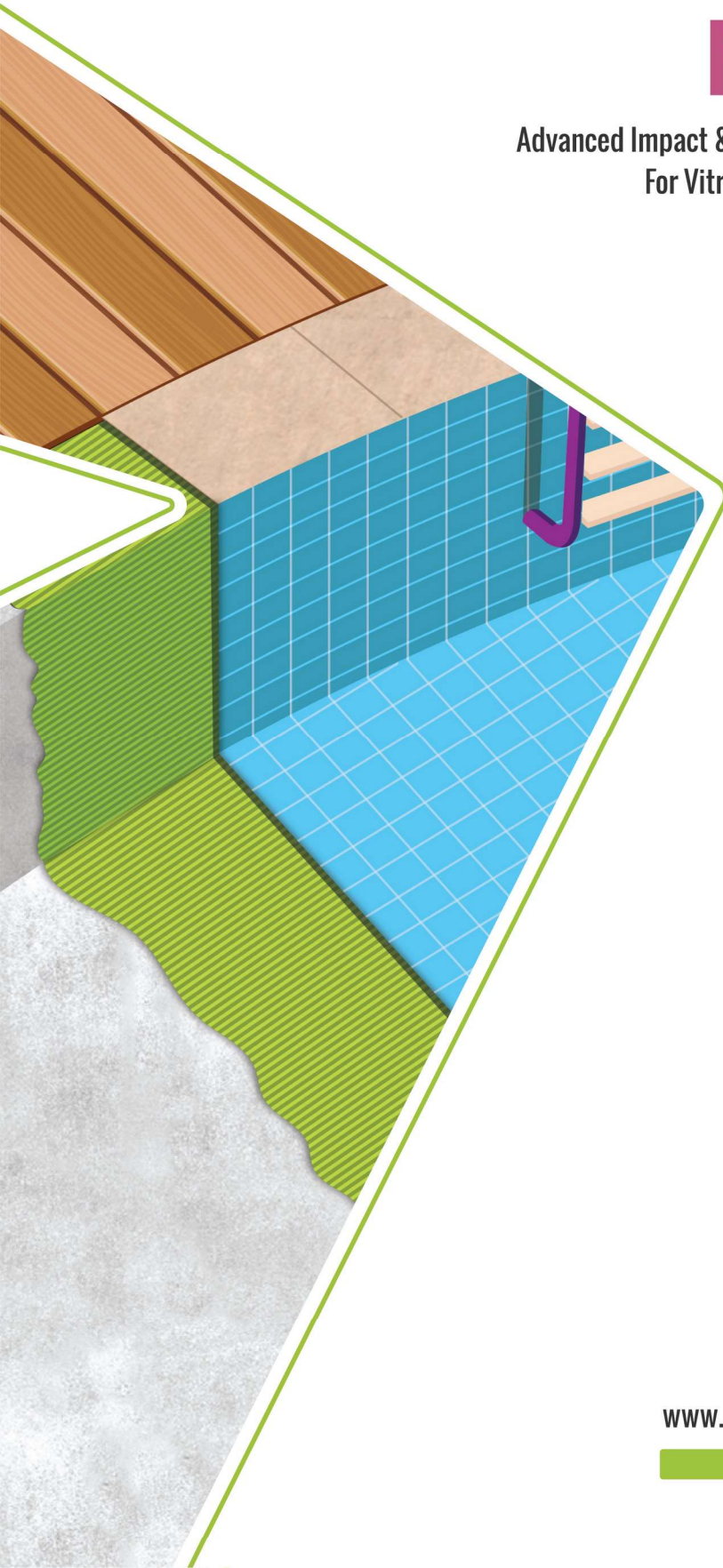


TECHNICAL DATASHEET

FIXOBOND™ PRIME

Advanced Impact & Shock Resistant (Grey / White) Deformable Adhesive
For Vitrified Tiles, Glass Mosaic & Natural Stone installations.



Shrinkage &
Crack Resistant



Shock and
Impact Resistant



Industrial
Grade



www.ascolite.in | info@ascolite.in

VERSION 3 (Apr. 2024)



FOR INQUIRY

PRODUCT DESCRIPTION

FIXOBOND PRIME is a high-strength cement-based polymer-enriched adhesive that has advanced impact and shock resistance characteristics, making it suitable for the installation of tiles and natural stone on interior and exterior walls, as well as floors. It is ideal for fixing vitrified tiles, glass mosaic, marble, and granite of medium to large profile.

INDEX

| | |
|---------------------------------------|----------|
| STANDARD COMPLIANCE | 1 |
| KEY FEATURES | 1 |
| TECHNICAL INFORMATION | 1 |
| APPLICATION COMPATIBILITY | 2 |
| APPLICATION METHOD | 2 |
| NOTCHED TROWEL GUIDELINES | 4 |
| PACKAGING | 6 |
| COVERAGE | 6 |
| SHELF LIFE | 6 |
| HEALTH & SAFETY GUIDELINES | 6 |
| TOOLS & ACCESSORIES | 6 |
| DISCLAIMER | 6 |

STANDARD COMPLIANCE

FIXOBOND PRIME adhesive complies to the Type 3TS1 specifications outlined in "IS 15477: 2019 - Adhesives for ceramic, mosaic, and stone tiles." Additionally, it aligns with class C2TES1, which designates it as a cementitious (C), improved performance (2) slip-resistant (T), deformable (S1) with extended open time (E) tile adhesive in accordance with **EN 12004: 2017**.

KEY FEATURES

- Shock and impact resistant
- Shrinkage & crack resistant
- Superior workability
- Extended open time
- Excellent dual bond strength
- No vertical slip
- Low VOC (Volatile Organic Compound)
- Industrial grade

TECHNICAL INFORMATION

■ APPLICATION PROPERTIES

| PROPERTY: TEST METHOD | TYPICAL VALUES |
|--|---|
| Appearance | Grey / White powder |
| Bulk density | Grey: 1380 to 1480 kg/m ³ White: 1310 to 1410 kg/m ³ |
| Water demand @ 27 ± 2°C Ambient & water temperature | Grey: 24 ± 3% by weight White: 30 ± 3% by weight |
| Mixing ratio @ 27 ± 2°C Ambient & water temperature (Powder : Water) | Grey: approx. 2.5 : 1 by volume White: approx. 2.5 : 1 by volume |
| Pot life @ 23 ± 2°C | 3 hours 30 minutes ± 15 minutes |
| @ 27 ± 2°C | 2 hours 45 minutes ± 15 minutes |
| @ 35 ± 2°C | 1 hour 30 minutes ± 15 minutes |

| | |
|--|-----------------|
| Open time @ 23 ± 2°C | 30 – 35 minutes |
| @ 27 ± 2°C | 25 – 30 minutes |
| @ 35 ± 2°C | 20 – 25 minutes |
| Wall grouting @ 27 ± 2°C | 24 hours |
| @ 35 ± 2°C | 16 hours |
| Floor grouting @ 27 ± 2°C | 24 hours |
| @ 35 ± 2°C | 16 hours |
| Light foot traffic @ 27 ± 2°C | 24 hours |
| @ 35 ± 2°C | 16 hours |
| Ready for use | 14 days |
| VOC content | < 0.5 gm/kg |
| Application temperature (Substrate & laying material) | +5°C to +35°C |
| Service temperature | -5°C to +70°C |
| Final bed thickness | 3 mm – 15 mm |

■ PERFORMANCE PROPERTIES AS PER IS 15477: 2019 (3TS1) @ 27 ± 2°C

| PROPERTY: TEST METHOD | TYPICAL VALUES |
|---|--------------------------|
| Tensile adhesion strength – dry condition @ 28 days | ≥ 1.65 N/mm ² |
| Tensile adhesion strength – wet condition @ 28 days | ≥ 1.20 N/mm ² |
| Shear adhesion strength – dry condition @ 28 days | ≥ 1.75 N/mm ² |
| Shear adhesion strength – wet condition @ 28 days | ≥ 1.20 N/mm ² |
| Shear adhesion strength – heat ageing condition @ 28 days | ≥ 1.20 N/mm ² |
| Open time | 25 – 30 minutes |
| Adjustment time | 20 – 30 minutes |
| Slip resistance (T) | ≤ 0.5 mm |
| Deformability | ≥ 2.5 mm & < 5 mm |

■ PERFORMANCE PROPERTIES AS PER EN 12004: 2017 (C2TES1) @ 23 ± 2°C

| PROPERTY: TEST METHOD | TYPICAL VALUES |
|---|---------------------------------------|
| Tensile adhesion strength – initial condition @ 28 days (dry condition) | ≥ 1.55 N/mm ² |
| Tensile adhesion strength – water immersion condition @ 28 days (wet condition) | ≥ 1.10 N/mm ² |
| Heat ageing condition @ 28 days | ≥ 1.25 N/mm ² |
| Freeze thaw condition @ 28 days | ≥ 1.20 N/mm ² |
| Open time | ≥ 0.70 N/mm ² @ 30 minutes |
| Slip resistance (T) | ≤ 0.5 mm |
| Transverse deformation | ≥ 2.5 mm & < 5 mm |

APPLICATION COMPATIBILITY

■ AREAS OF APPLICATION

Tiling of internal & external floors, walls*, roof, window/door frames, waterbodies, jacuzzi, steam, sauna and spa*.

Subject to cladding method statement by Ascolite, for walls above 20 feet consult with **ASCOLITE'S technical team.*

■ SUITABLE SUBSTRATES

All cementitious substrates, cementitious waterproof coatings, ceramic tiles, vitrified tiles natural stones and **SCORENDER**.

*In case of Cementitious Dry Panels, apply **ASCOPRIME GT** before the installation of **FIXOBOND PRIME**. Consult with **ASCOLITE'S** technical team for details.*

■ SUITABLE LAYING MATERIAL

Ceramic, clay, porcelain, cement mosaic tiles, vitrified tiles (Group B I & B II)**, basalt tiles, natural stone and glass mosaic/tiles. For laying large format tiles & natural stones, mix **FIXOBOND PRIME** with **FIXOBOND AD** during installation. Consult with **ASCOLITE'S** technical team for details.

****IS 15622: 2006** – Pressed ceramic tiles specifications.

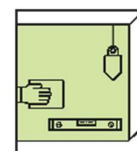
Note:

- In case of using **FIXOBOND AD**: Use 520-600ml of **FIXOBOND AD** with 4.7-5.4 litres of water and 20 kg of **FIXOBOND PRIME** Grey and 560-640 ml of **FIXOBOND AD** with 5- 5.8 litres of water and 20 Kg of **FIXOBOND PRIME** White.

APPLICATION METHOD

SUBSTRATE PREPARATION

- The substrate must be clean, level, fully cured, compact, stiff, undamaged and devoid of debonding agents.
- Any contaminants that impairs bonding must be mechanically removed before the tile is installed including off-cuts, sawdust, nails, screws, loose plaster and wood need to be carefully removed using a steel wire brush, vacuum cleaner, moist sponge or even a grinder if necessary.
- The substrate must be plumb, levelled and true with deviations from the necessary plane not to exceed ¼ inch in 10 feet (6 mm in 3 m). Make sure you use **SCORENDER** (Grey or White) to level any substrate that needs to be plumb. It could be necessary to utilise **FIXOBOND AD** as a bonding agent along with **SCORENDER**. Contact our technical team for a comprehensive process and verification.
- Use water to clean a dry, dusty surface and then sweep away any extra water.

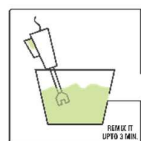
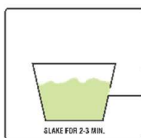
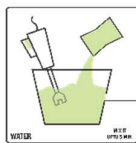


Notes:

- The required tensile strength of the substrate should be > 1N/mm².
- Add 11.7 litres of water and 800ml of **FIXOBOND AD** with 50 kg of **SCORENDER**.

MIXING

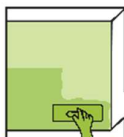
- A 20 kg bag will require roughly $24 \pm 3\%$ (for Grey) and $30 \pm 3\%$ (for White) of clean water by weight to reach a slump-free consistency. If weight mixing isn't an option, volume mixing can be done instantly with **FIXOBOND PRIME** in a clean vessel or container. Mix 4.2 – 5.4 litres (for Grey) and 5.4 – 6.6 litres (for White) of clean water with 20 kg powder to reach a slump-free consistency. Further the water demand may vary as per the site condition, ambient temperature & humidity.



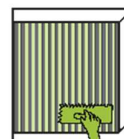

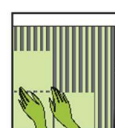


- Use a slow-speed mechanical mixer and mix the powder into the water for approximately 5 minutes. The mixture should have thixotropic characteristics and a smooth paste consistency.
- After letting the mixture slake for 2 - 3 minutes and remixing it for another 2 - 3 minutes, the adhesive is ready to be applied.
- The adhesive should have the right consistency so that it can be applied with a notched trowel of the right size without sagging.

APPLICATION

- The installation of tiles must strictly correspond to **EN 12004: 2017** and **IS 15477: 2019** specifications.
- It is imperative to clean the back of the tile and ensure that it is clear of any dust, filth, debris and/or releasing agent before beginning the tile installation procedure. If normal dusting and water cleaning are ineffective, **ASCOCLEAN BTC** can be used to clean the back side of the tile.
- To ensure full bedding of the tile, the right notch trowel size needs to be



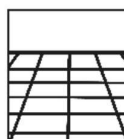
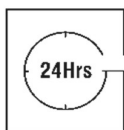
chosen according to the size and kind of tiles being used.

- Use the plain side of the proper notch trowel to apply the adhesive to the prepared SSD substrate before it surpasses its permitted pot life span. The adhesive must be distributed uniformly, making sure there are no voids or thick spots. 
- Whether using a notched trowel horizontally or vertically, pay attention to the direction in which the adhesive is combed using the notched side of the trowel, keeping in mind the direction in which air can be released easily while breaking the notches during tile laying. While applying, refrain from whirling the product.
- It is strongly advised to butter the adhesive onto the back side of the tile before laying for optimum bonding. 
- Verify that the applied adhesive remains within the permissible open time and proceed with the tile installation, positioning the tiles in a manner that facilitates the escape of air from beneath the tiles. This can be done by leaving small gaps between the tiles or by using spacers. 
- The open time will vary depending on the type of adhesive, substrate and the environmental conditions. 
- Ensure a secure bond between the tile and the adhesive by applying pressure to achieve complete contact and the desired level of the tile. Utilize a rubber mallet, along with a spirit level or plumb bob, to attain linear alignment and even surfaces. Any voids or honeycomb formations must be avoided. To confirm that the adhesive is fully in contact with the tile, occasionally slightly twist and lift to inspect the tile just after application. If the desired contact area is not achieved, adjust the size of the notched trowel according to the recommendations stated in the notching recommendation chart. 

- The finished bed thickness should match the requirements mentioned in the technical specifications table.

POST-APPLICATION PROCEDURES

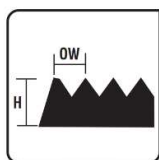
- While the adhesive is still wet, use a damp sponge or cloth to remove any excess adhesive from the tile joints and the tile face.
- After use, immediately wash and clean all tools with warm soapy water.
- Give the installation at least 24 hours to dry completely before starting the grouting process or using the tiled areas.



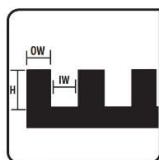
NOTCHED TROWEL GUIDELINES

- The table offers a general guideline on selecting a notched trowel.

| Laying material | Tile size in mm | Trowel size in mm (H x OW x IW)* | |
|---------------------------------|-----------------|----------------------------------|--------------------------|
| | | As per IS 15477 standard | As per EN 12004 standard |
| Ceramic tile/ Vitrified tile | 300 x 300 | 6 x 6 x 6 | 6 x 6 x 12 |
| | 600 x 600 | 6 x 6 x 6 | 6 x 6 x 12 |
| | 600 x 1200 | 8 x 8 x 6 | 8 x 8 x 12 |
| | 1200 x 1200 | 10 x 10 x 6 | 10 x 10 x 12 |
| Glass mosaic tile | 25 x 25 x 3 | 3 x 3 | 3 x 3 |
| | 50 x 50 x 6 | 6 x 6 | 6 x 6 |



V-Notched Trowel



Square-Notched Trowel

Note: These guidelines assume ideal conditions and practical situations may require adjusting the trowel size.

- Notched trowel selection for tile adhesive application considers several factors to achieve optimal adhesive coverage with minimum wastage. Tile size and type play a key role, with larger tiles requiring deeper notches for proper support and smaller tiles benefiting from shallower notches to prevent squeezing excess adhesive through grout lines. Substrate condition is also crucial, as rough or uneven surfaces may necessitate larger notches to account for variations and ensure sufficient coverage. Conducting test applications on a sample area allows you to determine the most suitable trowel notch size for your specific project, considering additional factors like ambient temperature, humidity, and drying time of the adhesive.

SPACING

- Ensure that there is a minimum grout joint spacing of 1.5 – 3 mm between tiles. Larger joints could be needed for tiles made of stone or quarry. For precise guidelines on the required spacing between tiles, it is crucial to consult the tile manufacturer's specifications.

MOVING JOINTS

- When doing large span tiling work, leave movement joints spaced three meters apart and fill them with a flexible sealant in accordance with BS 5385.

RECOMMENDED PRACTICES

- Use the appropriate tile adhesive for your project, based on the type of tile and substrate to be bonded. ASCOLITE offers a range of adhesives tailored for various applications.

- It is imperative to clean the back of the tile and ensure that it is clear of any dust, filth, debris and/or releasing agent before beginning the tile installation procedure. If normal dusting and water cleaning are ineffective, **ASCOCLEAN BTC** can be used to clean the back side of the tile.
- Use **ASCORENDER** and **FIXOBOND AD** to level substrates with high undulation.
- Continuously monitor the level and alignment of each tile as it is laid, making necessary adjustments to maintain linear alignment and even surfaces.
- For medium to large tile sizes, back-butter the tiles by applying adhesive to the back of each tile before setting it in place. This will ensure a strong bond between the tiles and the substrate.
- For large to extra large tiles or slabs, a double notching method is strongly recommended. This method involves applying adhesive to both the substrate and the back of the tile or slab. Additionally, it's crucial to ensure that the notching on both the substrate and the tile or slab are in the same direction. This alignment promotes proper air release and creates a stronger bond between the tile or slab and the substrate. The finished bed thickness should match the requirements mentioned in the technical specifications table.
- Use a slow speed mechanical mixer when mixing the adhesive.
- Ensure that all wall substrates are rigid, as excessive movement can cause the tile and grout to crack or loosen.
- To accommodate any floor slope, begin laying the tiles from the top and modify the size of the bottom layer as necessary.
- Make sure the colour, pattern, and shade of the tiles are as desired, spread them throughout the area before the installation.
- When applying in extreme conditions, please follow the technical guidelines or contact our technical team.
- When installing natural stone on an external wall facade, it is best to apply **FIXOPRIME BT** to the stone's edges and back side before installation for optimal results.

- After installation, shield the tiled surface from direct sunlight and rainfall for at least 24 hours.
- Regularly check for lippage, a condition where the edges of adjacent tiles are misaligned. Promptly correct any lippage to maintain a level surface.
- For the consistent and successful installation of large and extra-large format tiles, it is highly recommended to employ the double notching technique in conjunction with appropriate suction cups and tile vibrators.
- Employ tile vibrators to gently settle the tiles into the adhesive, ensuring even distribution and eliminating air pockets.

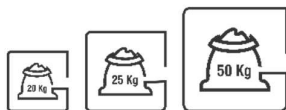
PRACTICES AVOID

- Do not accept any unsuitable adhesive or material on site without proper inspection.
- Do not apply tiles over weak, unstable or flexible surfaces, as this can lead to tile and adhesive failure.
- Do not use with PVC heating mats or coils, polyethylene membranes, or other such membranes.
- Do not use over anti-fracture and waterproofing APP/Bituminous membranes, sheets, ply, or mats.
- Do not apply directly on AAC blocks.
- Do not further add water to the adhesive after the initial mixing process.
- Do not add any extra sand, cement or contaminated water to the adhesive mix.
- Do not use a metal hammer to tap or fix the tiles, as this can lead to tile cracking.
- Avoid using tiles with broken edges.
- Avoid leaving too much grout on the tile's surface. Make use of a damp sponge to remove any extra grout.
- After installation, prevent placing any heavy object or equipment on the tiled surface till the adhesive is completely set.

- Always mix adhesive according to the manufacturer's instructions. An incorrect ratio of water can have an impact on the adhesive's performance.
- Never use adhesive on a surface that is too wet.

PACKAGING

- 20, 25 & 50 kg



COVERAGE

- 1.3 - 1.5 kg/m²/mm (by weight)*
- 7 – 8 ft²/kg/mm (by application area)*

*Subject to tile & substrate evenness.

SHELF LIFE

- **FIXOBOND ADHESIVE RANGE**, when unopened, can be stored above floor level in a cool dry place for a duration of up to 12 months.



HEALTH & SAFETY GUIDELINES

- Take preventive measures to keep children away from this product.
- Wear appropriate safety gear, such as gloves and face or eye protection during the installation.
- If the adhesive comes in contact with your eyes or skin, immediately rinse them well with lots of clean water and seek medical advice.
- Only qualified professional applicators or contractors may use this product.



TOOLS & ACCESSORIES

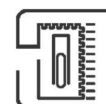
TILLING TOOLS



ROLLER



BUCKET



NOTCHED TROWEL



HAMMER & CHISEL



BRUSH



WIRE BRUSH



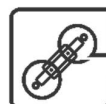
MIXER



RUBBER Mallet



TILE VIBRATOR



SUCTION CUP



SPIRIT LEVEL



PLUMB BOB

TILLING ACCESSORIES



TILE SPACER



TILE WEDGE WITH CLIP

GROUTING TOOLS



GROUT SPREADER



SPONGE



PUTTY KNIFE

DISCLAIMER:

This technical data sheet supersedes all previous versions from the immediate effect. The company guarantees its products against any manufacturing defects. The user should determine the product's usability for its intended use. Since the company has no control over site conditions and the installation procedures, the company would not be responsible under any circumstances for any loss, damage or liability from incorrect usage. For the products on which the company is offering a warranty, please refer to the warranty document to know the entire terms and conditions. The same can be availed on request or from the company website. All orders are accepted subject to our prevailing terms of sales and delivery. While the technical details & recommendations contained in this document and the related details given by the representatives of the company correspond to the best of our knowledge & experience, all the above information must in any case be considered as merely indicative and subject to confirmation. Our company maintains an active research and development policy, allowing us to continuously enhance our products. As a result, we reserve the right to revise this information at any time without prior notice. For optimal results, we recommend this product be installed by a qualified professional. By using this product, users acknowledge and agree to the terms and conditions outlined in this disclaimer.