Standard Specification for the application of Chevaline Epistixx CP Interior Carpark coating system to concrete surfaces

Project:
Prepared for:
Specification: P1641
Date: May 2023

1.0 PREAMBLE:

This specification is for the application of a three-coat **Chevaline Epistixx CP** interior carpark system to a concrete floor. Appropriate allowance is made for preparation and also upgrading of existing concrete floor areas to provide a uniform surface.

The **Chevaline Epistixx CP** system is a semi-gloss, waterborne epoxy coating for use on concrete floor areas where down-time restrictions require early access to coated areas.

The **Chevaline Epistixx CP** system is a low V.O.C product.

2.0 SURFACE PREPARATION:

2.1 General Responsibility:

Unless expressly agreed otherwise at time of contract pricing, all work in this section shall be the responsibility of the Main Contractor, whether carried out by his own staff, other sub-trades or the Specialist Finishes Sub-Contractor. In the latter case, such preparatory work shall be priced separately from work defined in Sections 3.0 - 5.0 inclusive.

2.2 Mosskilling Treatment: (If required)

All surfaces shall be treated with Equus Mosskill solution to kill all moss/mould spores and growths. Stipulated kill-times shall be observed.

Note: Badly affected surfaces may require treatment before and after waterblast cleaning to ensure a residual moss-kill treatment before the coating application.

2.3 Concrete Preparation:

The substrate must be dry, firm, solid and free of residues of laitance, dust, grease, oil and other contaminants. In case of serious oil contamination, acetylene flame cleaning, followed by mechanical treatment, is required. Never use solvents to clean as they tend to push fat/oil into concrete.

The concrete must have cured a minimum of 28 days. The cohesive strength of the concrete substrate has to be, in average value, greater than 1.5 N/mm^2. This can be checked by carrying out a pull-off test according to ***ASTM C1583 Standard Test Method for Tensile Strength of Concrete Surfaces and the Bond Strength or Tensile Strength of Concrete Repair and Overlay Materials by Direct Tension – Pull-off Method***.

The concrete substrate shall be prepared with suitable methods such as captive shot blasting, scarifying or grit blasting. After treatment, the surface must be cleaned with an industrial vacuum cleaner. Final prepared surface profile shall be CSP3 (typical of light shot blast), according to ***ICRI Guideline No. 310.2R-1997, Selecting and Specifying Concrete Surface Preparation for Sealers, Coatings, Polymer Overlays and Concrete Repair***.

The information contained in this Specification is based on our experience and testing and represents the latest information available at the date of production. No responsibility is taken for uses to which this information may be put, but we advise that where application of products and processes is in complete conformity with this Specification an appropriate warranty may be available. We reserve the right to alter or update information parameters and formulations at any time without prior notice.
E: info@equus.nz

WATERTIGHT TECHNOLOGY COATINGS & SILICATE SYSTEMS FLOORING TECHNOLOGY

On new concrete slabs, good water curing under polythene is recommended. Liquid- or spray-applied curing compounds shall not be used.

The humidity on the surface of the concrete must not exceed 4%. The substrate temperature should be at least 3°C above the dew point during application. Do not apply when atmospheric condensation is occurring or likely to occur before full cure is obtained.

Note: If doubt exists as to the correct procedure, Equus Industries Ltd shall be contacted for a detailed preparation methodology.

2.4 Treatment of Surface Defects:

Any concrete defects, voids or irregularities can be filled with one of the following mixes:

.1 Epoxy Mortar: Chevaline Epistixx mortar. After mixing **Chevaline Epistixx** primer as per the corresponding Technical Data Sheet instructions, the following materials should be added for 1 litre of **Chevaline Epistixx** primer:

- 0.4 litre of water, mixing until a homogenous consistency is achieved.
- 1 kg of cement and
- 2 kg of sand as a maximum.
- Adjust the amount of water to achieve a mortar consistency.

Allow to cure 6 – 8 hours, depending on weather conditions.

.2 Cementitious Mortar: ASOCRET BIS 5/40 mixed and installed in accordance with the Manufacturer's recommendations.
Allow to cure 12 hours, depending on weather conditions.

.3 MMA Mortar (Fast Curing Mortar): Equus Ready Rep mixed and installed in accordance with the Manufacturer's recommendations.
Allow to cure for 45 – 60 minutes, depending on weather conditions.

3.0 CRACK PRETREAMENT:

All hairline cracks and untreated cracks up to 1 mm wide shall be filled out with **Chevaline Epistixx** mortar as per above instructions. This is to be done after priming with **Chevaline Epistixx** primer.

All hairline cracks and untreated cracks up to 3 mm wide shall be strip coated with a 150 mm- wide strip of **Matacryl Thix,** applied at 1kg/m^2, embedding an 80 mm Equus Jointing Tape into the wet **Matacryl Thix**. This is to be done after priming.

4.0 CHEVALINE EPISTIXX CP SYSTEM APPLICATION:

4.1 Primer:
All surfaces to be coated shall receive one (1) coat of **Chevaline Epistixx** primer. This shall be mixed and diluted up to 40% as per instructions on the label for easy application by brush, roller or soft broom at a spreading rate of 8-10 m2 per litre of mixed product. Allow to dry overnight.

4.2 Bodycoat Application:
All primed surfaces shall receive one (1) coat of **Chevaline Epistixx CP**, mixed and diluted up to 10% as per the instructions on the label for easy application by roller at a spreading rate of 6-7 m^2 per litre of mixed product. Allow to dry for a minimum of 6–8 hours.

The information contained in this Specification is based on our experience and testing and represents the latest information available at the date of production. No responsibility is taken for uses to which this information may be put, but we advise that where application of products and processes is in complete conformity with this Specification an appropriate warranty may be available. We reserve the right to alter or update information parameters and formulations at any time without prior notice.
E: info@equus.nz

WATERTIGHT TECHNOLOGY COATINGS & SILICATE SYSTEMS FLOORING TECHNOLOGY

4.3 Topcoat Application:
All surfaces shall receive one (1) coat of **Chevaline Epistixx CP,** mixed and diluted up to 10% as per the instructions on the label for easy application by roller at a spreading rate of 6-7 m^2 per litre of mixed product. Allow to cure at least 5-7 days before allowing other-than-foot traffic on the surface. Matching product batch numbers will be used for the final coat.

4.4 Expansion Joints:
All joints shall be must be filled with an oversized backing rod, correctly placed and sealed with **Dymonic 100** sealant (always respecting the 2:1 width-to-depth ratio of the joint design). This shall be expressed through the system.

4.5 Service Lane Markings:
Service lane markings shall be applied using **Chevaline Epistixx CP** in the appropriate colour. Spreading rate will be 6-8 sqm/litre and markings shall be neatly masked to give a `crisp' edge.

5.0 MAINTENANCE AND WARRANTY:

5.1 Maintenance:
Should the **Chevaline Epistixx CP** system be damaged at any time by undue mechanical force or excessive building movement and/or wear, the surface shall be repaired using materials compatible with the existing membrane, applied in accordance with guidelines supplied by Equus Industries Ltd.

The surface can be washed down at any stage using a neutral detergent and soft surging with a low-pressure water wash.

5.2 Warranty:
The **Chevaline Epistixx CP Interior Carpark System** may be warranted for a period of up to ten (10) years from the date the application is completed.

Such warranty is issued by the Equus Certified Applicator carrying out the work, and is backed by the manufacturer as to the suitability for use of the materials supplied, provided that:

.1 All specified work is carried out by the approved Equus Certified Applicator.

.2 All work is carried out in accordance with this specification or any written amendments thereto issued by the manufacturer.

.3 A yearly inspection of the floor is carried out and any damaged areas repaired.

.4 Special conditions may be applied where service conditions involve severe mechanical abrasion / impact or chemical spillage, or both.

.5 The warranty does not cover cracking to the system caused by substrate movement.

.6 The warranty does not cover adhesion problems caused by moisture from the ground.

The area is subject to usage conditions described to Equus Industries Ltd. and the Approved Contractor at the time the work is done, and those conditions remain for the term of the Warranty.

--oo0oo--

The information contained in this Specification is based on our experience and testing and represents the latest information available at the date of production. No responsibility is taken for uses to which this information may be put, but we advise that where application of products and processes is in complete conformity with this Specification an appropriate warranty may be available. We reserve the right to alter or update information parameters and formulations at any time without prior notice.
E: info@equus.nz

WATERTIGHT TECHNOLOGY COATINGS & SILICATE SYSTEMS FLOORING TECHNOLOGY