



## **ADHFLEX PU 5 PLUS**

### **DESCRIPTION**

ADHFLEX PU 5 is a two-part polyurethane multipurpose adhesive for fixing all types of tiles and stones on a variety of substrates in interior and exterior areas on either walls or floor. It is suitable for fixing tiles/ stones over diverse surfaces like cement-based substrate, metal substrates, epoxy/ PU based substrate, drywall boards, Rubber, PVC, plywood, wood derivative and highly deformable & expandable, absorbent & non-absorbent substrates.

### **USES**

- Epoxy or PU resin based substrates
- Wooden/plywood table tops to achieve waterproof substrate.

- Plywood, Plasterboards, Gypsum and Fibre cement boards PVC, Rubber and linoleum
- Epoxy or Polyurethane based substrates
- Metal & wood floor and walls

## **FEATURES AND ADVANTAGES**

- Two components; just mix and use.
- Long open time - suitable for large format & external condition too.
- Bonds to various substrates including metals
- Sustains heat ageing - Idea for external & high temperature applications.
- Highly flexible adhesive - sustains heavy vibrations.
- Chemical resistant & resistance to solvents, alkalis & oils.
- Suitable for multiple substrates including glass, metals, drywalls & plywood.
- Suitable for fixing all tiles/ stones including composites, artificial stones, metal & glass tiles.

## **Substrate Preparation:**

Substrates must be compact and consistent, free from any rising dampness, with no loose, flaky, or imperfectly anchored parts. The substrate must be stable, without cracks and have already completed the curing period of hygrometric shrinkage. Uneven areas must be corrected with suitable smoothing and finishing products. Installation shall be made on a dry surface. New concrete slabs must be damp cured and at least 28 days old prior to application. All surfaces must be plumb and true to within 6 mm in 10 ft (3m). Do not apply to substrates that have a 0 0 temperature of less than 12 C or greater than 40 C.

## **Mixing:**

Add Part B to Part A and mix with a drill and paddle on a slow speed until a homogenous and uniform coloured paste is achieved.

## **Application**

Spread the mixed adhesive using a suitable notched trowel of the type and dimensions most appropriate for the format and type of tiles used. Apply the mix evenly as much material that can be tiled within the product's working time. Place the tiles and adjust to the correct position. Do not apply to substrates that have a 0 0 temperature of less than 12 C or greater than 40 C. ARDIFLEX PU 5 PLUS should not be used on the substrate having rising moisture problem or moisture content of more than 4%. Back butter large format tiles to provide full bedding and firm support. Place tiles into wet, sticky adhesive and tamp using a beating block or rubber mallet to fix tile and adjust level.

## Cleaning

Residues of ADHFLEX PU 5 PLUS can be cleaned from tools and covered surfaces with water and alcohol while the adhesive is still fresh. Once cured, the adhesive can only be removed by mechanical means

**GROUTING:** Grouting should be carried out after 24 hours of tiling. Use the appropriate grouting material from ADHCRETE range of cementitious and epoxy grouts.

## Technical information

### Product Appearance

Mixed Material Appearance	: Off White Paste
Mixed Density	: 1.65 ± 0.1 kg/ liter
Open Time Min	: 60 minutes
Adjustability Min	: 60 minutes
Pot Life Min	: 60 minutes
Sag/ Slip	: ≤ 0.3 mm
Application Temperature	: 10° C to 40° C
Resistance to temperature	: -40° C to +100° C
Trafficable/ Grouting Time	: 24 hours Interval before normal use

## PERFORMANCE PROPERTIES AS PER IS 15477 : 2019 (TYPE 5 'T S2')

Testing Properties	Requirements	Test Results
Tensile Adhesion at Dry Condition, after 28 days	≥ 2.0 N/mm <sup>2</sup>	≥ 2.5 N/mm <sup>2</sup>
Tensile Adhesion at Wet condition		≥ 1.5 N/mm <sup>2</sup>
Shear Adhesion at Dry Condition	≥ 6.0 N/mm <sup>2</sup>	≥ 6.25 N/mm <sup>2</sup>
Shear Adhesion at Wet Condition		≥ 6.0 N/mm <sup>2</sup>
Shear Adhesion at Heat Ageing	≥ 3 N/mm <sup>2</sup>	≥ 5.75 N/mm <sup>2</sup>

Deformability (S2)	≥ 0.50 mm	≥ 0.30 mm
Coverage per mm of thickness		1.5 kg/m <sup>2</sup>

### PERFORMANCE PROPERTIES AS PER ISO 13007 AND EN 12004 (R2T)

Testing Properties	Requirements	Test Results
Initial shear adhesion strength	≥ 2.0 N/mm <sup>2</sup>	≥ 5.0 N/mm <sup>2</sup>
Shear adhesion strength after water immersion	≥ 2.0 N/mm <sup>2</sup>	≥ 5.0 N/mm <sup>2</sup>
Shear adhesion strength after thermal shock	≥ 2.0 N/mm <sup>2</sup>	≥ 5.0 N/mm <sup>2</sup>
Tensile adhesion - Open time (at 60 minutes	≥ 1.0 N/mm <sup>2</sup>	≥ 1.5 N/mm <sup>2</sup>
Slip resistance (T)	≤ 0.50 mm	≤ 0.20 mm

**STORAGE AND SHELF LIFE** : ADHFLEX PU 5 PLUS has a shelf life of 12 months when stored in normal dry conditions

#### PRECAUTIONS:

Keep out of reach of children. Wear suitable protective clothing, gloves and eyes/face protection. After contact with skin, wash immediately with plenty of clean water. In case of contact with eyes rinse immediately with plenty of clean water and seek medical advice.