HERALASTIC CEM

Two–component cement–based mortar modified with high elasticity synthetic polymers for waterproofing terraces, balconies and swimming pools. Can be applied with a trowel or even by spray.

TECHNICAL FEATURES

HERALASTIC CEM is a special two-component elastoplastic and microfiber cementitious mortar, based on special hydraulic binders with high mechanical resistance, selected silicon / quartz aggregates with fine grain size, special additives and highly flexible acrylic polymers in aqueous emulsion, mixed together according to the strict quality standards of the **HERAKEM** laboratory. By mixing the two components, a smooth and easily applicable mixture is obtained with a trowel or, on large surfaces, even by spraying with a plastering machine, both on vertical surfaces and on horizontal substrates, in thicknesses of 2 mm for each coat.
HERALASTIC CEM thanks to the high quality of the raw materials used in its composition, once hardened, it is characterized by a high elasticity which is maintained even at low temperatures; by total impermeability to water and high resistance to aggressive substances such as chlorides, sulphates and carbon dioxide.
HERALASTIC CEM has excellent adhesion both on porous substrates such as cementitious screeds and plasters, and on compact substrates such as concrete and old ceramic tiles or natural stone. These characteristics, together with the characteristic of resisting the degrading effect of ultraviolet rays, ensure that all surfaces coated and protected with **HERALASTIC CEM** are durable over time.

FIELD OF APPLICATION

- Waterproofing of domestic environments before laying ceramic floors in bathrooms, showers, kitchens, etc.
- Waterproofing before laying ceramic floors outdoors on balconies and terraces; restoring the waterproofing allows the overlap of a new floor without demolishing the old one.
- Waterproofing of permanently submerged rooms, such as tanks, cisterns, swimming pools, etc.
- Flexible and waterproof protection of concrete surfaces and plasters.
- Waterproof and protective coatings of concrete surfaces subject to chemical aggression such as, for example, antifreeze salts, sulphates, etc. (especially when the thickness of the concrete cover is inadequate).
- Protection of walls, surfaces, castings and artefacts in contact with the ground or to be buried.
- Waterproofing in general with positive thrust.
- Waterproof and flexible skim coats of micro–cracked plasters.

PREPARATION OF THE SUBSTRATE

Before starting the operations it is necessary to check that there is no rising damp from the screed or walls, because the negative pressure of humidity and the formation of saline efflorescence can affect the adhesion of the product to the substrate. Only after blocking the rising damp, cleaning the surfaces and waiting for the substrates to dry, can the application be continued. In the case of structures intended for water containment (for non–food use), verify their suitability by means of a preload test (static testing). The substrates to be treated must be solid, clean, free of detaching parts, dust, release agents, rust and anything else that could affect good adhesion. The substrates must be seasoned and mature. Deteriorated concrete structures must be previously restored. Any settling cracks due to plastic or hygrometric shrinkage of the cementitious screeds must be sealed. Slightly "dusting" surfaces must be pre–treated with a special consolidating primer such as **HERALAX AC**. Slightly moisten the excessively porous and absorbent cementitious substrates before applying the product. In the case of laying on ceramic tiles, it is necessary to check that all the old tiles are well anchored. Thoroughly clean and degrease the surface of the old floor by washing with a basic detergent or other suitable detergent. If this were not enough, provide for mechanical cleaning in order to remove all inconsistent parts and materials that do not allow adhesion. In waterproofing, all corners (wall–floor and wall–wall) and expansion joints must be covered with a special elastic "strip"; in swimming pools and in the most critical applications, between the wall and the floor it is also necessary to create a dovetail “shell” to be filled with a special anti–shrinkage grout. The elastic band must also be used for any drains, "drains", or "technical connections".

MIX PREPARATION

Pour component B (liquid) into a suitable clean container; then slowly add component A (powder) while stirring mechanically. Mix thoroughly with a low–speed mechanical stirrer so that the mortar does not incorporate air, until a homogeneous and lump–free mix is obtained. Avoid preparing the dough manually.

APPLICATION

HERALASTIC CEM can be applied by using a smooth steel trowel, directly on the support, in two successive crossed coats, creating a total thickness of no less than 3 ÷ 4 mm. Before applying the second coat (fresh on fresh) wait for the first to dry (after about 3 hours depending on the absorption of the substrate and the environmental conditions). **HERALASTIC CEM** can be applied by spraying, using a plastering machine equipped with a smoothing lance, in at least two coats, in maximum thicknesses per layer of about 1 ÷ 1.5 mm in order to have a final thickness of not less than 3 mm. When waterproofing terraces, balconies, basins, swimming pools and in areas characterized by micro–cracks or particularly stressed, it is recommended to drown in the first still fresh layer of **HERALASTIC CEM** a special alkali–resistant glass fiber mesh with 4 x 5 mm mesh, taking care to overlap it by at least 5 cm in the junction areas. Once the mesh has been positioned, wait for the product to dry before applying the second layer.
NB Apply the elastic strips at the floor / wall joints by drowning it in the **HERALASTIC mortar CEM**. Apply the elastic band also to create waterproof expansion joints.
The laying of ceramic tiles or natural stone on the **HERALASTIC CEM** –based membrane can be carried out after at least 5 days of curing (in favorable temperature conditions), with an open joint, using the class C2 tile adhesive **HERACOLL GRES** or **HERACOLL FLEX**.

CLEANING

The tools used for laying must be cleaned with water before the mortar hardens; subsequently, cleaning can only take place by mechanical removal.

ITEM OF SPECIFICATIONS

The substrates must be waterproofed and / or protected with two–component cement–based mortar such as **HERALASTIC CEM** by **HERAKEM**, applicable by trowel or spray in two coats each of 2 mm, the final thickness must not be less than 3 ÷ 4 mm. The product must guarantee crack bridging ability characteristics according to the European standard **UNI EN 14891**.

WARNINGS

- Do not add lime, cement or other foreign substances to the product.
- Apply the product at temperatures between + 5 ° C and + 35 ° C.
- Do not use the product for thicknesses greater than 2 mm per coat
- In hot climates it is advisable to protect the packages from direct sunlight.
- After application, the treated area must be protected with sheets in order to avoid rapid drying.
- The substrates must be mature and dry, free from rising damp; any cracks or fissures must be repaired with pourable two-component epoxy sealant.
- Protect the works carried out for at least 24 hours from rain or washout and for at least 7 days from frost or beating sun.
- Do not apply on frozen substrates or in any case at ambient temperatures below + 5 ° C.
- Before filling tanks and cisterns, wait at least 21 days from application; rinse thoroughly with water before using them.
- Do not apply directly on bituminous surfaces. Pre-treat with a suitable primer.
- Do not apply to contain water in counterthrust
- Do not use the product for applications not indicated on this technical data sheet.

TECHNICAL DATA *(at +22±1°C and 55±5% R.H.)			
Appearance	**COMP. A:** gray powder **COMP. B:** white liquid	Flammability	no
Apparent density	**COMP. A:** about 1350 kg/m³ **COMP. B:** about 1050 kg/m³	Storage	12 months in original and dry packaging
Mixing ratio	pre-dosed components		
APPLICATION DATA VALUE			
Application	spreader or spray	Waiting time between 1st and 2nd coat	3÷5 h.
Usable time	50 min.	Temperatures during application	min.+5°C, max.+35°C
Minimum thickness per coat	1.5 mm	Waiting time for laying the tiles	5 days
Maximum thickness per coat	2 mm		
FINAL PERFORMANCE			
Initial adhesion	1.3 N/mm²	Adhesion after immersion in chlorinated water	1.4 N/mm²
Adhesion after water immersion	0.8 N/mm²	Adhesion after freeze / thaw cycles	1.0 N/mm²
Adhesion after heat action	1.5 N/mm²	Crack bridging ability	2.55 mm
Adhesion after immersion of basic water	0.7 N/mm²	Water pressure resistance of 1.5 bar for 7 days.	test passed

Consumption	**approx. 1.6 Kg/m² per mm of applied thickness**	**Packaging**	**COMP. A: 20 kg bag COMP. B: tank of 6.66 kg**

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.