building quality

A great many of Technokolla's products have obtained **CE** marking, testifying to their compliance with the essential requirements established in the EU for building materials.

This mark provides further confirmation of the quality and high standards of products created by a company that has made research and development one of its strong points. Throughout the years, Technokolla has perfected highly technological, ground-breaking products able to meet the requirements of the market.
All Technokolla's products comply with the strictest European Standards (EN) when it comes to quality and safety.

TILE ADHESIVES

STANDARD EN 12004
This standard establishes the criteria and methods for classifying adhesives for floor and wall cladding in ceramic and similar materials.

C *cement-based adhesives*	Cement-based powder adhesives to be mixed with water or some other appropriate liquid just before use in the building site.
D *dispersion adhesives*	Ready to use adhesive pastes based on organic polymers in a watery dispersion.
R *reactive adhesives*	Adhesives based on two or more components to be mixed just before use in the building site and that set by means of a chemical reaction.

Each of the three categories is divided into two sub-classes, depending on the results of the bonding test:

CLASS 1	Normal adhesives that pass the minimum bond values in all the class 1 tests.
CLASS 2	Improved adhesives that pass the minimum bond values in all the class 2 tests.

Moreover, when there are particular additional characteristics, adhesives are classified as:

F	Quick setting adhesives
T	Adhesives able to withstand slip
E	Adhesives with a longer open time

The required minimum values are defined for each of these characteristics.

STANDARD EN 12002
This standard determines the transverse deformation degree (elasticity) of cement-based sealants and adhesives and divides them into two classes:

S1	Deformable product with ≥ 2.5 mm deformability.
S2	Highly deformable product with ≥ 5 mm deformability.

It does not apply to adhesives for ceramic tiles and sealants that possess elastomeric properties, such as numerous dispersions and adhesives and sealants based on reactive resins..

SEALANTS

STANDARD EN 13888
This standard establishes the criteria and methods for classifying sealants for floor and wall cladding in ceramic and similar materials. It divides the sealants into two categories:

CG *cement-based sealants*	Cement-based sealants to be mixed with water or some other appropriate liquid just before use in the building site.
RG *reactive sealants*	Sealants based on two or more components to be mixed just before use in the building site and that set by means of a chemical reaction.

There are two classes of cement-based sealants (**CG**), depending on different additional characteristics. These classes are:

CLASS 1	Normal sealant that complies with the minimum requirements
CLASS 2	Improved sealant (complies with the requirements for the additional characteristics: reduced water absorption; high resistance to abrasion).

PRE-MIXED SCREEDS FOR SUBSTRATES

STANDARD EN 13813
This European standard establishes the requirements of the materials for the screeds used to make indoor floors. The standard classifies the screeds in relation to the binder used. For cement-based screeds, which are indicated by the initials **CT**, the standard requires a declaration of the compressive and flexural strength and the fire resistance class.

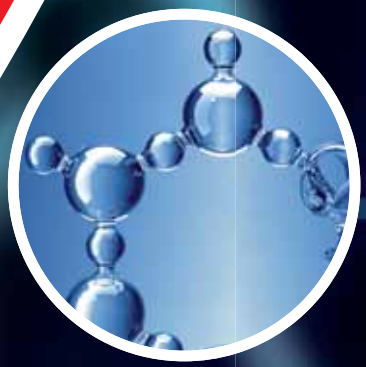
CT	Cement-based screed
C	Compressive strength at 28 days (N/mm^2)
F	Flexural strength at 28 days (N/mm^2)

MORTAR FOR INDOOR/OUTDOOR PLASTER

STANDARD EN 998-1
This standard establishes the criteria and methods for classifying plaster for use indoors and outdoors. It divides plaster according to the type of binders used and their respective proportions. The mortars used for plastering are divided according to the purpose for which they are used:

GP	Mortar for general indoor/outdoor uses
R	Mortar for refurbishing

The required minimum values are defined for each of these classes of plaster.



MASONRY MORTAR

STANDARD EN 998-2
This standard establishes the requirements for the masonry mortar produced in factories for use on walls, columns and partitions made of masonry work. It divides masonry mortar into three classes, defined according to the properties of the mortar and/or its use:

G	Masonry mortar for general purposes
T	Masonry mortar for use in thin coats
L	Light masonry mortar

The compressive strength of masonry mortar with guaranteed performance (produced in factories) must be declared by the manufacturer. This characteristic is identified by the letter M followed by the compressive strength class expressed in N/mm^2.

WATERPROOFING PRODUCTS

STANDARD EN 14891
This standard establishes the criteria and methods for classifying the liquid waterproofing products used under ceramic tiles glued with adhesives, applied to indoor and outdoor floors and walls. It divides the waterproofing products into three categories:

CM	Applied cement-based liquid waterproofing products
DM	Applied liquid waterproofing products in a dispersion
RM	Applied liquid waterproofing products with reactive resins

Each of these categories can have different classes depending on their optional characteristics:

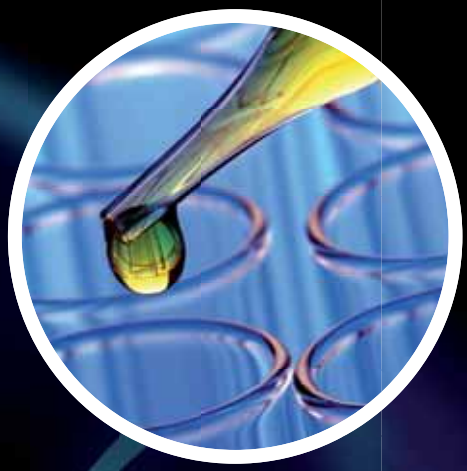
O	With crack bridging ability at low temperatures
P	Resistant to contact with chlorinated water (e.g. swimming-baths)

PRODUCTS AND SYSTEMS FOR PROTECTING CONCRETE SURFACES

STANDARD EN 1504-2
This standard specifies the requirements for the identification and performance of products and systems used for protecting the surface of concrete and to make the relative structures longer lasting. This standard covers the following surface protection methods:

H	Hydrophobic impregnation (treatment of the concrete so as to obtain a water-repellent surface but without changing the appearance of the concrete itself)
I	Impregnation (treatment of the concrete so as to reduce its porosity and strengthen the surface by creating a thin and discontinuous film)
C	Coating (a treatment that applies a continuous protective layer on the concrete)

The surface protection systems are divided according to the following principles:



PI	Protection against penetration
MC	Moisture control
PR	Physical resistance and surface improvement
RC	Resistance to chemicals
IR	Increasing resistivity by limiting the moisture content

PRODUCTS AND SYSTEMS FOR THE STRUCTURAL AND NON-STRUCTURAL REPAIR OF CONCRETE STRUCTURES

STANDARD EN 1504-3
This standard specifies the requirements for the identification and performance of products and systems used for the structural and non structural repair of concrete structures.
This standard divides the products for repairing concrete into the following classes:

Products for structural repairs (products and systems for refurbishing damaged concrete and obtaining durable structures)
CLASS R4
CLASS R3

Products for non-structural repairs (products and systems applied to a concrete surface so as to restore the shape and appearance of that surface)
CLASS R2
CLASS R1

Depending on their fundamental characteristics, the products are classified as:

Conforme Norma Europea R4 CC EN 1504-3

CC	mortars based on hydraulic binders
PCC	mortars based on hydraulic binders with polymers
PC	mixtures of polymeric binders
P	reactive polymeric binders

PRODUCTS AND SYSTEMS FOR PROTECTING REINFORCEMENTS FROM CORROSION

STANDARD EN 1504-7
This standard specifies the requirements for the identification and performance of products and systems used as active coatings and barrier coatings for protecting existing non-coated steel reinforcements and steel reinforcements buried in the concrete structure under repair.
The standard does not cover the products used for protecting pre-stressed or stainless steel from corrosion.

The standard describes the following corrosion protection products:

Conforme Norma Europea EN 1504-7

active coatings: coatings that contain electrochemically active pigments, which may function as inhibitors or which can provide localized cathodic protection.

barrier coatings: coatings which isolate the reinforcement from pore water in the surrounding cementitious matrix.