TECHNICAL DATA SHEET

NOV 2025 Ver 01 - PALMF 25.11.25



RAPID SETTING
MULTI-FLEX
FLEXIBLE - FIBRE REINFORCED WALL & FLOOR TILE ADHESIVE

- **Suitable for ceramic, marble, stone, porcelain & large format tiles**
- **Walk on & ready to grout in 3 hours**
- **Suitable for use with underfloor heating**
- **Ideal for swimming pools & wet areas**
- **60 minute working pot-life**

DESCRIPTION

PALACE MULTI-FLEX is a rapid setting, flexible and fibre-reinforced cement-based tile adhesive, available in both white & grey. Provides a high bond strength and instant grab required when fixing ceramic, marble, natural stone, mosaic, porcelain and large format tiles to walls & floors both internally and externally. **PALACE MULTI-FLEX** will fix tiles onto a wide range of suitably prepared substrates including tile backer boards and sub-floor heating systems as well as bonding to impermeable surfaces, such as existing tiles and power-floated concrete without the need to include a flexible additive in the mix. When fixing lighter shades of natural stone such as light or translucent Marble and Travertine, it is recommended to use **PALACE MULTI-FLEX WHITE**.

Conforms to BS EN 12004 Type C2FTE-S1

TECHNICAL DATA

UNIT SIZE	20kg
COLOUR	White / Grey
MAX BED DEPTH	Up to 16mm
TIME UNTIL READY TO GROUT	3 hours*
WORKING POT LIFE	40 - 60 minutes*
INITIAL SET TIME	2 hours @ 20°C*
APPLICATION TEMPERATURES	5 - 25°C
CLASSIFICATION	C2FTE-S1

** Dependent on temperature, substrate and site conditions*

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SURFACE PREPARATION

The substrate must be clean, firm and free of dust, dirt, oil, grease and loose flakey coatings. New or fresh concrete surfaces must be allowed at least 4 weeks to dry and cure, whereas older porous or worn concrete should be primed with **PALACE MULTI-PRIME** diluted 1:3 parts with water. It must also be structurally sound and strong enough to support the expected "in-service" loading. **PALACE MULTI-FLEX** can be applied to 15-18mm waterproof ply-board overlaid with tile backer boards, screw-fixed at 300mm centres and rigidly braced to provide a dimensionally stable background as described in the Code of Practice - BS 5385 parts 1 to 4.

Applications over sub-floor heating should allow 28 days before switching the heat on & only gradually raising the temperature day by day for the first week. **PALACE MULTI-FLEX** is not recommended for application directly onto tongue and groove timber floorboards or floating floors. Do not apply onto bare, un-sealed gypsum plaster or anhydrite floor screeds before removing dust & laitance and then sealing this type of surface with two coats of **PALACE MULTI-PRIME** the first diluted 1:1 with water and the second applied neat.

MIXING & APPLICATION

Always adding the powder to water, mechanically mix approximately 4.4 to 4.8 litres of clean water per 20kg to a smooth, lump-free consistency. Spread the adhesive using a suitable notched trowel for the application, fixing tiles firmly with a twist and slide action to a maximum bed depth of no more than 16mm. Fix full tiles, working away from the centre of the room and use tile spacers to ensure consistent joint width whilst periodically checking the laid tiles with a spirit level and wiping away any excess with a damp cloth. As temperatures and atmospheric conditions will cause the pot life / setting times to change (lower temperature = longer setting time), it is recommended to fix tiles before the adhesive forms a skin (typically 30 – 40 minutes). If the adhesive skins over, remove and apply fresh adhesive. Never add extra water to freshen up the mix. At ambient room temperature, the working life of the mixed adhesive will be up to 1 hour. The tiling project can take light foot traffic for grout application after 3 hours once the adhesive reaches its initial set.

COVERAGE

When fixing on a level, even floor surface using a flooring grade notched trowel, **PALACE MULTI-FLEX** will cover at a rate of about 4.0 kg per sq. mtr for heavy duty, studded floor tiles. When applying wall tiles, with a 6mm notched trowel a coverage rate of about 2.5 kg per sq. mtr will be achieved.

PRECAUTIONS

All tile fixing should be carried out in accordance with BS 5385 Parts 1 to 4 – The Code of practice for the installation of Ceramic & Stone wall & floor tiles. Do not allow adhesive residue 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

CUTTING & SHAPING TILES

Mark the front of the tile with a pencil and score the glazed face with a tile scriber or combination cutter, which can then be used to snap the tile. The cutting of large format wall or floor tiles should be carried out using a professional platform type mechanical cutter, preferably with a diamond tipped wet wheel cutting disc, especially when shaping natural stone. Shaping tiles to fit around curved units can be made easier by making a cardboard template of the area, or by using a profile gauge before cutting to the outline with either a tile-saw or a diamond tipped wheel cutter.

GROUTING

Grouting may proceed as soon as the tile bed is sufficiently firm, which for **PALACE MULTI-FLEX** will be after 3-4 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

Keep the product sealed until use in dry, well ventilated conditions at an ambient temperature and away from all sources of damp. When kept in its original sealed state in a permanently dry environment, this product will retain a shelf life of up to 12 months from date of manufacture. Should further technical information be required, contact the Palace Technical helpline on 0151 486 6101.

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 & weight of the associated adhesive bed. Maximum weight restrictions for wall substrates:

Gypsum plaster	20kg/m²
Gypsum plasterboard (12.5mm)	32kg/m²
Cement / sand rendering & concrete	No limit
Lightweight foam-cored tile backer boards	60kg/m²
Glass reinforced cement-based boards	50kg/m²
Gypsum fibreboards	40kg/m²
Other rigid tile backer boards	Consult manufacturer

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HEALTH & SAFETY



DANGER Contains Portland Cement
Causes Serious Eye Damage. Causes Skin Irriration.
May Cause Respiratory Irritation. May Cause An Allergic Reaction
Keep out of reach of children. Avoid breathing dust. Wear protective gloves/protective clothing/eye protection or face protection (mask). Use only outdoors or in a well ventilated area. IF IN EYES: rinse cautiously with water for several minutes, remove contact lenses, continue rinsing and immediately call for medical assistance. IF ON SKIN: Wash with plenty of water and soap. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs seek medical attention. If inhaled, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, call for medical assistance.

Always ensure that appropriate PPE & overalls are worn when applying this product. Wash hands after use and launder stained clothing.
A complete PALACE material safety data sheet is available on request or online at www.palacechemicals.co.uk

TECHNICAL ADVICE

For advice on tile installation products call the Palace Chemicals Technical Helpline on 0151 336 9104.

APPROVED RECEIVING SURFACES

Concrete
Sand / cement screed
Tile backer boards
Cement faced fibre boards
Anhydrite / gypsum based screeds
Plasterboard
Sand / cement render
Concrete brick / block

Tile on tile
Must be securely fixed

Firm & stable plaster
Seal with Multi-Prime

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 footprint.

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. Our products are guaranteed against defective materials and manufacture and will be replaced or money refunded if the goods do not comply with our promotional literature. We cannot however accept responsibility arising from the application or use of our products because we have no direct or control over where and how our products are stored and used. All products are sold and guaranteed subject to our terms and conditions of sale, copies of which may be obtained on request.

CLASSIFICATION

UKCA	CE	UKNI
1289 - 21		
Palace Chemicals Ltd, Speke Hall Industrial Estate, Speke, Liverpool L24 1YA		
DoP - 47-27		
EN 12004 : 2007 + A1 2012 - C2FTE-S1 Improved deformable fast setting cementitious adhesive with reduced slip and extended open time for internal & external tiling		
Release of dangerous substrates	See MSDS	
Bond strength:		
- Early tensile strength	≥ 0.5 N/mm²	
- Initial tensile strength	≥ 1.0 N/mm²	
Durability for:		
- Tensile adhesion strength after 30 minutes open time	≥ 0.5 N/mm²	
- Tensile adhesion strength after heat ageing	≥ 1.0 N/mm²	
- Tensile adhesion strength after freeze thaw cycles	≥ 1.0 N/mm²	
- Tensile strength after water immersion	≥ 1.0 N/mm²	
Special Characteristics:		
- Reduced slip	≤ 0.5mm	
- Deformation	≥ 2.5mm	
Reaction to fire	A1	

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