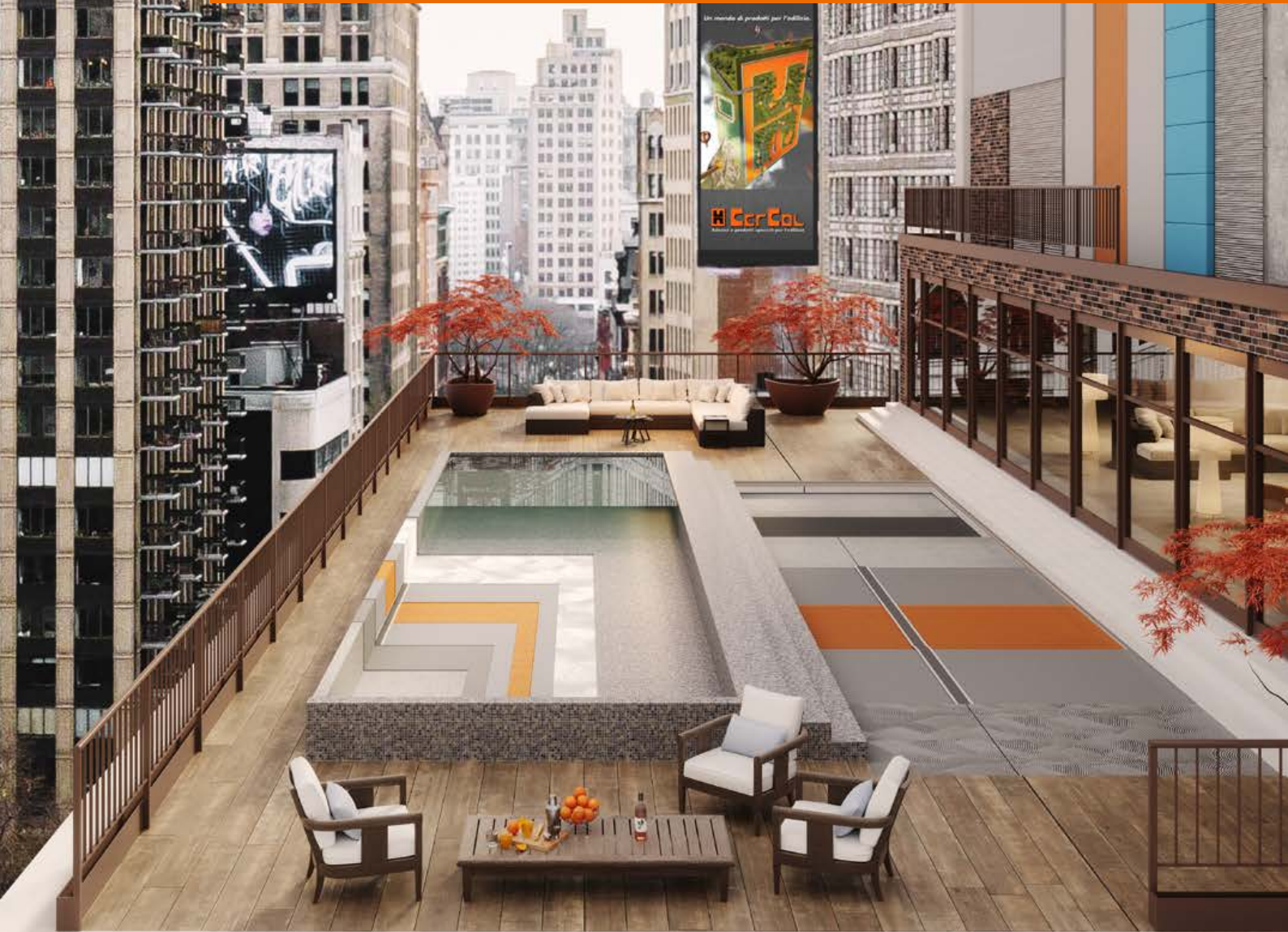


# CERCOL SYSTEM FOR CERAMIC FURNISHING ELEMENTS



**CerCol**  
Adhesives and special building products

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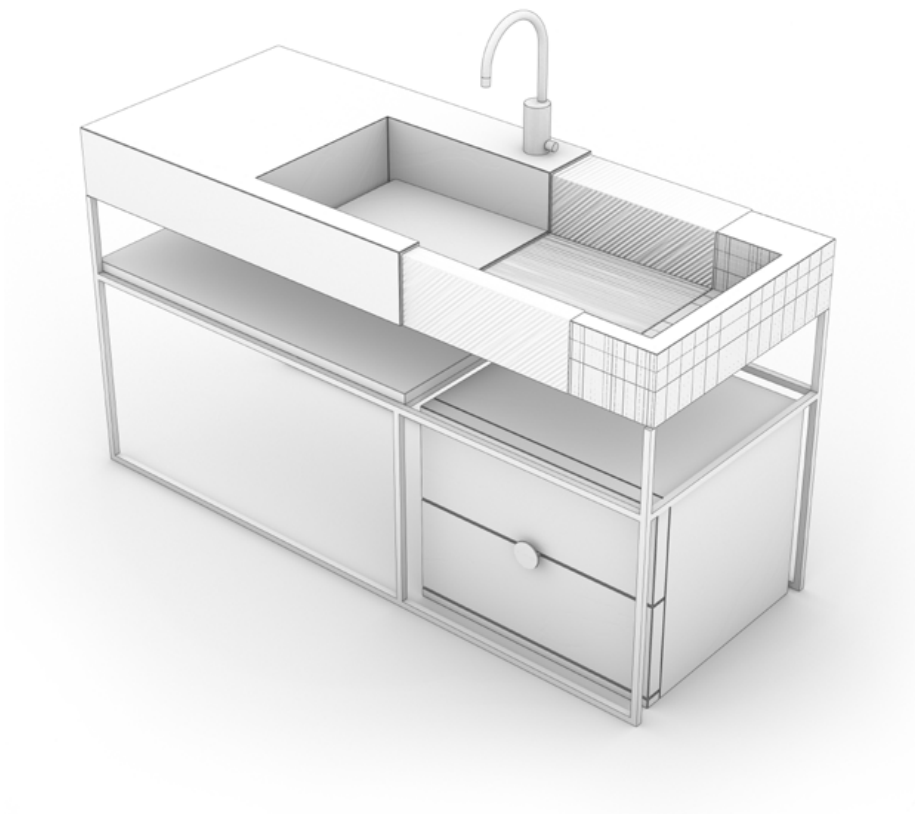
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## PORCELAIN STONEWARE SLABS

A constantly evolving market requires a great deal of attention in terms of new ways of using ceramic material in general, such as the increasing use of large porcelain stoneware slabs in the residential construction sector.

A rapidly growing sector which, through design, is coming into contact with unexplored fields of use:

- **furnishing accessories**
- **bathroom furnishings**
- **kitchens**

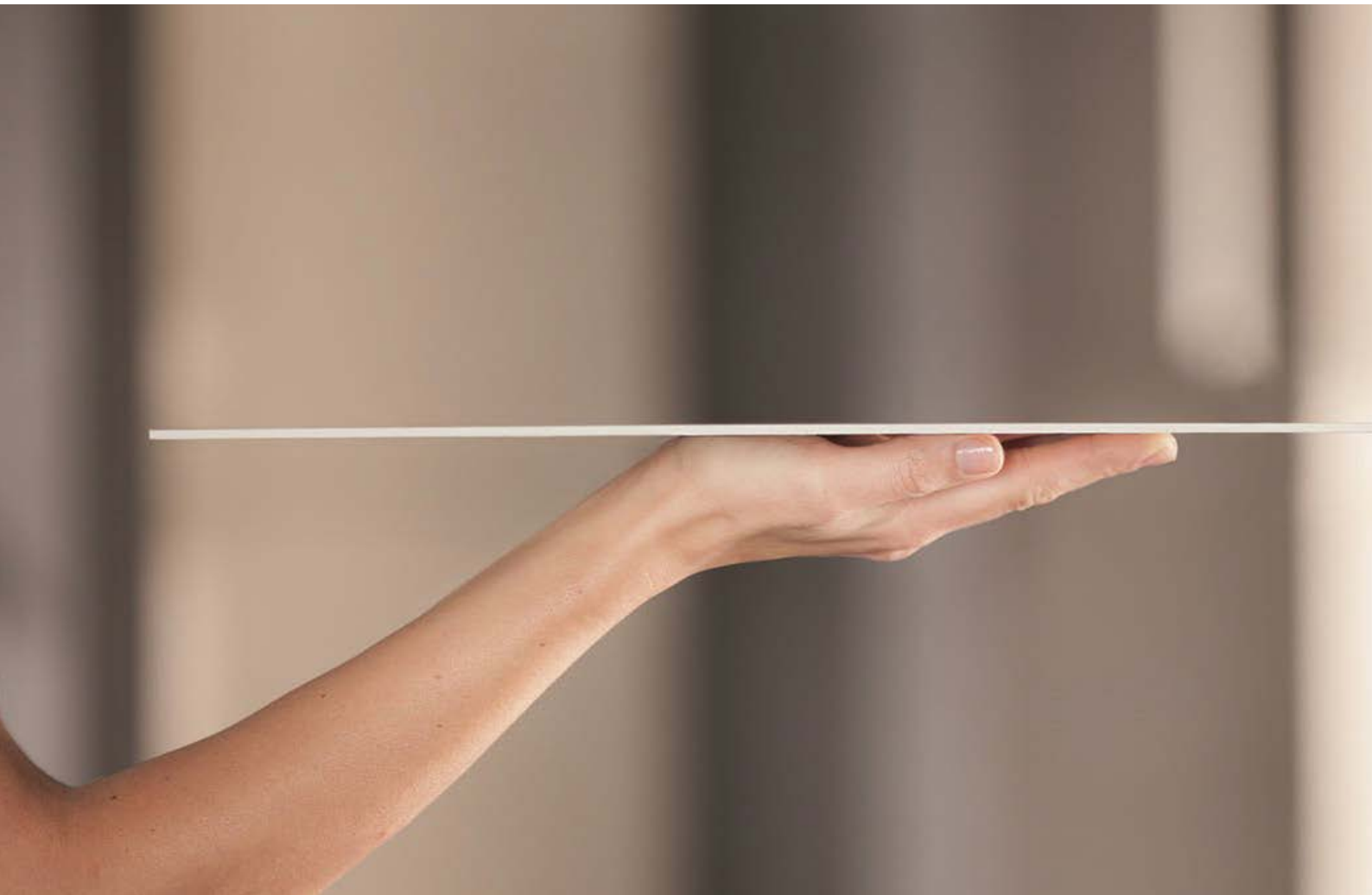


This is why it has become essential for CERCOL, which has always accorded particular importance to the needs of business operators in the adhesive and special building materials trade, to dedicate a **specific line for assembling and grouting home furnishing items**.

Thanks to its physical and mechanical properties, stoneware is UV-resistant, chemical resistant, will not discolour or fade, withstands heat and the most extreme stress. One of the major advantages of porcelain stoneware is undoubtedly its ability to imitate, through use of modern technologies, the characteristic surface textures of other materials like parquet, stone and marble.

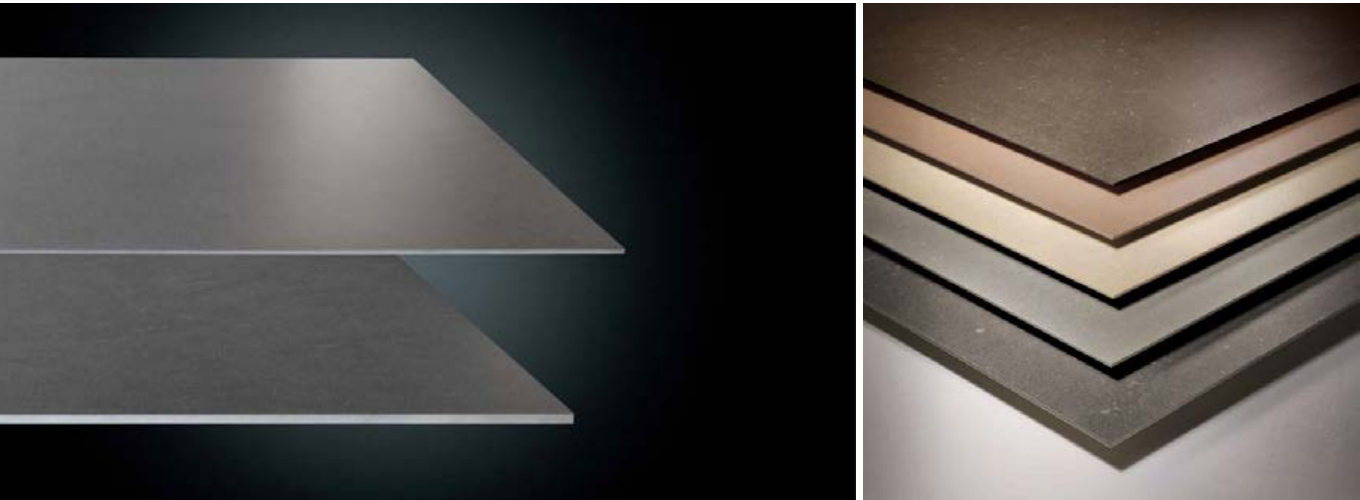
Some of the key features of porcelain stoneware include:

- **versatility** and a vast assortment of styles and colours;
- **resistance** to shock, moisture and abrasion;
- **easily cleaned** tile surfaces and joints (*chemical resistance*).



Standard UNI 11493-1 defines “thin tiles/slabs” and “large tiles/slabs” in the following way:

- **thin** tiles/slabs: tiles up to **5 mm thick**;
- **large** tiles/slabs: tiles with side **length over 60 cm**.



The procedure for correctly handling the tiles/slabs, preparing the substrates and the tile laying technique are the same for both thin and large tiles/slabs.

- Tiles 3 mm thick or more and 1x3 meters maximum size produced by compressing the dry material on a belt feeder without dies and then firing it in special kilns at the temperature of 1200°C. This type of slabs are marketed in three different versions:
  - without further processing, thickness 3 mm;
  - with back reinforced by fiberglass mesh applied using organic adhesive during the manufacturing process, thickness 3,5 mm, with improved resistance to footfall;
  - coupled, consisting of two 3 mm slabs with fiberglass mesh between them (glued with organic adhesive), forming an overall thickness of about 7 mm. Ideal for heavy traffic areas.
- Tiles from 4 to 5 mm thick and sizes up to 8100 cm<sup>2</sup> produced by pressing in dies and then fired in kilns at a temperature of 1200 °C, without reinforcement on the back.

# 02

## PORCELAIN STONEWARE FURNISHING

These large slabs have revolutionized the world of interior design. They have taken over the furnishing sector, replacing marble in many cases while generating new and modern products and solutions.

Not only can they be used to create small washbasins, but also the tops of large pieces of furniture. For this recent type of product, the furniture is assembled with stoneware slabs which are cut and shaped.

Glass-cutting tools are used to transform the slabs into furniture cladding elements: the slabs are cut, their edges are ground or rounded and they are then glued to the previously assembled furniture to achieve the required final shape. Clearly, the internal edges cannot be rounded but must be at 90°.



Thanks to this new type of workmanship, porcelain stoneware is now used to clad kitchens, worktops, partition walls, furniture, cupboards, tables and many other surfaces, which then become extremely easy to clean and hygienic. Porcelain stoneware is used in bathrooms to create the tops of furniture, shelves on which basins can be placed or even surrounds to house recessed washbasins, also made of stoneware.

# 03

## IMPLEMENTATION PROCEDURE

Ceramic furnishing items are made by cutting ceramic slabs of different thicknesses to shape and bonding them to a preformed framework, generally made of composite panels able to bear the weight of the slabs.

These panels usually contain a core of light polymeric material (extruded polystyrene, polyurethane, etc.) and are covered on both sides by a thin layer of resin with high mechanical properties, reinforced by fiberglass mesh.

### 1. JOINTS BETWEEN FRAMEWORK COMPONENTS

When required for ensuring greater stability or to seal elements which pass through surfaces, the bearing framework panels (e.g. HDF panels-composite panels) are joined by full-spread application of **F.50 POLICOL ECO** using a notched trowel.



## 2. GLUEING THE CERAMIC SLABS TO THE FRAMEWORK COMPONENTS

The cut porcelain stoneware slabs are glued to the reinforced composite panels which form the furnishing item using **F.49 POXYRAPID** applied with a 3 mm triangular-shaped trowel to the entire surface of the panel (the product takes about 3 hours to set at 23°C, 7 hours at 10°C).

## 3. GROUTING OF EXTERNAL EDGES (270°)

The external edges are grouted with **F.40 CERPOXY ART** after they have been taped with gummed paper, applying slightly more product than required. Remove the protective tape, wait for about 24 hours after applying the grouting and then sand down the surface with fine-grain sandpaper. F.40 CERPOXY ART contains tiny aggregates allowing an equivalent finish to that of the surface of the ceramic slab to be obtained.

## 4. GROUTING OF INTERNAL EDGES (90°)

The internal edges are grouted with **F.40 CERPOXY ART**. The surface should be finished off immediately after application using white felt F.91/11T and a cellulose sponge to obtain a smooth and homogeneous result.

When required for ensuring greater stability or to seal elements which pass through surfaces, the bearing framework panels (e.g. HDF panels-composite panels) are joined by full-spread application of F.50 POLICOL ECO using a notched trowel.







# 04

## F.50 POLICOL ECO

**F.50 POLICOL ECO is an highly-performing, waterproof, solvent-free, two-component polyurethane adhesive with permanent elasticity. For floors and walls, indoors and outdoors. It can be applied on vertical surfaces without slumping. Suitable for users allergic to epoxy and epoxy-polyurethane products. Very low emission level of volatile organic compounds (VOC).**

For the lying of:

- vitreous mosaic and all types of ceramic tiles including klinker and porcelain, also large-format;
- all types of tiles overlaying existing floors;
- cotto, marble, natural and recomposed stones of every type;
- wooden boards.

Suitable substrates:

- cement-based screeds and plasters, hammered or bush-hammered concrete, cellular concrete;
- cured concrete slabs;
- self-leveling cement-based screeds;
- heated screeds, existing ceramic floors;
- anhydrite screeds previously sanded;
- industrial environments also subject to heavy traffic, terraces and balconies;
- commercial environments (supermarkets, offices, etc...);
- large surfaces (shopping centres, airports, etc...);
- panels in cork or expanded polyurethane or plasterboard (free from dust), also with waterproofing treatment, as long as they are rigidly fixed;
- gypsum and scagliola;
- metal surfaces previously degreased (sheets, metal ladders, etc...);
- existing floors in wood or dewaxed parquet, wooden floorboards;

- PVC, fibre cement, polyester, etc...;
- waterproofing cement-based mortars such as F.72 ELASTOMALTA or three-component epoxy treatments (F.71 ACQUASTOP).

For floors and walls. For indoor and outdoor use. PROFESSIONAL USE.

### TECHNICAL DATA

Appearance:	Comp. A - Thick paste	Comp.B - Liquid
Hazard classification	Consult the technical and safety data sheet	
Pot-life of mixture:	20/30 min.	
Application temperature range	from +5°C to + 30°C	
Open time:	20 min.	EN 1346
Adjustment time:	70 min.	
Setting time:	Start: 4,5 h    Finish: 7 h	
Walk-over time:	12 h	
Grouting:	12 h	
Final Setting:	7 gg	
Thermal resistance:	from -40°C to +100°C	
Storage:	12 months in original packaging in a dry place	

### COVERAGE:

Notched trowel (mm)	3x3	6x6	8x8	10x10
kg/m <sup>2</sup>	2,0	6,0	3,5	5,0

### PACKAGING:

10 kg buckets (8,8+1,2)

**F.50 POLICOL ECO allows the joint between the supporting panels (for instance, composite panels or HDF-Panels) in order to guarantee better stability or to create an anchor for pass through elements.**

**F.50 POLICOL ECO must be applied full-bed, with a notched trowel (3mm).**



# 05

## F.49 POXYRAPID

**F.49 POXYRAPID is a fast-drying two-component epoxy adhesive with no vertical slip and a high mechanical strength for repairing, glueing and structurally reinforcing parts in concrete or reinforced concrete, natural stone, mortar and bricks.**

Suitable for:

- Structural reinforcing of girders and pillars. Rigid structural bonding of precast concrete elements.
- Glueing steel slabs and carbon plates.
- Sealing large cracks and repairing the edges of joints in industrial floors.
- Glueing bullnoses and special pieces to ceramic tiles in general.
- Structural glueing and bonding of concrete to steel.
- Bonding of joints between waterproofing fabric tapes like F.25 BAND

For vertical and horizontal surfaces.

For indoor and outdoor use. PROFESSIONAL USE.

### TECHNICAL DATA:

	Comp. A	Comp.B
Apperance:	Thick grey paste	Thick paste
Hazard classification	Consult the technical and safety data sheet	
Mixing ratio:	Comp. A : Comp. B = 3 : 1	
Workability time at +10°C:	60 min.	
Workability time at +23°C:	35 min.	
Setting at +10°C:	7/8 h	
Setting at +23°C:	3/3,5 h	
Setting at +30°C:	1,5/2 h	
Walk-over time:	24 h	
Final setting:	4 gg	
Application temperature range:	From +5°C to +30°C	
Storage:	24 month in original packaging in a dry place	

**COVERAGE:**

1,5-1,6 kg/m<sup>2</sup> per mm of thickness.

**PACKAGE:**

2 kg buckets (1,5+0,5)

**F.49 POXYRAPID is used to glue the gres tiles on composite reinforced panels which make the final shape of the furnishing element. F.49 POXYRAPID must be applied on the entire surface of the panel using a triangular trowel (3mm).**

# 06

## F.40 CERPOXY ART



**F.40 CERPOXY ART is a two-component epoxy sealant for grouting floors and walls subject to high chemical-physical stress. Provides a decorative finish. Completely waterproof and anti-acid. Especially recommended for vitreous mosaic. Can also be used as an adhesive.**

Provides a decorative finish and is suitable for sealing the joints (at least 2 mm in width) of:

- All types of ceramic tiles and stone materials, especially recommended for vitreous mosaic.

Fields of use:

- Grouting tiled industrial floors and walls when large areas are involved (galvanizing industries, tanneries, storage battery rooms, paper-mills, etc.) and where high mechanical strength and resistance to acids is required.
- Grouting the floors and walls in food industries (central milk plants, dairies, slaughterhouses, breweries, wine cellars, preserving plants, etc.), shops and places where a high degree of hygiene is required (ice-cream parlours, butcheries, etc.).
- Grouting and bonding in swimming pools, also made of PVC and fibreglass, containing sea water or spas.

- F.40 CERPOXY ART can be mixed with F.40 CERPOXY GLITTER to obtain unusual decorative effects.

For floors and walls. For indoor and outdoor use. PROFESSIONAL USE.

### TECHNICAL DATA:

	Comp. A	Comp. B
Appearance:	Creamy paste	Gel
Bulk density (g/m <sup>3</sup> ):	1,64	1,06
Solid residue (%):	100	100
Brookfield viscosity (mPa•s):	550.000	20.000
Hazard classification	Consult the technical and safety data sheet	
Mixing Ratio:	Comp. A : Comp. B = 9 : 1	
Plot life of the mixture:	45 min.	
Treadable:	24 h	
Fit for use:	4 gg	
Thermal resistance:	From +12°C to +30°C	
Storage:	24 months in original packaging in a dry place	

### COVERAGE:

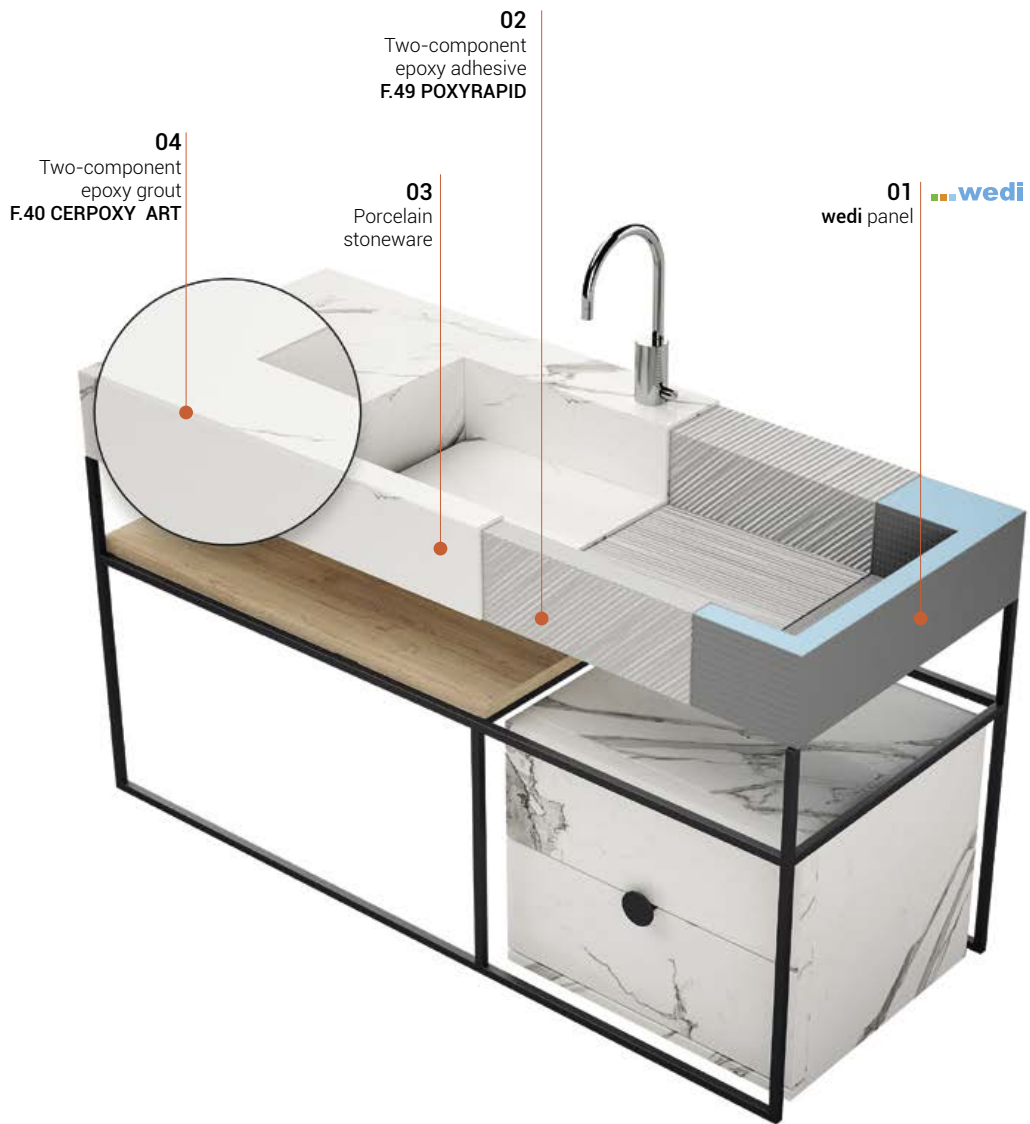
Depending on the size of the joint and the tile format.

### PACKAGING:

3 kg buckets.

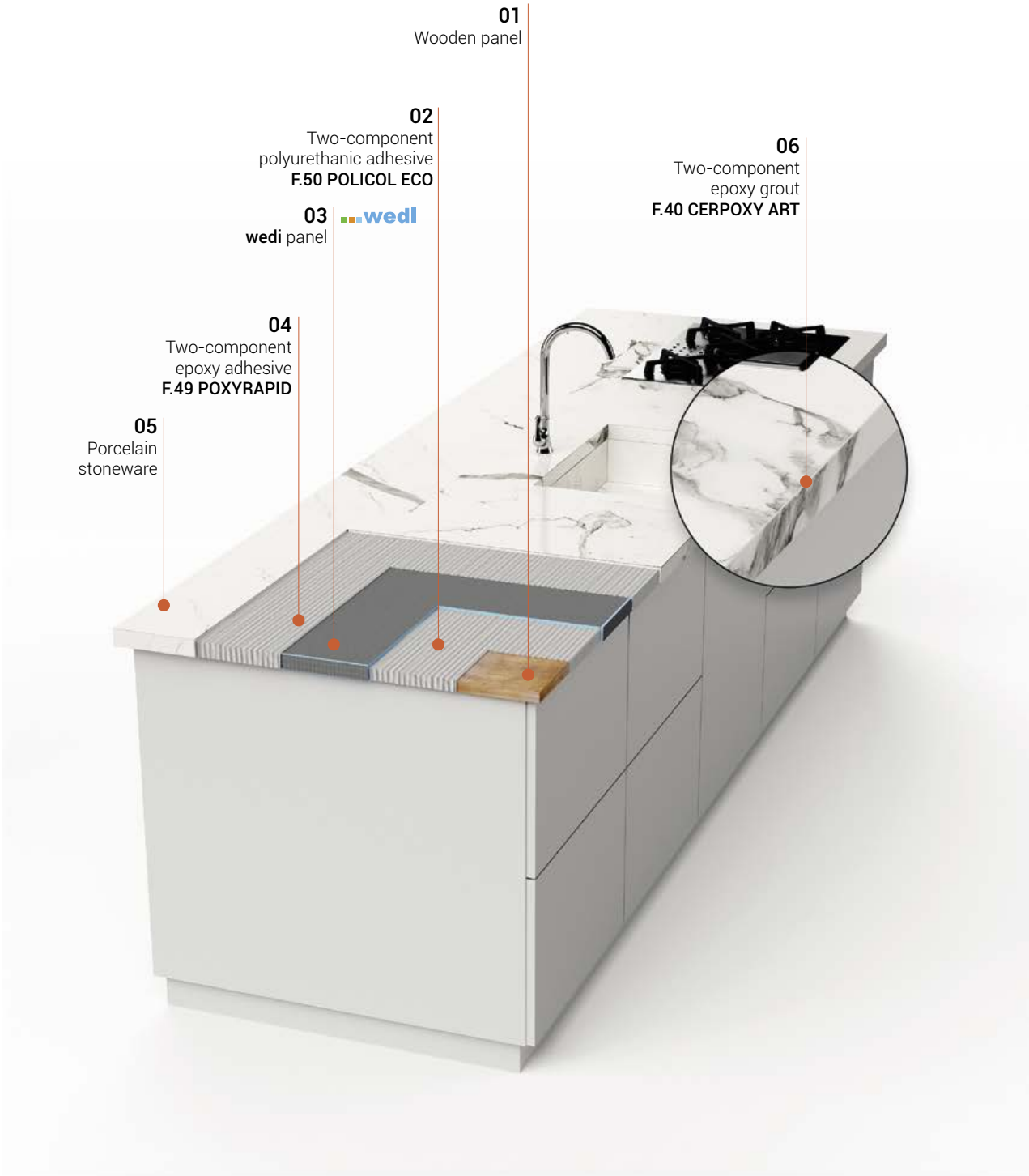
**F.40 CERPOXY ART is suggested for the grouting of external corners after the application of gummed tapes to the edges. Once 24 hours have past and the protective strips have been removed, it is possible to sand the surface using fine abrasive paper.**

**The presence of microscopical inerts within the mixture of this product allows to get a final finishing similar to the surface of the ceramics. The grouting of internal edges is done as well with F.40 CERPOXY ART, and then proceed with the cleaning of the surface with a white felt F.91/11T and cellulose sponge right after the application, in order to obtain a smooth and homogeneous finish.**



02  
F.49 POXYRAPID

04  
F.40 CERPOXY ART



**01**  
Wooden panel

**02**  
Two-component  
polyurethane adhesive  
**F.50 POLICOL ECO**

**03**   
wedi panel

**04**  
Two-component  
epoxy adhesive  
**F.49 POXYRAPID**

**05**  
Porcelain  
stoneware

**06**  
Two-component  
epoxy grout  
**F.40 CERPOXY ART**



**02**  
F.50 POLICOL ECO



**04**  
F.49 POXYRAPID



**06**  
F.40 CERPOXY ART

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