

# Roff Tile C1



## CEMENTITIOUS TILE ADHESIVE WITH NORMAL ADHESION

### Description

**Roff Tile C1** is a polymer modified water resistant, single component, cement based adhesive suitable for interior and exterior domestic and light commercial use. Roff Tile C1 is designed to bond most ceramic, porcelain, mosaic and stone tiles in a broad range of applications including wet areas such as showers and wet rooms. Roff Tile C1 is supplied in grey and white colours. Roff Tile C1 meets the requirement for ANSI 118.1.



### Typical Applications

- Residential
- Light commercial
- Floor and wall tiling

### Features

- Water resistant
- High initial grab
- Non slump
- Designed for Middle East Climate.
- Suitable for glazed and unglazed ceramic tiles, natural stone and mosaic

### Suitable Substrates

Wall: suitable for use on concrete, cement based plaster, brickwork and dense concrete blocks. Can be applied to gypsum and cement board when using Roff Acrylic Primer.

Floors: cement based screeds and concrete. When overlaying existing ceramic surfaces use RoK DSP Dense Surface Primer

### Packaging

25 kg bag

### TECHNICAL DATA (typical values)

#### PRODUCT IDENTITY

Type	Powder
Colour	Grey and White
Bulk Density (kg/m <sup>3</sup> )	1600 +/- 50

#### APPLICATION DATA (at 23°C and 50% R.H)

Mixing Ratio	24-26 parts water for 100 parts of Roff Tile C1
Consistency of mixture	Very creamy
Density of mix (kg/m <sup>3</sup> )	1650 +/- 50
pH of mix	Over 12
Pot life	> 1 hour
Application temperature	From +5°C to +40°C
Open time	20 minutes
Pull Off Adhesion Strength @28 days	≥ 0.5 MPa
Adjustability time	15 minutes approx.
Ready for grouting on walls	After 24 hours
Ready of grouting on floors	After 24 hours
Set to light foot traffic	24 hours
Ready for use	14 days

#### FINAL PERFORMANCES

Shear Strength (ceramic tiles)	ANSI 118.1
VOC Content	<0.3 g/L
7 days Air	>1.4 MPa
7 days Water immersion	>1.0 MPa
Shear Strength ( Porcelain tiles)	ANSI 118.1
7 days air	> 1.0 MPa
7 day water immersion	> 0.7 MPa
28 days Air	>1.0 MPa

### Applicable Standards:

- ISO 13007 -1 as class c1
- ANSI 118.1
- EN12004 (Mixed with Roff Tile PA)
- ANSI 118.4 (When mixed with Roff Tile PA)

### Method of Application

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#### 1 SURFACE PREPARATION

- New floor and wall surfaces must be a minimum of 28 days old to allow for all standard concrete and blockwork shrinkage. Surfaces must be sound, free of all contaminants and any material which may inhibit adhesion and should not be subject to movement.
- If necessary, mechanically prepare concrete substrates to remove contamination, coatings or poorly bonded material.
- Vacuum to remove all dust and debris deposits. Any making good should be carried out using a suitable Dr Fixit repair mortar or Roff smoothing screed (consult Technical Department).

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#### 2 PRIMING

- Priming mineral substrates is not normally necessary however excessively porous or friable surfaces should be primed using Roff Acrylic Primer. Priming any substrate will reduce the suction and therefore improve adhesion and extend the open time of the applied material.

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#### 3 MIXING

- One bag of Roff Tile C1 should be added slowly to 6.0-6.25 litres of clean potable water to achieve consistency. Mix using a heavy duty paddle mixer to achieve a creamy, lump free consistency. Roff Tile C1 should be used within its pot life. If the material begins to firm up, do not add additional water after the original mixing. Dispose of any material not used within the pot life.

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#### 4 APPLICATION

Apply Roff Tile C1 with a trowel on the substrate. When choosing the trowel, the basic rule to follow is to choose one which guarantees sufficient buttering of the back of the tile generally from 3-6 mm bed for solid bed application.

- Notched bed: For all floor tile applications and wall tiling in dry area apply the mixed adhesive directly to the surface at 3-6mm thick and comb the surface with notched trowel. Only spread sufficient material that can be tiled within the open time of 20 minutes.
- Press the dry tiles firmly into place with a slight twisting motion to ensure full contact with the adhesive and prevent any voids.
- Deeply textured tile backs should be “buttered” with adhesive to fill the texture prior to application to the wall.
- Grouting may commence as soon as the adhesive is sufficiently firm usually after 24 hours, whereas for floor tiling allow 48 hours before applying grout.

**N.B.** For better results our recommendation will be to mix 5 kg of Roff Tile PA with a 25 kg bag of Roff Tile C1 to improve its characteristics up to requirements, also required water could be added and adjusted to suitable consistency.

**Please consult our technical department for any application and technical queries.**

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#### 5 JOINT DESIGN

- All movement joints in the substrate should be brought through the finished floor.

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#### 6 CLEANING

- Clean all adhesive spillage and any adhesive extruded through the tile joints prior to setting, using a damp sponge. All tools should be cleaned using water prior to curing. Cured material can only be removed mechanically.

**Note:**

There should be a fully functioning vapour barrier below all concrete substrates.

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### Theoretical Coverage

5.0 m<sup>2</sup> per unit using a 6mm x 6mm notch (water addition 6 ltrs per 25kg bag)

### Storage

When stored in dry conditions in original unopened packaging this product has a shelf life of 12 months. Storage above 35°C and high humidity (above 50%) will reduce shelf life and product performance.

### Health and Safety Precautions

This product contains cement, and contact with the skin can cause irritation. It should not be inhaled, and a properly designed and maintained face mask should be used whilst handling, pouring and mixing. Avoid contact with the mixed product by working carefully, using barrier cream and wearing protective gloves. In the event of skin contact, wash immediately and thoroughly with clean water. Avoid contact with eyes, use eye protection. If contact with eyes occurs, irrigate with water for 20 minutes and seek medical advice. Do not ingest, if mistakenly ingested, drink plenty of clean water and seek medical advice.

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