

REACTIVE CONCRETE LIQUID DENSIFIER

**REDUCES CONCRETE POROSITY AND DUSTING
IMPROVES SURFACE ABRASION AND WATER RESISTANCE
IMPROVES CLEANABILITY AND STAIN RESISTANCE
WATER-BASED, EASY TO USE AND NO ODOUR**

PRODUCT DESCRIPTION:

Pro-Struct 542 is a water-based blend of polymers designed to penetrate into fresh or hardened concrete reacting within the substrate to increase the density. The cured Pro-Struct 542 provides a surface hardening effect which improves the durability, water repellancy and anti-dusting properties.

USES:

- Old or new concrete surfaces where an improvement to abrasion resistance is required.
- Warehouses, industrial floors, shopping malls and parking decks.
- Interior or exterior concrete slabs.
- Seals polished concrete surfaces.

PACKAGING & COVERAGE:

5 and 20 litre plastic containers

Approximately 5 to 6m²/litre/coat on power trowelled concrete

Additional material may be required due to surface porosity, surface profile and variations in levelling.

Approximately 2 to 3m²/litre/coat on porous concrete

SHELF LIFE:

Two years in original, unopened packaging when stored between 10 to 30°C.

TYPICAL PROPERTIES AT 25°C

Colour	Clear
Consistency	Liquid
Dry Solids	25%
No. of Components	1
Mix Ratio by Volume	As supplied
Pot Life	30 to 60 Minutes
Apply Over	Prepared concrete surfaces
Apply by	Broom, squeegee or floor scrubber. Remove excess with wet vacuum
Curing Time	2 to 4 hours – Recoat 24 Hours – Service 7 Days – Full cure
Application Temperature Range	10 to 38°C
Maximum Service Temperature	90°C
VOC Level	0gm/litre
Fire Resistance (ASTM 635)	Non-burning
Abrasion Resistance	35 to 50% Increase
Water Absorption	80% Reduction

APPLICATION INSTRUCTIONS

These instructions are not intended to show product recommendations for specific service. They are issued as an aid in determining correct surface preparation, mixing instructions and application procedure. It is assumed that the proper product recommendations have been made. These instructions should be followed closely to obtain the maximum service from the materials.

PLACEMENT GUIDELINES

SCOPE OF WORK (BOQ):

As a liquid densifier and sealer, apply Pro-Struct 542 as a clear water-based liquid by means of broom or squeegee to concrete surfaces, removing excess from the surface by wet vacuum.

SURFACE PREPARATION:

New Concrete:

Cure the concrete by a wet or sheet cure method in accordance with ASTM C-171. New concrete should cure seven days or longer before application of Pro-Struct 542. Allow concrete to air dry a minimum of 24 hours prior to the application of Pro-Struct 542. Insufficient drying of the concrete will prevent full penetration of Pro-Struct 542, reducing its effectiveness.

Existing / Older Concrete:

Concrete that is already in service or older floors must be clean and free of any materials that could prevent penetration of Pro-Struct 542, such as curing compounds or cure and seals, paints, coatings, dirt / oil, waxes, etc. If necessary, use Carboclean 252 to remove these contaminants before applying Pro-Struct 542.

APPLICATION:

Air temperature during application must be between 10°C and 38°C. At temperatures below 10°C the reaction and “gelling” process of Pro-Struct 542 is slower, so the concrete will need to remain wet with Pro-Struct 542 for a longer period of time. In hot or windy conditions, above 30°C, the reaction may take less than the normal 30 to 60 minute period. Concrete should be pre-dampened in hot weather, apply when all standing water has disappeared. Apply the Pro-Struct 542 to the concrete surface by low pressure sprayer or by pouring directly onto the surface and distributing evenly by broom or squeegee. With soft bristle hand brooms or brushes on an auto-scrubber, work the Pro-Struct 542 around the area to be treated and into the surface. The concrete must be kept with Pro-Struct 542 for at least 30 minutes – add additional Pro-Struct 542 if necessary to maintain a wet surface.

As the Pro-Struct 542 begins to thicken and gel underfoot, lightly spray the area with clean water to break up the thickened Pro-Struct 542 and move the excess material onto the adjacent floor area to be treated next. Do not track Pro-Struct 542 onto untreated concrete, as permanent footprints or tire marks can result. Continue the application process until the entire floor has been treated. When finished, completely **remove all excess Pro-Struct 542 from the surface.**

If excess Pro-Struct 542 is allowed to dry on the concrete surface, a white residue will form that can only be removed by mechanical means such as grinding discs or sanding. Prevent this by completely removing all excess Pro-Struct 542 from the surface when application is complete, with a wet vacuum.

Floor Joints:

If the floor joints are to be filled after Pro-Struct 542 has been applied, they must be thoroughly cleaned before installation of joint filler. Cleaning joints by circular concrete saw or a drill equipped with a wire turning wheel is recommended.

REFERENCE SAMPLE:

A trial reference sample should be installed by the applicator prior to start of contract to ensure correct coverages and workmanship.

RECOMMENDATION:

- DO NOT attempt to install material if temperature of components and substrate are not within 10 to 38°C. The cure time and application properties of the material are severely affected.
- DO NOT use water or steam in the vicinity of the application. Moisture can seriously affect the working time and other properties.
- Protect areas from dust and isolate access. Contamination between layers will affect the final appearance.
- Avoid contact with all liquid as they may cause skin and/or eye irritation. Workmen should cover hands with protective creams or rubber gloves and wear safety glasses.

CAUTION: MAY CONTAIN FLAMMABLE SOLVENTS. KEEP AWAY FROM SPARKS AND OPEN FLAMES. IN CONFINED AREAS WORKMEN MUST WEAR FRESH AIRLINE RESPIRATORS. HYPERSENSITIVE PERSONS SHOULD WEAR GLOVES OR USE PROTECTIVE CREAM. ALL ELECTRONIC EQUIPMENT AND INSTALLATIONS SHOULD BE MADE AND GROUNDED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE. IN AREAS WHERE EXPLOSION HAZARDS EXIST, WORKMEN SHOULD BE REQUIRED TO USE NON-FERROUS TOOLS AND TO WEAR CONDUCTIVE AND NON-SPARKING SHOES.



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- Protect all adjacent surfaces, including metals, glass, wood or brick from contact. If accidental contact occurs, wash with water immediately and remove.

NOTES:

- Procedures for maintenance of the flooring system during operations are described in "StonCor Cleaning Procedures".
- Specific information regarding chemical resistance is available in the Chemical Resistance Guide.
- Material Safety Data Sheets are available on request.
- A staff of technical service engineers is available to assist in installation or to answer questions related to our flooring products specifically or flooring problems in general.
- Requests for technical service or literature can be made through local sales representatives and offices, or corporate offices located throughout the world.

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