

DegafloorNZ > Dekor Series Specification

DEGADUR® 420 | 527 High Performance Decorative Floor Topping

| | |
|-------------------------------|--|
| Specifier: | |
| Project & Address: | |
| Colour: | |
| Date: | |
| Project Notes: | |

OVERVIEW.

This specification is for the application of the DEGADUR® Dekor Series flooring system utilizing 420 & 527 resins. It is a commercial grade, high performance flooring screed designed for environments requiring a highly decorative but easy to maintain floor surface that is subject to high foot traffic and moderate mechanical loading.

It is particularly suitable for use in **Schools, Cafes, Restaurants, Public Toilets, Retail Spaces** and **Public Facilities** due to the highly decorative aesthetics and strong resistance to wear.



Properties.

DEGADUR® ~ based on Liquid Plexiglas® resin technology is the perfect choice for projects requiring a rapid return to service.

- DEGADUR® floors can be returned to full service in just 2 hours after the final coat of sealer coat is applied.
- The unique chemistry of DEGADUR® allows installation and full cure in temperatures as low as (-) minus 30°C.
- Available in a range of 10 off the shelf, multi-coloured flake finishes.
- The resin rich formula with a finished thickness of 2.5mm offers excellent resistance to impact and wear.
- DEGADUR® Dekor Series floors are an excellent alternative to sheet vinyl and can be used in wet areas.

SURFACE PREPARATION.

Responsibility.

All work in this section shall be the responsibility of the DegafloorNZ Registered Applicator.

To facilitate cleaning and meet health and safety requirements, all surfaces leading to drains and gutters must be laid with appropriate falls to ensure they are free draining to mitigate ponding. All control joints are to be as specified and detailed by the engineer. All surfaces must be clean and free from grease, grime, oils, release agent or any other contaminants.

Note: Any areas requiring levelling or re falling are to be treated as a variation unless specified at the time of pricing. Before proceeding the Architect or Project Manager must approve any additional work required.

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 required 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, Methyl Methacrylate resins emit an odour and ventilation is suggested when working in confined spaces or populated areas to disperse the vapour.

Concrete Surface Preparation.

Concrete substrates shall have a surface which has been manually or mechanically trowelled or floated to an NZS 3114:1987 U3 finish. Concrete shall be cured for a minimum of 28 days prior to the installation of the selected DegafloorNZ Flooring System.

The slab moisture content shall be no greater than 4% or 75% RH ~ If this moisture content cannot be achieved, contact DegafloorNZ for an alternative solution. Applying DegafloorNZ flooring systems over green concrete is not advised.

Grinding | Bush Hammering | Shot Blasting.

Prepare the concrete floor by mechanical abrasion with vacuum attachment to achieve a surface profile of CSP6-8. Thoroughly vacuum with an industrial grade machine to remove any leftover dust from the grinding process.

Ceramic Tiles.

Prior to grinding, ensure all tiles are well adhered. Loose or damaged tiles are to be removed. Voids shall be filled with DEGADUR® 510 fast cure mortar. Allow minimum 1 hour cure.

Diamond grind the tiled surface with vacuum attachment to remove any contamination and to ensure the surface profile is sufficient for adhesion.

Once the surface preparation is complete, prime with a light coat of DEGADUR® 112 **with the addition of 0.25% DEGADUR® Bond Promotor**. It is important to ensure the standard quantity of hardener (BPO) for the specific temperature is doubled due to the Bond Promoter retarding the resin cure. Avoid leaving puddles in the application of the primer.

Cracks & Voids.

Fill any holes and voids that are not subject to continuing movement with DEGADUR® 510 Repair Mortar. Fill cracks that are less than 1.5mm wide with DEGADUR® Crack Sealer. Allow to cure for a minimum of (1) hour before grinding flush. For cracks greater than 1.5mm use unfilled DEGADUR® 430. For additional reinforcement prime the surface with 112 and lay a slurry of unfilled DEGADUR® 332 over pretreated cracks for additional reinforcement.

In the case of very porous slabs or slabs with extensive micro cracking, DEGADUR® Crack Sealer can be used to condition the surface. Lightly grind the floor to remove any contaminants, vacuum the dust then **flood the surface** with Crack Sealer allowing **approx. ½ litre per sqm** and leave to penetrate for 2~3 minutes before hard squeegeeing the sealer around the entire floor surface. It is important that no puddles are left which could affect the cure. Allow a minimum cure of 1 hour before a final light grind.

Any cracks that may be subject to cyclic movement refer to DegafloorNZ for a specific solution.

Falls | Leveling*

For areas that require shape correction or to provide falls, **DEGADUR® 510** resin prefill can be used in thicknesses up to 150mm in one application. **See last page for DEGADUR® 510 mix formulation.**

Epoxy bonded concrete is an alternative on stable concrete substrates if a **minimum 28 day cure** can be accommodated.

***A fall of 1:20 for showers is mandatory.**

In other wet areas, a fall of 1:50 is required to achieve a free draining floor and 1:100 is suggested in kitchens or laundries to aid cleaning and water removal.

Inspection Hatch & Drain Edge detailing.

It is recommended in these areas where the covers are removed on a regular basis for cleaning and inspection to utilize a stainless-steel L angle, rebated into the concrete for the cover to sit in. A standard profile would be 30x30x3mm aluminum or 316 stainless steel. Refer to DegafloorNZ online CAD details 15 & 16.

Control Joints.

Any existing or new control joints within the concrete slab shall be reflected through the DEGADUR® System. Control joints are normally addressed by recording the location of existing concrete joints and re cutting them once the floor has been laid with a crack chaser to form a neat chase filled with floor sealant. Joints should be filled with PEF rod and a flooring grade sealant such as **Gorilla 940FC** PU Adhesive Sealant by Soudal.

Dekor Coving.

Where required install coving to floor & wall junctions. A typical cove height is 150mm with a nominal 50mm radius. Cove height can be reduced to 50mm with a 10-20mm radius or increased in height if required. Coving can be finished against the wall lining with an aluminium coving bead or behind the wall linings.

Please note, on block or precast concrete walls, a cove bead is not used, the cove is finished by manually "rolling" the resin back into the vertical wall surface.

Mix **DekorCove®** resins, Part A 1.5Kg with 0.5Kg of Part B, adding 5Kg of 7/14 sand, 6Kg of 18/36 and 4.5Kg of J61.

This formula will yield approx. 2.5 lineal metres of cove at 150mm high with a nominal 50mm radius.

DEGADUR® Application & Materials:

| | |
|----------------------------------|--|
| DEGADUR® Primer 112 or 111 | DEGADUR® 510 Mortar |
| DEGADUR® 420 527 | DEGADUR® Crack Sealer |
| BPO Hardener Accelerator 101 | DegaFiller 420 |
| Degafloor DekorCove® resin A + B | AEROSIL® 200 Degafloor Bond Promotor |

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

Dissimilar Surfaces.

All dissimilar surfaces are to be checked for compatibility with the DEGADUR® System and are to be correctly detailed to ensure any transitions remain secure and watertight. As required, install metal termination edges to protect the finished surface.

DEGADUR® 112 Primer.

Note: For wet concrete, use DEGADUR® 111. Add 1Kg of F111 Filler per 1.86Kg of resin. Consumption is approx. 0.6Kg per m².

Prime prepared surfaces with the selected DEGADUR® primer using a 10mm pile roller and/or brush to distribute the product evenly. Consumption is approx. **0.4Kg per m²** depending on the absorbency of the substrate.

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

IMPORTANT: Bond Promotor must be added at a ratio of 0.25% per kilo of primer for ceramic substrates.

DEGADUR® 420 Dekor Body Coat

Note: Where the 420 coat is being laid to falls, additional DegaFiller 420 should be used to thicken the resin.

Mix the DEGADUR® 420 body coat formula based on **1.6Kg resin per m²** with DegaFiller 420 (2.2Kg filler per 1Kg resin), mix with appropriate percentage of hardener and apply the catalyzed resin screed. The material should be dispersed using a trowel, gauge rake or notched squeegee.

Broadcast the **Degafloor MMA flake** immediately into the fresh screed at a rate of approx. **0.4Kg per m²**. Once full coverage is achieved with no resin bleed, allow to dry for a minimum of one (1) hour.

Once dry, sand the entire surface smooth, ideally with a **Progress Sander** or a **Pole Sander** using **16 ~ 24 grit pads** to remove all surface irregularities. Thoroughly vacuum all loose flake and debris before sealing.

DEGADUR® 527 Sealer

Apply the 1st coat of DEGADUR® 527 at a rate of **0.5Kg per m²** with a pole roller and back roll using a high quality 10mm pile, lint free roller sleeve. Once dry, sand the entire floor area with a **coarse grade, 24 ~ 40 grit sandpaper** to achieve a smooth finish, vacuum thoroughly, then apply the **2nd and final sealer coat** at a spread rate of **approx. 0.3Kg per m²**.

RETURN TO SERVICE TIME.

DEGADUR® Flooring Systems are ready for light foot traffic one (1) hour after the final application of sealer and ready for full use two (2) hours after the final application of sealer.

MAINTENANCE.

This DEGADUR® 420 | 527 system should be cleaned using clean water not exceeding 65°C* with a neutral detergent solution. Contact DegafloorNZ for a Cleaning & Maintenance guide.

*** Health & Safety regulations stipulate water temperature must not exceed 65°C to avoid severe burns.**

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.

Certain substances such as iodine and turmeric can cause staining. This is an aesthetic issue but does not affect the performance or functionality of the floor and is therefore not considered a defect or warranty issue.

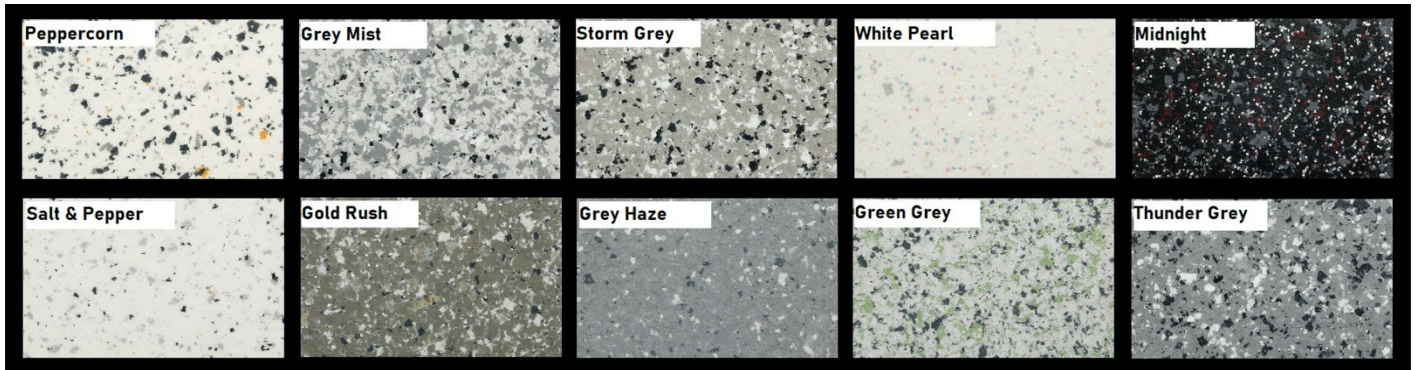
The use of solvents or abrasives is not recommended. Any resulting damage will not be covered under the warranty. Contact DegafloorNZ for a Cleaning & Maintenance guide.

SLIP RESISTANCE.

DEGADUR® Dekor Series floors are smooth by default however Degafloor anti-slip spheres can be applied to achieve a **coefficient of friction** up to 0.7 if required.

COLOUR.

To be confirmed in writing by Architect or Client. Refer to DegafloorNZ for available options.



PRICING | APPLICATORS.

For a list of registered applicators, contact Matthew Collie on 027 238 2955 or email matt@degafloor.nz

WARRANTY.

The DEGADUR® Flooring System described in this specification is warranted as fit for the purpose for **seven (7) years** 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 DegafloorNZ 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 DegafloorNZ 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.** DegafloorNZ 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.

DEGADUR® LOW TEMPERATURE GUIDE.

DEGADUR® BPO Hardener percentages: From 0° to (+) 35° Celsius

| Temp °C | Crack Sealer | 111 | 112 | CP200 | 332 | 420 | 430 | 510 | 165 | 526 | 527 | 530 |
|------------|--------------|------|-----|-------|-----|------|------|------|------|------|------|------|
| 0° to +5 | 5% | 2% | 6% | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ | ~ |
| +5 to +10 | 5% | 1.5% | 5% | 4% | 5% | 4% | 5% | 6% | 1.8% | 1.5% | 1.5% | 3.5% |
| +10 to +15 | 5% | 1.2% | 4% | 3% | 4% | 3% | 4.5% | 4% | 1.5% | 1.5% | 1.5% | 2.5% |
| +15 to +20 | 3% | 1% | 3% | 3% | 3% | 2.5% | 3.5% | 3.2% | 1% | 1.5% | 1.5% | 2% |
| +20 to +25 | 2% | 0.7% | 2% | 2% | 2% | 1% | 2.5% | 2.4% | 0.8% | 1% | 1% | 1.5% |
| +25 to +30 | 2% | 0.7% | 2% | 2% | 2% | 1% | 1.5% | 1.8% | 0.8% | 1% | 1% | 1% |
| +30 to +35 | 1% | 0.7% | 1% | 1.5% | 1% | 1% | 1% | 1.2% | 0.8% | 1% | 1% | 1% |

DEGADUR® 510 formulation.

| THICKNESS | 0 ~ 20mm | 20 ~ 150mm |
|----------------------|-------------------|-------------------|
| DEGADUR® 510 | 2.7 ~ 3.0Kg resin | 2.5 ~ 2.7Kg resin |
| 7/14 | 7.5Kg | 7.5Kg |
| 18/36 | 7.5Kg | 7.5Kg |
| J61 | 5Kg | 5Kg |
| BPO – refer to chart | | |

Note: resin must come to the top of your mix when it is being troweled otherwise it will not cure properly.