish wheter it is suitable fot the intended use and in any case it assumes any responsibility that may derive from its use.

## SPECIAL WARNINGS

Product for professionals do not use MEGAKOLL FLEX S1 on concrete subject shrinkage, on metal surfaces , wood, plastic and resilient materials and to fill irregularities of the bottom greater than 10 mm. Provide perimeter joints and elastic fractioning joints every 20-25 square meters indoors, every 10-15 square meters outdoor and every 8 linear meters along the corridors. In any case, respect always the structural expansion joints and those string courses, if present, protect the coating from rain and form washing out at least for the first 24 hours after laying and from the action of the beating sun and frost until the product has completely hardened. For laying outdoors and in case of high stresses, spread the adhesive also on the back of the tiles.