

METASET[®] STRUCTURAL ADHESIVE

Fast Curing Multi-Purpose Adhesive

Product Description

METASET[®] Structural Adhesive is a two component, flexible, multi-purpose adhesive based on GCP's (formerly Stirling Lloyd) unique ESSELAC[®] advanced resin technology.

Uses

METASET[®] Structural Adhesive is suitable for the bonding of flexible PVC sheets to concrete and steel. As such it is used in conjunction with our SENTINEL[®] joint systems.

METASET[®] Structural Adhesive can also be applied underwater as a repair or coating for concrete. It is available in both a standard grade and a tropical grade for application in hotter climates.

Advantages

- Fast curing
- Excellent ageing properties
- Can be applied underwater
- Low temperature application
- Multi-purpose adhesive. Suitable for numerous applications

Technical Data

PROPERTY	VALUE
Application Temperature Range ¹	0 - 50 °C
Typical Working Life (3% Catalyst)	
Standard Grade	
30 °C	8 minutes
20 °C	10 minutes
10 °C	20 minutes
0 °C	30 minutes
Tropical Grade	
50 °C	8 minutes

40 °C	10 minutes
30 °C	15 minutes
Typical Cure Time (3% Catalyst)	
Standard Grade	
30 °C	15 minutes
20 °C	20 minutes
10 °C	30 minutes
0 °C	40 minutes
Tropical Grade	
50 °C	12 minutes
40 °C	15 minutes
30 °C	20 minutes
Bond Strength to Concrete	> cohesive strength of concrete
Peel Strength to PVC Sheet	>2N/mm ²

¹METASET[®] Structural Adhesive can be applied at surface temperatures as low as -30 °C with minor modifications during either production or on site. Please contact our Customer Services Department for further details.

²If the surface has been coated with ELIMINATOR[®], the METASET[®] Structural Adhesive will bind directly to this membrane. Resin on surfaces which are not covered by PVC sheet will remain tacky.

Surface Preparation

It should be stressed that the success of any coating or repair system is dependent on the thoroughness of the surface preparation.

All substrates must be clean, dry and structurally sound. They must be free from laitance, dust, oils, fats and other surface contaminants.

Concrete

Repairs to damaged concrete can be made using METASET[®] Rapid Repair Mortar. If other repair materials are to be used then the compatibility must be checked with our Customer Services Department first.

If additives, cement replacement or curing agents have been used please contact our Customer Services Department.

Steel

On steel surfaces all rust, dirt and contamination should be removed to expose bright metal to achieve a surface finish to comply with Swedish standard Sa 2.5. Prior to any blast cleaning the surface must be thoroughly degreased.

Underwater

Clean the surface and remove all loose material.

For compatibility with other construction materials please consult our Customer Services Department.

Application

Primer

Concrete substrates must be primed using either PAR1 or PA1 primer. Steel substrates must be primed with ZED S94 primer. Please refer to the relevant datasheets for further information².

No primer is required for underwater applications.

Mixing

METASET[®] Structural Adhesive consists of a pre-packed resin component and a bag of powder catalyst (BPO). Both components are supplied pre-measured for on-site whole pack mixing.

Ensure the job is prepared before starting the mixing operation. Immediately before use add the correct amount of BPO to the resin and stir thoroughly using a mechanical stirrer, such as an air-driven drill (400-800rpm) and paddle until all the BPO has dispersed. Some settlement may occur during storage and transportation so stirring should continue until the mix is fully homogenised. Scrape round the sides and base of the drum to ensure thorough mixing. The lower the temperature the longer dispersion takes, but is typically around one minute. Once the BPO is added this initiates the 'working life' of the material during which time it should be applied. Do not add fresh material to partially cured material.

METASET[®] Structural Adhesive can be applied using a trowel, brush or similar instrument.

For underwater applications use of a palette knife is recommended. Ensure that the METASET[®] Structural Adhesive is worked into the surface to dispel all of the water.

Coverage

METASET[®] Structural Adhesive - 1.1kg/m²/mm

Cleaning

All tools and equipment should be cleaned with acetone before the material is allowed to cure.

Packaging & Storage

METASET[®] Structural Adhesive - 5kg & 20kg kits.

All components of METASET® Structural Adhesive should be stored in cool, dry, protected conditions, out of direct sunlight and in accordance with the relevant site Health & Safety regulations. Storage temperature must not exceed 25°C. Do not store near naked flames or foodstuffs. Stored in unopened containers, under these conditions, the components have a shelf life of twelve months.

Health & Safety

The Safety Datasheet must be read, understood and available on site before commencing work.

It is the Company's policy to take all reasonable steps to prevent injury to all property and personnel from foreseeable hazards. This extends to the public in so far as they come into contact with the Company or its products.

General Information

METASET® Structural Adhesive is part of a wide range of specialist waterproofing, surfacing and repair materials manufactured and supplied by GCP. If you require any further information on this or any other of our products, please contact our Customer Services Department or visit www.gcpat.com.



Certificate Number 15174
ISO 9001, ISO 14001

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gcpat.uk/solutions/products/metaset-resifila-concrete-levelling-repair-and-smoothing-system/metaset