

TECHNICAL DATA SHEET



Ver 04 - PALMF 28.10.24

MULTI-FLEX

ONE PART FLEXIBLE RAPID SET ADHESIVE

- RAPID SETTING HIGH EARLY STRENGTH ADHESIVE FOR INTERIOR & EXTERIOR FIXING APPLICATIONS
- EXCELLENT NON-SLIP WITH EXTENDED OPEN TIME AND A RAPID CURE TO ALLOW GROUTING TO PROCEED AFTER JUST 3 HOURS
- FIXES VITRIFIED, PORCELAIN, LARGE FORMAT CERAMIC & MOSAIC TILE AND IS AVAILABLE IN WHITE FOR LIGHT MARBLE & STONE
- POLYMER FORTIFIED TO S1 DEFORMABILITY STANDARD GIVING GREATER TOLERANCE TO VIBRATION & MOVEMENT

TECHNICAL SUMMARY

UNIT SIZE	20kg
COLOURS	White & Grey
MAX BED DEPTH	Up to 6mm
TIME UNTIL READY TO GROUT	3 hours*
WORKING POT LIFE	40 - 60 minutes*
INITIAL SET TIME	2 hours at 20°C*
APPLICATION TEMPERATURES	5 – 25°C

^{*} Dependent on temperature of substrate and site conditions



PALACE MULTI-FLEX

Is ideal for fixing all types of ceramic tile and stone to solid surfaces, heated sub-floors and tile backer boards. It is a fast setting adhesive and allows grouting to proceed 3 hours after it sets to a fully water-resistant high early strength bond. Suitable for interior / exterior use and locations which are frequently wet.

RAPID CURE FORMULA

POLYMER FORTIFIED

GREATER TOLERANCE









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MULTI-FLEX

One Part Flexible Rapid Set Adhesive



DESCRIPTION

PALACE MULTI-FLEX is a cement-based, highly polymer modified, thin-bed ceramic tile adhesive, which conforms to BS EN 12004 Type C, Class 2FTE-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 MULTI-FLEX is ideally suited for application onto securely fixed & suitably rated Tile Backer boards and impermeable surfaces, such as existing tiles and dense power-floated concrete, without the need to include a flexi-additive in the mix. PALACE MULTI-FLEX gives improved bond strength, water-resistance and is recommended for applications over sub-floor heating. PALACE MULTI-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 MULTI-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 MULTI-PRIME diluted as 1:3 with water. PALACE MULTI-FLEX can be applied to Tile Backer boards overlaid onto a suitably rigid structure, such as well-braced 15mm waterproof plywood screw fixed at 300mm centres to supporting battens. Applications over sub-floor heating should allow 28 days before switching the heat on. PALACE **MULTI-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 PALACE TILERS MULTI-**PRIME**, the first diluted 1 to 1 and the second neat.

MIX PREPARATION

PALACE MULTI-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 MULTI-FLEX** will remain workable for 40 to 60 minutes and then reach final set after about 2 to 3 hours. The workable open time will be shortened in higher temperatures and mix volumes should be reduced to work in smaller areas per batch.

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 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 10-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 MULTI-FLEX** adhesive.

PRECAUTIONS

All tile fixing should be carried out in accordance with BS 5385 Parts 1 to 5 – The Code of practice for the installation of Ceramic & Stone wall & floor tiles. Following recommendations which require movement joints are incorporated within the tiling plan, to accommodate surface stress build up at the perimeters and over existing sub-floor joints. Do not apply any cement-based adhesive directly onto bare, unsealed gypsum plaster or anhydrite screeds and do not allow adhesive residues to set & harden on the tile face. Avoid applying 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. Should further technical advice be needed, please contact the Palace Technical service department or go to www.palacechemicals.co.uk.









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COVERAGE

When fixing on a level, even surface using a 10mm notched trowel, PALACE MULTI-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 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 AND PACKAGING

PALACE MULTI-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.

HEALTH AND 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 AND 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.

TECHNIC

Should m contact the Palace Technical helpline on: 0151 486 6101.

For a Technical Specification and quantity requirements, visit our 'TilingSpecifier' on the Palace website at: http://www.palacechemicals.co.uk

CAL	ADVISC	RY SERV	ICE		
more	specific	technical	in formation	be	required,

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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/M ²
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
\checkmark Cement faced fibre boards
√ Anhydrite /gypsum-based screeds
√ Tile on Tile*
√ Firm and stable plaster (sealed)**
√ Plasterboard
√ Sand/cement render
√ Concrete brick/block

^{*} Must be securely fixed









^{**} Sealed with TILERS PRIMER

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PALACE CHEMICALS LTD

SPEKE HALL INDUSTRIAL ESTATE SPEKE LIVERPOOL L24 1YA

EN 12004 - C2FTE-S1

Improved, fast setting deformable cementitious adhesive with extended open time and reduced slip

EARLY TENSILE ADHESION STRENGTH	> 0.5 N/mm²
INITIAL TENSILE ADHESION STRENGTH AT 30 MINS OPEN TIME	> 0.5 N/mm ²
INITIAL TENSILE ADHESION STRENGTH	> 1.0 N/mm ²
TENSILE ADHESION STRENGTH AFTER HEAT AGEING	> 1.0 N/mm ²
TENSILE ADHESION STRENGTH AFTER FREEZE THAW CYCLES	> 1.0 N/mm ²
TENSILE ADHESION STRENGTH AFTER WATER IMMERSION	> 1.0 N/mm ²
DEFORMATION	> 2.5mm
REDUCED SLIP	< 0.5mm
REACTION TO FIRE	NPD

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.









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