

Technical Data Sheet

<p>In Compliance With EN & IS norms</p>	<p>Walnut Lite Tile Plus is a Eco friendly, light weight, polymer modified, mineral based, ready to use adhesive formulated with high quality raw material for fixing small size Vitrified Tiles and natural marble on internal floor and all type of Ceramic tiles on wall in internal areas. Can be used for renovation as well as for fresh work. For interior use only.</p>
<p>Main application Adhesive for fixing small size Vitrified Tiles and natural stone on floor & ceramic on wall.</p>	



Technical advantage of Walnut Lite Tile Plus over cement or normal adhesive

- Conformity to Class 1 adhesive as per European Norms (EN) and Type 1 adhesive as per Indian Standard (IS) 15477: 2019
- Highly thixotropic (non-seg) for fixing all type of Ceramic tiles on floor and wall.
- Polymer modified and made with high grip technology.
- Suitable to fix small size vitrified tiles and natural marble (Upto 2X2 feet) onto cement-based floor.
- Guaranteed fixing of all type of absorbent ceramic & glazed tiles on wall & floor in internal area.
- Exceed strength of Class 1 adhesive as per EN and Type 1 as per IS norms.
- Very good coverage and high workability among Type 1 adhesive available across industry.
- Suitable for renovation work.
- No water curing required.
- Saving of time & labor.
- No need to mix any extra cement.
- No need to soak absorbent tiles into water prior to fixing.
- Very low VOC and suitable for green building.

Suitable areas

- Internal walls for ceramic tiles & floors for vitrified tiles.
- Residential houses & buildings.

Suitable surfaces

- Fully dry and sound new or old traditional plaster.
- New or old fully cured and stable IPS (Indian Patent Stone), PCC (Plain Cement Concrete) floors.

Suitable covering material

- All type of absorbent ceramic & Glazed tiles.
- Vitrified tiles of small size upto 2X2 feet on the floor.
- Natural marble of small size on floor.

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Product not to be used

- For large format tile slab. (Use Calcibond Secure and Flex adhesives).
- In Exterior. (Use Calcibond series of adhesive).
- On dense concrete and other rigid non-absorbent cement surfaces. (Use Calcibond Secure and Flex adhesive).
- On metal, wood, rubber, dry wall & on cement boards. (Use Calcibond Ultima).
- For fixing vitrified tiles & stone on wall. (Use Calcibond Secure and flex adhesive).
- In interior wall height greater than 10 feet. (Use Calcibond series of adhesive).
- More than 6 mm. of thickness. (Use Calcibond series of adhesive).
- Over expansion joint or in area with extreme movement.
- In swimming pool or under water. (Use Calcibond series of adhesives).

How to Use



How to use

Important tools for application:

- Electric low speed mixing stirrer.
- Wallnut notched trowel of 6x6 or 10 x 10 mm.
- Auto spirit level
- Other mixing & finishing tools such as mixing trowel, bucket, brush, broom, measuring tape etc.

Cleaning of tools:

- While still the material is fresh, all the tools can be cleaned with normal water. Once material is hardened, the material can be removed only by mechanical means.

Surface Preparation:

- Ensure that plaster / screed surface is sound, clean and free from all foreign material such as oil, grease, dust etc.
- If surface is uneven of more than 6 mm. than first do the leveling by using correct leveling material in order to avoid using excess thickness of adhesive or apply first thin coat of same adhesive to level the surface and wait for 24 hours.
- Onto dry clean surface, splash the enough water and let it surface dry to improve the workability of adhesive.
- If surface area is larger, provide movement joint every 3 meters.
- Follow concrete expansion joint and connection joint as per standard.

Mixing:

- Mix Wallnut Lite Tile Plus 20 kg. Bag of powder with approx. 4 to 4.5 lt. of clean water. Use slow speed electric stirrer to have desire results. Manual mixing can compromise performance of adhesive.
- Adjust the water quantity as per ambient temperature & surface. The final mix must be workable paste.

How to apply:

- Spread the adhesive in desire thickness from 3 to 6 mm. onto cement surface using proper notch trowel.
- Once adhesive is applied, fix the tiles or stone onto adhesive before skin formation and press firmly. In case tiles are of big size, also apply the adhesive layer at the back of tiles.
- Leave the space between tiles to have proper grouting and to accommodate surface movement.
- Leave the tiles for 24 hours to bond well and then follow the grouting process.

Product & Working Data

Product appearance	: Grey or White colour powder
Packing	: 20 Kg moisture proof BOPP bags.
Shelf life	: 12 months from the date of manufacturing.
Water ratio	: Approx. 4 to 4.5 Lt. for grey and white per 20 kg. Bag.
Pot life	: > 2 hours
Thickness limit	: Minimum 3 to maximum 6 mm.
Open Time	: > 20 minute
Adjustability	: > 20 minute
Initial setting	: 6 to 8 hours.
Final setting	: 24 hours.
Walking on floor	: After 24 hours.
Grouting	: After 24 hours.
Normal use of surface	: After 2 weeks.
Full strength of adhesive	: At 28 days.
Coverage	: Approx. 60 sq.ft. / bag of 20 kg using 3 mm. thick. OR 1.20 kg. / m ² / mm.
Working temperature	: + 5° C. to + 35° C.

(Data @ 27° C. & 50% humidity)

Technical Performances

In compliance with (Indian Standard) IS 15477-2019: for Type 1 Tile Adhesive

Tensile Adhesion (Dry condition)	: ≥ 0.70 to 0.85 N/mm ²	(Requirement as per IS: 0.5 N/mm ²)
Sheer Adhesion (Dry Condition)	: ≥ 1.1 to 1.25 N/mm ²	(Requirement as per IS: 1 N/mm ²)

(Final results @ 28 days. 27° C. & 65% humidity)

- Final resistance to temperature after 28 days or full cure: -30 to $+70^\circ$ C.
- The final results at test site may vary based on temperature and humidity & surface condition.

Technical Performances

In compliance with (European Norms) EN 1348 – Class C1 Tile Adhesive test requirement:

Initial adhesion (After 28 days)	: ≥ 0.65 to 0.80 N / mm ²	}	Exceed all results than EN Norms.
Adhesion after heat cycle	: ≥ 0.5 to 0.7 N / mm ²	}	
Adhesion after water immersion	: ≥ 0.5 to 0.6 N / mm ²	}	
Adhesion after freeze / thaw cycle	: ≥ 0.5 to 0.6 N / mm ²	}	

(Final results @ 28 days. 23° C. & 50% humidity)

- Final resistance to temperature after 28 days or full cure: -30 to $+70^\circ$ C.
- The final results at test site may vary based on temperature and humidity & surface condition.

Walnut Exclusive Technology



Important instructions

- Once bags are open, entire material must be consumed within 24 hours. Store the bags in safe environment.
- In case hollow or weak cement surface, please ensure that proper correction is done before use of adhesive.
- If temperature is more than 35° C., then avoid using the products under direct sun.
- In case temperature is cold and below 5° C., the initial and final setting may affect.
- Expansion & connection joint must be followed of concrete and all other elements of concrete structure.
- For any structure related issue, follow local code and appropriate consultant guidelines.
- In case the performance of Walnut products is not as per technical data mentioned, please call Walnut technical helpline.

Walnut Range of Tile Adhesives and Recommended Application

Fixing Material									
Walnut® Tile & Stone Adhesives	AAC Block / Fly Ash bricks	Ceramic / Clay & Glazed tiles	Vitrified Tiles upto 2x2'	Vitrified Tiles Slab	Ceramic Mosaic	Glass Mosaic	Marble & Granite tiles	Marble Granite Slab	Enginnered Quartz Stone
Lite Tile	X	✓	X	X	X	X	X	X	X
Lite Tile Plus	X	✓	✓	X	X	X	X	X	X
Lite Block	✓	✓	X	X	X	X	X	X	X
Lite Floor	X	✓	✓	✓	X	X	✓	✓	X
Calcibond Smart	✓	✓	✓	✓	✓	X	✓	✓**	X
Calcibond Smart Plus	✓	✓	✓	✓	✓	X	✓	✓**	X
Calcibond Secure	✓	✓	✓	✓	✓	✓	✓	✓**	X
Calcibond Flex	✓	✓	✓	✓	✓	✓	✓	✓**	X
Calcibond Advance	✓	✓	✓	✓	✓	✓	✓	✓	✓**
Calcibond Ultima	✓	✓	✓	✓	✓	✓	✓	✓	✓

Strike with star (**) mark it is recommended to use Walnut Calcibond Latex as replacement of water in part or full for best results. For further detail and if any fixing material not covered above or doubt, please consult Walnut Technical Department before using the product.

Application Surfaces									
Walnut® Tile & Stone Adhesives	Plaster	Cement Screed / PCC	Traditional Concrete	Mivan / Precast Concrete	Existing Tiles	Wood	Metal	Dry Wall	Rubber floor
Lite Tile	✓	✓	X	X	X	X	X	X	X
Lite Tile Plus	✓	✓	X	X	X	X	X	X	X
Lite Block	✓	✓	X	X	X	X	X	X	X
Lite Floor	✓	✓	X	X	X	X	X	X	X
Calcibond Smart	✓	✓	✓	✓**	✓**	X	X	X	X
Calcibond Smart Plus	✓	✓	✓	✓	✓	X	X	X	X
Calcibond Secure	✓	✓	✓	✓	✓	X	X	X	X
Calcibond Flex	✓	✓	✓	✓	✓	X	X	X	X
Calcibond Advance	✓	✓	✓	✓	✓	X	X	X	X
Calcibond Ultima	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Application Areas									
Walnut® Tile & Stone Adhesives	Internal Floor	Internal Wall	External floor	External Wall upto 10 feet	External Building Façade	Lift area / Lobby	Roof / Terrece	Balcony	Swimming Pool
Lite Tile	✓	✓	X	X	X	X	X	X	X
Lite Tile Plus	✓	✓	X	X	X	X	X	X	X
Lite Block	X	✓	X	✓	X	X	X	X	X
Lite Floor	✓	X	✓	X	X	X	X	X	X
Calcibond Smart	✓	✓	✓	✓	✓**	✓**	X	✓	X
Calcibond Smart Plus	✓	✓	✓	✓	✓**	✓**	X	✓	X
Calcibond Secure	✓	✓	✓	✓	✓**	✓**	✓	✓	✓
Calcibond Flex	✓	✓	✓	✓	✓**	✓	✓	✓	✓
Calcibond Advance	✓	✓	✓	✓	✓	✓	✓	✓	✓
Calcibond Ultima	✓	✓	✓	✓	✓	✓	✓	✓	✓

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Walnut Green Building Index

Walnut range of products are most eco-friendly and suitable to use in all kind of buildings including certified green. Apart from using best of international raw material for best performance, Walnut procure the major raw material locally to safeguard environment.



- Recycled raw material used.
- VOC-Very low organic compounds.
- 100% suitable to recycle after expiry.
- Suitable for all kind of green/normal buildings.

Walnut Quality & Safety Assurance

Products supplied are safe to use by any worker at site. However proper tools and safety measures must be in place for prolong working. The gloves, safety glasses and other protection measure must be followed as per local regulation.



Declaration

All the above information and results are provided based on Walnut internal quality test. Customer must check before using the product about performance and final expected results. Walnut cannot be held responsible for any damage of whatsoever nature at site.

Technical Help

Walnut Building Solutions India Private Limited | CIN: U36999MH2017PTC289638

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