## **DEGADUR® ELASTOMERIC JOINT SYSTEM**

# FOR CONCRETE SURFACES WHERE A HIGH STRENGTH FLEXIBLE JOINT SYSTEM IS REQUIRED.

| Project Details: |  |
|------------------|--|
| Prepared for:    |  |
| Notes:           |  |
| Date:            |  |
| Colour:          |  |

## 1. PREAMBLE

This specification is for the application of the DEGADUR® 510 | 430 Elastomeric Joint System applied to construction movement joints in concrete slabs. This DEGADUR® system is intended for use in areas subject to heavy mechanical load. The DEGADUR® system thickness will vary depending on specific requirements but can be laid from 1mm to 150mm in a single application with no change in cure times.

It is available with anti-skid friction coatings or can be left as a smooth surface.

DEGADUR® resins have the unique ability to cure at temperatures from -30°C to +35°C, therefore extreme temperature installations can be accommodated for by adjusting the catalyzing formula to ensure minimal change in the curing time, enabling a working environment to be back to use quickly.

Rapid Return to Service. DEGADUR® resins derived from Liquid Plexiglas® achieve full cure within two hours making them a perfect choice for time poor projects where installation time is critical so a surface or floor can be returned to full service as quickly as possible.

## 2. SURFACE PREPARATION

## Responsibility

All work in this section shall be the responsibility of the Degafloor NZ Registered Applicator, unless otherwise expressly agreed.

## New Concrete Cure times

Depending on the thickness of the slab and the concrete design (MPa), appropriate curing times must be observed to ensure all shrinkage has taken place prior to filling the construction joints. Industry standard practice suggests 1 month per inch of concrete.

## **Surface Preparation**

All control joints are to be as specified and detailed by the engineer. All surfaces must be clean and free from dirt, grease, grime, oils, bonding or release agent and any other contaminants.

Ensure surfaces are thoroughly dry before applying the specified system. Test method ASTM D4263 is recommended. The moisture content of the concrete at surface level must comply with the specific requirements of the relevant TDS sheets or no more than 4% moisture content or 75% Relative Humidity.

## Spalled or Broken Concrete

Any spalled or damaged concrete must be cut back to sound concrete ideally with a crack chaser to ensure straight lines. Fill with DEGADUR® 510 Repair Mortar tinted concrete grey. Once cured re-cut the construction joints, ensuring total separation between the two slabs leaving a 6mm chase in the middle.

Mask either side of the chase and fill with DEGADUR® 430 elastomeric joint filler.

## **Sloping Surfaces**

Thickening the DEGADUR® 430 with AEROSIL® 200 maybe required when applying on heavily sloped surfaces.

## **Onsite Equipment**

Ensure all necessary equipment is on site, such as calibrated scales, air flow equipment, mixers etc.

Calibrated weighing scales are required for precise measured quantities of resin and catalyst.

The installation process requires air movement to facilitate curing. If air movement is limited, fans are used to create air flow. Air flow equipment is also used to assist in extraction of odour to an appropriate outlet.

During the brief curing process, the Methyl Methacrylate resin emits an odor and ventilation is required when working in confined spaces or populated areas to disperse the vapour.

## 3. DEGADUR® Application & Materials:

| DEGADUR® Primer 112 or 111  | DEGADUR® 510   DEGADUR® Crack Sealer |
|-----------------------------|--------------------------------------|
| DEGADUR® 430 elastic resin  | Accelerator 101   Bond Promoter      |
| BPO Hardener   AEROSIL® 200 | Degafloor Fillers   Aggregates       |

**NOTE:** All DEGADUR® resins must be kept and mixed at the same ambient temperature as the location of installation to prevent a premature reaction.

## DEGADUR® 112 Primer.

For damp concrete use 111 - Add 1Kg of F111 Filler per 1.86Kg of 111 resin. Consumption 0.6Kg/m<sup>2</sup>.

Prime prepared surfaces with selected DEGADUR® primer using a rubber bladed squeegee and a brush. Consumption is approx. **0.4Kg per m²** depending on the absorbency of the substrate.

Broadcast the freshly laid primer immediately with fire-dried quartz sand 0.3 - 0.8 mm (Blackhead Quarries 1836). Material consumption: approximately **0.2Kg per m**<sup>2</sup>. Do not cover the surface completely – approx. 70%. Vacuum excess aggregate once primer has dried which takes approximately 30 minutes. Hardener % is adjusted according to temperature.

Application in minus (-) temperatures requires the use of Accelerator 101. Refer to DEGADUR® low temperature guide.

## DEGADUR® 510 Repair Mortar

Mix DEGADUR® 510 repair mortar for thicknesses >10mm at 20% quartz sand filler, mix with appropriate hardener percentage and apply the catalyzed resin into the freshly prepared area of concrete requiring repair.

#### **DEGADUR® 430 Joint Filler**

Mix DEGADUR® 430 (no filler) with appropriate percentage of hardener and apply the catalyzed resin into the movement joint up to the height of the 1<sup>st</sup> shoulder cut. Once fully cured and all heat has dissipated then mix and apply the DEGADUR® 430 Formula (tint if required) till it is flush with the finished floor height, ensure all surrounding surfaces are adequately masked (protected) during the application.

## 4. RETURN TO SERVICE TIME

The DEGADUR® Elastomeric Joint System is ready for use two (2) hours after the application of the final sealer.

## 5. MAINTENANCE.

This DEGADUR® 510 Joint system should be cleaned using warm or hot water not exceeding 60°C with a neutral detergent solution. Scrubbing or power washing yield the best results.

Annual inspections should be carried out so any mechanical or physical damage can be addressed. The system is easily repaired, new DEGADUR® layers chemically fuse to existing layers indefinitely. Areas that are identified as damaged should be immediately rectified to the original specification standard to maintain system integrity and stop any substrate corrosion.

The use of solvents or abrasives is not recommended. Any resulting damage will not be covered under the warranty. Contact Degafloor NZ for a Cleaning & Maintenance guide.

## 6. COLOUR

Concrete Grey

## 7. PRICING

For a list of registered applicators contact Matthew Collie matt@degafloor.nz or Bernard Scott bernard@degafloor.nz

## 8. WARRANTY

The DEGADUR® Flooring System described in this specification is warranted as fit for the purpose for **one (1) year** from the date installation is completed. Regular maintenance and damage rectification are essential to maintain the warranty. Structural movement is not covered within the warranty.

We strongly encourage annual inspections to be undertaken by the original applicator to identify any maintenance that may be required to ensure optimal performance and service life.

Such a warranty is issued by the DEGAFLOOR NZ applicator carrying out the work, and is backed by the manufacturer as to the suitability for use of the material supplied, provided that:

- **A.** All specified work is carried out by an approved Degafloor NZ applicator who must complete the DEGADUR® Flooring Compliance Form and DEGADUR® PS3 Workmanship Warranty.
- B. All work is carried out in accordance with this specification, or any written amendment issued by the manufacturer.
- **C.** Degafloor NZ must be informed of any usage conditions that may affect the warranty. Special conditions may be applied where service or usage conditions involve any one of the following: severe mechanical abrasion, excessive impact, extreme temperature, and/or chemical spillage.