

Technical Data Sheet

Ref.: W-Lb-05- 010520-02

<p>In Compliance With IS norms</p>	<p>Walnut Lite Block is an Eco friendly, light weight, polymer modified, mineral based ready to use adhesive for fixing of all kind of AAC (Autoclaved Aerated Concrete) blocks, concrete blocks, fly ash bricks and other absorbent blocks and bricks.</p>
<p>Main application Adhesive for fixing of AAC block, concrete block & fly ash bricks etc.</p>	

Technical advantage of Walnut Lite Block over cement or traditional jointing mortar

- Guaranteed fixing of all kind of AAC block, absorbent brick, and concrete block.
- Perform with minimum thickness of 2 mm. can be used till 6 mm.
- Exceed strength of class one adhesive as per IS norms.
- Very high coverage compares to conventional block jointing mortar.
- High strength once fully dry and can be used upto full room height for fixing of AAC blocks.
- No water curing required.
- Saves time & labour.
- Easy spread and creamy workability.
- No need to mix any extra cement.
- Very low VOC and suitable for green building credit point.

Suitable areas

- Internal & external.
- Residential, commercial & industrial buildings.

Suitable surfaces

- New or old fully cured absorbent plasters.
- New or old fully cured absorbent concrete, IPS or PCC floors which are sound and stable.

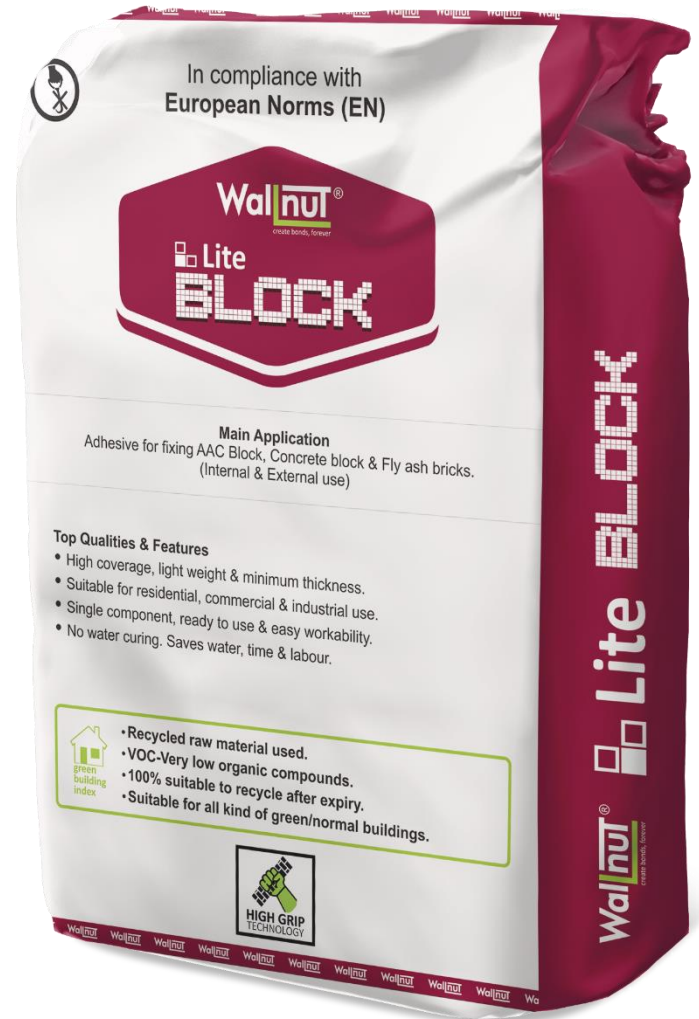
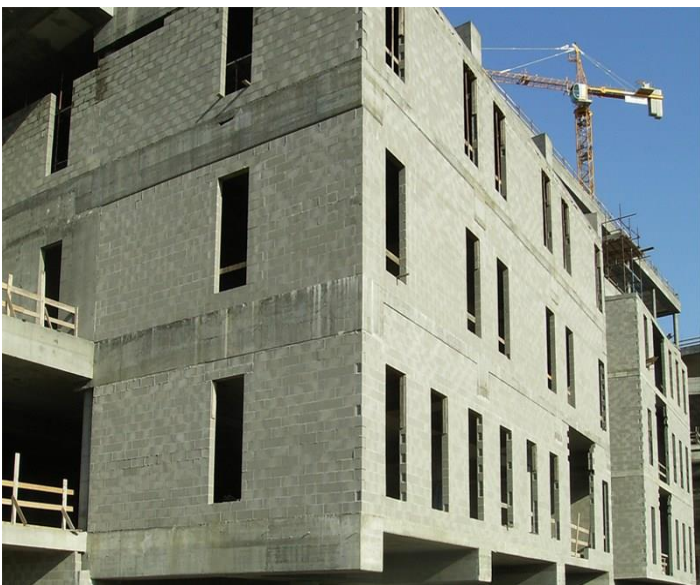
Suitable covering material

- AAC (Autoclaved Aerated Concrete)
- Concrete block, Hollow concrete blocks.
- Absorbent machine cut bricks, fly ash bricks etc.

Product not to be used

- On non-absorbent concrete and other rigid cement surfaces (Use Calcibond series of adhesive).
- On metal, wood, rubber and on cement board. (Use calcibond Ultima).
- On non-absorbent surfaces.
- For fixing tiles & stone (Use Calcibond series of adhesive.)
- More than 6 mm.
- Over expansion joint or in area with extreme movement.

How to Use



Important tools for application:

- Electric low speed mixing stirrer.
- Walnut notched trowel 3x3 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 base surface such as screed / plaster on which product to be applied are sound, clean and free from all foreign material such as oil, grease, dust etc.
- Ensure that AAC block or brick are clean and free from dust.
- Before applying the adhesive onto block surface, splash the water and let it surface dry to improve the workability of adhesive.
- Follow concrete expansion joint and connection joint as per standard.

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- **Mixing:**

- Mix Walnut Lite Block 40 kg. bag of powder with approx. 10 lt. of clean water. Use electric low speed stirrer to have desired results. Manual mixing can compromise performance of adhesive.
- Adjust the water quantity as per ambient temperature. The final mix must be workable paste.

How to apply:

- Moist the surface of block with water before applying the adhesive. Once surface is moist, spread the adhesive onto the surface of block with help of notched trowel in thickness of 2-3 mm. or as needed.
- Once adhesive is applied, fix the blocks onto adhesive before skin formation and press firmly. In case adhesive dries too fast due to surface absorption of block and windy surround, then apply at a time in small areas of block surface.
- Leave appropriate space between concrete wall and blocks to accommodate surface movement. Fill the joint with correct sealant or flexible material.
- Once adhesive is fully cured, apply the plaster or any other covering.

Product & Working Data

Product appearance	: Grey colour powder
Packing	: 40 Kg. moisture proof bag
Shelf life	: 12 months from the date of manufacturing.
Water ratio	: Approx. 10 Lt. per 40 kg. bag.
Pot life	: > 2 hours
Thickness	: Minimum 2-3 mm.
Open Time	: 20 minutes
Adjustability	: 20 minutes
Initial setting	: 6 to 8 hours.
Final setting	: 24 hours.
Grouting of blocks	: After 24 hours.
Plaster or other covering	: After two weeks.
Full strength of adhesive	: At 21 days.
Coverage	: Approx. 140 sq. ft. / bag of 40 kg using 2 mm. thickness.
Working temperature	: + 5° C. to + 35° C.

(Data @ 27° C. & 50% humidity)

Technical Performances

In compliance with EN norms 12004

Tensile adhesion (porous surface)	: 1.0 N / mm ²	: As per EN 1348
Tensile Adhesion after heat cycle	: 0.55 N / mm ²	: As per EN 1348
Tensile Adhesion after water immersion	: 0.66 N / mm ²	: As per EN 1348
Tensile Adhesion after Freeze- thaw cycle	: 0.52 N / mm ²	: As per EN 1348



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

In compliance with IS 15477-2019: for Type 1 Adhesive

Tensile Adhesion (Dry condition)	: ≥ 1.0 N/mm ²
Shear Adhesion (Dry Condition)	: ≥ 1.2 N/mm ²

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

- Final resistance to temperature after 28 days or full cure: - 30 to + 80° C.
- The final results may vary based on temperature and humidity. Freeze thaw cycles are having different curing cycles.

Important instructions

- Check the soundness of blocks and if they are not stable under movement or high temperature, use Walnut flexible adhesive of Calcibond series.
- Once bags are open, entire material must be consumed within 24 hours. Store the bags in safe environment.
- In case of very weak cement surface, please ensure that proper strength or correction are done before use of adhesive.
- If temperature is more than 35° C., than avoid using the products under direct sun.
- In case temperature are extremely cold 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 are not as per technical data mentioned, please call Walnut technical helpline.

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 and 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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