

# Technical Data Sheet





**PALACE EASI–FLEX** is standard setting polymer reinforced adhesive for fixing porcelain, vitrified & ceramic tile and stone to solid surfaces, heated sub-floors and Tile Backer boards. It offers the fixer a 4-hour working pot-life and allows grouting to proceed after 24 hours when it sets to a water-resistant bond suitable for interior / exterior use and in locations which are frequently wet or fully immersed.

- Standard setting adhesive with 4-hour working pot-life
- Fixes vitrified, porcelain & natural stone tiles in wall & floor locations
- For fixing tiles over all types of heated sub-floor
- For Interior & Exterior & fully immersed locations
- Fixes to well braced Backer Boards & tolerates slight movement stress

#### **Description:**

PALACE EASI–FLEX is a cement-based, standard setting polymer modified, thin-bed wall & floor tile adhesive, which conforms to BS EN 12004 Type C, Class 2TE-S1). Available in GREY & WHITE for fixing all types of ceramic and porcelain FLOOR and WALL tiles, including natural stone, mosaics, porcelain and vitrified tiles in interior & exterior locations. PALACE EASI–FLEX has a long working pot-life and extended open time both of which assist the fixer where extensive cutting is required during application. PALACE EASI–FLEX cures to a high bond strength, with excellent water-resistance and is also recommended for applications over sub-floor heating. PALACE EASI–FLEX WHITE is particularly recommended when fixing light coloured natural stone such as Marble and Travertine.

## **Surface Preparation:**

The substrate must be clean, firm and free of dust, dirt, oil, grease and loose flaking coatings. It must also be structurally sound and strong enough to support the expected traffic loading. PALACE EASI-FLEX can be applied to dry or damp surfaces however moisture sensitive materials must be dry and remain dry after fixing. Worn or porous surfaces should be sealed with PALACE TILERS PRIMER] diluted as 1 to 3 with water. PALACE EASI-FLEX can be applied to Tile Backer boards over-laid onto a suitably rigid structure, such as well-braced 15mm waterproof plyboard screw fixed at 300mm centres to supporting battens. Applications over sub-floor heating should allow 28 days before switching the heat on. PALACE EASI-FLEX is not recommended for application directly onto tongue and groove timer floorboards or floating plywood floors. Do not apply onto bare, un-sealed gypsum plaster or anhydrite floor screed before first priming this type surface with two coats of neat PALACE TILERS PRIMER the first diluted 1 to 1 and the second neat.

### **Mix Preparation:**

PALACE EASI-FLEX should be added to water in a clean container whilst mechanically stirring and mixed thoroughly to give a soft, slump-free, easily worked mortar.

The recommended mixing proportions by volume are 1-part water to 3 parts powder (Approximately 5 litres per 20kg sack). The consistency of the paste can be adjusted with slight additions of water or powder at the initial mixing stage, however part-used adhesive should never be "freshened up" with later water additions but should always be discarded once it appears to lose its' workability. In ideal conditions (20'C room temperature), **PALACE EASI-FLEX** will remain workable for up to 4 hours at 20'C and then reach final set after 24 hours, after which time it is sufficiently well cured to permit grout application on both walls & floors.

## **Application Method:**

For fixing ceramic tiles or mosaics, use a notched trowel to give a ribbed mortar bed on the substrate, into which the tiles are firmly bedded with a twist and slide action to ensure full contact. Use a 3mm x 3mm notch at 6mm centres for mosaics and thin flat backed wall tiling, a 5mm x 5mm notch at 10mm centres for general wall tiling and 10mm x 10mm notch at 16mm centres for floor tiling. The position of the tiles can be adjusted up to 10 minutes after initial fixing. Open time of the exposed mortar bed is approximately 30 minutes, depending on surface porosity and site temperatures. It is recommended that tiles with raised or studded back profiles, (or in situations where dampness is likely after tiling), should be back-buttered to ensure solid bed fixing. Do not trowel out an area of adhesive greater than can be tiled over within a 30-minute period. Surfaces, such as tamp-rutted concrete and masonry block-work, that are rough or uneven should be prepared with PALACE SELF-LEVEL floor smoothing & levelling compound and when sufficiently firm (24 – 48 hours later), followed by an application of PALACE EASI-FLEX adhesive. Do not apply any cement-based adhesive onto bare, unsealed gypsum plaster or anhydrite screeds and do not allow adhesive residues to set & harden on the tile face. Do not mix or apply this adhesive when air or ground temperatures are forecast to be below 5'C or greater than 35'C at any time during the first 24 hours after application.



















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#### **Coverage:**

When fixing on a level, even surface using a 10mm notched trowel, PALACE EASI-FLEX will cover at a rate of about 4kg per sq. mtr for heavy-duty, studded tiles. When applying wall tiles, the product will cover at about 2.5 kg per sq. mtr.

#### **Grouting:**

Grouting may proceed as soon as the tile bed is sufficiently firm, which for PALACE EASI-FLEX will be after 24 hours at room temperature. This period however will be extended in cold conditions. When the adhesive is fully set, wall & floor joints can be grouted using PALACE COLOUR-LOCK GROUT or PALACE ANTI-MOULD GROUT, however on wider flooring applications, joints of up to 20mm wide can be grouted using PALACE WIDE JOINT FLEXI FLOOR TILE GROUT.

## **Storage & Packaging:**

PALACE EASI-FLEX is supplied in 20kg multi-ply, moisture resistant paper sacks and has a storage life of not less than 12 months if stored in dry, un-opened conditions. Should further technical information be required, contact the Palace Technical helpline on 0151 486 6101.

#### **Health & Safety:**

Always ensure that appropriate PPE is worn when mixing & applying this product to ensure protection from airborne dust and skin contact with the mixed liquid product. Wash hands after use and launder stained clothing. Do not consume food when working with this material and keep children & animals away from any possible risk of contact. A complete PALACE material safety data sheet is available on request or online at www.palacechemicals.co.uk

### **Quality & Environment:**

All Palace Chemicals products are manufactured under a BSI accredited ISO 9001:2015 Quality Management System, along with an ISO 14001 Environmental Management system continually working to reduce our carbon

## **Disclaimer:**

The information provided by this Technical data sheet is given in good faith and is to the best of our current knowledge true and accurate, however it is given without guarantee, as conditions of use and workmanship involved are both beyond our control. All information supplied is subject to the company's terms and conditions of sale, copies of which are available on request. footprint.

#### **Technical summary:**

Unit size:	20kg
Colours:	White & Grey
Mean bed depth:	Up to 6mm
Time till ready to grout:	24 hours*
Working pot life:	3 – 4 hours*
Initial Set time:	16 - 24 hours*
Application Temperatures:	5 – 25'C

Dependent on temperature substrate and site conditions

#### **Wall Tiles – substrate load limits:**

Wall substrates should be strong enough to support the weight of the ceramic tile or natural stone to be installed and the weight of the associated adhesive bed. The maximum weight restrictions for wall substrates are given below:

Description	Kg/M2
Gypsum plaster	20.0
Gypsum plasterboard (12.5 mm)	32.0
Cement / sand rendering & Concrete	No limit
Lightweight foam-cored tile backer boards	60.0
Glass reinforced cement-based boards	50.0
Gypsum fibreboards	40.0
Other rigid tile backer boards	#

# - Consult the manufacturer

## **Approved receiving surfaces:**

- ✓ Concrete
- Sand/cement screed
- Tile backer boards
- Cement faced fibre boards
- Anhydrite /gypsum-based screeds
- Tile on Tile\*
- Firm and stable plaster (sealed with TILERS PRIMER)
- Plasterboard
- Sand/cement render
- Concrete brick/block
- Must be securely fixed

#### Performance test data:

#### EN 12004 - C2TE-S1

Improved, deformable standard setting cementitious adhesive with reduced slip & extended open time

Initial Tensile adhesion strength at 30 mins open time Initial Tensile adhesion strength Tensile adhesion strength after heat ageing Tensile adhesion strength after freeze thaw cycles

Tensile adhesion strength after water immersion Deformation Reduced Slin

Reaction to Fire

 $> 0.5 \text{ N/mm}^2$ 

> 1.0 N/mm<sup>2</sup>

> 1.0 N/mm2

> 1.0 N/mm2

> 1.0 N/mm2

> 2.5mm

< 0.5mm

EN ISO 14001













