

PRODUCT NAME

Rotafix Zeraset T Structural Adhesive
400 cc pack (3544) - 5.5kg/3.5lt pack (3547)

Product Description

ZEROSET T is a thixotropic, structural two part adhesive based on a combination of epoxy resins and special graded fillers, designed for the bonding of timber, masonry and concrete

Uses

As a structural adhesive : for concrete & wood, hard natural stone, bricks, masonry steel, Iron, Aluminium, Holes and void filling, Plate bonding for concrete & timber can be used in vertical and overhead situations. Installation of high strength anchors and the bonding adhesive of our Rotafix (Hypalon) Membrane to tank vertical and horizontal joints in concrete to prevent the ingress of water

Characteristics/Advantages

ZEROSET T Adhesive has the following advantages: Easy to mix and apply, Excellent adhesion to most construction materials. High strength thixotropic adhesive, low-sag in vertical and overhead applications, Solvent Free, Hardens without shrinkage, High initial and ultimate strength.

Tests

Approval/Standards
Testing according to ISO 15274

Product Data

Colours:
Base part : Grey paste
Hardener : yellowish Paste

Packaging:
Supplied in 400 cc pre batched packs consisting of 2 x plastic screw cap jars with an empty cartridge set and follower plate
Supplied in 1 x 5.5kg/3.5lt pre batched packs (no cartridge sets supplied with this pack)

Storage

Storage conditions:
Shelf Life of 24 months from date of production if stored properly in original unopened, sealed and undamaged packaging, in dry conditions at temperatures between +5°C and +25°C. Protect from direct sunshine, Keep of cold floors and protect from frost.

Chemical Type:
Thixotropic Epoxy paste and its curing agent

Density

1.55 + 0.02 kg/ per pack (base & hardener mixed) (at +20°C)

Compressive Strength

(According to ASTM D695)

Curing time	+ 20°C
3 days	25 – 30 N/mm ²
7 days	40 – 50 N/mm ²
11 days	50 – 60 N/mm ²

Mechanical/Physical Properties

Property	Units	Test Method	Result Mean
Tensile Strength	N/mm ²	BS EN ISO 527-2	12.75
Bond Strength *50% of Ultimate	MPa	BS EN 1465	>20
Environmental Durability	MPa	BS EN ISO 9142	>21
Environmental Conditions	24hrs at 24 °C & 90% RH 72hrs at 24 °C & 90% RH	24hrs at 40°C & 30%RH 48hrs at 40°C & 30%RH	Timber Species tested on tropical hardwood
Bond Strength on adhesive to tropical hardwood 'Jarrah'	MPa	BS EN 1465	>9
Bond Strength on adhesive to common UK structural timber, CLT, Glulam, Douglas Fir	MPa	BS EN 1465	>6

Elongation at break	%	BS EN ISO 527-2	16.03
Crack Extension	mm	ASTM D3762	13.94
Temperature of Deflection Under Load	°C	BS EN ISO 75-2	<23.0
**Pot life 100 G @ 20°C	Minutes	EN 14022	50
**Cure time 100 G @ 20°C	Days	EN 14022	300

**Pot life and cure times will vary dependant on ambient temperature and humidity

System Information

Consumption/Dosage:

The volume contents are stated on the packs. As a guide 400cc pack of mixed **ZEROSSET T** as an Adhesive thickness of 1mm thick will cover 0.4m² of concrete .

As a guide 5.5kg pack will bond 20 linear meters of Rotafix (Hypalon) Membrane @ 1.5mm glue line.

Substrate Quality:

All types of substrate must be clean, dry or mat damp (no standing water) and free from contaminants such as dust, dirt, oil, grease, existing surface treatments and coatings etc.. Steel substrates must be de-rusted to Sa 2.5 standard to maximise adhesion. The substrate must be sound and all loose particles must be removed.

Substrate Preparation:

Old surface treatments or coatings and all loose or friable particles must be removed to achieve a laitance and contaminant free, open textured surface. Steel: Must be cleaned and prepared thoroughly to an acceptable quality i.e. by blast cleaning and vacuum. Avoid dew point conditions.

Application Conditions/Limitations

Substrate Temperature: +8°C min. / +25°C max.

Ambient Temperature: +5°C min. / +25°C max.

Material Temperature: ZEROSET T must be applied at temperatures between +5°C and +25°C (Avoid dew point conditions)

Application Instructions

Mixing:

Add the total contents of the smaller container (curing agent) to the (base) Mix the pastes

Thoroughly using a flat end pal let knife, reference 3642. (to give a homogenous coloured mix)

Place the Follower-plate onto the surface of the mixed material ensuring it fits parallel in the tub with the outer and central lip pointing upwards. Cut the seal from the front end of the cartridge sleeve. Place the back of the cartridge vertically and centrally over the hole in the follower-plate.

Press the cartridge firmly and continuously down on to the follower-plate until t he follower-plate bottoms on the mixing tub base. Carefully remove and invert the now full cartridge.

Screw on the front injection nozzle plus any chosen injection tube assembly. Finally, insert the rear plunger. Where applicable, install the full cartridge of ZEROSET T STRUCTURAL ADHESIVE into the injection gun. Alternatively for spreader application as an adhesive, dispense directly from the cartridge without the aid of the front nozzle or injection tube.

Mixing knife Ref: 3642. 400cc injection gun Ref: 3667. Available from Rotafix.

Mixing Time:

Mix the Base & Hardener parts together for at least 3 minutes with a mixing Knife until the material becomes smooth in consistency and a uniform in colour. (use a mixing drill and paddle for the 5.5kg pack) Mix only 1 x pack at a time or the quantity which can be used within its pot life.

Cleaning of Tools:

All tools and application equipment can be with thinners or solvent wipes immediately after use. Hardened and or cured material can only be removed by mechanical means

Health and Safety & Legal Information

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The requirements for a Rotafix product(s) may be specific for an individual project. Advice given by Rotafix can only be considered as part of the contract if it is provided in writing.

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