



ARDEX EG 800 F

Multi-Purpose Epoxy System

For tile joints from 1.5mm to 10mm

Ideal for wet areas and commercial floors

When combined with an approved ARDEX filler, can be used for a variety of applications

Use where strict hygiene standards, high chemical and physical resistance are required

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ARDEX EG 800 F

Multi-Purpose Epoxy System

DESCRIPTION

ARDEX EG 800 F is a high performance multi-purpose epoxy system designed for environments that may require strict standards of hygiene, high chemical and physical resistance.

USES

- Primer for subsequent ARDEX Concrete Repair material.
- Combined with ARDEX Gravel Mix, the ARDEX EG 800 F becomes a stable epoxy based screed.
- Combined with ARDEX Aggregate 5/2mm, the ARDEX EG 800 F becomes an effective epoxy drainage screed.
- Combined with ARDEX Floor Leveller Primer Sand to create various consistencies used for a variety of epoxy mortar applications.
- For tile grouting all natural stone and terrazzo.

NOTE: Porous, moisture sensitive, and textured tiles may require special application procedures. Contact ARDEX Technical Services (technicalservices@ardexaustralia.com).

SURFACE PREPARATION

By way of mechanical methods and vacuum cleaning as necessary, remove all dirt, dust, curing compounds, oils, grease, surface sealers, and any other contaminants prior to installation. Prepare surface to leave sound, clean, free from loose or other materials which may cause potential adhesion issues.

Old or new concrete must be clean and profiled or textured. New concrete must be a minimum of 28 days old. Prepare the surface by rough-grinding, scarifying or by using other equipment that will give a roughened profile. A roughened surface is imperative for good adhesion.

For tile grouting, ensure joints are clean and free from dust, excess adhesive and bedding mortar. Do not grout until the tile adhesive has set firmly. All 'spacers' must be removed from joints. Joint must be totally dry before grouting and free from permanent dampness.

MIXING

Each ARDEX EG 800 F component must be individually mixed to form a homogenous state. Do not use the same mixing paddle for each component. Combine the two components and thoroughly mix until a homogeneous blend is obtained. Only mix as much as may be used within the pot life and avoid excessive aeration during mixing. The mix ratio for ARDEX EG 800 F resin and hardener is 2:1 (two parts Part A : one part Part B).

Mix ratio by weight -

0.73kg Part A : 0.33kg Part B = 1.06kg mixed binder (equals 1.0L mixed binder).

APPLICATION

Priming Only Applications

Once the prepared substrate has been primed (Part A & Part B only), ensure there are no surface pin holes before applying an epoxy mortar/screed or ARDEX Concrete Repair product. A uniform coating must be achieved, and depending on the substrate condition, additional priming coats may be required. All excess or free standing water must be removed before applying ARDEX EG 800 F (saturated surface dry substrate is acceptable).

ARDEX Concrete Repair material applications only, should be applied within 30 mins - 2 hours after ARDEX EG 800 F priming application. Generally, the bond of ARDEX EG 800 F will exceed the tensile strength on the host concrete.

Epoxy Mortar Applications

For epoxy mortar applications, mix the recommended amount as per the mix ratio section below. Mix at low speed in a suitable sized mixing container. Maintain mixing paddle head below surface of liquid to reduce entrapped air. Once the mixed binder obtains a uniform mixture, add the mixed binder to the required amount of ARDEX Floor Leveller Primer Sand and mix for a further 2 - 3 minutes. The mixed epoxy (Part A & Part B) must be poured into the ARDEX Floor Leveller Primer Sand.

Prime the prepared substrate with the mixed binder (Part A & Part B only) and whilst wet install the mixed epoxy mortar. A wet-on-wet application must be achieved during this process.

MIX RATIO - EPOXY MORTAR						
Mixed binder (Ltrs)	Kg mixed ARDEX Sand	Yield (Ltrs)	Consistency	Flexural Strength (28 days)	Comp. Strength (7 days)	Comp. Strength (28 days)
1.00	2.95	2.29	Fluid Paste	>20 MPa	>70 MPa	>80 MPa
1.00	3.32	2.47	Stiff Paste	>20 MPa	>70 MPa	>80 MPa
1.00	3.69	2.64	Trowelable	>20 MPa	>70 MPa	>80 MPa
1.00	4.06	2.78	Trowelable/Dry	>20 MPa	>70 MPa	>80 MPa
1.00	4.43	2.98	Dry Mortar	>20 MPa	>70 MPa	>80 MPa

Epoxy Screed Applications

As an epoxy screed is designed for larger applications it is advised complete kits (Part A & Part B) are to be mixed. The epoxy screed mix can be applied at a minimum thickness of 10mm as a bonded screed, with total thickness up to 80mm. For epoxy screed applications, mix the recommended amount as per the mix ratio section below. Mix at low speed in a suitable sized mixing container. Maintain mixing paddle head below surface of liquid to reduce entrapped air. Once the mixed binder obtains a uniform mixture, add the mixed binder to the required amount of ARDEX Gravel Mix and mix for a further 2 - 3 minutes. The mixed epoxy (Part A & Part B) must be poured into the ARDEX Gravel Mix.

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Prime the prepared substrate with the mixed binder (Part A & Part B only) and whilst wet install the mixed epoxy screed. A wet-on-wet application must be achieved during this process.

Coverage:

Complete mixed unit (132kg) will occupy 62.8 litres or 6.28m² at 10mm thickness.

MIXED RATIO - EPOXY SCREED	
COMPONENT	QUANTITY
ARDEX EG 800 F (12kg kit)	1 kit
ARDEX Gravel Mix (20kg bag)	6 bags

CHARACTERISTICS	VALUE
Flexural Strength	16.3 MPa @ 7 days 24.0 MPa @ 28 days
Compressive Strength	42.2 MPa @ 7 days 60.2 MPa @ 28 days

Epoxy Drainage Screed Applications

As an epoxy drainage screed is designed for larger applications it is advised complete kits (Part A & Part B) are to be mixed. For epoxy drainage screed applications, mix the recommended amount as per the mix ratio section below. Mix at low speed in a suitable sized mixing container. Maintain mixing paddle head below surface of liquid to reduce entrapped air. Once the mixed binder obtains a uniform mixture, add the mixed binder to the required amount of ARDEX Aggregate 5/2mm and mix for a further 2 - 3 minutes. The mixed epoxy (Part A & Part B) must be poured into the ARDEX Aggregate 5/2mm.

Prime the prepared substrate with the mixed binder (Part A & Part B only) and whilst wet install the mixed epoxy screed. A wet-on-wet application must be achieved during this process.

MIX RATIO - EPOXY DRAINAGE SCREED					
Mixed binder (Ltrs)	Kg mixed ARDEX Agg.	Yield (Ltrs)	Flexural Strength (28 days)	Comp. Strength (7 days)	Comp. Strength (28 days)
12	200	133	4 - 7 MPa	~20 MPa	~20 MPa
12	300	195	3 - 5 MPa	~15 MPa	~15 MPa

Tile Grouting Applications

For tile grouting applications, ARDEX EG 800 F is designed for large areas with complete kits to be mixed. Transfer resin (Part A) to a suitable sized mixing container and add the hardener (Part B). Mix the two components using a low speed mechanical stirrer (eg. electric drill) until a uniform mixture is obtained. Maintain mixing paddle head below surface of liquid to reduce entrapped air. Add

Colour Pack (Part C) until a uniform consistency is obtained. To extend the pot life, spread the mix onto a non-absorbent surface (eg. plastic sheet, paint tray) at a thickness not exceeding 15mm and begin application.

Apply with a two-part gun or squeegee. A second application may be necessary due to unforeseen voids in the tile bed. For best results, allow a small amount of material to remain on the surface to ensure a flush finish when ground back. Mix sufficient amount for the second application. The second application should remain proud of the joint to allow for grinding (terrazzo tiles). Avoid concave finishes.

The ARDEX EG 800 F components can be warmed or cooled to achieve optimal results depending on ambient temperature and site conditions. Do not apply in ambient or surface temperatures below 10°C or above 30°C. Low temperatures will retard curing and high temperatures will dramatically shorten the pot life. The pot life of the mixed mortar is approximately 40 minutes at 23°C and 50% relative humidity. Warmer temperatures and larger mixes will reduce the pot life, ensure to only mix sufficient material that can be used within 30 minutes. Optimum pot life, coverage and workability are achievable when ARDEX EG 800 F is used at temperatures between 20°C - 25°C.

TECHNICAL DATA

CHARACTERISTICS	VALUE
Type	Part A: Resin Part B: Hardener Part C: Inert Filler
Solids Content	100%
Form and Colour	Part A: clear colourless/pale yellow, medium viscosity liquid Part B: clear low viscosity amber liquid with an ammonia odour. Part C: inert coloured powder
Pot Life	40 minutes (pot life will vary depending on filler/aggregate being added)
Application Temperature	+10°C to +30°C
Application Humidity	30% - 70% RH
Curing Time (tile grouting only)	Initial set: 6 hours Trafficable: 24 hours Full cure: 7 days (achieved chemical resistance)
Service Temperature	-20°C to +60°C (continuous) +105°C (intermittent)
Flammability	Not flammable
Compressive Strength	70 MPa (tile grouting)
Classification (tile grouting only)	RG

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CHEMICAL RESISTANCE

ARDEX EG 800 F is designed for environments that may require strict standards of hygiene and high chemical resistance. The chemical resistance table is intended as a guide only. In some cases slight discolouration may occur. Contact ARDEX Technical Services if other reagents are encountered.

CHEMICAL RESISTANCE TABLE

CHEMICAL REAGENTS	7 days Exposure	28 days Exposure
ACIDIC		
Sulphuric acid (20%)	R	R
Nitric acid (20%)	R	-
Hydrochloric acid (30%)	R	R
Formic Acid (7%)	R	-
Acetic acid (10%)	R	-
Phosphoric acid (50%)	R	R
Tartaric acid (50%)	R	R
Citric acid (50%)	R	R
Lactic acid (10%)	R	R
ALKALINE		
Sodium Hydroxide (20%)	R	R
Ammonia concentrated	R	R
Hydrogen Peroxide (6%)	R	R
Aluminium Sulphate (40%)	R	R
Ammonium Chloride (20%)	R	R
SOLVENTS		
Diesel oil	R	R
Unleaded Petrol	R	R
Ethanol	R	-
White spirits	R	-
Xylene	R	-
1,1,1 Trichloroethane	R	-
Mineral Turpentine	R	R
MISCELLANEOUS		
Bleach	R	-
Pool Chlorine	R	R
Water (distilled, mineral, sea)	R	R
Milk	R	R
Wine	R	R
Fruit Juice	R	R
Olive Oil	R	R
Motor Oil	R	R
Sugar	R	R

FINISHING

For tile grouting, after grinding the installation, terrazzo/stone sealers can be applied to the desired finish.

COVERAGE

6m² - 9m² per mixed litre (priming only)

For tile grouting, please refer to the ARDEX calculator on our website (www.ardexaustralia.com). Coverage will vary depending on the tile size, tile depth, joint width, any voids between the tile and the substrate and how much product is intended to remain over the tiled surface prior to finishing/grinding.

PACKAGING

ARDEX EG 800 F Part A - 8L

ARDEX EG 800 F Part B - 4L

ARDEX EG 800 F Part C - 15kg ARDEX Colour Pack

Note: ARDEX EG 800 F Part C not required for priming / epoxy mortar / screed / drainage screed applications.

SHELF LIFE

ARDEX EG 800 F has a shelf life of 24 months when stored in the original unopened packaging, in a dry place at 23°C and 50% relative humidity.

LIMITATIONS

Epoxy based grouts are prone to discolouration and chalking when used externally, however, product performance is not affected. Light coloured epoxy grouts are subject to colour variation over prolonged periods. Not suitable for use in areas subject to long term contact with high concentrations of chicken fat. Product must be applied to dry concrete only for grout tiling applications.

As with all epoxy systems such as ARDEX EG 800 F, the product will develop a temperature rise during mixing. The degree of temperature rise may depend on variables such as ambient temperature, and or mass and thermal conductivity of the surrounding materials. When the product is mixed do not re-lid the container or allow mixed product to hold in bulk. Do not mix more product than can be used well within the pot life stated in this document.

In low temperatures below 10°C, it is advisable to pre-heat the separate components or store in a temperature controlled environment for 12 hours prior to use. The sealed liquid components can be heated in warm water of up to 25°C. In high temperatures above 30°C, the material should be stored in shade or an air conditioned environment for 12 hours prior to use.

ARDEX EG 800 F is not designed for traditional clean off by hand. For epoxy grout applications where non-mechanical finishing is required ARDEX Australia suggest ARDEX EG 15.

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Before any substrate preparation, installation or finishing methods relating to ARDEX product are undertaken, please be aware of any potential risks and use appropriate PPE (personal protective equipment). This may involve contacting substrate manufacturers for Safety Data Sheets.

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GUARANTEE

ARDEX Australia Pty Ltd (“we” or “us”) guarantees this product (“our goods”) is free from manufacturing defects and will perform to any applicable specification published by us for 10 years from the date of purchase. Our liability under this guarantee is limited at our option to replacement of the product, repair of any damage to the immediate surface or area of application of the product, or compensation, in each case if we are satisfied loss or damage was due to a breach of this guarantee. This guarantee does not apply if damage or loss is due to failure to follow published instructions or any act or circumstance beyond our control, including shade variations and efflorescence. If you wish to make a claim under this guarantee you must notify us (ARDEX Australia Pty Ltd, 20 Powers Road Seven Hills NSW 2147; Toll Free: 1800 224 070; Email: technicalservices@ardexaustralia.com) and provide evidence of your purchase of the product within 30 days of any alleged loss or damage occurring. We reserve the right to ask you for satisfactory evidence of any alleged loss or damage. Any claim under this guarantee is at your cost. This guarantee is in addition to any rights or remedies you may have as a “consumer” under the Australian Consumer Law and to that extent you need to be aware that: “Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure”.

DISCLAIMER

The technical details, recommendations and other information contained in this data sheet are given in good faith and represent the best of our knowledge and experience at the time of printing. It is your responsibility to ensure that our products are used and handled correctly and in accordance with any applicable Australian Standards. Our instructions and recommendations are only for the uses they are intended. Users are advised to confirm that this product is suitable for their application and conforms with the specifications of the system. We also reserve the right to update information without prior notice to you to reflect our ongoing research and development program. Country specific recommendations, depending on local standards, codes of practice, building regulations or industry guidelines, may affect specific installation recommendations. The supply of our products and services is also subject to certain terms, warranties and exclusions, which may have already been disclosed to you in prior dealings or are otherwise available to you on request. You should make yourself familiar with them.