



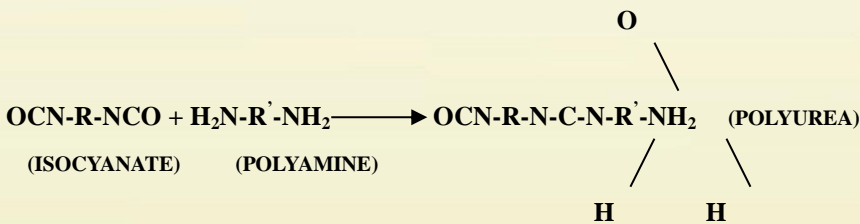
STELACOAT K770/K790/K690

Polyurea Rim Spray Coating

1.0 Description :

StelaCoat Polyurea Rim Spray System is a 100% solid, VOC free, thermal curing, coating system which is designed for high demanding quality requirement for professional engineering and industrial works. Polyurea's membranes are produced by thermal curing system which are physically tough and highly chemical resistance; they are most suitable for waterproofing, anti-corrosion, anti-rusting and heavy duty/traffic flooring. Stelacoat Polyurea coating is much superior to traditional polyurethane membrane in term of its physical properties, efficiency and quality control of application.

2.0 Chemical Mechanism of StelaCoat



3.0 Scope of Application and Recommended Area

Type of Work	Recommended Area	Model Number		
		K-770	K-790	K-690
A) Waterproofing	Roofing(A1), Decking(A2), Tanking(A3), Runway(A4), Foundation(A5), Retaining Wall(A6), Swimming Pool(A7), Tunnel Lining(A8), (A9) Corrugated Roof Sheet, (10) Aluminum Panel, (11) Steel Platform	A1 to A5, A9 to A11	A2 to A7 A9 to A11	A5 to A8
B) Anti-corrosion	(B1) Mechanical Room(B1); (B2) Waste Disposal Area; (B3) Fertilizer/Sewage Disposal Plants (B4, Light-water Nuclear Power Plant	B1, B2	B1, B2, B3	ALL
C) Flooring	- Floor for general traffic (C1) - Mechanical Room for tow truck (C2) - Car Parking Lot (C3) - Car Park for heavy traffic > 12 tons (C4) - Warehouse (C5)	C1, C2	ALL	ALL
D) Mold Making	Open Mold	-	-	ALL

* For those areas not specified in above table, please consult R & D Department of Master Proofer Co Ltd at 2609 2300 for comments.

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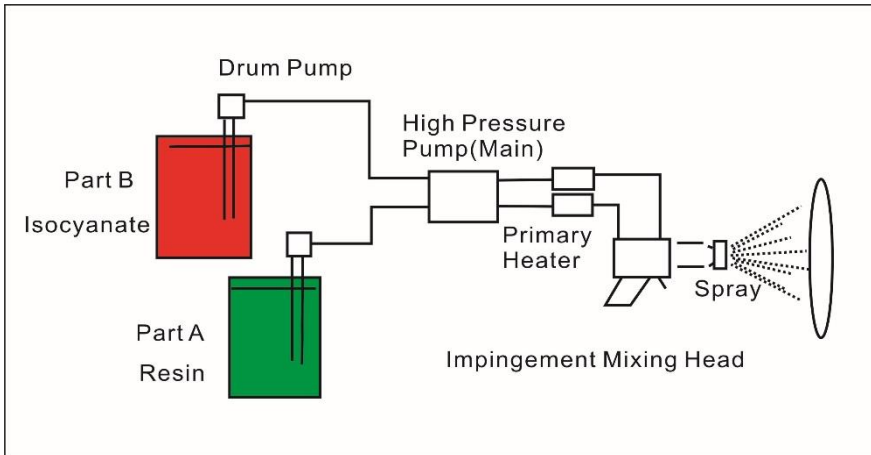


4.0 Technical Specification

	STELACOAT K-770		STELACOAT K-790		STELACOAT K-690	
	KA-770 (MDI)	KR-770 (Resin)	KA-790 (MDI)	KR-790 (Resin)	KA-690 (MDI)	KR-690 (Resin)
Viscosity (25°C ,mPa.s)	600 ~1200	200 ~600	400 ~1000	400 ~1000	500 ~1500	300 ~800
Mixing ratio(v/v)	1	1	1	1	1	1
Initial Cure for Touching (sec)	20~30		5~15		5~15	
Membrane Formed for Traffic (Min)	30 minutes		30 minutes		30 minutes	
Fire Resistance	BS 476 Part 7 Class 1		BS 476 Part 7 Class 1		BS 476 Part 7 Class 1	
Tensile strength BS 2782	>6N/mm ²		>7.5N/mm ²		>9N/mm ²	
Elongation (%) BS 2782	800		450		320	
Hardness(Shore A)	65~75		85~95		90~100	
Solid Content	100%		100%		100%	

5.0 Application Procedure:

5.01 System Requirement:



5.02 Application Method

StelaCoat Polyurea membrane is generated by Spraying Method with the following equipments and conditions:-

Air Compressor Pump

Minimum Requirement

Air Output Capacity 0.8M³/Min
 Air Pressure 0.8 MPa

Recommended Spray Machine (With Heat and Proportionator)

- Gusmer H2000/3000
- Marksman
- Labond A928
- Labond A928D Two Phase System

Recommended Spray Gun

- GX-7 Gun Series
- Labond A990

5.03 Spraying Condition

Pan Tip Size	Hose Temperature	Best Spraying Pressure	Distance Gun - Substrate
203	50 – 70 ⁰ C	2000 – 3000 psi	0.8 – 1.5M

6.0 Steps of Application

6.01 Safety Measure

Polyurea is fast curing membrane which will adhere tightly onto most of the substrate within 20 seconds. All personnel involved in spraying operation who locate within 3 meter of spraying points must be equipped protective cloth, MASK....

6.02 Segmentation of Work Site

No persons are allowed to enter into 5 meters in distance to spraying points, necessary warning sign must be hanged to alert public place.

6.03 Working Procedure

Surface preparation

The cement substrates shall be clean and free of dirt, dust, loose materials and foreign matters. Before any coating work is started the worker shall thoroughly examine all surfaces for any deficiency.

As the profile and roughness of the substrate influences local coating thickness, the concrete of cement mortar substrate shall have a relatively smooth surface to obtain a coating of satisfactory dry film thickness. Prior to priming the concrete surface shall be inspected to ensure that blow holes affected pin-holes shall be filled.

Primer System

Subject to site substrate nature and conditions, following primer should be applied:

Cementitious Substrate: Labond T117 water based moisture curing poly-urethane primer

Metallic Substrate: Labond P940 Epoxy Based Primer (please consult Labond representative to conduct compatibility adhesion test on substrate if unknown coating previously treated before). Other Labond primer may be recommend after test taken.

Should the work condition is subject to substantial raising damp due to capillary action or underground hydrostatic pressure, Primer P948 AquaBlocker primer might be necessary to apply two days before spraying operation.

6.04 Thickness Requirement of Membrane

Type of Work	Minimum Thickness Requirements		
	K-770	K-790	K-690
Waterproofing	>1.5 mm	>1.5 mm	>1.5 mm
Anti-Corrosion	>1.5 mm	>1.5 mm	>1.5 mm
Flooring	2 mm	2 mm	2 mm
Mold Making	N/A	N/A	2mm

6.05 Top Coat/Anti-slipping Surface

StelaCoat have excellent resistance to UV weathering, however, the colour of colour might be lighten greenished after exposure of sun light. Two types of top coat: ThaneTop P772 (Polyurethane based) for outdoor or Labond T060 (Epoxy Based) Top Coat series for indoor may be considered .ThaneTop P772 will offer anti-slipping effect; Labond T060 will offer a hard wearing surface for mechanical abrasion condition.

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7.0 Repair Procedure for Fully Cured Coatings

7.01 STELACOAT System must be repaired by either Labond Stelacoat K-690HP or StelaRack

K-600 repairing coating under the following conditions.

- Where the STELACOAT does not achieve the minimum film thickness.
- Where the applied STELACOAT coating did not pass the continuity minimum requirements for over-lapping areas 75mm width.
- Where the applied STELACOAT coating has been damaged.
- On those concealed areas where STELACOAT is unable to assess by spraying method.

7.02 Surface Preparation

- All areas to be repaired must be free of dirt dust loose materials or foreign matters.
- Coating surface shall be cleaned and roughened by sweep blasting power tool wire brushing or sanding to ensure good adhesion of the repair coating.

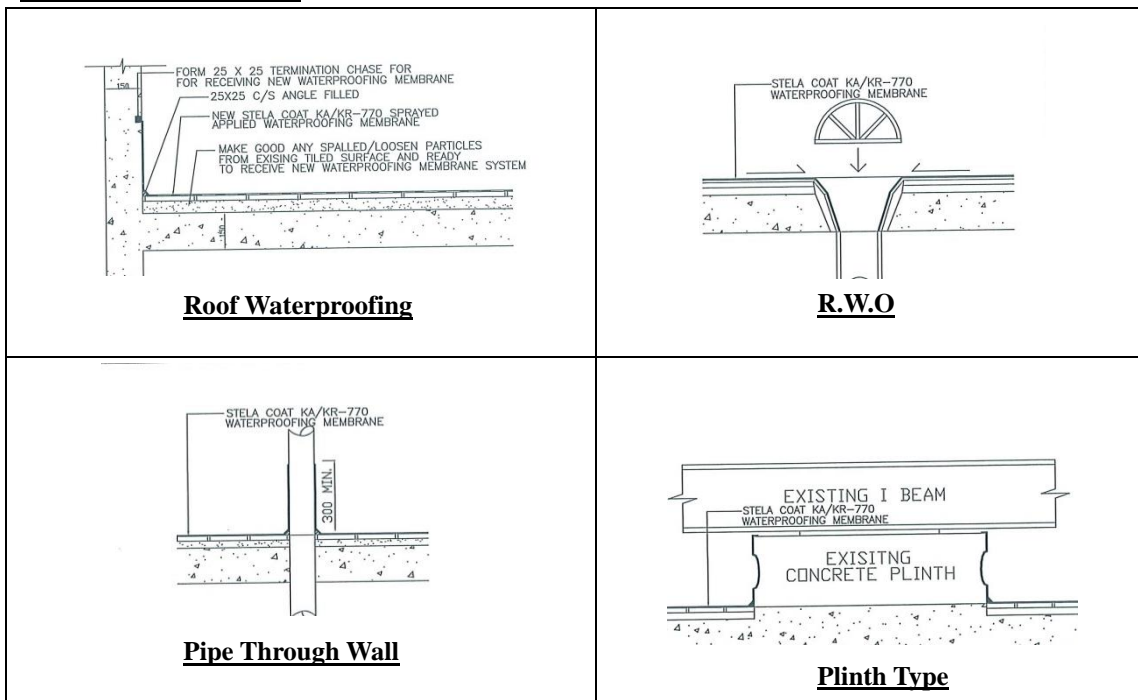
8.0 Specialist Applicator

It is important to have STELACOAT System be applied by Specialist Applicators who have been well trained and bounded to implement quality control procedure with the Manufacturer. We highly recommended customer to employ qualified applicators who have been trained and certified by Technical Department of Master Proofer Co Ltd. A list of qualified applicator could be obtained at web-site www.LABONDHK.com or consult Technical Department at 852-2609 2300.

9.0 Technical Advisory Notes

For rubber membrane, it may sometimes encounter problem of “Blisters” due to trapped air on rough concrete or moisture vapour which are sometimes practically unavoidable. Provided that the blister are in low scale and they are not punctured, it is unlikely to affect the overall performance of the system. for minimizing the “Blisters” caused by trapped moisture, it is highly recommended to install vent pipes at high moisture areas before application of rubber coating.

10. Typical Drawings



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11. Coverage

1.3kg -1.45kg/mm/M² by spraying method subject to vary substrate profile.

12. Packaging

200kg/Close Drum, 50kg/Close Drum, 18kg/Close Drum (two phase application system)

13. Health and Safety

Please refer to the MSDS of STELACOAT. In case of emergency incident, please contact our office :

Hong Kong : Technical Representative, Labond HongKong : (852) 2609 2300

Korea : R & D, Factory Korea – Kangnam Chemical Co Ltd: (345) 491-4111