

EQUUS CHEVALINE EPISTIXX CP CARPARK SYSTEM

Standard Building Consent Package





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Specification

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

Project: Prepared for: Specification: P1641 Date: May 2023 Page 1 of 3

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 subtrades 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/mm². 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.

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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:
 - o 0.4 litre of water, mixing until a homogenous consistency is achieved.
 - o 1 kg of cement and
 - 2 kg of sand as a maximum.
 - o 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/m², 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 m² per litre of mixed product. Allow to dry for a minimum of 6–8 hours.

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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 m² 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.

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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

Date Prepared: May 2023





Specification No: P1641

Quality Assurance

Chevaline Epistixx CP Floor Coating

Epoxy floor coating system for interior carparks applied to concrete surfaces

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ed Applicator:				
ng Contractor:				
ng Owner/Property M	anager:			
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eas to which the coatin	g applied are deta	iled below, with refe	ence to plans (where appr	opriate).
nfirm that all applicable tage has been made b	processes listed y a person with the	in Section 4 have be authority to do so.	en correctly completed a	nd that sign-off or
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4. Checklist And Method Statement

* Denotes those processes which must be signed off by the Building Contractor as well.

No.	Process	Min. WFT	Completed On	Building Contractor	Equus Contractor	Notes
1.*	Concrete must be dry, firm, clean, and free of laitance, dust, grease, oil and other contaminants.					
2.*	Surface defects to be filled with ASO- CRET BIS product range or other ap- proved mix. Any major concrete dishing or ponding is to be discussed with Equus to work out a remedy.					
4.	Concrete surface satisfactory for installation of coating by Equus Certified Applicator.					
5	All surfaces are primed with Chevaline Epistixx primer, mixed and diluted up to 40%, at a spread rate of 8-10m ² per litre. Allow to dry overnight.	60				
	Hairline cracks up to 1mm to be filled with a Chevaline Epistixx mortar. Cracks up to 3mm to be coated with a strip of Matacryl Thix and jointing tape.					
6.	Bodycoat: Primed surfaces receive one coat of Chevaline Epistixx CP , mixed and diluted up to 10%, at 6-7m ² per litre. Allow to dry for a minimum of 6-8 hours.	125				
7.	Topcoat : All surfaces to receive one coat of Chevaline Epistixx CP , mixed and diluted up to 10%, at 6-7m ² per litre. Allow to cure at least 7 days before allowing other than foot traffic on the surface.	125				
	Expansion joints shall filled with an over- sized backing rod, and sealed with Dy- monic 100 sealant. This shall be ex- pressed through the system.					
8.	Where required, 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.					
9.*	System to be inspected upon completion.					

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FIRE TEST REPORT FH 5630

CONE CALORIMETER TEST AND NZBC VERIFICATION METHOD C/VM2 APPENDIX A AND NCC SPECIFICATION C1.10 PERFORMANCE OF CHEVALINE® EPISTIXX CP SYSTEM

CLIENT

Equus Industries Ltd 7 Sheffield St Riverlands Marborough 7274 New Zealand



National Association of Testing Authorities, Australia (NATA) and International Accreditation New Zealand (IANZ) are both signatories of the ILAC Mutual Recognition Agreement. Users of test reports are recommended to accept test reports in the name of either accrediting body.

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TEST SUMMARY

Objective

To conduct cone calorimeter testing and reduce the data in accordance with ISO 5660 and AS/NZS 3837 on client supplied specimens for the purposes of determination of the Group Classifications in accordance with;

- New Zealand Building Code (NZBC) Verification Method C/VM2 Appendix A
- National Construction Code (NCC) Volume One Specifications C1.10 and A 2.4 of the Building Code of Australia (BCA).

Test sponsor

Equus Industries Ltd 7 Sheffield St Riverlands Marborough 7274 New Zealand

Description of test specimen

The product as described by the client as Chevaline® Epistixx CP System applied to nominally 4.5 mm fibre cement board.

Date of test

24 November and 1 December 2014.

Test results

For the purposes of compliance with the relevant building code documents, the following classification is considered applicable to the tested sample as described in Section 1.

Building Code Document	Group Number Classification	
NZBC Verification Method C/VM2 Appendix A	1–S	
NCC Specifications C1.10 and A 2.4	1 The average specific extinction area was less than the 250 m²/kg limit.	

LIMITATION

The results reported here relate only to the item/s tested.

TERMS AND CONDITIONS

This report is issued in accordance with the Terms and Conditions as detailed and agreed in the BRANZ Services Agreement for this work.



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TO WHOM IT MAY CONCERN

Both NATA (National Association of Testing Authorities, Australia) and IANZ (International Accreditation New Zealand) are signatories to the ILAC Mutual Recognition Arrangement. Under the terms of this arrangement, each signatory:

- recognises within its scope of recognition of this Arrangement the accreditation of an organisation by other signatories as being equivalent to an accreditation by its own organisation.
- (ii) accepts, for its own purposes, endorsed* certificates or reports issued by organisations accredited by other signatories on the same basis as it accepts endorsed* certificates or reports issued by its own accredited organisations,
- recommends and promotes the acceptance by users in its economy of endorsed* certificates and reports,
 - * The word "endorsed" means a certificate or report bearing an Arrangement signatory's accreditation symbol (or mark) preferably combined with the ILAC-MRA Mark.

Signed:

Jennifer Evans NATA CEO

Date: 24 Murch 2014

Dr Llewellyn Richards IANZ CEO

Date: 24th Merch 2014

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SIGNATORIES

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1. GENERAL

The product submitted by the client for testing was identified by the client as Chevaline® Epistixx CP System applied to nominally 4.5 mm fibre cement board. Figure 1 illustrates a representative specimen of that tested.

Figure 1: Representative specimen (front face on left, back on right)



1.1 Sample measurements

The following physical parameters were measured for each specimen prior to testing.

Table 1: Physical parameters

	Initial	Overall apparent		
Specimen ID	Mass (g)	Mean thickness (mm)	density (kg/m³)	
FH5630-1-50-1	67.9	4.7	1445	
FH5630-1-50-2	67.9	4.9	1386	
FH5630-1-50-3	67.9	4.9	1386	







2. EXPERIMENTAL PROCEDURE

2.1 Test standard

The tests were carried out and data reduced according to the test procedures described in ISO 5660: (2002), Reaction-to-fire tests – Heat release, smoke production and mass loss – Part 1: Heat release rate, and Part 2: Smoke production rate, and AS/NZS 3837:1998 'Method of test for heat and smoke release rates for materials and products using an oxygen consumption calorimeter'; (the test standard). The sample preparation and test procedure were as described in 2.4 and 2.5.

2.2 Test date

The tests were conducted on 24 November and 1 December 2014 by Mr Matthew Van Atta at BRANZ Limited laboratories, Judgeford, New Zealand.

2.3 Specimen conditioning

All specimens were conditioned to moisture equilibrium (constant weight), at a temperature of 23 ± 2 °C and a relative humidity of 50 ± 5 % immediately prior to testing.

2.4 Specimen wrapping and preparation

All tests were conducted and the specimens prepared in accordance with the test standard. The spark igniter and the stainless steel retainer frame were used. All specimens were wrapped in a single layer of aluminium foil, covering the unexposed surfaces.

2.5 Test programme

The test program consisted of three replicate specimens as identified in the above table, tested at an irradiance level of 50 kW/m². All tests were carried out with the specimen horizontal, and with a nominal duct flow rate of 0.024 m³/s.

2.6 Specimen Selection

BRANZ was not involved in the selection of the materials submitted for testing. The test materials used were supplied to the laboratory by the client.



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3. TEST RESULTS AND REDUCED DATA

3.1 Test results and reduced data - NZBC C/VM2

Table 2: Test results and reduced data - NZBC C/VM2

Material		Test specin (in ac	Mean		
Specimen test number		FH5630-1-50-1	FH5630-1-50-2	FH5630-1-50-3	
Test Date		24/11/2014	1/12/2014	1/12/2014	
Time to sustained flaming	s	78	77	77	77
Observations ^a		-	-	-	
Test duration ^b	s	916*	842*	872*	877
Mass remaining, mf	g	58.2	59.2	55.2	57.5
Mass pyrolyzed	%	14.3%	12.8%	18.7%	15.3%
Specimen mass lossc	kg/m²	0.9	0.9	1.2	1.0
Specimen mass loss rate ^c	g/m².s	1.1	1.1	1.5	1.3
Heat release rate					
peak, $\dot{q}''_{ m mx}$	kW/m²	180.9	190.8	196.3	189.3
average, \dot{q}''_{avg}				- *	
Over 60 s from ignition	kW/m²	74.2	74.9	80.4	76.5
Over 180 s from ignition	kW/m²	43.9	37.8	45.6	42.4
Over 300 s from ignition	kW/m²	28.8	23.4	29.5	27.2
Total heat released	MJ/m ²	10.3	7.1	9.8	9.1
Average Specific Extinction Area	m²/kg	114.3	127.7	109.1	117.1
Effective heat of combustion $^{ m d}h_{c,{\it eff}}$	MJ/kg	9.4	7.2	6.9	7.8

Notes:

NR not recorded



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a no significant observations were recorded

^b determined by * X₀₂ returning to the pretest value within 100 ppm of oxygen concentration for 10 minutes

^{** 30} minutes after time to sustained flaming

^c from ignition to end of test;

d from the start of the test

^{*} value calculated using data beyond the official end of test time according to the test standard.



3.2 Test results and reduced data - NCC C1.10

Table 3: Test results and reduced data - NCC C1.10

Material		Test specimens as described in Section 1 (in accordance with AS/NZS 3837)			
Specimen test number		FH5630-1-50-1	FH5630-1-50-2	-50-2 FH5630-1-50-3	
Test Date		24/11/2014	1/12/2014	1/12/2014	
Time to sustained flaming	S	78	77	77	77
Observations ^a		-	-	-	
Test duration ^b	s	340**	327**	330**	332
Mass remaining, mf	g	59.6	60.8	58.4	59.6
Mass pyrolyzed	%	12.2%	10.4%	14.0%	12.2%
Specimen mass loss ^c	kg/m²	0.7	0.7	0.9	0.8
Specimen mass loss rate ^c	g/m².s	5.1	4.7	5.3	5.1
Heat release rate					
$\dot{q}''_{ ext{max}}$	kW/m ²	180.9	190.8	196.3	189.3
average, \dot{q}''_{avg}					
Over 60 s from ignition	kW/m²	74.2	74.9	80.4	76.5
Over 180 s from ignition	kW/m²	43.9	37.8	45.6	42.4
Over 300 s from ignition	kW/m²	28.8	23.4	29.5	27.2
Total heat released	MJ/m ²	8.5	7.0	8.8	8.1
Average Specific Extinction Area	m²/kg	140.2	158.8	147.1	148.7
Effective heat of combustion $^{\rm d}$ $^{\rm d}$ $^{\rm d}$ $^{\rm d}$ $^{\rm d}$	MJ/kg	9.1	8.8	8.2	8.7

Notes:

NR not recorded



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^a no significant observations were recorded

^b determined by

^{*} average mass loss over 1 minute dropped below 150 g/m²

^{**} two minutes after flameout or other signs of combustion cease

^{*** 60} minutes have elapsed or 10 minutes without ignition

c from ignition to end of test;

d from the start of the test

⁺ value calculated using data beyond the official end of test time according to the test standard.



4. SUMMARY

The test standards requires that the mean heat release rate (HRR) readings over the first 180 s from ignition for the three specimens should differ by no more than 10% of the arithmetic mean of the three readings. In the event of this criterion not being met, a further three specimens are required to be tested.

Table 4: Heat release rate

Specimen ID	Average HRR over 180 s from ignition	Arithmetic mean	% difference from the arithmetic mean
FH5630-1-50-1	43.9		3.5%
FH5630-1-50-2	37.8	42.4	-11.0%
FH5630-1-50-3	45.6		7.5%

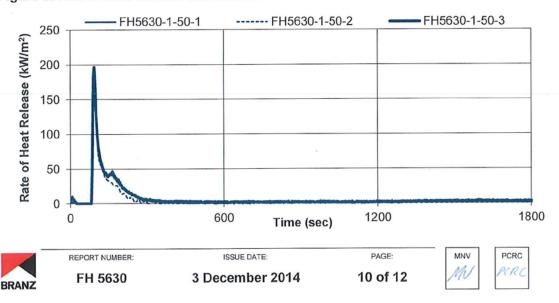
Table 4 identifies one of the specimens exposed to 50 kW/m² irradiance exceeded the acceptance criteria. Although one of the specimens was outside of the variability criteria of the test standard, the same Group Classification was determined for each specimen. A further set of three tests as required by the test standard was deemed not to be necessary and would not be expected to lead to an alteration of the classification.

The report summary for the specimens as described in Section 1, exposed to an irradiance of 50 kW/m² is given in table below with rates of heat release illustrated in Figure 2.

Table 5: Report summary

Mean Specimen thickness (mm)	Irradiance (kW/m²)	Mean Time to Ignition (s)	Mean Peak Heat Release Rate (kW/m²)	Average Specific Extinction Area (m²/kg)
4.8	50	77	189.3	117.1 (NZBC) 148.7 (NCC)

Figure 2: Rate of heat release versus time





CLASSIFICATION IN ACCORDANCE WITH NZBC 5. VERIFICATION METHOD C/VM2 APPENDIX A

The following classification has been assessed in accordance with the New Zealand Building Code Verification Method C/VM2 Appendix A: Establishing Group Numbers for lining materials. Calculations were carried out according to section A1.3 for predicting a material's group number for each specimen tested. It states that "If a different classification group is obtained for different specimens tested, then the highest (worst) classification for any specimen must be taken as the final classification for that material." The classification for the specimens as described in Section 1 is as follows:

Table 6: NZBC Group classification and smoke extinction area

	Sample 1	Sample 2	Sample 3	Classification
Group number Classification	1	1	. 1	1-S
Average Specific Extinction Area (m²/kg)	114.3	127.7	109.1	1-0

The tested samples recorded an average specific extinction area less than 250 m²/kg. In accordance with Verification Method C/VM2 Appendix A, samples achieving either a Group number classification 1 or 2, and with an average specific extinction area less than 250 m²/kg are identified with "S" post-script to the Group number.

CLASSIFICATION IN ACCORDANCE WITH NCC 6. **VOLUME ONE SPECIFICATION C1.10**

Calculations were carried out according to Specification A2.4. The classification and for smoke extinction area for the sample as described in Section 1 is as follows:

Table 7: NCC Group classification and smoke extinction area

	Specimen 1	Specimen 2	Specimen 3	Classification
Group number Classification	1	1	1	1
Average Specific Extinction Area (m²/kg)	140.2	158.8	147.1	'

The average specific extinction area for the sample is less than the 250 m²/kg limit and therefore it may be used in buildings with or without a sprinkler system complying with Specification E1.5 in accordance with Specification C1.10 Table 2.



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NZBC CONCLUSION 7.

The cone calorimeter testing was carried out on the specimens as described in Section 1. For the purposes of compliance with the NZBC Verification Method C/VM2 Appendix A, the following classification is considered applicable to the material as described in Section 1.

Group Number Classification 1-S

NCC CONCLUSION 8.

The cone calorimeter testing was carried out on the specimens as described in Section 1. For the purposes of compliance with the NCC Volume One Specification C1.10 for the Classification of Fire Performance of Wall and Ceiling Lining Materials, the following classification is considered applicable to the material as described in Section 1.

Group Number Classification	1
The average specific extinction area was less than the 250 m²/kg limit.	



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EQUUS PRODUCT SYSTEM REFERENCE SHEET



Concrete substrate preparation



Crack repair with Sealboss crack injection



Finished coat of Chevaline Epistixx CP



Finished topcoat

Project Name: Christchurch Casino Carpark



Finished project

Project Size: 3000 sqm

Location: Christchurch

Project: Carpark

System: Chevaline Epistixx CP

Certified Applicator: Cantebury Waterproofing Ltd

Completion Date: 2012

Equus Industries Ltd

Email: info@equus.nz
Website: www.equus.nz



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CHEVALINE EPISTIXX CP CARPARK SYSTEM

Finish coating for interior carpark floors

August 2024

PURPOSE AND AREAS OF USE:

The system is a two-component waterborne epoxy primer and bodycoat with high adhesion, and a two-component waterborne epoxy topcoat that provides a semi-gloss, fast-curing finish. These properties make the system an ideal solution where solvent release during application is not desirable, and where down-time restrictions require early access to coated areas.

Chevaline Epistixx CP Carpark Coating System is an easy to maintain, economical interior concrete carpark finish.

PRODUCT:

The system encompasses the products below. Refer to standard specification P1641 for full specification details.

Chevaline Epistixx Chevaline Epistixx CP

COLOUR:

Chevaline Epistixx CP is supplied as Standard Grey (00-A-05). Custom colours are available to match any colour chart.

SCOPE OF USE:

Chevaline Epistixx CP Carpark Coating system is used over new or existing interior concrete floors in carparking buildings or underground carparks. It is designed as a decorative coating to refresh and seal concrete surfaces stopping carbonation from breaking down the concrete. The system provides a smooth or non-slip finish in areas where required.

This product is particularly useful on carpark areas where down-time restrictions require early access to coated areas.

CONDITIONS OF USE:

Chevaline Epistixx CP Carpark Coating system must be used in accordance with the correct specifications and substrates mentioned in this TDS, or in other Equus approved technical documentation.

Not suitable as a heavy-duty floor finish. Not suitable as a waterproofing solution. Not suitable for exterior conditions or in areas with UV exposure except where specifically approved by Equus Industries.

BUILDING CODE COMPLIANCE:

When used with the correct specification the product complies with the following building code clauses:

- **B2** Durability B2.3.1(c) Chevaline Epistixx CP has a durability of at least 5 years when installed with the correct specification, installation and maintenance.
- **C3** Fire affecting areas beyond the fire source C3.4 (b) Chevaline Epistixx CP test data together with in-service history of the correctly installed system show that the product limits the probability of fire spreading throughout the building. See BRANZ Fire Test Report FH5630.
- **D1** Access Routes D1.3.3(d) Chevaline Epistixx CP complies with D1/AS1 on level surfaces, and on sloping surfaces and stairs with the addition of aggregate to create Chevaline Epistixx CP NS.
- **F2 Hazardous building materials** F2.3.1 Chevaline Epistixx CP is a waterborne material and contains no mammalian-toxic substances . Refer to SDS at www.equus.nz

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CHEVALINE EPISTIXX CP CARPARK SYSTEM

Finish coating for interior carpark floors

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SUPPORTING DOCUMENTATION:

Title (type)	Version	URL
BRANZ Fire Test Report FH5630 (Test Results)	03 Dec 2014	www.equus.nz/content/reports/branz-fire-test-epistixxCP-FH5630.pdf
TDS-181 Chevaline Epistixx	August 2023	www.equus.nz/content/tds/tds-181-epistixx.pdf
TDS-164 Chevaline Epistixx CP	August 2023	www.equus.nz/content/tds/tds-164-epistixx-cp.pdf

WARNINGS AND BANS:

Is the building product/building product line subject to warning or ban under section 26 of the Building Act 2004?	No

MANUFACTURER CONTACT DETAILS:

Manufacture location	New Zealand
Legal and trading name of manufacturer	Equus Industries Ltd.
Manufacturer address for service	4 Sheffield Street, Blenheim 7274
Manufacturer website	www.equus.nz
Manufacturer email	info@equus.nz
Manufacturer phone number	03 578 0214
Manufacturer NZBN	9429032000306

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CHEVALINE EPISTIXX CP

Finish coating for interior carpark floors

February 2024

PURPOSE AND AREAS OF USE:

A semi-gloss, waterborne epoxy coating for use on concrete floor areas where down-time restrictions require early access to coated areas. Particularly suitable for underground car parks and in parking buildings.

The product is also available in a non-slip grade applied direct from the can for use in areas exposed to intermittent water or greasy contamination. The non-slip properties can be further enhanced in high stress areas by the incorporation of a broadcast aggregate layer between coats.

PRODUCT:

A pigmented, two-component waterborne epoxy based on a modified epoxy resin and third generation polyaminoamide.

PROCESS COMPATIBILITY:

Exhibits excellent adhesion to unprimed clean concrete surfaces and other rigid surfaces primed with Chevaline Epistixx Primer (see Chevaline Epistixx Product Data Sheet 181).

COLOUR:

Standard Concrete Grey (nr BS 5252F 00-A-05). 'Near Match' to required colours are available on request but will attract a surcharge and may be subject to minimum quantities.

STANDARD PACK:

11.5 litre batch units. Units A & B are both packed in recyclable plastic pails.

PHYSICAL PROPERTIES:

Liquid Material	Mixed	Unit A	Unit B
Solids (% by volume)	67.5%	97%	44%
Specific Gravity	1.37	1.7	1.06
Flash Point (°C)	-	> 100	-
Shelf Life	-	3 years	2 years
Appearance		Pigmented	

Applied Coating		
Wear resistance	Excellent	
Chemical resistance:		
Fresh water	Excellent	
Brine and salt	Excellent	
Fuels and greases	Excellent	
Petrol and hydrocarbon solvents	Excellent	
Caustic soda	Very good	
Inorganic acids	Fair to poor	
Organic acids	Not recommended	

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CHEVALINE EPISTIXX CP

Finish coating for interior carpark floors

February 2024

SCOPE OF USE:

Chevaline Epistixx CP is used as a topcoat in the Chevaline Epistixx CP Carpark Coating System over new or existing concrete carparks in in a variety of residential and commercial areas as a medium duty interior carpark finish. It is designed as a decorative coating to refresh and seal concrete surfaces stopping carbonation from breaking down the concrete. The product is easy to maintain and provides a smooth or non-slip finish in areas where non-slip is required. This product is particularly useful on carpark areas where down-time restrictions require early access to coated areas.

CONDITIONS OF USE:

Chevaline Epistixx CP must be used in accordance with the correct specifications and substrates mentioned in this TDS, or in other Equus approved technical documentation. Chevaline Epistixx CP must be used as a part of the Chevaline Epistixx CP Carpark Coating System unless otherwise specified by Equus Industries.

Not suitable as a heavy-duty floor finish. Not suitable as a waterproofing solution. Not suitable for exterior conditions or in areas of with UV exposure except where specifically approved by Equus Industries.

SURFACE PREPARATION:

Chevaline Epistixx CP must be applied to a sound, dry, clean substrate in order to achieve maximum adhesion. Chevaline Epistixx CP is a low build flooring system so any irregularities in the surface will show through and any high spots could suffer premature wear.

New concrete: Light captive grit blasting or diamond grinding is the preferred method of dry removal of laitance. Where this is not feasible the surface must be acid washed, followed by a neutralising solution, thorough rinsing with water and then be allowed to dry completely. Use vacuum brush to remove dirt and other debris.

Old Concrete: A sound, clean, contamination-free surface is essential to achieve maximise performance. This may require preparation similar to that for new floors, of light captive grit blasting, diamond grinding, or acid washing. Diamond grinding and acid washing should only take place after any contamination such as penetrated oil and grease is first removed. Adhesion trials must be carried out to confirm the surface preparation has been adequate.

APPLICATION METHOD:

Units A and B for each batch must be thoroughly mixed by adding Unit A to Unit B and drill mixing for 4-5 minutes until completely homogenous. The mixed material should then be diluted with up to 30-35% by volume of clean water, mixed and allowed to stand 10 minutes before using. Use only sufficient water to achieve a satisfactory application viscosity given conditions at the time. Application may be by brush, roller or airless spray.

APPLICATION PROPERTIES:

Application in a minimum of two coats.

Spreading rate 10 sqm/litre/coat as supplied, i.e. 7 sqm/litre/coat diluted 35% with clean water		
Normal dft for a two coat system Between 135-145 microns		
Recommended spreading rates:		
(Airless spray application) 1st coat 9 sqm/litre diluted 35%		
(Airless spray application) 2nd coat	6 sqm/litre diluted 35%	
Pot Life	1.5-2 hours (Note: that end of pot life is indicated by a rapid viscosity increase).	

Dry time(15°C, 60%RH):

Touch dry	1-2 hours
Dry to hard	6-8 hours
Cure time	7-10 days for full cure (Note: Low temperatures and/or high humidities will considerably retard the cure times. Do not apply at temperatures below 5°C or relative humidity greater than 85%.

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CHEVALINE EPISTIXX CP

Finish coating for interior carpark floors

February 2024

THINNING / CLEANING UP:

Thin with clean tap water. Clean up gear by rinsing immediately with water. Some hardened residues may need solvent removal.

SPECIFICATION NOTES:

Although Chevaline Epistixx CP is waterborne, allow adequate ventilation, not for personal safety reasons, but to ensure that adequate inter-coat/final drying occurs.

Although designed for interior use, the product also has limited exterior application. However, as an epoxy coating, it may be subject to chalking and light colours may yellow slightly when exposed to exterior conditions particularly UV light. Check with your local Equus Representative.

BUILDING CODE COMPLIANCE:

When used in the Chevaline Epistixx Carpark System the product complies with the following building code clauses:

- **B2** Durability B2.3.1(c) Chevaline Epistixx CP has a durability of at least 5 years when installed with the correct specification, installation and maintenance.
- **C3** Fire affecting areas beyond the fire source C3.4 (b) Chevaline Epistixx CP test data together with in-service history of the correctly installed system show that the product limits the probability of fire spreading throughout the building. See BRANZ Fire Test Report FH5525.
- **D1** Access Routes D1.3.3(d) Chevaline Epistixx CP complies with D1/AS1 on level surfaces, and on sloping surfaces and stairs with the addition of aggregate to create Chevaline Epistixx CP NS.
- **F2 Hazardous building materials** F2.3.1 Chevaline Epistixx CP is a waterborne material and contains no mammalian-toxic substances . Refer to SDS at www.equus.nz

SUPPORTING DOCUMENTATION:

Title (type)	Version	URL
BRANZ Fire Test Report FH5630 (Test Results)	03 Dec 2014	https://www.equus.nz/content/reports/branz-fire-test-epistixxCP-FH5630.pdf

HEALTH AND SAFETY:

Refer to Safety Data sheets No's 164/164B. Minimum precautions are to wear barrier cream on hands and exposed forearms to prevent epoxy sensitisation and possible dermatitis effects, and to ensure that eye protection is worn at all times while mixing and handling Chevaline Epistixx CP.

Do not smoke while handling the materials. Always store product at above 0°C to prevent possible deterioration in the unmixed components.

TRANSPORT AND STORAGE:

Unit A	No restriction
Unit B	No restriction

WARNINGS AND BANS:

Is the building product/building product line subject to warning or ban under section 26 of the Building Act 2004?	No

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CHEVALINE EPISTIXX CP

Finish coating for interior carpark floors

February 2024

MANUFACTURERS CONTACT DETAILS:

Manufacture location	New Zealand
Legal and trading name of manufacturer	Equus Industries Ltd.
Manufacturer address for service	4 Sheffield Street, Blenheim 7274
Manufacturer website	www.equus.nz
Manufacturer email	info@equus.nz
Manufacturer phone number	03 578 0214
Manufacturer NZBN	9429032000306

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CHEVALINE EPISTIXX

Multi-use waterborne epoxy primer/bodycoat

February 2024

PURPOSE AND AREAS OF USE:

A multi-use waterborne epoxy primer/bodycoat for use on most building surfaces. Generally used as an adhesion-promoting primer for Traxx flooring, or in situations where solvent release during application is not desirable. Where high-gloss and trueness of pastel colours is not important, may be used as a finish coat.

PRODUCT:

A pigmented two-component waterborne epoxy coating based on a modified epoxy resin and polyaminoamide curing agent combination.

PROCESS COMPATIBILITY:

Exhibits excellent adhesion to most common building materials, particularly those that are mineral-based. May be overcoated with Traxx Primers, Traxx Colourseal, Traxx Smooth/NS, Traxx SL, Chevaline Dexx, Chevaline Colourcure, Chevaline Colourcure, Chevaline Coverflexx, Equus/Tremco urethane membranes.

COLOUR:

Standard colour is off-white. Mid and deep tone colours can be supplied as close matches on demand, subject to minimum order quantities. Pastel colours, when required are a near-match only.

STANDARD PACK:

1, 3.5, 9 litre units. Units A & B are both packed in plastic pails.

PHYSICAL PROPERTIES:

Liquid Material	Mixed	Unit A	Unit B
Solids (% by volume)	45%	99%	21%
Specific Gravity	1.21	1.67	1.01
Flash Point (°C)	-	> 100	-
Shelf Life	-	3 years	2 years
Appearance		Pigmented	Clear Brown

Applied Coating		
Wear resistance (ASTM D1043-73)	<55mg/1000 cycles	
Chemical resistance:		
Fresh water	Excellent	
Brine and salt	Excellent	
Fuels and greases	Excellent	
Petrol and hydrocarbon solvents	Excellent	
Caustic soda 10%	Very good	
Inorganic acids	Fair to good	
Suitable for potable water applications	Consult Manufacturer for specific advice where necessary.	

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CHEVALINE EPISTIXX

Multi-use waterborne epoxy primer/bodycoat

February 2024

SCOPE OF USE:

Chevaline Epistixx is generally used as a primer coat in a range of Equus flooring and waterproofing systems; Generally, the Chevaline Epistixx Rapid Floor Coating System, Traxx Floor Coating System and Chevaline Dexx Waterproofing membrane. It can be used over a variety of substrates including new or existing concrete and plywood. When installed as a primer with the correct system specification it is suitable for light-heavy duty interior floor finishes, hygiene and clean rooms, food processing, and the waterproofing of roofs and decks.

CONDITIONS OF USE:

Chevaline Epistixx must be used in accordance with the correct specifications and substrates mentioned in this TDS, or in other Equus approved technical documentation. Chevaline Epistixx must be used as a part of an approved Equus system unless otherwise specified by Equus Industries.

Not suitable for exterior conditions or in areas of with UV exposure except where specifically approved by Equus Industries.

SURFACE PREPARATION:

Concrete plaster: Must be free of all contamination, clean and dry to touch. Surface imperfections should be filled with epoxy mortar.

Steel: Should be clean and primed with Protexx Zincure.

Old painted surfaces: Should be sanded clean and with all unsound material removed. Check compatibility with a test patch.

Stone, slate and tiles: Must be free of all contamination. Glazed tiles should be sanded to 'open' the surface.

APPLICATION METHOD:

Units A and B for a batch must be thoroughly mixed by adding Unit A to Unit B and drill mixing for 4-5 minutes until completely homogeneous. The mixed material should then be diluted with clean water, the quantity used depending on end use.

Primer:	1.3-2.5 litres water per 3.5 litre unit
Bodycoat:	0.5-1.5 litres water per 3.5 litre unit

APPLICATION PROPERTIES:

Spreading rate:

-	
As a primer	8-12 sqm/litre depending on surface density.
As bodycoat	5-7 sqm/litre
As topcoat	7-10 sqm/litre
All rates are per litre as supplied. Normal d.f.t. for a 3 coat system is 160-180µm	

Pot Life:

As primer (maximum dilution)	4-6 hours
As bodycoat (minimum dilution)	1.5-2 hours

Dry time(15°C, 60%RH):

As primer (maximum dilution)	4-6 hours
As bodycoat (minimum dilution)	1.5-2 hours
	7-10 days for full three-coat system. Note that low temperatures and/or high humidities will considerably retard dry and cure times. Do not apply in temperatures below 5°C or relative humidity greater than 85% .

THINNING / CLEANING UP:

Thin with clean tap water. Clean up gear by rinsing with water, then wiping with Xylol.

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CHEVALINE EPISTIXX

Multi-use waterborne epoxy primer/bodycoat

February 2024

SPECIFICATION NOTES:

Although Chevaline Epistixx is waterborne, allow adequate ventilation, not so much for safety reasons as to ensure adequate inter-coat/final drying occurs.

When used as a decorative finish externally or in areas of high UV intensity, it is recommended that Colourcure be used as the final topcoat to inhibit chalking and colour change.

BUILDING CODE COMPLIANCE:

For information on compliance with the New Zealand Building Code refer to the relevant Equus system TDS.

HEALTH AND SAFETY:

Wear barrier cream when handling Epistixx to prevent epoxy sensitisation and possible dermatitic effects. Always store above 0°C to prevent possible deterioration in the unmixed components. Do not smoke while handling the materials.

TRANSPORT AND STORAGE:

Unit A	No restriction
Unit B	No restriction

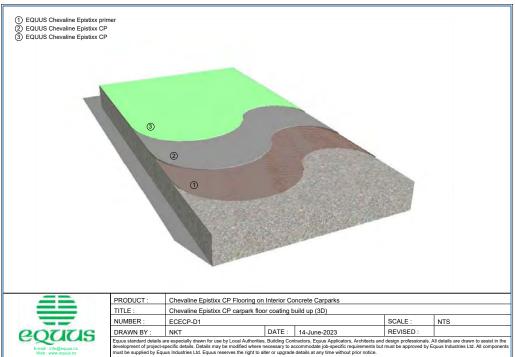
WARNINGS AND BANS:

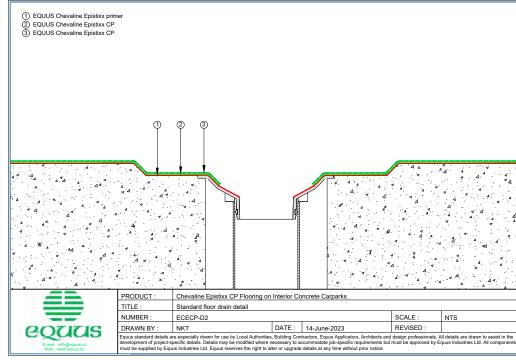
Is the building product/building product line subject to warning or ban under section 26 of the Building Act 2004?	No

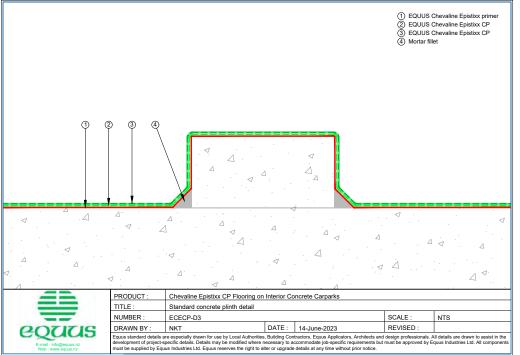
MANUFACTURERS CONTACT DETAILS:

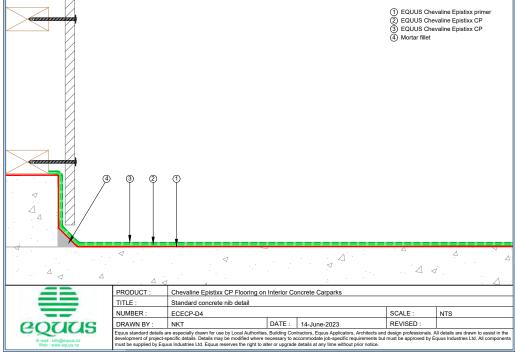
Manufacture location	New Zealand
Legal and trading name of manufacturer	Equus Industries Ltd.
Manufacturer address for service	4 Sheffield Street, Blenheim 7274
Manufacturer website	www.equus.nz
Manufacturer email	info@equus.nz
Manufacturer phone number	03 578 0214
Manufacturer NZBN	9429032000306

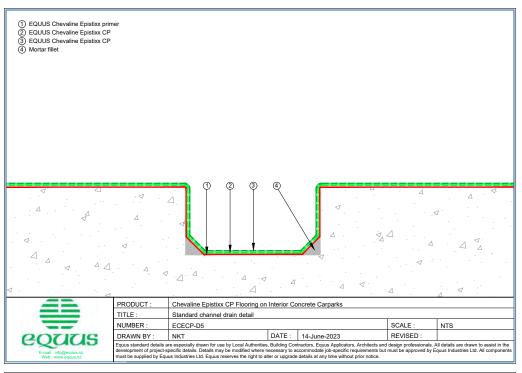
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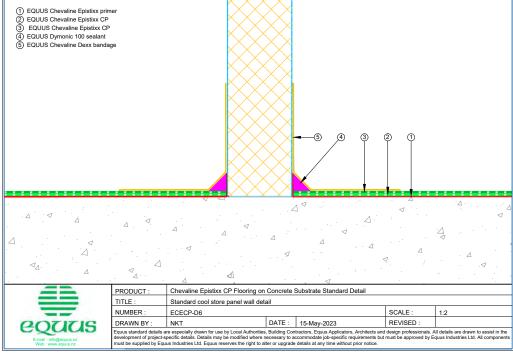


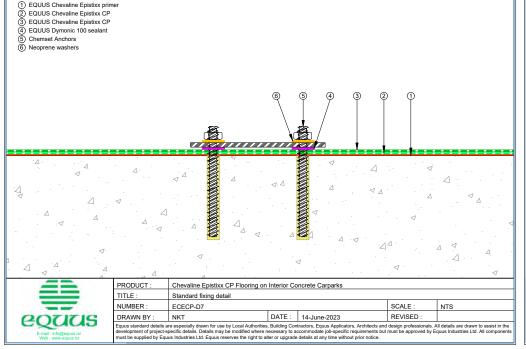


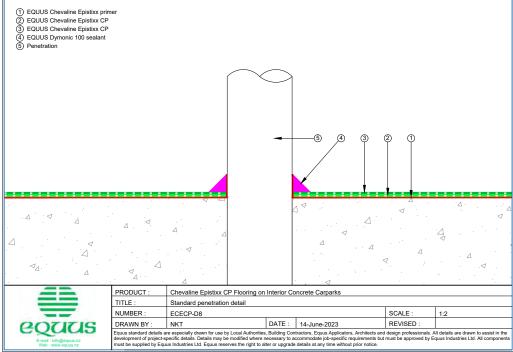


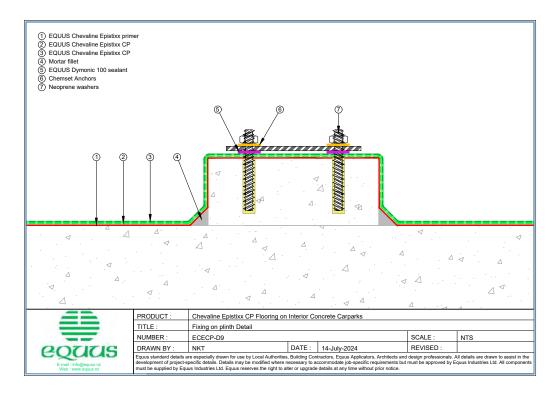










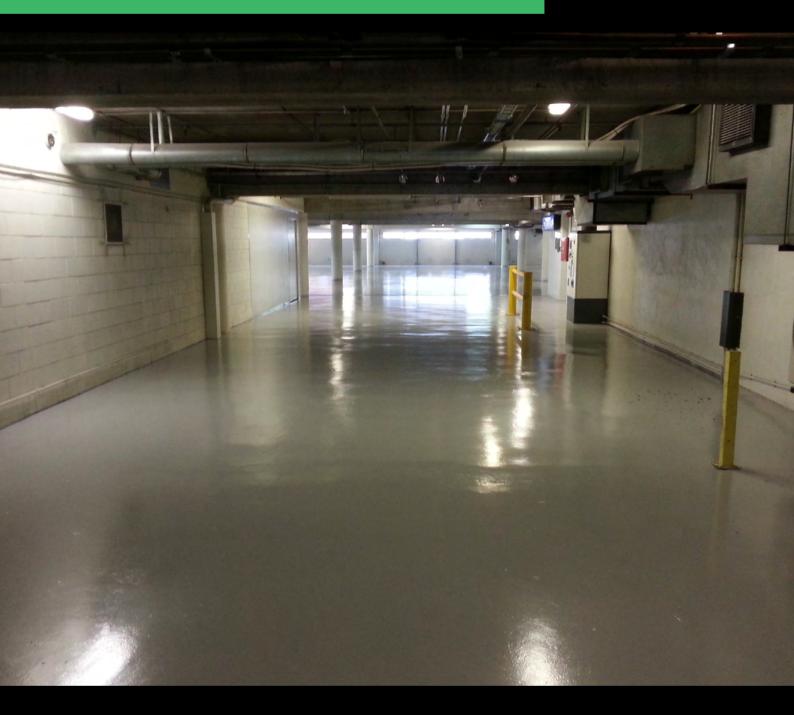


WHO ARE WE?

Equus Industries provides technical waterproofing solutions for Architects, Engineers, Property Managers, and Contractors in the building industry. One system does not fit all.

Equus can provide complete solutions, systems, specifications, technical support and warranties.





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