

# ADHERE FLEX F1

OUTDOOR DEFORMABLE CEMENT ADHESIVE

## 1. DESCRIPTION

**ADHERE FLEX F1** is an improved construction adhesive with extended open time, reduced vertical slip and high deformability (Classification **C2 TE S2** according to EN 12004), made from mixed binders, fine silica sands and additives. **ADHERE FLEX F1** is available in white.

## 2. FIELD OF USE

**ADHERE FLEX F1** is specially designed for bonding large ceramic tiles and special low absorption formats to exterior walls and floors on cementitious substrates such as plaster, floor screed or concrete.

It can be used for bonding ceramic tiles to ceramic on outdoor floors for large, low-absorption tiles. For façades up to 6 metres high, use **ADHERE FLEX F1** to bond ceramic tiles to medium-sized, low-absorption ceramic. Recommended for façades subjected to strong hydrothermal stress, reducing the occurrence of the carbonation effect (bubbling). It can be used for bonding large-format ornamental stone to interior walls and floors, and for bonding medium-sized stone to exterior façades.

For non-standard applications or special circumstances contact our Commercial-Technical Service.

## 3. PRODUCT FEATURES

Powder product	Amount
Colour	White
Grade	<1.0 mm
Paste product	Amount
Mixing water	31.5% ± 2.0%
Hardened Product	Amount
Initial tensile adherence	≥ 1.0 N/mm <sup>2</sup>
Tensile adherence after immersion in water	≥ 1.0 N/mm <sup>2</sup>
Tensile adherence after heat action	≥ 1.0 N/mm <sup>2</sup>
Tensile adherence after freeze-thaw cycles	≥ 1.0 N/mm <sup>2</sup>
Tensile adherence after extended open time (after 30 min.)	≥ 0.5 N/mm <sup>2</sup>
Sliding	≤ 0.5 mm
Transverse deformation	≤ 5.0 mm
Reaction to fire	Class E

## 4. APPLICATION

### a) Preparation of substrates

The substrates must be clean and free of dust, stripping oils, efflorescence and/or any other matter that could affect adherence. They must also be even, flat and cohesive. The flattening can be checked using a 2m metal ruler.

On highly absorbent substrates, moisten before application. However, they must not be saturated with water at the time of application.

For more demanding wall bonding, use **REDUR MAX FORCE** render and for floors we recommend using a floor screed filler layer of **PLAN FORCE**.

Always provide laying and/or fractionation joints so that they can absorb possible movements in the coating.

The ceramic tile must comply with the existing structural joints in the substrate, such as expansion joints. These must be made watertight by applying a suitable sealant.

Should the surface be an old ceramic bonding, it must be ensured that it is sturdy, smooth and all parts adhere well to the surface. If this is not the case, the loose parts should be removed and the coating smoothed. If necessary, clean the surface with suitable detergents to remove oils and residues accumulated on the surface.

### b) Preparation of the mixture

**ADHERE FLEX F1** should be mixed with 7.9 to 8.4 litres of clean drinking water per 25 kg bag using a low speed mixer until a homogeneous, lump-free paste is obtained.

Leave the mixture to stand for 5 minutes and mix again.

### c) Application

Spread the mixture on the substrate using small sections, suitable for the temperature and humidity conditions. Smooth the surface with a comb or notched trowel suitable for the application. The piece to be glued must be pressed against the substrate with the aid of a rubber mallet until the adhesive strands are completely compressed.

Do not proceed with bonding when the open time has expired (see point 3.), which is confirmed by the appearance of a film of a different colour on the surface of the cementitious adhesive.

The joints between ceramic tiles must be at least 2 mm apart indoors and 5 mm apart outdoors.

When bonding polished natural stone, the back of the piece should be sanded to improve adherence.

For more demanding bonding work outdoors or for bonding large parts indoors, use the double bonding process. When bonding coatings weighing more than 40 kg/m<sup>2</sup>, mechanical fixing of the pieces is recommended.

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## d) Consumption

Theoretical consumption	Bonding method	
	Simple bonding	Double bonding
<b>No. 6 notched trowel</b>	4.0 kg/m <sup>2</sup>	6.0 kg/m <sup>2</sup>

## e) Restrictions

**ADHERE FLEX F1** should never be applied in isolated portions, but rather covering the entire substrate to be tiled with ceramic/natural stone. The same applies to the back of the parts to be glued when double bonding.

**ADHERE FLEX F1** should not be applied when the room or substrate temperature is below 5°C or above 30°C. Bonding should not be carried out outdoors under adverse weather conditions within 24 hours of application.

In cases of strong exposure to wind, the façades should be protected to minimise its impact.

## f) Complementary advice

- The mixing water must be free of impurities (clay, organic matter) and must be of drinking quality;
- Any mortar that has exceeded its open time must not be applied. Do not soften the mortar by adding water after preparation.
- Do not add any other products to the mortar, **ADHERE FLEX F1** should be applied as it is presented in its original packaging.

## 5. PACKAGING AND VALIDITY

### Packaging

Plastic pallets of 60 x 25kg paper bags.

### Expiry

12 months, provided the original packaging conditions remain unchanged and in storage conditions protected from extreme temperatures and damp.


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## 6. HYGIENE AND SAFETY

(DOES NOT PRECLUDE THE PRODUCT SAFETY DATA SHEET)

- Irritant to the eyes, respiratory system and skin;
- May cause sensitivity in contact with the skin;
- Do not inhale the dust;
- Avoid contact with the skin and eyes;
- In case of contact with the eyes, wash immediately with plenty of water and consult a specialist;
- Wear suitable protective clothing and gloves;
- Keep out of the reach of children.

 04	<b>ADHERE FLEX F1</b> EN 12004:2007 + A1:2012 C2 TE S2 - Improved cementitious adhesive, with reduced slip, extended open time and highly deformable, for outdoor applications.
	Declaration of performance <b>DOP.01006B</b> (white) Notified laboratory no. 0855

*Since the conditions of application of our products are out of our control, we cannot be held responsible for their incorrect use. It is the customer's responsibility to verify the suitability of the product for its intended purpose. In any case our liability is limited to the value of the goods provided by us. The information contained in this factsheet may be changed without notice. In case of doubt, and should you require further clarification, we recommend you contact our technical services.*

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