

MULTIPLE + BONDING MORTAR

PRODUCT DESCRIPTION

The **Multiple+ Special Bonding Mortar** is a gray product developed especially for indoor, outdoor and facade areas. It has the proprietary ACQUA PROTECT technology that provides additional protection when waterproofing wet indoor areas.

This industrial product is classified as ACII, according to ABNT NBR 14081-1.

INDICATION

This product is especially designed for:

- Ceramic tiles measuring up to 100x100 cm on floors and walls in indoor areas and up to 80x80 cm on floors in outdoor areas;
- Glazed Porcelain, Technical Porcelain Tiles and Large-Format pieces (from 80x80 cm) and those with conventional thickness over 7 mm on indoor floors and walls and outdoor floors;
- Ceramic and Porcelain tiles on indoor Drywall boards (plasterboard);
- Ceramic, Glazed Porcelain and Technical Porcelain tiles measuring up to 80x80 cm on outdoor walls up to 3 meters in height;
- Ceramic tiles measuring up to 45x45 cm on facades no more than 6 meters high.

COMPOSITION

Selected sand, Portland cement, chemical additives that provide water retention, flexibility and high adhesion.

LIMITATIONS

This product should not be used:

- For overlapping (floor over floor and tile over tile);
- On barbecue grills, fireplaces, greenhouses, refrigerators, saunas and swimming pools;
- For laying glass, porcelain and light-colored natural stone tiles;
- On wood, parquet, vinyl, metal, fiberglass, particle board, paint, plaster and cement board bases;
- For the technical purpose of waterproofing and on refractory material;
- On unsteady bases with cracks, hollow sound, displacements, etc.;
- On a very wet subfloor or plaster, wait for the base to dry before starting the application;
- During application, on bases at temperatures below 0°C and above 40°C;
- After 2 hours and 30 minutes of mixing.

TECHNICAL RECOMMENDATIONS

- The back of the coating must be clean, free of release agent, oil, dirt or any other type of impurity that could damage the integrity of the laid base.
- When laying tiles measuring less than 4.5x4.5 cm, it is essential to clean the joints properly so as to eliminate mortar residue and ensure that the grouting is not affected.
- When the wear on the trowel notches exceeds 1 mm in height, it should be replaced.
- When using the "double layer technique, the mortar should be applied with the notched side of the trowel on both the substrate and the back of the piece so that the strips are parallel.
- On floors and walls of indoor and outdoor environments, for pieces over 900 cm², using a "double layer is mandatory.
- For facades, the "double layer is mandatory for 400 cm² tiles and the use of notched trowels with a radius of 10 mm is recommended to minimize the possibility of backfilling failure.
- Details about the coating design should be discussed with the planner.

ATTENTION

Avoid contact with eyes, skin and clothing during handling. Wear safety glasses, rubber gloves and a mask to avoid inhaling the product. In case of contact with the eyes, rinse immediately with running water and do not induce vomiting in the event of accidental ingestion. In both situations, seek immediate medical help; KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.

CONSUMPTION

Coating format (cm ²)	Format of trowel notches (mm)	Approximate consumption (kg/m ²)	
		Single layer	*Double layer
Smaller than 400	6x6x6	4 to 5	5 to 6
Greater than or equal to 400	8x8x8	5 to 6	6 to 8
	10x10x10	6 to 8	8 to 10

Consumption may vary according to the type of trowel used and base conditions.

RELEASE FOR TRAFFIC

Construction personnel (carefully)	72 hours, for grouting
Light Traffic	7 days after laying
Heavy Traffic	14 days after laying

STORAGE / SHELF LIFE

Store in the original packaging, in a dry place protected from rain, sun and heat, on pallets and in stacks of 1.5 meters maximum height.

If stored according to the instructions above, the product is valid for one (1) year after the manufacturing date shown on the packaging.

BASE PREPARATION

- The coating should only be laid after 14 days of base (subfloor) curing, as indicated by the Standards: NBR 7200, NBR 13753, NBR 13754, NBR 13755.
- The base surface must be rough and free of cement, moisture, rust stains, grease, efflorescence, release agent, dust and mold. Clean with a wire brush and wash with high-pressure jets to remove all dirt before laying.
- Flatness, waterproofing, cracking and resistance problems must be corrected 72 hours before laying.
- Base absorption must be evaluated before laying the mortar by spraying water on the surface. If the water is absorbed in less than 60 seconds, there will be loss of adhesion. In this case and when the location is subject to sun and wind, the base should be moistened, but without drenching.
- Spacing, movement and structural joints must be brought to the coating surface and filled with deformable material (for example, products based on expanded polyethylene or polyurethane) and then sealed with flexible sealant.
- Protect friction-sensitive surfaces (aluminum parts, special metal inserts and embossed details) with adhesive tape, as they can get stained and scratched during mortar application to the base, but without drenching.

PRODUCT PREPARATION AND APPLICATION



1. In a clean, dry, metal or plastic container, mix the mortar powder with clean water until it forms a firm paste without any dry lumps. Mix by hand or with a propeller attached to the drill. Work with the product protected from sun, wind and rain, so as not to interfere with the mortar setting time.

POWDER	WATER	MANUFACTURING FACILITY
20 Kg	4.6 liters	Itupeva - SP
	4.2 liters	Itaboraí - RJ
	4.2 liters	Joinville - SC
	4.4 liters	Cravinhos - SP
	6.2 liters	Goiânia - GO
	4.4 liters	Salvador - BA
	4.4 liters	Nova Santa Rita - RS
	4.4 liters	Paulista - PE



2. Let mortar rest for 10 minutes. Mix again and apply with an appropriate notched trowel.



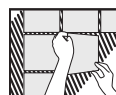
3. Apply the mortar over the base with the smooth side of the trowel and then pass the notched side over it at an angle of 60° to form the laying strips.



4. When the "double layer technique is needed, also apply mortar on the back of the piece and lay so that the strips are parallel to the strips on the base. Return the mortar stuck to the trowel to the container, mix WITHOUT ADDING WATER and use again.



5. Place the piece just before its final position and drag it to the desired position, press with your hands and tap all over the piece with a rubber hammer to compress the mortar strips.



6. Lay the coating only on the strips of wet, sticky mortar. When laying, remove some recently placed pieces and check whether the back of the piece is covered with mortar. The more bonded mortar, the better the adhesion.



7. Clean the joints after laying the pieces, removing excess mortar to facilitate grouting. Protect the area from the sun, rain and wind for 72 hours. After this period, grouting can be performed.



8. For grouting, use Portobello grout.



9. For final construction site cleaning, 7 days after grouting, use PortoKoll® CleanMax Multi-Floor Cleaner.



10. After final cleaning, wait for the grout to dry completely and apply PortoKoll® CleanMax Sealer to protect the surface against moisture, small mold stains, oil and dirt, if the chosen grout is cementitious.