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PRODUCT DATA SHEET

# ARDEX-FLEX FS

## Flexible Tile Grout with Built-in Admix

### Features

- Available in 35 colours\*
- No colour variation or streaking during mixing
- Water repellent and dirt resistant
- Easy to apply and clean off the tile surface
- Ideal for commercial and domestic environments such as swimming pools, showers and kitchens
- For tile joints up to 4mm wide
- Suitable for wall tiling, and narrow joints in floors
- For internal and external applications, including heated subfloors



\*For a copy of the Grout Colour Selector and Coverage Guide, please call ARDEX Customer Services on 01440 714939



Reg No. FM 01207

EMS 565427

OHS 628374

ARDEX UK LIMITED  
Homefield Road, Haverhill, Suffolk CB9 8QP UK.  
Telephone: +44 (0)1440 714939  
Fax: +44 (0)1440 716640  
Email: [technical\\_admin@ardex.co.uk](mailto:technical_admin@ardex.co.uk)  
ARDEX online: [www.ardex.co.uk](http://www.ardex.co.uk)

# ARDEX-FLEX FS

## Flexible Tile Grout with Built-in Admix

### DESCRIPTION

ARDEX-FLEX FS is a cement-based grouting compound with excellent flexible and water repellent properties, without the need to add a separate admix.

### USE

The BS EN 13888 classification for ARDEX-FLEX FS is CG2 WA, an "improved cementitious grout with additional characteristics of reduced water absorption and high abrasion resistance".

ARDEX-FLEX FS is suitable for grouting joints up to 4mm wide, between porcelain, ceramic, non-moisture sensitive natural stone and quarry tiles, as well as extruded tiles and glass block-work. The hardened grout is weather resistant, unaffected by water, and can be used for internal and external tiling in dry and wet locations, including swimming pools with non-aggressive water conditions.

ARDEX-FLEX FS can be applied to both wall and floor tile joints and can receive foot traffic after 5 hours at 20°C.

Where chemical spillages or corrosive liquids are likely to be in contact with the tile joints, use either ARDEX WA Epoxide Adhesive and Grout or ARDEX EG 8 PLUS Epoxide Adhesive and Grout.

### PREPARATION

Ensure the tiles are firmly fixed and the tile joints are clean, free of dust, excess adhesive or bedding mortar etc.

### MIX PROPORTIONS

Mix proportions by volume are approximately:-  
1 part water : 2<sup>3</sup>/<sub>4</sub> parts ARDEX-FLEX FS powder.

A 10kg bag of ARDEX-FLEX FS requires approximately 3 litres of water.

A 5kg bag requires approximately 1.5 litres of water.

A 2.5 kg bag requires 0.75 litres of water.

### MIXING

Add the ARDEX-FLEX FS powder to the required amount of clean water in a clean container, whilst stirring thoroughly until a creamy, easily worked mortar is obtained. The mixed grout has a working time of approximately 2<sup>1</sup>/<sub>2</sub> hours at 20°C and will be walkable after approximately 5 hours. Higher temperatures will shorten, and lower temperatures will extend the working time.

### APPLICATION

Using a rubber squeegee or rubber backed trowel, work the grout mortar thoroughly into the joints, ensuring that they are completely filled. Excess grout should be removed as work proceeds, any residues left on the tile face can be removed by wiping off with a damp sponge, up to 30 minutes after application. If an area is left for more than 30 minutes prior to cleaning, the grout residues may require moistening in order to make wiping off easier.

The use of a fine mist from a suitable spray bottle will help in emulsifying the grout residues on the tile surface. Any dry film left remaining on the tile surface after cleaning can easily be removed by polishing off with a dry cloth when the grout has hardened in the joints.

Apply at temperatures above 5°C.

**NOTE:** Some ceramic, vitrified, porcelain and natural stone tiles, or tiles with textured, matt glazed or porous surfaces, may be susceptible to surface discolouration during grouting. A trial application should be carried out to ascertain if discolouration is likely. For natural stone that may be susceptible to water staining, ARDEX MG Rapid Drying Marble and Natural Stone Grout should be considered. Where necessary, particularly when using intense grout colours, apply a protective treatment to the tile face to ensure the grout is not retained in the surface porosity/texture of the tile.

Guidance on the application of coloured grouts can be found in clause 7.3.4 of BS 5385: Part 1: 2009. If in any doubt, please contact the tile manufacturer or distributor for information and advice.

### PACKAGING

ARDEX-FLEX FS is packed in paper sacks incorporating a polyethylene liner - net weight 2.5kg, 5kg or 10kg.

### STORAGE AND SHELF LIFE

ARDEX-FLEX FS must be stored in unopened packaging, clear of the ground, in cool dry conditions and be protected from excessive draught. If stored correctly, as detailed above, the shelf life of this product is 12 months from the date shown on the packaging.

### PRECAUTIONS

ARDEX-FLEX FS contains more than 20% Portland cement and, therefore, in line with current legislation, is classified as irritating to eyes and skin. For this reason the following precautions should be observed:-  
Avoid contact with skin and eyes; in case of contact with the eyes, rinse immediately with plenty of water and seek medical advice; wear suitable gloves and keep the product out of the reach of children. Avoid generation of airborne dust during mixing.

### DISPOSAL

Dispose of waste and residue in accordance with local authority guidelines. For further information, consult the relevant Health and Safety Datasheet.

**NOTE:** Where acid based cleaning products are to be used on the hardened grout, we recommend that the product is first tested on the wetted grout before application, to ascertain the resistance of the colour/grout.

Thorough rinsing off is required to remove any residues of the acidic cleaner to prevent discolouration/ damage to the grouted joint.

Where acidic cleaners are routinely used, consideration should be given to using ARDEX EG 8 PLUS Epoxide Adhesive and Grout.

\*Due to the production process all colours are approximate. Grout colours may vary when dry, depending on the type of tile installed, substrate and installation conditions.

### COVERAGE

This will depend upon the tile size, joint width and depth and the grout coverage figure, which for ARDEX-FLEX FS is 1.5.

Use the following to estimate the approximate grout requirements for square or rectangular tiles:-

Stage (all measurements in mm)

1. ADD length and breadth of tile together.
2. MULTIPLY result by joint width.
3. MULTIPLY result by joint depth.
4. MULTIPLY result by Grout Coverage Figure (i.e. for ARDEX-FLEX FS, this is 1.5).
5. DIVIDE result by length of tile.
6. DIVIDE result by breadth of tile.

The result is the material requirement in kg per sq. metre.

### SUMMARY

Material required is:-

$$\frac{(\text{length} + \text{breadth}) \times \text{width} \times \text{depth}}{\text{length} \times \text{breadth}} \times 1.5 = \text{kg/m}^2$$

Quick and easy grout coverage can be calculated using the ARDEX grout calculator online at: [www.ardex.co.uk/calculator.asp](http://www.ardex.co.uk/calculator.asp)

### TECHNICAL DATA

Working time	approx. 2.5 hours
Initial Set (Vicat)	approx. 3 hours
Final Set (Vicat)	approx. 4 hours
Bulk density of powder	approx. 1.2 kg/litre
Density of fresh mortar	approx. 1.9 kg/litre

### BRINELL HARDNESS

After 1 day	approx. 25.0 N/mm <sup>2</sup>
After 3 days	approx. 40.0 N/mm <sup>2</sup>
After 7 days	approx. 55.0 N/mm <sup>2</sup>

**NOTE:** The information supplied in our literature or given by our employees is based upon extensive experience and, together with that supplied by our agents or distributors, is given in good faith in order to help you. Our Company policy is one of continuous Research and Development; we therefore reserve the right to update this information at any time without prior notice. We also guarantee the consistent high quality of our products; however, as we have no control over site conditions or the execution of the work, we accept no liability for any loss or damage which may arise as a result thereof.

Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations.

**TECHNICAL ADVICE HELPLINE:**  
**01440 714939**  
**ARDEX online: [www.ardex.co.uk](http://www.ardex.co.uk)**