

PA1 PRIMER

Air Drying Primer

Description

PA1 PRIMER is a single-component, air drying primer for concrete and cement screeds, enabling application in temperatures as high as 50 °C. PA1 PRIMER is based on GCP Applied Technologies' advanced resin technology and extensive experience in the development of high performance primers.

Uses

PA1 PRIMER is used to seal the surface of concrete screeds and to improve the adhesion of GCP's wide range of membranes, screeds and coatings.

Approved for use with the Eliminator bridge deck waterproofing membrane by:

- EOTA – ETA No.15/0362, Liquid Applied Bridge Deck Waterproofing, ETAG 033
- British Board of Agreement (UK) - HAPAS Certificates No.11/H169, 11/H170, for Highways England road bridges

Technical Data

PROPERTY	VALUE
Application Temperature Range ¹	5 to 50 °C
Typical Cure Time	
50 °C	10 minutes
40 °C	15 minutes
30 °C	25 minutes
25 °C	40 minutes
20 °C	60 minutes
15 °C	2 hours
10 °C	4 hours
5 °C	8 hours

Surface Preparation

All surface coating systems are dependent on the quality of surface preparation.

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

All concrete decks must be prepared by suitable mechanical means such as vacuum blasting to provide a sound surface, prior to priming.

Solid ground floors must have an effective moisture/vapour barrier.

Repairs to damaged concrete can be made using METASET® ResiFilla rapid curing repair compounds. If other materials are to be used then the compatibility must be checked with our Technical Services Department first.

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

Application

PA1 PRIMER consists of a clear resin supplied in a metal pail.

Immediately before use stir the primer resin thoroughly using a mechanical mixer, such as an air-driven drill (400 – 800 rpm) or intrinsically safe electric drill with mixing paddle. Care should be taken not to entrain excessive air in the mix.

Note: If PA1 PRIMER is to be decanted from a large drum into smaller pails on site ensure that the supply drum is stirred thoroughly prior to decanting.

PA1 PRIMER should be applied evenly to the substrate by brush, roller or airless spray.

For spray application the recommended equipment is a Graco 23:1 Monark airless spray pump with a ¼" spray line and a spray tip size between 0.025" (25 thou) and 0.035" (35 thou). If spray applied then it is preferable to follow closely behind with a dry roller to remove any 'ponding'.

For roller application, a roller tray should be used as this helps to avoid ponding that can occur if you pour straight from the container onto the deck.

The substrate should be completely wetted with PA1, ensuring maximum penetration so as to prevent pinholing and ensure good adhesion, however 'ponding' and a coat application above the coverage rate must be avoided.

One application of PA1 PRIMER is normally sufficient. When dry, adequately sealed areas will display a slight gloss. On very porous concretes, areas may dry to give a matt finish where all the primer has been absorbed. These areas will require a second coat. Visually inspect the primed surface for defects e.g. pinholes. If any defects are found, apply a second coat to areas to ensure the substrate is adequately sealed. Ensure all areas of the first coat of PA1 are completely dry and hard before applying a second coat.

The drying time of the PA1 PRIMER will depend upon site conditions, but typically is 60 minutes at 20°C. Additional drying time may be required on porous substrates.

The coverage rate will depend upon the porosity of the substrate but is typically between 0.15kg/m² and 0.25kg/m² depending on the concrete.

Once it has cured the primer will accept foot traffic and, where necessary, vehicle traffic with rubber tyres. To prevent unnecessary contamination, keep traffic to a minimum. The primer should be dry to the touch and fully cured before the next application stage starts.

Limitations

On asphalt substrates the primer must be left to dry for a minimum of 8 hours at 20°C, longer at lower temperatures.

When applied in an enclosed space or an area with restricted air circulation, adequate ventilation must be provided. In many cases it may be adequate just to leave a door open and allow a through draft. Alternatively the use of mechanical ventilation such as industrial fans may be required. An air exchange of 5 to 6 times an hour is normally sufficient.

Coverage

PA1 PRIMER (Typical) 0.2kg/m²

(Coverage rate will vary with surface texture and porosity.)

Cleaning

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

Packaging & Storage

PA1 PRIMER is supplied in 5kg, 20kg, 55kg (airfreight) and 190kg packs.

All components of the system should be stored in cool, dry, protected conditions, out of direct sunlight and in accordance with the relevant Health & Safety regulations. Storage temperatures must not exceed 25°C. Do not store near naked flames or foodstuffs. Protect from frost.

Stored in unopened containers, under the correct conditions, the components have a minimum shelf life of twelve months. If your product is more than twelve months old you must contact GCP before use.

Health & Safety

Please refer to our safety datasheets for further information.

General Information

PA1 PRIMER 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

¹ The Cure Times given are for application onto concrete. They will vary with temperature, film thickness, substrate porosity, and degree of air movement. Below +5 °C or for faster drying times use one of GCP's reactive ESSELAC[®] primers such as PAR1.

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