



## Installation Guidelines (Adhesive System) for Kalingastone Engineered Marble in Flooring

Standard Size of Marble	Thickness	Recommended Sizes of Marble
3040 mm x 1250 mm	18 mm	1520 mm x 1250 mm ( 5' x 4' ) approx..
(10' x 4' approx..)	18 mm	1013 mm x 1250 mm (3'4"x 4' ) approx..
	15 mm	1013 mm x 1250 mm (3'4"x 4' ) approx..
	15 mm	760 mm x 1250 mm ( 2'6" x 4' ) approx..
	12 mm	304 mm x 312 mm ( 1' x 1' ) approx..
	12 mm	304 mm x 625 mm (1' x 2') approx..
	12 mm	506 mm x 625 mm (1'8" x 2' ) approx..
	12 mm	506 mm x 417 mm) (1'8"x 1'4") approx..
	12 mm	608 mm x 625 mm (2' x 2' approx..)

## Adhesive System for Kalingastone Engineered Marble for Flooring

- It is advisable not to stack Kalingastone Engineered Marble slabs under direct Sunlight. The Engineered marble slabs should be stacked in covered shed only.
- It is advisable to inspect the shade, color, design etc. by removing the plastic surface protection sheet from Engineered Marble slab and check the shade before you start cutting. We do not recommend to lay full size slabs in flooring.
- We recommend using water liberally while cutting to avoid burning and chipping of Engineered marble slabs.
- It is advisable to clean the sides of Engineered marble with a polish paper just before laying as it will remove dust and smoothen the sides for a better installation.
- As per site requirement, a well leveled, properly compacted and adequately cured as well as properly dried PCC sub-base should be prepared.
- The PCC sub-base should be properly cleaned and made free from dust, dirt, oil, grease etc. at the time of installation of Engineered marble.
- Apply adhesive conforming to Type 2 Adhesive as per IS 15477 : 2004 Indian Standard / C2TES1 conforming to EN 12002 standard. (The details of duly recommended adhesives of various suppliers is attached herewith).
- For adhesive paste preparation, add Adhesive powder to clean water. Mix thoroughly until a lump-free mortar is obtained using stirrer mixer. A 50 kg bag will require approx. 11.25 – 12 litres of water in the ratio of 1: 4.4 (water: powder). No further water should be added to obtain a slump-free consistency. The adhesive paste is immediately ready-for-use and has a pot life of 3 hours while lying inside bucket after mixing. Consumption of material will be approx. 1.2 kg / Sqm / mm.
- Make sure not to keep excess water in the adhesive paste, because too much water in the adhesive paste will weaken bond of Engineered marble with sub-base.
- Comb the adhesive paste to the required depth using 12 mm square notched trowel to maintain the specified bed thickness up to 5 – 6 mm. Simultaneously apply a thin layer of adhesive paste on back of Engineered marble ensuring better bonding.
- Make sure not to spread more adhesive than that needed to lay Engineered Marble within a 15 minute period. Engineered Marble piece can be adjusted up to 25 minutes after fixing.
- Engineered Marble shall be installed with slight twisting action, making sure that complete bonding (100 % bonding) is achieved.
- We recommend to use a rubber hammer only to press the Engineered Marble ensuring that there is left no hollowness beneath marble.
- Immediately remove any excess adhesive paste coming out through the joints with a damp cloth or sponge before it starts to set.

- Ideally the flooring should have 2 - 3 mm wide joints, which is international best practice. However, if the client wants to have a seamless joint for smaller areas, then we recommend to have approx. 10 mm gap below skirting with a provision of backer rod below skirting.
- The joints in between the marble pieces should not be filled immediately on its installation and instead should be left open for a minimum of 3 - 4 days to allow excess moisture to evaporate.
- Preferably after four days, the joints will be properly cleaned once again before grouting.
- White cement or white cement based grouts should not be filled in the joints. Only epoxy should be filled. However, if the client wants to avoid polishing after installation, two inches wide ABRO masking tape should be used on both sides of seamless joints while grouting. And this ABRO masking tape should be removed after half an hour of filling epoxy in the joints. It is advisable not to use any cello tape / brown masking tape as it will leave stain on marble.
- The joints will be filled with Resin T 8 of Tenax / Equivalent by adding Engineered Marble powder of particular variety (i.e. a uniform paste of transparent resin of T8 + marble powder will be initially prepared and thereafter hardener will be added to said paste in parts. The excess epoxy lying on the joints should be cleaned immediately.
- We recommend to provide approx. 10 mm wide gap below skirting to accommodate thermal expansion of the product. Immediately remove excess adhesive paste from gap below skirting.
- We recommend to insert a suitable backer rod of bigger size (say 12 – 15 mm dia.) in said gap of 10 mm width below skirting so that it is tightly fitted.
- Keep 3 – 5 mm wide expansion joint (ideally 6 mm) after every 5 metres in both directions (i.e. along Length & Breadth), when Engineered Marble is being laid in a large expanse like shopping mall, lobby area etc.
- Fill the expansion joint with Silicone High Performance Sealant of Dow Corning / Akemi . After filling Silicone Sealant, a drying period of 4 to 5 days is a must.
- Lamination film should be removed from surface of marble, the very next day of installation.
- The Engineered Marble flooring should be covered with thick PVC sheets ensuring that no dust / dirt etc. should be left on marble flooring before covering with said PVC sheets.
- It is also to be ensured that POP must not come in direct contact with Engineered Marble during / post installation.
- The flooring should be polished using Diamond Polishing Pads only as and when required.
- For care and maintenance, it is advisable to use only a neutral pH cleaner (pH=7). Kindly ensure that any acidic / alkaline cleaner should not be used on marble surface.

## Various Adhesive Co.'s Grade for Kalingastone Engineered Marble in Flooring :

1.	Kalingastone Engineered Marble - <b>For Interior-</b> for flooring	(A) KeraKoll : <b>For Interior</b> : H40 No Limits White & To add 50% Top Latex and 50% water for mixing H40 No Limits for big format stones	(B) Ardex Endura : <b>For Interior</b> :: Under Tile & Stone Primer + Ardiflex S1 / Or Diamond Star White + Admix Ad1	(C) Mapei : <b>For Interior</b> : Keraflex Maxi S1/ (Kerabond T + Isolastic )	(D)MYK Laticrete : <b>For Interior</b> : PUA 212	(E) Saint-Gobain Weber : <b>For Interior</b> Weber.set ultra
2.	Kalingastone Engineered Marble - for external use for flooring	(A) KeraKoll : <b>For External Area</b> : Superflex Eco	(B) Ardex Endura : <b>External Area</b> : Under Tile & Stone Primer + Ardiflex S1 / Or Diamond Star White + Admix Ad1	(C) Mapei : <b>For Exterior</b> : Keralastic T (PU based adhesive with 100% bonding)	(D) MYK Laticrete : <b>For External Area</b> : PUA 212	(E) Saint-Gobain Weber : <b>For Exterior</b> Weber.set ultra
3.	Kalingastone Engineered Marble - <b>For Interior-</b> for flooring	(A) KeraKoll : <b>For Interior</b> : H40 No Limits White & To add 50% Top Latex and 50% water for mixing H40 No Limits for big format stones	(B) Ardex Endura : <b>For Interior</b> :: Under Tile & Stone Primer + Ardiflex S1 / Or Diamond Star White + Admix Ad1	(C) Mapei : <b>For Interior</b> : Keraflex Maxi S1/ (Kerabond T + Isolastic)	(D) MYK Laticrete : <b>For Interior</b> : PUA 212	(E) Saint-Gobain Weber : <b>For Interior</b> Weber.set ultra
4.	Kalingastone Engineered Marble - <b>For Exterior-</b> for flooring	(A) KeraKoll : <b>For External Area</b> : Superflex Eco	(B) Ardex Endura : <b>External Area</b> : Under Tile & Stone Primer + Ardiflex S1 / Or Diamond Star White + Admix Ad1	(C) Mapei : <b>For Exterior</b> : Keralastic T (PU based adhesive with 100% bonding)	(D) MYK Laticrete : <b>For Exterior:</b> PUA 212	(E) Saint-Gobain Weber : <b>For Exterior</b> Weber.set ultra