

SUPERIOR WHITE BONDING MORTAR

PRODUCT DESCRIPTION

Superior White Bonding Mortar is a distinctive mortar that has Dual Mix technology, allowing for selecting application consistency, providing high adhesion and superior water retention properties and flexibility in special mortar laying. This industrial product is classified as ACII, according to ABNT NBR 14081-1.

It has Dual Mix technology, which can be prepared in two ways:

Conventional Consistency: for conventional laying on floors and walls in indoor and outdoor areas.

Fluid Consistency: for laying conventional tiles on floors in indoor and outdoor areas.

The fluid consistency makes it easier to apply.

INDICATION

This product is especially designed for:

- Conventional mortar laying and overlapping of ceramic tiles, conventional porcelain tiles and large formats (thickness over 7 mm) and natural stones. Extra-thin large-format porcelain tiles (from 3 mm to 7 mm) on indoor floors and walls and outdoor floors.
- Conventional mortar laying and overlaying of ceramic pieces, conventional porcelain tiles (thickness over 7 mm) up to 80x80 cm (6400 cm²) and extra-thin large-format porcelain tiles (from 3 mm to 7 mm) on outdoor walls.

COMPOSITION

It is formulated based on select sand, White Portland Cement and special chemical additives.

LIMITATIONS

This product should not be used:

- For overlaying on walls with pieces measuring over 80x80 cm, except for extra-thin large-format porcelain tiles (from 3 mm to 7 mm);
- For overlaying on slate and on slabs;
- On facades (outdoor walls over 3 m);
- On barbecue grills, fireplaces, greenhouses, refrigerators, saunas and swimming pools;
- For laying transparent glass tiles, as they can damage the laying aesthetics;
- 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 40 minutes of mixing.

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)	4 hours, for grouting
Light Traffic	4 to 6 hours after laying
Heavy Traffic	12 to 24 hours 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.

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.

PRECAUTIONS WHEN LAYING LOW-THICKNESS LARGE SHAPES

- The use of large-format pieces on Facades is contingent upon the following factors: facade design, specification of the bonding mortar to be used, use of qualified labor, tile specification; quality assurance of the application as specified.
- The substrate must be perfectly flat, because faulty mortar impregnation on the back of the piece impairs its adhesion, causing cracks and breakage of pieces after laying and grouting difficulties due to unevenness.
- It is crucial that the maximum unevenness or irregularity of the base is less than 2 millimeters every 2 meters. The flatness check must be evaluated all over the base and, if necessary, faults must be fixed before laying the mortar. The assessment must be carried out by placing a 2-meter aluminum ruler on the floor or wall and, with the aid of a 2-mm spacer, checking whether the gaps between the ruler and the floor are greater than 2 mm. If the measurements are higher than specified, the base must be leveled.
- It should be laid following a *double layer process. Incorrect laying (mortar flaw) can cause the tiles to crack due to hollow spaces that can form between the base and the coating.
- For mortar laying in high impact areas, refer to the manual BOT 07 - Portobello (item 2 - Material Specifications).

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.

Overlapped Laying

- Evaluate the flatness of the base to be covered, checking that old pieces are well bonded. If any of the pieces are loose, they must be replaced with Superior White bonding mortar 24 hours before starting overlaying.
- Plan for the new pieces to be placed in a different position from the old ones, so that the old and new joints do not overlap.
- For mortar overlaying on granilite, granite, polished cement and waxed floors, treat with mechanical sanding to roughen the surface in order to facilitate bonding mortar adherence.
- To remove any kind of dirt that could impair mortar adherence (such as grease, dust), the surface to be coated must be washed with the PortoKoll CleanMax Multi-Floor Cleaner 48 hours before laying the pieces.
- Check the height of electrical boxes, hydraulic points and baseboards, as overlapped mortar laying increases the height and thickness of the base.
- For overlaying on walls, after cleaning the base to be laid, use a support ruler to curb sliding. The time for removing the support ruler is 48 to 72 hours.

PRODUCT PREPARATION AND APPLICATION



- In a clean, dry, metal or plastic container, mix the product manually or mechanically with clean water until it forms a firm paste without any dry lumps. Work with the product protected from sun, wind and rain, so as not to interfere with the mortar setting time. **DO NOT ADD ANY COMPONENTS OTHER THAN WATER.**

CONSISTENCY	Itupeva	Joinville	Goiânia	Cravinhos	Itaboraí
Conventional	5.4 liters	4.2 liters	6.0 liters	5.4 liters	4.4 liters
	Maximum addition of 500 ml of water				
Fluid	6.0 liters	4.8 liters	6.6 liters	6.0 liters	5.0 liters
	Maximum allowed addition: 1 liter of water				



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



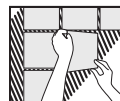
- Apply the mortar over the base with the smooth side of the trowel and then pass the notched side over it at an angle of 60° to form the laying strips.



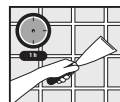
- When the *double layer technique is needed, also apply mortar on the back of the piece and lay so that the strips are parallel to the strips on the base. Return the mortar stuck to the trowel to the container, mix **WITHOUT ADDING WATER** and use again.



- Place the piece 5 cm before the 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. In cases of Thin porcelain tiles, using suction cups on large pieces is recommended to make it easier to slide the piece, and a rubber trowel to press the mortar strips so as not to break the piece.



- 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.



- Clean the joints after laying the pieces, removing excess mortar to facilitate grouting. Protect the area from the sun, rain and wind for 4 hours. After this period, grouting can be performed.



- For grouting, use Portobello grout.



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



- 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.