

DELTA ROOF GUARD CONCRETE PRIMER / HUMIDITY PRIMER

Delta Roof Guard Concrete Primer (humidity primer) A two part water based epoxy primer (humidity primer) is a highly effective penetrative resin, which provides a sound, solid base prior to the application of Delta Roof Guard QC or Roof Guard CP. Delta Roof Guard Concrete Primer will improve adhesion to damp: wood and concrete substrates. It effectively blocks residual moisture flow and prevent blistering of the polyurethane coating applied on top.

This product is useful for any kind of waterproofing project, involving polyurethane sealing, such as:

- Roof and wall refurbishments
- Waterproofing treatment of tanks and other water management facilities
- Floorings in moisture-affected environments



PRODUCT DESCRIPTION

Moist surfaces are troublesome when treated with any synthetic resin, both because of immediate adhesion difficulties and problems arising afterwards because of the upward water pressure. In many cases, material, and time constraints force applicators to work on less-than-optimal support conditions, and a moisture-addressed product is needed in order to:

- Minimise adhesion failures
- Avoid blistering due to the water pressure from below (support saturation)
- Avoid air bubbles, due to the water vapour pressure which cannot be released (mostly encountered in elastic membrane treatments)
- Incompatibility of the support with one-component, moisture-cured polyurethane resins

Delta Roof Guard Concrete Primer is the best solution as a primer for waterproofing or flooring polyurethane application on supports with moisture content greater than 4%. Nevertheless, this product is not useful when moisture has a phreatic origin, with pressures greater than 1,5 N/mm².

Delta Roof Guard Concrete Primer is a 2-component, water-based epoxy resin. Components, once mixed, are totally compatible with moist supports, and the resulting polymerized product is a crystalline material with high adhesion and tensile strength. It effectively blocks residual moisture flow and prevent blistering of the polyurethane coating applied on top.

SUPPORT REQUIREMENTS

In order to achieve a good penetration and bonding, support must be:

1. Flat and levelled (Product is self-levelling)
2. Compact and cohesive (pull off test must show a minimum resistance of 1,4 N/mm²)
3. Even and regular surface
4. Free from cracks and fissures. If any, they must be previously repaired
5. Clean and dry, free of dust, loose particles, oils, organic residues, or laitance.

RECOMMENDED ENVIRONMENTAL CONDITIONS

Support temperature should be between 15°C and 40°C. At higher temperatures, specific precautionary measures must be taken. Please follow manufacturer advice. Application under low temperature and high humidity conditions is not recommended.

PREPARATIONS

Concrete surfaces must be previously prepared by sandblasting or any other suitable means. Remove all dust and loose material before priming.

MIXING

Stir and homogenise thoroughly component A and B using a low-speed stirrer. The mixture turns to a whitish, milky dispersion. After application, the milky layer should turn to a colourless film in a one to two hours period, depending on temperature, humidity, and thickness.

APPLICATION

Apply 200 to 500g/m², by brush or roller. Higher quantities may lead to white/translucent areas and poor appearance. On very absorbent substrates, dilution is allowed. Use 10 to 20% water. On hot surfaces (e.g. recently exposed to sun), moist the surface before starting application. Application in excess can lead to resin retraction upon water evaporation. Do not exceed the recommended application quantities. If some white spots appear after curing, they must be removed before application of following coats.

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CURING TIME

Data for a 500g/m² application. High temperature and low humidity favour the drying process. High humidity conditions make the initial milky film to remain white and sticky.

Conditions	Dry to touch (h)
25°C, 5% rh	6
25°C, 90% rh	10 (milky)
35°C, 20% rh	2
6°C, 50°C	>100
-15°C	>100, always milky

REAPPLICATION

A second coat may be applied, if needed, from the moment when the first coat is dry to touch, and not later than 24 hours.

RETURN TO SERVICE

When used as a primer for polyurethane waterproofing or flooring jobs where appearance is important, it is recommended to ensure Delta Roof Guard Concrete Primer is fully cured and dry, by measuring the moisture content on the Primer film if necessary. If some of the initial water remains when a moisture-curing polyurethane is applied, some blisters may develop.

TOOL CLEANING

Component A can be cleaned using Delta Roof Guard PU Solvent. Component B and the unreacted AB mixture can be cleaned with water.

ENVIRONMENTAL PRECAUTIONS

Empty containers must be handled with the same precautions as if they were full. Treat empty containers as hazardous waste and transfer them to an authorized waste manager. If the containers still have some material left, do not mix with other product before considering the risk of potentially dangerous reactions. Never mix in volumes larger than 5 litres in order to prevent a dangerous heat evolution.

SAFETY

Epoxy components are potentially sensitising. Always follow instruction provided in the Material Safety Data Sheet. As a general rule, suitable skin and eye protection must be worn. This product is intended to be used only for the uses and in the way here described. This product is to be used only by industrial or professional users. It is not suitable for DIY-type uses.

Problem	Question	Cause	Solution
Film remains white and sticky	Suitable solvent	Slow reaction rate	Remove and change primer system

OTHER INFORMATION

Disclaimer: All data and information contained in these Product/Technical Data Sheets is up-to-date and correct as at the date of issue. The information given is suggested as guidance and should only be used for evaluating your specific application. Delta Membrane Systems Limited cannot control or anticipate the conditions under which this product may be used, each user should review the information in specific context of the planned use. The information contained in these Product/Technical Data Sheets should not be considered a warranty, expressed or implied, including but not limited to a warranty of merchantability or fitness for a particular purpose. In no event shall Delta Membrane Systems Limited be liable for any incidental or consequential damages resulting from the use, misuse or inability to use the product. This exclusion applies regardless of whether such damages are sought based on breach of warranty, breach of contract, negligence, strict liability in tort, or any other legal theory. When in doubt, contact Delta's Technical Team on 01992 523 523.