

# **TECHNICAL DATA SHEET**

NOV 2025 Ver 01 - PALHR 25.11.25



# **HEAT-RESIST**

# RAPID SETTING HEAT RESISTANT WALL & FLOOR TILE ADHESIVE

- For stoves & log burners
- Rapid setting
- Easy to apply

### **DESCRIPTION**

**PALACE HEAT-RESIST** is specially formulated to provide a high strength, durable bond in areas where tiles are fixed on walls & floors surrounding a radiant source of heat, which is not in continuous use, such as domestic log burning fires, cooking stoves or range ovens where temperatures will not exceed 250°c.

## Conforms to EN 12004 Type C2FT-S1

# **SURFACE PREPARATION**

Recently plastered or rendered surfaces should be allowed at least 4-6 weeks to dry out before tiling can proceed. Ensure all surfaces are sound, dry and free from dust, grease and loose or weak surface coatings. Porous surfaces will require priming with PALACE MULTI-PRIME diluted 1:3 parts with water, whereas impermeable surfaces should be clean, dry and slightly scored to provide a key. Tile Backer Boards should be rigidly fixed and prepared in accordance with the Code of Practice for Ceramic Wall Tiling - BS 5385 part 1. PALACE HEAT-RESIST is not recommended for application directly onto any substrate which may be subject to shrinkage, warping or any type of movement or degradation likely to occur when subjected to elevated temperatures likely to be reached within the intended working environment.

### **TECHNICAL DATA**

UNIT SIZE	10kg
COLOUR	Light Grey
MAX BED DEPTH	Up to 6mm
TIME UNTIL READY TO GROUT	3 hours*
WORKING POT LIFE	1 hour*
INITIAL SET TIME	2 hours (porous walls)*
APPLICATION TEMPERATURES	5 - 25°C
CLASSIFICATION	C2FT-S1
<u>.                                      </u>	

<sup>\*</sup> Dependent on temperature, substrate and site conditions









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## **MIXING & APPLICATION**

Powder should be added to water in a clean container whilst mechanically stirring and mixed thoroughly to give a smooth, slump-free, easily worked adhesive. The recommended mixing proportions by volume are 3:1 parts powder to water (Approx 1.25 litres per 5kg).

When 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  $3 \text{mm} \times 3 \text{mm}$  notch at 6 mm centres for mosaics and thin flat backed wall tiling, a  $6 \text{mm} \times 6 \text{mm}$  notch at 10 mm centres for general wall tiling and  $10 \text{mm} \times 10 \text{mm}$  notch at 16 mm centres for floor tiling.

#### **COVERAGE**

When fixing on a level, even floor surface using a 10mm notched trowel, **PALACE HEAT-RESIST** will cover at a rate of about 2.5kg per sq. mtr for flat tiles on walls however when fixing heavy-duty, studded tiles on floors subject to load, a coverage rate of approximately 4.0 kg per sq. mtr should be expected.

#### **PRECAUTIONS**

Due to the temperature variations & thermal stresses likely to exist in areas & locations for which this adhesive is intended, it is advisable to ensure that Movement Joints are always installed in all corners & wall to floor junctions and in any other joints abutting surrounding masonry, or over any pre-existing structural joints. Any radiant source of heat should not be in continuous use, nor should the tiled surface be exposed to temperatures in excess of 250°C.

#### **GROUTING**

Grouting may proceed as soon as the tile bed is sufficiently firm, which at the earliest is 3 to 4 hours after fixing tiles. In view of the temperature range expected the use of a premium quality grout which conforms to EN13888 CG2WA such as **PALACE COLOUR-LOCK** is advised.

# STORAGE

Store in cool, dry, well-ventilated conditions, away from sources of heat, direct sunlight or exposure to frost. Always completely reseal the container after partial use.

## 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	n/a
Concrete block-work & brickwork	50kg/m²
Cement / sand rendering & concrete	No limit
Glass reinforced cement-based boards	50kg/m²
Other rigid cement-based backer boards	50kg/m²

#### **HEALTH & SAFETY**





# Causes Serious Eye Damage. Causes Skin Irriration. May Cause Respiratory Irritation.

Keep out of reach of children. Avoid breathing dust. Wear protective gloves, protective clothing eye protection/face protection. 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 soap and water. 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. Dispose of contents/ container in accordance with local regulations. This product should be stored in unopened bags clear of the ground.

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.

## **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.











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#### **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.

# **APPROVED RECEIVING SURFACES**

Concrete
Sand / cement screed
Tile backer boards
Sand / cement render
Concrete brick / block

## **CLASSIFICATION**







1289 - 21

Palace Chemicals Ltd, Speke Hall Industrial Estate, Speke, Liverpool L24 1YA

DoP - 95-1

#### EN 12004 : 2007 + A1 2012 - C2FT-S1

Improved deformable fast setting cementitious adhesive with reduced slip and extended open time for internal & external tiling

and extended open time for internal & external timing		
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	Class E	





