

TECHNICAL DATASHEET

FIXOBOND PU

2-Part, High performance & Multipurpose PU
Based Thin Adhesive



PRODUCT INTRODUCTION

FIXOBOND PU is a highly modified, two-component polyurethane based high impact thin adhesive with high elasticity and no vertical slip. **FIXOBOND PU** is an excellent multi-purpose adhesive providing exceptional bond strength to a wide variety of substrates; concrete, glass, plastic, wood, metal, etc. This highly flexible adhesive also provides excellent peel strength. **FIXOBOND PU conforms to IS 15477:2019 (Type 5) EN 12004 R2,T,E.**

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KEY FEATURES

1. High strength and ultimate adhesion , flexible
2. Suitable for external and internal applications
3. Economical application , just mix and use
4. Excellent shrinkage and crack resistance
5. Excellent bonding with variety of substrates
6. Thixotropic, completely non-slump rheology
7. Suitable for exposed surfaces
8. Water, freezing, thermal shock resistant
9. Chemical and heat resistant
10. Extended open time (E)
11. Excellent Slip resistance on vertical application (T)

RECOMMENDED APPLICATIONS

1. Flooring and walls for all types of indoor/outdoor use
2. Ceramic tile, vitrified tile, natural stones, glass mosaic tiles, artificial stone, wood/metal tiles and over concrete and on a variety of substrates including metal substrates.
3. Concrete , Tremix , Mivan, Metallic floor
4. Cement Terrazzo , Epoxy or PU resin based surface
5. All types of wood , plywood , rubber, PVC & linoleum

Adhesive grade recommended for different tile/stone sizes are subject to thickness and weight of tiles, groove between tile/stone, application area, environmental conditions and application height etc. Refer TDS/technical team for details)

TECHNICAL PROPERTIES (Complies IS 15477(2019) , R2 EN 12004, EN12003 ,EN 1348 & EN 1308,ISO 13007 CR2T)

Appearance/Color	Part 1 – Smooth White Paste Part 2 – Viscous Off White Paste
Mixing Ratio	4 (R) : 1 (H) by weight
Density (Kg/l)	1.75±0.03(Resin),1.13± 0.03(Hardener),1.65±0.05(Mixed)
Pot Life	50 ± 10 minutes
Open Time	45 ± 10 minutes
Adjustability	45 ± 10 minutes
Vertical Slip	Less than 0.5 mm
Grouting	10-12 hours (wall) ; 22-24 hours (floors)
Time to Traffic	24 Hours
Tensile Adhesion	≥ 2 N/mm ² @ 7 Days (Dry)
Shear Adhesion Strength	> 6.0 N/mm ² @ 7 Days (Dry) > 3.5 N/mm ² @ 7 Days (Heat) > 3.5 N/mm ² @ 7 Days (Water)
Deformability	≥ 5 mm
Setting Time	3 - 4 Hours

The values obtained are from laboratory testing conditions and at 27 ± 2°C . On site tests may show slight variation due to site conditions and / or methods of testing. Follow company TDS to obtain best results.

APPLICATION METHODS:

1. Surface Preparation

The substrate must be clean, dry, sound and free of all contamination such as dirt, oil, grease, & coatings etc. which hinder an adhesion.

Weak concrete must be removed and surface defects such as blowholes and voids must be fully exposed. All dust, loose and friable material must be completely removed from all surfaces before application of the product, preferably by brush and/or vacuum.

2. Coverage

2.5 - 3.0 ft² / kg at 3 mm thickness
(Use 6mm x 6mm to 12mm x 12mm notches depending up on substrates and weight of tiles/ stone)

3. Mixing

FIXOBOND PU consists of two parts and the proportions for the mix are ready to use. Pour the small container of part B in the large pail of part A and stir thoroughly with a variable speed mixer until a homogeneous and smooth consistency is obtained. The complete contents of both parts of the adhesive must be used at once. Improper mixing may result in a poor bond. Using a variable speed mixer should not take longer than 2 minutes to mix the two parts to a creamy texture. Over mixing will cause the catalyst to set up too fast, thus reducing pot life and entrapping air which may reduce bond performance. The adhesive has to be applied immediately after mixing, otherwise it will thicken and be much harder to trowel. The flooring must be installed while the adhesive is wet. The mix must be used within 45 minutes.

4. Application

Use the recommended notched trowel with sufficient depth to ensure that at least 80-90% of the adhesive transfers to the material backing. Do not spread more adhesive than can be covered with material within 30 minutes. (Note: floor and room temperatures directly affects setting time: The warmer it gets, the faster it sets). Install the flooring material onto the fresh adhesive. Push out air using the rubber hammer and press down the tiles. Adhesive setting time will depend mainly on the temperature of the substrate, the floor covering and jobsite conditions. Do not lay on substrates subject to moisture rising or which are not perfectly dry. Cleaning or removal of adhesive must be done with solvent/thinner while the adhesive is still wet.

5. Substrates

It is compatible with most solid substrates such as concrete, masonry, plaster board, fibrous cement sheets, renders & screeds, metal, glass. All substrates should be pre-tested to ensure bonding.

5. Packaging

FIXOBOND PU is available in packages of 5 kg (4 Kg Resin & 1 Kg Hardener) plastic bucket. The container of component 2 is built in the container of component 1.

6. Shelf Life

12 months from the date of production if stored in original, unopened packaging and in places protected from moisture, sun exposure and frost.

7. Health and Safety Guidelines

- i. Use protective PPE items while using **FIXOBOND PU**
- ii. Use of gloves is recommended to protect skin and mouth while in use.

(Material Safety Data Sheets are available through company representative or ASCOLITE's website)

NB: Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

Follow ANSI Specification AN-3.8 "Requirements for Expansion Joints" or TCA Detail EJ171-91 "Expansion Joints". Do not cover expansion joints with mortar.

DISCLAIMER:

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. Users are recommended to conduct a product suitability test before it is used at full scale. In any case, the consumer alone is entirely liable for any consequences resulting from using the product. For the most up-to-date TDS, please visit our website at www.ascolite.in. Our company policy is one of ongoing R&D; therefore, we reserve the right to update this information without prior notice at any time. As the correct identification of the problems, the quality of other materials used, on-site environmental conditions and the workmanship on-site are factors beyond our control, there is no express or implied guarantee/warranty as to the results achieved. The company assumes no liability or consequential damage arising from the use of our products for unsatisfactory results. Site visits are not a supervisory responsibility wherever provided. Suggestions made either verbally or in writing by the company may be followed, modified or rejected by the owner, engineer or contractor, since they are solely responsible for carrying out procedures appropriate to a specific application.