Fulton Hogan	Inspection & Test Plan - Structural Concrete Coatings (Moisture Resistant Pore-lining Penetrants)		
	Document No.:	Revision:	2
		Date:	18.10.2024

Legend: HP: Hold Point, HP* Internal Hold Point, WP: Witness Point, IP: Inspection Point, SP: Surveillance Point

Item	Task/Activity Description	Reference	Acceptance Criteria	Inspection / Test			Responsibility	Verifying Documents	Date Completed	Sign-off
				Method	Frequency	Category				
1	**Referenced Documentation**									
1.1	Non Dependent	Department of Transport & Planning Section 686 November 2018	N/A	N/A	N/A	N/A	N/A	N/A	NA	N/A
2	**Preliminaries**									
2.1	Material Selection	Product TDS 686.04 686.05 (h) 686.05 (c) (iii) Request for Concession #1	The material shall be selected based on the following criteria: i. active ingredients: Silane = at least 95% Solid Silane / Silane Cream = at least 80% Silane-Siloxane & Siloxane = not specified ii. application rates: Silane = 2 applications of 0.3L/m² min. Solid Silane / Silane Cream = 1 application of 0.4L/m² min. Silane-Siloxane & Siloxane = as per the rates on the manufacturer's TDS iii. penetration level: Silane = 5mm min. Solid Silane / Silane Cream = 5mm min. Silane-Siloxane & Siloxane = 3mm min. iv. contain a fugitive dye v. be compatible with any future film-forming coatings (where applicable) Enter: Teambinder Material Approval number [free text box]:	Document Review	Once, for each product, 21 days prior to application	HP	Nominated Authority	ConQA Hold Point Release		
2.2	Quality Documentation	686.04	The quality documentation shall demonstrate compliance with the specifications and is to be submitted for review to the Nominated Authority. Enter: Enter: Teambinder Hold Point number [free text box]	Document Review	Once, for each product, 21 days prior to application	HP	Nominated Authority	ConQA Hold Point Release		
2.3	Application Personnel & Equipment	Product TDS 686.07 (a) (i) 686.19	The supervisor shall remain present at all times. Silane: Atmospheric sprayer or roller are acceptabe Solid Silane / Silane Cream: The spray equipment shall be an airless pump system not exceeding 70kPa so that no atomisation or misting of the material occurs, but roller is acceptable for smaller areas.	Document Review	Once, prior to application.	IP	SE/PE/SPE	This ITP		

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2	**Preliminaries (Continued)**									
2.4	Protection of Adjacent Works & Property	686.1	Protection shall be implemented for existing coated surfaces, services, bearings, joints, signs and nameplates during the surface preparation, abrasive blasting and material application processes. No spraying shall be performed within 10m of buildings, footpaths, roadways, drains, pedestrians or vehicles without protective measures in place. Where these instances are expected, the protective methods shall be submitted for review to the Nominated Authority.	Visual Document Review	Where applicable, 2 days prior to application.	HP	Nominated Authority	ConQA Hold Point Release		
2.5	Minimum Concrete Curing Period	686.16	Concrete shall not be coated until the minimum concrete curing times have elapsed: Standard cured concrete = 28 days Accelerated cured concrete = 14 days Repaired concrete = 14 days (if repaired with a patching product) or 28 days (if repaired with concrete) Note: All durations may be reduced by 50% if the moisture content is less than 10% when measured with a moisture meter.	Visual Document Review	Once, prior to application.	IP	SE/PE/SPE	This ITP		
3	**Pre-application Activities**									
3.1	Material Records	Product TDS 686.12	Materials shall be brought to site in unopened, sealed containers, clearly marked with: i. the manufacturer's name & address ii. product reference iii. batch number iv. quantity manufactured in the batch v. date of manufacture Product beyond the manufacturer's shelf life shall not be used. Record: Trace each product to it's final location on the Application Record.	Visual	Prior to application	IP	SE/PE/SPE	This ITP		

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3	**Pre-application Activities (Continued)**									
3.2	Weather Conditions	Product TDS 686.11 686.14 (a) (iii)	Materials shall not be applied under any of the following conditions: i. windy conditions where spray/splatter may be generated ii. when wind-borne debris is likely to contaminate the uncured surface iii. when the ambient temperature exceeds 35°C or is below 10°C unless the Material TDS states otherwise iv. when the surface temperature of the substrate is less than 3°C above the dew point or exceeding 40°C v. when the relative humidity exceeds 85% or is expected to exceed 85% within 12 hours of application vi. when rain splatter, water run-off or water deposits onto the surface and affects penetration into the substrate vii. when the substrate surface is wet or damp (unless it is required for, or acceptable to specific material as shown in the Product's TDS) Record: Weather conditions on the Application Record	Visual Measure	Prior to application and every 4 hours per shift	IP	SE/PE/SPE	This ITP		
3.3	Surface Preparation	Product TDS 686.06 (a & b)	The surface shall be prepared in accordance with the Product's TDS, but as a minimum, all surface contaminants such as release agents and curing compounds shall be removed by high-pressure (e.g 3,000psi) washing with potable water or other suitable means. The surface shall then be flushed with water and be surface dry for at least 24 hours prior to application commences. Where surface preparation is performed in stages (e.g pressure washed the previous shift), remove any loose particles with compressed air or air-blowers prior to the application. Any concrete defects exposed during the surface preparation shall be repaired accordingly	Visual	Once, prior to application	IP	SE/PE/SPE	This ITP		

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3	**Pre-application Activities (Continued)**									
3.4	Surface Moisture Inspection	Product TDS 686.14 (a) (i) & (iii)	A 1m³ representative sample of prepared concrete surface shall be inspected for surface moisture condition and environmental conditions. The surface moisture conditions shall satisfy the Product's TDS. Record: Surface moisture conditions on the	Visual	1m³ / lot, immediately prior to application	IP	SE/PE/SPE	This ITP		
4	**Application Activities**									
4.1	Trial Application	686.13	A trial application of the material shall be conducted on either a 10m² area of the element to be coated or on a test panel made from the same substrate to determine the technique to achieve the approved application rate. Attach: Photographs Enter: Teambinder Hold Point number [free text box]	Document Review	Once, for each Material, 7 days prior to full application	HP	Nominated Authority	ConQA Hold Point Release		
4.2	Application	Product TDS 686.07 686.09 Request for Concession #2	Application should be carried out to the Product's TDS within 24 hours after completing the surface preparation so that the desired, uniform surface finish is achieved. The material shall be applied in a continuous operation, starting at the lowest point proceeding upwards to higher elevations and saturated enough so that a "wet look" can be observed for at least a few seconds after application. Where a second coat is required (e.g SIlane), re-application, shall be within the recommended timeframe from the Product's TDS and treated as a separate Lot. Times of application(s), product names, locations applied and volumes used shall be recorded.	Visual Measure	Each coat	IP	SE/PE/SPE	This ITP		
4.3	Inspection & Defect Identification	686.07 686.15	The work shall be inspected for uniformity and appearance between coats. Re-application at dry-appearance locations may be required.	Visual	After each coat	IP	SE/PE/SPE	This ITP		
4.4	Drying & Penetrating Periods	Product TDS 686.09	The material shall be protected from adverse conditions and traffic during the (wet) penetrating period.	Visual	After each coat	IP	SE/PE/SPE	This ITP		

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5	**Post-application Activities**									
5.1	Clean-up & Waste Disposal	686.10	All material pooling and over-spray shall be removed from all surfaces, including surfaces not being treated. All rubbish and remaining material shall be removed from site.	Visual	At completion of Works	IP	SE/PE/SPE	This ITP		
5.2	Penetration Depth Testing	686.14 (b) (v) Request for Concession #3	50mmØ core samples, 50mm depth, are to be taken and immersed in a dye to determine the depth of penetration. The subsequent results shall be: i. Silane = 5mm min. ii. Solid silane & silane cream = 5mm min. iii. Silane-siloxane & siloxane = 3mm min. Attach: Penetration Depth Testing Results	Test	3 no. tests every 50m² or part thereof	IP	SE/PE/SPE	This ITP		
5.3	Non-conformance Report (NCR) Closure	Fulton Hogan Quality Management Plan	Ensure that any NCRs pertaining to the lot / element / Work area that this ITP covers, have been closed in CAMs.	Document Review	Once, prior to closure of this lot / element / Work area	HP*	SE/PE/SPE	This ITP		
	Final Inspection									

On behalf of Fulton Hogan, it is hereby certified that the Works represented by the item of work listed have been tested in accordance with the Project Quality Plan and conform in all respects with the requirements of the Contract.

Print Name: Position: Signature: Date: / /