

Corrogrout AG

Thixotropic epoxy anchoring grout

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Product Features

Corrogrout AG is a 100% solids, thixotropic, epoxy resin anchoring grout designed to develop rapid strength gain and securely anchor tendons, bolts, dowels or bars in drilled holes in horizontal or vertical substrates.

Corrogrout AG has excellent adhesion, resistance to chemicals, vibration & impact damage, and is supplied in pre-weighed packs ready for on site mixing and application, giving consistent superior tensile strength and mechanical properties compared to concrete.

Typical Uses

Corrogrout AG is typically used for anchoring dowels & starter bars, ground anchors, bolts for foundations, machines, balustrades, barriers, tracks & crane rails into pre-drilled holes with an annulus of at least 5 mm.

Technical Data

Properties	Test Standards	Typical Values
Compressive strength @ 6 hours @ 8 hours @ 24 hours	BS 6319 - 2	: 50 N/mm ² : 70 N/mm ² : 96 N/mm ²
Flexural strength	BS 6319 - 3	: 35 N/mm ²
Splitting tensile strength	BS 6319 - 7	: 33 N/mm ²
Pot life @ 25°C @ 35°C @ 45°C		: 100 minutes : 60 minutes : 30 minutes
Touch dry time @ 35°C		: 3 - 4 hours
Bond strength	ASTM D454 1	: greater than cohesive strength of concrete (Typical concrete : 3 N/mm ²)
Creep property		: not affected at operating temperature not more than 80°C
Chemical resistance acids alkalines petrol fresh and sea water		: excellent : excellent : excellent : excellent
Loading chart: the following data are typical loads attained at failure at various embedment lengths. Test conducted using 25 mm diameter deformed bar embedded on 35 N/mm² unreinforced concrete.		
Embedded length in mm		Load in kg
150		: 6,600
200		: 8,800
250		: 11,000
300		: 13,200
350		: 15,400

Note: All values given are subject to 5 - 10% tolerance.

Directions for use

Preparation

Long term durability and function can only be achieved with good preparation to give a strong adhesive & mechanical bond to the substrate.

Holes should be drilled preferably using rotary percussive equipment or under-reamed to provide a rough sided or dovetailed hole to allow for mechanical and chemical bonding, however **Corrogrout AG** can be used on smooth sided holes from diamond drilling etc.

Ensure the surfaces of the hole are clean and free from contamination such as dust, oil, grease & organic growth, with a minimum annulus of 5 mm.

Damp holes are permitted but standing water should be removed from the holes prior to application.

Priming

No priming is required for this product.

Mixing

It is essential that the mixing instructions are carefully followed to ensure the correct characteristics of the product are achieved. Failure to do so can result in lower performance or even possible failure of the product.

Mechanically mix the entire contents of the resin components together for at least 1 – 2 minutes until a uniform colour & consistency is achieved. **DO NOT UNDER ANY CIRCUMSTANCES PART MIX MATERIALS.**

Empty the mixed resin into a suitable empty container with sufficient volume to accommodate the total yield of the material.

Add the powder or aggregate component to the mixed resin component and mix using a slow speed drill and paddle or forced action mixer for an additional 2 – 3 minutes, until a uniform colour & consistency is achieved. **ALWAYS ADD THE POWDER TO THE RESIN.**

Application

Vertical holes

Pour the mixed **Corrogrout AG** into the hole allowing it to fill between 50 – 60% of the total depth of the hole.

Insert the bolt or bar into the hole and slowly twist it to the full depth allowing the **Corrogrout AG** to be displaced.

Corrogrout AG

Thixotropic epoxy anchoring grout

After the bar is fully inserted, top up the hole with more material, or wipe any excess away and temporarily hold the bar in place during initial setting.

Horizontal holes

For horizontal holes, carefully empty to contents of the mixed product into a solid barrel gun by unscrewing the end cap of the gun to allow easy filling.

Once the barrel is full, screw the end cap back on and apply by squeezing the trigger to discharge the mixed material into the hole.

It is essential that the hole is filled from back to front to between 50 – 60% of the total depth, to ensure no air is trapped inside.

A piece of clean hose pipe can be cut and placed over the nozzle of the barrel gun to allow the **Corrogrout AG** to be placed easily from the back to the front of the hole.

After filling, insert the bolt or bar into the hole and slowly twist the bar to the full depth allowing the **Corrogrout AG** to be displaced.

After the bar is fully inserted, top up the hole with more material, or wipe any excess away and temporarily hold the bar in place during initial setting.

Curing

Allow **Corrogrout AG** to cure fully for 24 hours depending on local conditions, before exposing to full mechanical conditions.

Hot weather conditions

For application above 40°C we recommend adopting the following guidelines:

Store unmixed materials in a cool preferably air conditioned environment.

Avoid exposure of mixed & unmixed materials to direct sunlight.

Keep equipment that will be in contact with the product cool and away from direct sunlight.

Avoid application during the hottest time of day.

Cleaning

Clean tools and equipment immediately after use with **Corroclean**.

Limitations

Substrate temperatures should be above 5°C and rising.

For application in temperatures above 40°C please refer to hot weather condition recommendations.

Avoid application if the work area may be subject to the onset of rain or moving water.

Do not part mix under any circumstances.

All products should be used within the pot life. Materials not used within the specified time should be discarded.

The product should not be thinned with any type of solvent under any circumstances.

If the above general application details do not meet with your requirements, please contact Corrotech for a project specific method statement.

Estimating

Corrogrout AG pack size: 2 litres pail. Coverage rate as per table below:

Approximate volume (ml) of Corrogrout AG per 100mm depth of hole						
Hole diameter (mm)	Bolt diameter (mm)					
	12	16	20	25	32	40
20	25					
25	50	40	25			
32	80	70	60	40		
38		100	100	75	45	
45			150	130	100	45
50				180	150	90
62					280	225

All coverage rates given are theoretical and subject to actual site conditions. We recommend trial areas are done to establish practical consumption.

Health & Safety

Always use appropriate PPE including gloves, goggles and a barrier cream to avoid contact with skin and eyes.

Should contact with skin or eyes occur, wash immediately with plenty of clean water and seek medical advice.

If swallowed, seek medical attention immediately. Do not induce vomiting.

Corrogrout AG

Thixotropic epoxy anchoring grout

Avoid inhalation and ensure adequate ventilation or suitable respiratory equipment if working in confined spaces.

Do not expose products to fire or naked flames under any circumstances.

Always refer to the product Material Safety Data Sheet (MSDS) for full health & safety and handling recommendations.

Storage

Corrogrout AG has a maximum shelf life of 12 months from the date of manufacture.

To maximize shelf life always store products in their original, unopened packaging in a dry environment, away from direct sunlight with a minimum temperature of 10°C.

Damaged packaging, high humidity or extreme temperatures may reduce the shelf life.