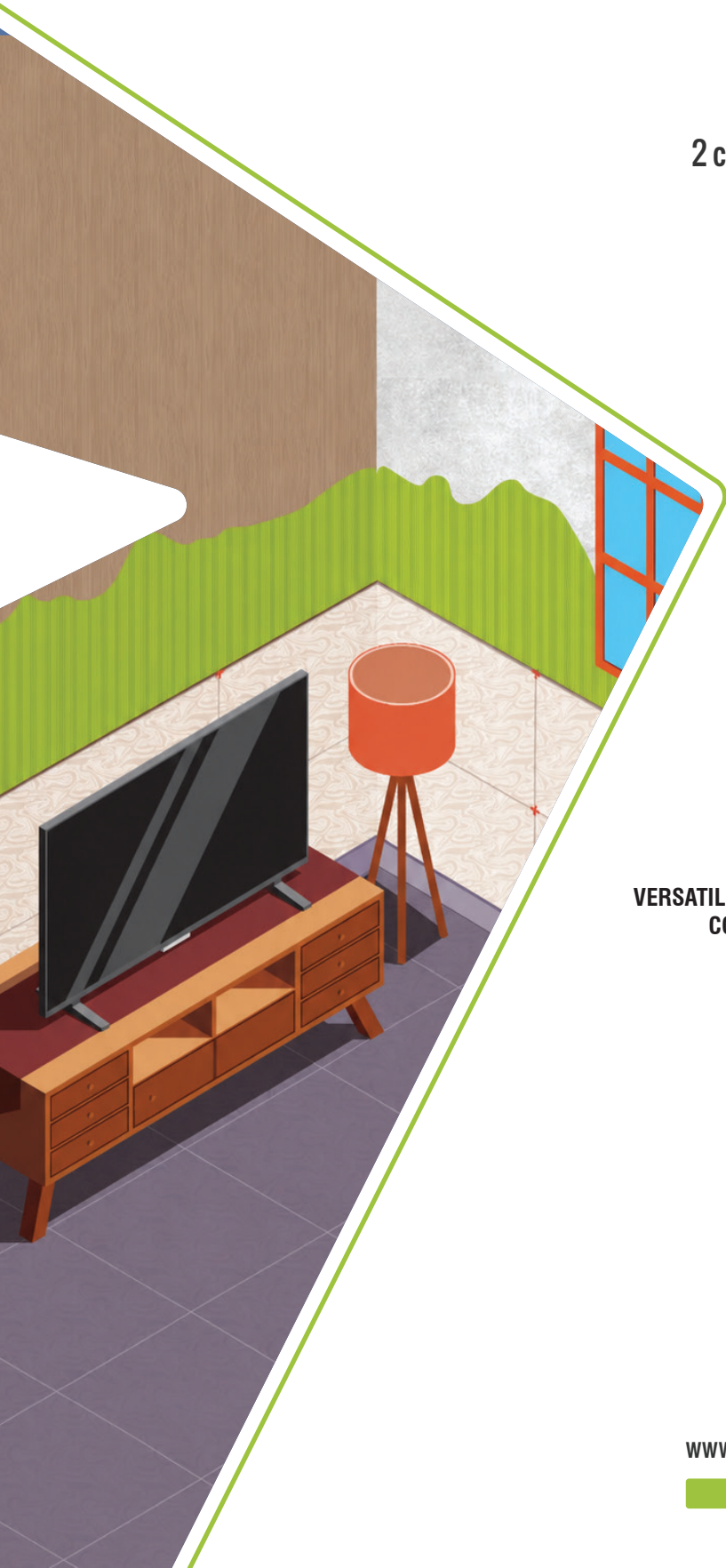


## TECHNICAL DATASHEET

# FIXOBOND® DW

2 component, modified polyurethane based multipurpose adhesive designed for drywall substrates



VERSATILE SUBSTRATE  
COMPATIBILITY



THIXOTROPIC



HIGHLY  
DURABLE



## PRODUCT DESCRIPTION

**FIXOBOND® DW** is a versatile polyurethane adhesive formulated for application over drywall. It bonds strongly to dry gypsum board, plywood, cement board and provides superior bond strength for glass mosaic, natural stones including large and heavy tiles. With its highly thixotropic nature and smooth workability, **FIXOBOND® DW** simplifies vertical tile fixing, eliminates the need for screws or nails in drywall tile installations.

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## STANDARD COMPLIANCE

FIXOBOND® DW adhesive complies with the RT2 S2 specifications outlined in "EN 12004: 2017"

## KEY FEATURES

- Thixotropic
- Cost Effective
- Easy to use
- Versatile Substrate Compatibility
- Highly Durable
- Ideal for Critical Applications
- Suitable for Humid Surface
- Industrial Grade
- Ultimate Adhesion
- No Vertical Slip
- Shock Resistant
- Appropriate for Exposed Surfaces

## TECHNICAL INFORMATION

### ■ APPLICATION PROPERTIES

PROPERTY: TEST METHOD	TYPICAL VALUES
Appearance	Part A – Off White Smooth Paste Part B – Yellow Paste
Mixed density	1500 to 1600 kg/m <sup>3</sup>
Mixing ratio @ 27 ± 2°C Ambient temperature	3 (Part A) : 1 (Part B) - by weight
Pot life @ 23 ± 2°C	1 hour 20 minutes ± 15 minutes
@ 27 ± 2°C	1 hour 10 minutes ± 15 minutes
@ 35 ± 2°C	1 hour ± 15 minutes
Open time @ 23 ± 2°C	35 - 40 minutes
@ 27 ± 2°C	30 - 35 minutes

@ 35 ± 2°C	25 - 30 minutes
Adjustment 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
Floor grouting @ 27 ± 2°C	24 hours
Light foot traffic @ 27 ± 2°C	24 hours
Ready for use	24 hours
VOC content	< 0.5 gm/kg
Application temperature (Substrate & laying material)	+5°C to +40°C
Service temperature	-10°C to +70 °C
Final bed thickness	2 mm – 10 mm

### ■ PERFORMANCE PROPERTIES AS PER EN 12004: 2017 (RT2 S2) @ 23 ± 2°C

PROPERTY: TEST METHOD	TYPICAL VALUES
Tensile adhesion strength (Dry condition)	> 2.20 N/mm <sup>2</sup>
Tensile adhesion strength (Wet condition)	> 2.00 N/mm <sup>2</sup>
Tensile adhesion strength (Heat Ageing condition)	> 2.00 N/mm <sup>2</sup>
Shear adhesion strength (Dry Condition)	> 1.80 N/mm <sup>2</sup>
Shear adhesion strength (Heat Ageing condition)	> 1.80 N/mm <sup>2</sup>
Extended Open time	≥ 1.60 N/mm <sup>2</sup> @ 20 minutes
Slip Resistance (T)	≤ 0.5 mm
Transverse deformation	≥ 5 mm

## APPLICATION COMPATIBILITY

### ■ AREAS OF APPLICATION

- Floor & Walls, Internal & External Area, Residential, Domestic, Industrial & Commercial Application.

- Wet areas like bathroom, waterbodies, spa, jacuzzi, balcony, terraces, etc.

### SUITABLE SUBSTRATES

- Drywall surfaces like AAC block walls, Gypsum Plaster, Gypsum board, cementitious backer sheets, plywood, timber, calcium silicate board, glass, etc.
- Cementitious surfaces like cement renders, cement screeds, Precast concrete, concrete, plastered walls, aluminium shuttered concrete, trimix concrete, etc.
- Waterproofing surfaces like cementitious waterproofing coatings, PU waterproofing coatings, epoxy coatings & acrylic waterproofing coatings.
- Marble, Natural stone & Artificial/Engineered stones
- All types of tiles, including Vitrified tiles, ceramic tiles, etc.

### SUITABLE LAYING MATERIAL

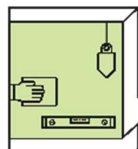
Glass mosaics, Art glass, Accent tiles, Wooden flooring, insulating panels, Soundproofing panels, Marble, natural stones & artificial/engineered stone, and All types of tiles, including Vitrified tiles, ceramic tiles, etc.

*\*IS 15622: 2006 – Pressed Ceramic Tiles Specifications.*

## 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 by using a steel wire brush, vacuum cleaner, moist sponge or even a grinder if necessary.
- The substrate must be plumb, level, 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 **ASCORENDER** (Grey or White) to level any substrate that needs to be plumbed. It could be necessary to utilise **FIXOBOND AD** as a bonding agent along with **ASCORENDER**. Contact our technical team for a comprehensive process and verification.

- Use water to clean dry, dusty surfaces and then sweep away any extra water.

### Notes:

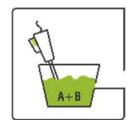
- The required tensile strength of the substrate should be  $> 1 \text{ N/mm}^2$ .
- Add 11.7 litres of water and 800ml of **FIXOBOND AD** with 50 kg of **ASCORENDER**.

### MIXING

- Pour Part B of **Fixobond® DW** in to the container or vessel containing Part A of **Fixobond® DW**, with the preset ratio of 3:1 (Part A : Part B) of the packs.



- Using a mechanical mixer set to medium to high speed, thoroughly mix both components until a smooth paste consistency is achieved having thixotropic properties.



- Allow the mixture to slake for 2 – 3 minutes, and then re-mix before application.
- The adhesive should have a proper consistency, allowing it to be easily applied with the appropriate size notched trowel without sagging.

### APPLICATION

- The installation of tiles must strictly correspond to **EN 12004: 2017** 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.

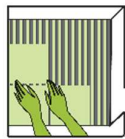
- Use the plain side of the appropriate notched trowel to apply the adhesive to the prepared SSD substrate before it surpasses its permitted pot life span. The adhesive must be distributed uniformly, making sure there are no voids or thick spots.



- 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.



- 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

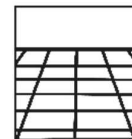
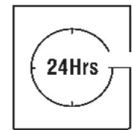


contact area is not achieved, adjust the size of the notched trowel.

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

## POST-APPLICATION PROCEDURES

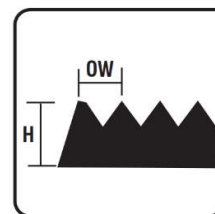
- While the adhesive is still wet, use a damp sponge or cloth to remove any excess adhesive from the tile joints and the tile face.
- After use, immediately wash and clean all tools with warm soapy water.
- Give the installation at least 24 hours to dry completely before starting the grouting process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



## NOTCHED TROWEL GUIDELINES

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

Trowel Size in mm (H X OW)	Final bed thickness
3 x 3	1.5 - 2 mm
6 x 6	3 - 3.5 mm



### V-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.

## MOVEMENT 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.
- 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.
- In order 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.
- Use the necessary clamps in conjunction with adhesive when installing tiles or stones above a height of 3 metres.
- 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. Regularly check for lippage, a condition where the edges of adjacent tiles are misaligned. Promptly correct any lippage to maintain a level surface.
- 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 vibrator
- Employ tile vibrators to gently settle the tiles into the adhesive, ensuring even distribution and eliminating air pockets.

### PRACTICES TO 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 mix with water or any other foreign component.
- 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.
- Never use adhesive on a surface that is too wet.

### PACKAGING

- 4 kg & 20 kg

### COVERAGE

- 1.1 - 1.2 kg/m<sup>2</sup>/mm (by weight)\*
- 9 – 10 ft<sup>2</sup>/kg/mm (by application area)\*

\*Subject to tile & substrate evenness.

### SHELF LIFE

- **FIXOBOND® DW**, 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

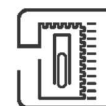
#### TILLING TOOLS



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.*