



# HERACOLL PLUS

Cementitious adhesive with no vertical slip and long open time for laying ceramic tiles indoors and outdoors.



## TECHNICAL FEATURES

**HERACOLL PLUS** is a white or gray powder adhesive, consisting mainly of high mechanical strength cements, silicon / quartz mineral fillers of selected grain size and special resins and additives, mixed together according to the scrupulous research of the **HERAKEM** laboratory.

Mixing **HERACOLL PLUS** with water, a soft and flowing dough is obtained, with a long open time ( $\geq 30$  min.) an excellent adjustability time, high adhesiveness and excellent thixotropy, such that it can be applied vertically without pouring and without letting the tiles slip even if they are of great weight.

**HERACOLL PLUS** is resistant to freeze and thaw cycles.

## FIELD OF APPLICATION

**HERACOLL PLUS** is used for laying all types of absorbent and even non-absorbent ceramic tiles and mosaics on walls and floors indoors and outdoors. **HERACOLL PLUS** can be applied on cementitious or lime-based plasters and screeds and on gypsum-based plasters, as long as they are cured and dry. For particularly heavy-duty installations (large tiles, non-absorbent ceramic tiles and mosaics, heated substrates, external facades, tubs and swimming pools, etc.) mix **HERACOLL PLUS** with **HERALAX FLEX** adhesive synthetic latex instead of water.

**HERACOLL PLUS** can also be used for laying cellular concrete blocks or for bonding expanded polystyrene panels indoors. In case of need, contact our Technical office.

## PREPARATION OF THE SUBSTRATE

The substrates must be cured and dry, free from dust, oils and greases, free from rising damp, free from crumbly and insubstantial parts or not perfectly anchored. The bottom must be stable, non-deformable, without cracks and have already completed the hygrometric shrinkage of maturation. In the case of substrates under direct solar radiation, therefore in high temperatures, it is advisable to moisten them with a sponge in order to cool them and, before laying, wait for the surface water to evaporate. Restore excessive unevenness with **HERARAS ONE** for thicknesses not exceeding 3 mm, for higher thicknesses and for a quick intervention use **HERAGROUT MONO** or self-leveling mortars such as **HERAPLAN 10**.

## MIX PREPARATION

Mix with clean water (or **HERALAX FLEX** synthetic latex) in the ratio of  $25 \div 27\%$  equal to  $6.2 \div 6.7$  liters of water per 25 kg of product. Slowly add the powder to the liquid. Mix with a low-speed drill fitted with a mixing propeller until a homogeneous, lump-free mortar is obtained. Leave the mixture to rest for 5 minutes and mix again briefly. The adhesive thus prepared has a usage time of approximately 6 hours.

## APPLICATION

Apply the adhesive with a special notched trowel, whose dimensions of the teeth will depend on the type and size of the tiles to be glued, so that total coverage of the back of the tiles is guaranteed. For better adhesion, it is advisable to first spread a thin and uniform layer of adhesive on the substrate using the smooth part of the notched trowel, and then to apply a second layer of the desired thickness with the toothed part. Apply the tiles by exerting adequate pressure and imparting a slight translational movement to them. For demanding applications, the double-buttering method is recommended to obtain an adhesive-tile contact extended to the entire bonding surface (spread the adhesive also on the back of the tile). The tiles must only be laid within that time interval in which the spread adhesive is still fresh, i.e. it has not yet formed a surface skin. This time interval is called the "open time" of the adhesive, and is a function of the environmental conditions. If the open time has been exceeded and the spread adhesive has formed a surface film, it is necessary to go over with the notched trowel to "refresh" it. Absolutely avoid wetting the adhesive on the surface as this would form an anti-adhesive film of water, irreparably compromising the adhesion. The tiles normally do not need to be wet before laying; only in the case of tiles with dusty backs it is recommended to wash them by dipping them for a few moments in clean water; wait for the veil of water to disappear before placing them. On gypsum-based substrates, pre-treatment with **HERALAX AC** is absolutely necessary. After laying, protect the covering for at least  $24 \div 48$  hours from rain and washout and for at least 7 days from direct sunlight. In the case of installation in the winter months, it is necessary to protect from frost for at least 48 hours.



## JOINT

The tiles can be grouted after 4 ÷ 8 hours on the wall and after 24 hours on the floor with the special **HERAKEM** cementitious sealants, available in different colors.

## CLEANING

The tools used for installation must be cleaned with water before the adhesive hardens; subsequently, cleaning can only take place by mechanical removal. Any adhesive residues on the surface of the tiles must also be cleaned with a damp cloth before the adhesive sets.

## ITEM OF SPECIFICATIONS

Ceramic floors and coverings must be laid with a cement-based powder adhesive, which allows application thicknesses up to 5 mm, with no vertical slip and extended open time, class "C1TE according to EN 12004" type **HERACOLL PLUS** from **HERAKEM**.

## WARNINGS

**To lay non-absorbent ceramic tiles, on heated floors, for laying large sizes, or on prefabricated concrete structures, mix HERACOLL PLUS with HERALAX FLEX synthetic latex to be used instead of water. For laying on gypsum substrates and ready-made gypsum-based plasters, first apply a coat of HERALAX AC before spreading the adhesive.**

### Do not use in the following cases:

- On supports subjected to deformations or thermal or mechanical stresses.
- On plasterboard walls.
- On metal, PVC, rubber or linoleum surfaces, wood.
- For laying tiles that require an adhesive thickness greater than 5 mm
- Where rapid walkability is required
- Overlapping on old ceramic floors.

## TECHNICAL DATA \*(at +22±1°C and 55±5% R.H.)

Appearance	powder	Density of mix	about 1500 kg/m³
Color	gray and white	Pot life of mix	about 6 hours
Density of the powder	1500 kg/m³	Application temperature	from +5°C to +35°C
Solid residue	100%	Open time	> 30 min*
Storage	12 months in original dry packaging	Recording time	> 40 min*
Flammability	no	Walkability	24 hours*
Customs heading	3824 5090/0	Ready for use	14 days*
Mixing water	6.2 ÷ 6.7 liters per 25 kg of product (25 ÷ 27%)		

## HERACOLL PLUS mixed with water

Initial adhesion	≥ 0,5 N/mm²	Adhesion after freeze-thaw cycles	≥ 0,5 N/mm²
Adhesion after heat action	≥ 0,5 N/mm²	Deformability	no
Adhesion after immersion in water	≥ 0,5 N/mm²		

## HERACOLL PLUS mixed with HERALAX FLEX latex

Initial adhesion	≥ 1 N/mm²	Resistance to humidity	excellent
Adhesion after heat action	≥ 1 N/mm²	Aging resistance	excellent
Adhesion after immersion in water	≥ 1 N/mm²	Resistance to solvents and oils	excellent
Adhesion after freeze-thaw cycles	≥ 1 N/mm²	Resistance to acids and alkalis	poor
Deformability	yes		

Consumption	from 2.5 to 5 kg/m² in function of the spatula used	Packaging	25 kg bag
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## PRODUCT FOR PROFESSIONAL USE ONLY

All the data and indications given in this technical data sheet, although resulting from laboratory tests carried out and from our direct application experiences, due to the infinite number of variables linked to the construction site conditions, are to be considered, in any case, purely indicative. Therefore, before applying the product, the user is required to establish whether it is suitable for the use envisaged by him, in the specific hygrothermal and application conditions foreseen at the time of use and, in any case, he assumes all responsibility for it. We are not liable for damage to people or things deriving from improper use of the product. We reserve the right to modify the data contained therein as a result of improvements and technical progress.

