Specification

Standard Specification for the application of Chevaline Dexx waterproofing membrane to plywood carparking decks.

Project:
Prepared for:
Specification: P3013
Date: April 2020

1.0 PREAMBLE:

This specification is for the application of the **Chevaline Dexx Carpark System to** waterproof plywood car parking areas where it is desirable or essential to prevent water penetration into the structure, or through the structure, to underlying facilities.

The **Chevaline Dexx Carpark System** is a multi-layer waterproofing system that incorporates two layers of chopped strand fibreglass as reinforcement to accommodate stresses in all directions. It is generally further protected against oil, petrol and grease contamination by the application of a topcoat of **Traxx 2000 HS Wearcoat**.

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 Plywood Grade & Thickness:

.1 Structural Underlay - general usage:
Plywood thickness shall be determined by the engineer, based on loading and support spacing, but generally will be a minimum 22mm Cp-D-treated structural plywood, unless otherwise expressly stipulated by the specifier.

.2 Overlay to existing parking substrate:
Plywood shall be minimum 18 mm Cp-D treated structural plywood, unless otherwise expressly stipulated by the specifier.

2.3 Sheet Layout:
All sheets shall be laid out so as to maximize the use of whole sheets. All sheet joints shall be laid over framing members.

2.4 Back Priming:
Sheets used over spaces which are not ventilated shall be back primed with **Chevaprime PBT,** or equivalent, prior to installation.

2.5 Sheet Spacing:
Sheets shall be laid tight butt-jointed, with edges pre-primed with **Chevaprime PBT**.

2.6 Sheet Fixing:
Plywood sheets must be fixed in accordance with Manufacturer's instructions, taking into

account wind loading, frame spacing and ply thickness. Screw-fixing is preferred, using countersunk corrosion-resistant screws. All sheets shall be laid in a bead of construction adhesive along all framing members.

All fastener heads shall be recessed below the level of the sheet face.
All surface defects and fasteners shall be flushed out with an approved filler such as **Epar 801 Epoxy Filler** or **Equus Chevaline Superflush.**

3.0 SURFACE PRETREATMENT:

3.1 Surface Defects:
All splits and surface defects shall be flushed with **Chevaline Superflush or Epar 801,** which shall be allowed to cure before the membrane application begins. This shall include any gaps resulting from irregularities in sheet edges at tight-butt joints.

3.2 Treatment of Plywood Joints:
Apply a 150 mm-wide strip of 300gsm. chopped strand fibreglass mat, centered over all joints, and firmly bedded in **Chevaline Dexx.** This shall be done after priming (see 4.1) and before the membrane application.

3.3 Upstands, Junctions and Joints:
All vertical/horizontal transitions and joints shall have a minimum 150mm-wide strip of 300 gsm glass fibre mat embedded in **Chevaline Dexx** and centered on the transition/joint as additional stress reinforcement. This shall be done after priming and before application of the **Dexx** membrane layer.

4.0 CHEVALINE DEXX MEMBRANE APPLICATION:

4.1 Priming:
All surfaces to be coated shall be primed with **Chevaline Epistixx** Primer, applied by roller or brush at a spreading rate of 8-10 m2 per litre of mixed material. Allow to dry over-night.

This shall include upstands to a minimum height of 150 mm adjacent to all horizontal surfaces being coated.

Note: If there is likely to be a delay in membrane application apply a thin key coat of Chevaline Dexx Bodycoat thinned in a ratio of 80/20 with clean tap water within 24 hours of primer application, to ensure good bonding of the subsequent **Chevaline Dexx Carpark System**. Allow overnight dry before proceeding with membrane application.

4.2 Membrane Application:
The membrane comprises **Chevaline Dexx Bodycoat** and 300 gsm. glass fibre mat applied in the following sequence:

- **Chevaline Dexx** Bodycoat
- Glass-fibre mat (laid into wet Chevaline Dexx Bodycoat)
- **Chevaline Dexx** Bodycoat
- Glass-fibre mat (laid at right angles to the first layer)
- **Chevaline Dexx** Bodycoat (Allow to dry over-night).
- **Chevaline Dexx** Bodycoat (Allow to dry over-night).

All **Chevaline Dexx** Bodycoat layers shall be applied with a medium/ long nap roller. Application shall be in accordance with Equus Industries Ltd instructions, particularly with

regard to spreading rates and dry times, to ensure a sound tight membrane is achieved.

Ensure that the reinforcement mat is well embedded in the wet **Chevaline Dexx Bodycoat** working the mat through the wet material. to eliminate air-trap and to fully encapsulate all glass fibre strands. Apply further **Chevaline Dexx Bodycoat** layers as needed to provide the correct film build and even finish. Total spreading rate shall be not more than 10 m2 per 15 litre pail of **Chevaline Dexx Bodycoat** under normal laying conditions.

In areas of high traffic use, allowance shall be made for an additional thickness of glass fibre mat and an additional **Chevaline Dexx Bodycoat** within the membrane system, to ensure resistance to such traffic and the increased likelihood of impact damage. Such areas shall be clearly delineated on plans.

4.3 Non-Slip Surface – Pedestrian Access/ All Traffic Areas:
Treat the membrane with one coat of **Chevaline Dexx Wearcoat**, with profile grade and spreading rate in accordance with Equus recommendations, for likely service conditions.

4.4 Topcoat Application:
To provide chemical and hydrocarbon resistance, **Traxx 2000 HS Wearcoat** shall be applied 48 – 72 hours after the final **Chevaline Dexx Bodycoat** application. Two (2) coats of **Traxx 2000 HS Wearcoat** shall be applied at a spreading rate of 7-8 m2 per litre per application. Allow overnight drying between coats.

4.5 Procedures:
Ensure that at all times all work is carried out in accordance with procedures published by Equus Industries Ltd for this system. A full Quality Assurance Program shall be followed during installation. All detail work shall be carried out strictly in accordance with recommendations, and all surfaces shall be fully inspected for integrity under the QA Program, prior to hand-over.

5.0 SPECIFICATION NOTES:

5.1 Upstands/Coves/Sumps:
The **Chevaline Dexx** Membrane shall be taken 150 mm up all associated upstands and turned into any rainwater sumps which may be incorporated in the deck. For sumps and gutters, a finish coat of **Traxx 2000 Wearcoat** (without aggregate) shall be applied at 7-8 m^2 per litre.

5.2 Water Entry Points:
Ensure that all likely construction details which may allow water entry to the deck beneath the membrane are adequately sealed.

5.3 Membrane Edge Protection:
Where vehicular traffic enters or exits **Chevaline Dexx**-treated areas, it is recommended that low-profile hardwood or galvanised steel judder bars be bolted to the deck so that the membrane edge is protected against scuffing.

Where the **Chevaline Dexx Carpark System** is finished to a preformed patent metal expansion joint, or terminated part-way across any deck, it is recommended that the membrane be turned down to a chase at the rear edge of the metal or cut into the deck and sealed using **Traxx Floorjoint** as an adhesive/sealant.

5.4 Traffic Markings:
Traffic markings may be incorporated in the system. Using a brush, roller or spray

equipment, a coat of **Traxx 2000 Wearcoat NS (**white or yellow), or conventional road-marking paint can be applied after the final application of the **Traxx 2000 HS Wearcoat.**

5.5 Access Ramps:
Unless specifically required, access ramps are not generally treated using this system.

Where a non-skid treatment is needed, a **Traxx NS/Floorjoint** system should be detailed for application with modification to allow application of a coarse non-skid grit between the 2nd and 3rd coats of the **Traxx NS** coating system. Consult Equus Industries Ltd for a detailed recommendation if this application is to be carried out.

Where it is essential that the full **Chevaline Dexx** membrane is used on ramps because of a critical need to waterproof underlying areas, then the **Chevaline Dexx** membrane shall be applied, and overlaid with **Traxx Wearcoat** incorporating graded aggregate for slip resistance. Consult Equus Industries Ltd for a detailed recommendation if this application is to be carried out.

5.6 Placing in Service:
The treated areas may be placed in service 72 hours after the final **Traxx 2000 HS Wearcoat** application, depending on ambient site conditions.

6.0 PENETRATIONS:

Should any penetrations need to be made after the **Chevaline Dexx Carpark System** installation, all fixing holes shall be filled with **Tremco Dymonic FC** (PU sealant). Fixing bolts shall be half screwed into the sealant, leaving the sealant to cure for at least 6 hours. After 6 hours, finish the screwing process. This will act as a gasket.

7.0 MAINTENANCE AND WARRANTY:

7.1 Maintenance:
The **Chevaline Dexx Carpark System** may be cleaned at any time by low pressure spraying/brooming and hosing off using a weak (0.1%) neutral detergent solution. Floor sweeping machines and/or abrasive cleaning agents shall not be used.

It is recommended that the surface be inspected at 2-3 yearly intervals, and if necessary, a further application of **Traxx 2000 HS Wearcoat** be carried out to preserve the appearance and performance of the applied membrane depending on traffic loadings.

Should mechanical damage occur because of undue wear, vandalism or associated building maintenance, the **Chevaline Dexx Carpark System** can be easily repaired by patching and/or resurfacing as required, after simple preparation.

7.2 Warranty:
The **Chevaline Dexx Carpark System** described in this specification may be warranted for up to fifteen (15) years provided that:

.1 All specified work is carried out by a Certified Equus 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 deck is carried out and any damaged areas repaired.

.4 Special conditions will 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.

Such a warranty is issued by the Certified Equus Applicator who does the work and is backed by the Manufacturer as to the fitness for the purpose of the materials supplied by them for the contract.
It should be noted that as the surface is a wearing surface, certain provisions regarding mechanical damage and maintenance re-coating will be incorporated within the warranty, depending entirely upon the declared intended use to which the surface is to be put, or may be issued as a mandatory Maintenance Statement attached to the warranty.

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E: info@equus.nz