

## INSTRUCTION MANUAL

Handling  
Cutting and Drilling  
Laying  
Processing



Sistema di gestione della Qualità:  
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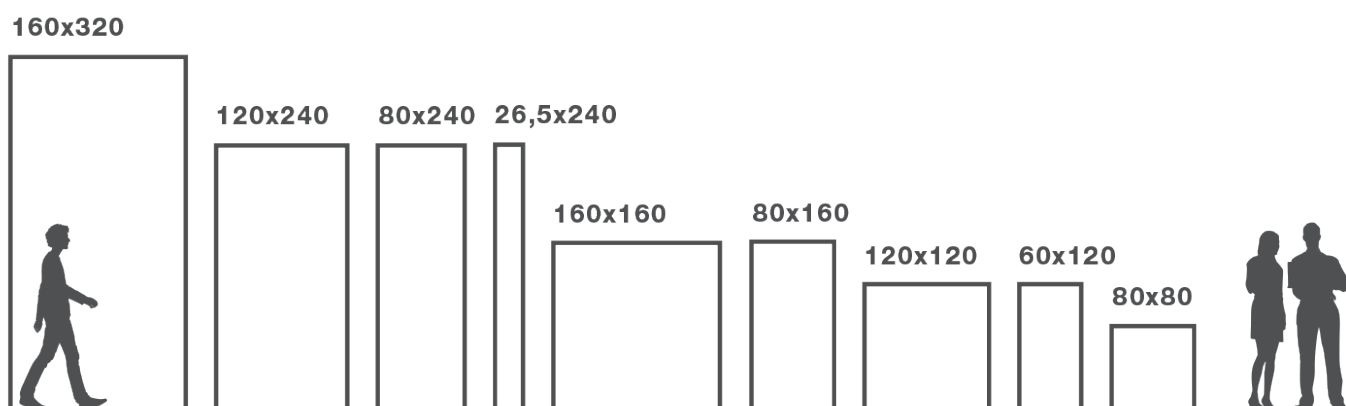
Dry-pressed ceramic tiles, with water absorption Eb ≤ 0.5 %,  
for internal and external walls and floorings



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## Handling

For handling the slabs, as well as for cutting and laying. Florim recommends the use of a kit of devices designed especially for large sizes.

To increase rigidity and limit twisting, use a system composed of parallel and transverse guides for manual handling of the 160x320 cm slab.

For perfect adhesion, clean the slab and the suckers with a damp sponge.

This device also has suckers that run along the guides and adhere to the ceramic slab. Ensure that a vacuum is created between the device and the surface.

A single guide device may be used for maximum length of 150 cm.

Florim recommends to carry out handling operations of the 160x320 cm slab with four operators at the same time.

Lift the slab along the long side and hang it vertically to the handles of the frame.

Set the guides to the trolley needed for carrying the slab. For the 160x320 cm size a suitably reinforced trolley is recommended.

Florim recommends the same procedure for handling the 120x240 cm and all other sub-sizes, where only two operators are sufficient.



## Cutting and Drilling

For successful cutting and drilling, lay the slab on a stable surface, flat and not flexible. A workbench with aluminium profiles is recommended for this purpose.

Set the cutting unit on the tile so that the references coincide with the marked lines and lock it with the appropriate suckers.

Score one end of the slab for 5-10 cm then complete the scoring from one edge to the other being careful to maintain the same pressure while moving along.

When the cut has been made, move the slab until the incision line sticks out 10 cm from the workbench.

Start splitting from both sides using appropriate cutting off pliers, and follow the scoring line to complete the cut.

Smooth rough edges with a diamond polishing pad.





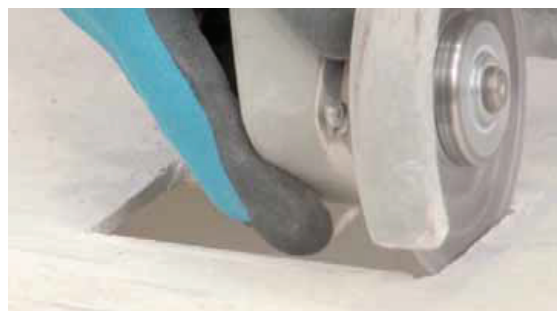
## Internal Cutouts



To drill internal cutouts from the slab, you need first of all to draw the guide lines.

Florim suggests to drill first a Ø 5/7 mm hole at the corners of the rectangle shape using a non-percussion drill.

While drilling, ensure to keep both surface and drill bits wet.



Follow the drawn lines using a diamond blade angle grinder and then finish off the edges with a diamond polishing pad.

## Round Holes



Round holes must be made in wet drilling, using diamond blades.

Start engraving the surface with a 75 degree point angle, then straighten out the drill avoiding excessive pressure on the slab.

No need for a percussive drill, even for holes of less than 1 cm diameter.

## Jolly



Manual traction devices are available in order to make a finishing cut at 45° and thus enable special applications of the material.

Also in this case finish with a diamond polishing pad.



## LAYING - Floor Installation

Check the laying substrate has no cracks, it is homogeneous and mature, totally clean and flat. Maximum deviation from flatness of 1 mm per 2 meters length measured.

First apply the adhesive onto the back of the slab with a 3 mm tile trowel. The recommended adhesive is "Porcelain Fix" and it must be spread over in one direction only.

At the same time, spread the adhesive onto the floor substrate using a 15 mm U-notch or a 10 mm V-notch trowel and following the same direction as previously applied to the back of the slab.

Using the appropriate sucker frame, position the slab on the adhesive bed, being careful to maintain a minimum joint of 3 mm.

Tap the slab with a rubber trowel for a complete fixing, ensuring the air is expelled. It is recommended to start from the center of the slabs and then move towards the edges.

Complete the laying operations using a suitable sealant, while keeping at least a 3 mm joint through the use of spacers. To make the task easier, use the special device for pulling over the slabs, available on the market.

Levelling wedges at each linear meter of the slabs are recommended.



## LAYING - Wall Installation

For wall cladding, follow the same procedure as previously show in the floor installation section.

Remember to apply the adhesive using a 15 mm U-notch or a 10 mm V-notch trowel, and spread towards one direction only.

Complete the laying operations using a suitable sealant, while keeping at least a 3 mm joint through the use of spacers. For outdoor laying, keep a 5 mm wide joint.

Levelling wedges at each linear meter of the slabs are recommended also for wall cladding.





## Processing



For the processing: marble and granite equipment can be used, whereas the diamond blades shall be specific for porcelain stoneware. Finally, we recommend the use of adequate equipment to handle the slabs.

The bridge saw can be used for the initial squaring and for the linear cuts. We recommend the use of diamond cutting wheels specific for porcelain stoneware, to check that the work top is flat and solid and to proceed at reduced speed.

## Water-jet cutting



Water-jet cutting can be used either to carry out both linear cuts and holes. Please note that in case the supporting grid is not optimum, the use of a rigid carton placed underneath reduces vibrations, thus facilitating the cutting procedures.

## 45° edging



During this operation it is very important to avoid obtaining sharp edges and to stop instead 1 mm away from the surface.

## Measurement Control and Processing



Use rigid, continuous, humidity resistant supports, such as for example slabs of stone, MDF, compound, rigid high density expanded fiber-reinforced panels, etc...

For what concerns the laying procedure on both floors and walls, glue the slabs using adhesives for porcelain stoneware of "Porcelain Fix" type. To install kitchen top, glue the slabs with adequate adhesives (such as polyurethane or epoxy adhesive, for example). Grout the joints and polish manually (using a diamond wheel or similar tools).



## Sink Hole



## Sink 45° edging

The use of cutting wheels on the surface of the slabs must be totally avoided.



## Assembly and Joints Filling

Apply a protective masking tape in the proximity of the points to seal in order to avoid every contact between resins and surface.



## Finished Product

Built in elements installed at the same level (such as cook tops) or beneath the level of the slab (such as metal basins or similar items) must be bound to the substructure that must be adequately prepared. Please note: cantilever slabs (compared to the substrate plan) are not allowed, either where the built-in elements are placed or along the external edges.



Recommendations for processing, care and maintenance

Recommendations/notes before processing

- Before processing the slab, it is necessary to check that the slab does not show any damage and/or visible defects;
- To set the forward speed and the rotation speed of the bridge saw, use wastages or cut pieces;
- During the design and planning phase of the processing, please dimension any hole to keep it at least 80 mm away from the edge;
- The holes for basins or flush-mounted equipment must have rounded corners. In case of bridge saw processing, grind the edges with diamond polishing pads;
- Bonding to structure: make sure that the adhesive is applied on both the whole surface of the back of the slab and to the whole substrate to obtain a 100% adhesive coverage. The presence of air bubbles between the slab and the surface should be absolutely avoided to prevent possible breakages;
- In case of processing/adjustments on the job site, the operators shall wear the adequate equipment concerning personal protection (mask, goggles, gloves, etc...).

Care and maintenance of the material

- The material is high temperature resistant. However, it is always advisable to use an adequate pan-support whenever hot cookware should be placed on the slab surface;
- Use a chopping board to cut/prepare foods;
- Possible breakages can be repaired with adequate and specific resins. Before repairing, check that the colour of the resins that are used for the reparation operations and the slab colour are the same;
- If stains have maintained contact with the slab surface for a short time, they can be easily removed with the use of a rag and hot water.

Type of detergent according to the type of dirt

Below are some of the substances indicated to remove stains. The instructions are grouped by type of product and do not contain references to specific detergents: however, these features are clearly indicated on the labels of detergents available from most retailers.

Type of dirt	Type of detergent
Grease and oil	Alkaline detergent
Ink	Sodium hypochlorite solution (bleach) or acid detergent
Rust	Acid detergent
Beer, wine, coffee	Sodium hypochlorite solution (bleach) or alkaline detergent
Type marks	Organic solvent (trichloroethylene, thinner)
Ice-cream	Alkaline detergent
Resin	Organic solvent (trichloroethylene, thinner)
Fruit Juice	Diluted sodium hypochlorite solution (bleach)
Pen marks (Permanent marker)	Organic solvent (acetone, thinner)
Aluminium scratch marks	Acid detergent or abrasive detergent (cream/powder)
Other stains	Abrasive cream detergent

Rinse abundantly with water after the stain-remover has been used.

