

ELASTOSEAL P

PURE POLYUREA, FLEXIBLE, FAST CURING, WATERPROOF COATING



DESCRIPTION

ELASTOSEAL P is a solvent free, two component, flexible, fast curing, seamless, spray applied pure polyurea protective and waterproofing coating membrane. It is very long life cycles and high durability which designed for use as anti-corrosion, waterproof, and protective coating for concrete and steel structures where a high degree of chemical and mechanical resistance is needed.

RECOMMENDED USE

- Podium Decks
- Stadiums
- Cold Storage
- For underneath planting or hard landscaping waterproofing
- For Green roof waterproofing
- As waterproofing membrane for trafficked concrete with additional UV protection top coat
- Waterproofing for large scale industrial, commercial and manufacturing facilities
- For secondary containment
- Bridge piers
- Aquarium lining
- Tunnel lining
- Truck bed lining
- Ponds, pool and water feature waterproofing
- Substrates and waterproofing protection for areas which is exposed to high wind abrasion
- Protective coating for access ramps and loading docks

FEATURES & BENEFITS

- Seamless, sprayed applied to any thickness in one application.
- Fast curing
- Rain resistance after only 30 seconds
- Accessible to traffic after only 12 hours
- fast reactivity and tack free time
- Enhance the durability of reinforce concrete
- Excellent adhesion on concrete, steel, fiber glass, aluminum, foam, wood, etc.
- High abrasion and impact resistance
- Solvent free, VOC free and 100% solid content
- Flexible and does not brittle over a wide range of temperature
- High elongation

TECHNICAL PROPERTIES

Chemical Base	Component A- Isocyanate Component B- Amine
Mixing ratio of Part A to Part B	1:1 by Volume
Volume Solid, ASTM D 2697	100%
Mixing ratio, by volume	1:1
Shore D Hardness, ASTM D2240	40 +/- 5
Viscosity, ASTM D 4878 @ 25°C	Component A- 400 – 900 cps Component B- 400 – 1000 cps
Density, ASTM D 1217	Component A- 1.11 +/- 0.02 Component B- 0.99 +/- 0.02
Elongation, ASTM D412	>350%
Tensile Strength, ASTM D412	>19 MPa
Modulus, ASTM D412	@100% Elongation= > 9 MPa @200% Elongation= > 13 MPa @300% Elongation= > 16 MPa
Bond Strength to Concrete, ASTM D4541	>1.5 MPa
Bond Strength to Steel, ASTM D4541	>3.0 MPa

PROCESSING REQUIREMENTS

ELASTOSEAL P must be applied using a plural two component, hot spraying machine.

Recommended Thickness	Min: 1.5mm Max: No Limit
Processing Temperature Part A Part B	70 - 80°C 70 - 80°C
Hose Temperature	70 up to 80°C
Spray Temperature	70 up to 80°C
Pressure	2500 Psi
Gel time	5-15 second @ 23°C (depend on the substrate temperature)
Tack Free	15-30 @ 23°C (depend on ambient temperature)
Over Coating	0-8 hours
Curing time	1 hour: Foot Traffic loading 2 hours: Mechanical loading 24 hours: Chemical loading

COVERAGE 1Liter / 1 Sqm @ 1mm Thickness DFT

COLOR Grey RAL 7005

Application temperature	5 up to 50 °C
Application Relative Humidity	98%

Note: Higher humidity levels do not prevent correct polymerization but may make adhesion increasingly difficult to substrates due to the potential for condensation on surface.

Surface Preparation

All surfaces must be clean, dry, and free from contamination. Metal surfaces must be assessed and treated in accordance with ISO 8504.

FOR STEEL

All welding seams must have a surface finish which ensures that the quality of the paint system will be maintained in all respects. Voids and holes in welding seams, undercuts, cracks, etc. must be avoided. If found, this should be rectified by welding and/or grinding. All weld spatters must be removed. All sharp edges must be removed or rounded off in such a way that the specified film thickness can be built-up on all surfaces. The radius of the rounding must be minimum 2 mm. The steel must be of first-class quality and must not have been allowed to rust more than corresponding to grade B of ISO 8501-1:2007. Any laminations must be removed. Blast cleaning to Sa 2½. (ISO 8501-1:2007). Roughness: using abrasives suitable to achieve a coarse surface of Grade Medium G (50-85µm, Ry5) (ISO 8503-2).

FOR CONCRETE

Dry abrasive blasting, wet abrasive blasting, vacuum-assisted abrasive blasting, and centrifugal shot blasting, as described in ASTM D4259, may be used to remove contaminants, laitance, and weak concrete, to expose blow holes, and to produce a sound concrete surface with adequate profile and surface porosity. All blow holes and minor surface imperfections shall be filled with recommended CMCI filler prior to application of **ELASTOPOXY PRIMER HP**.

PRIMER

All concrete must be primed with **ELASTOPOXY PRIMER HP**. Sound and dry concrete, should have an ambient substrate temperature of ≥10°C.

All Metal substrates must be primed with **ELASTOTHANE PRIMER HP**.

Quality Statement

CMCI manufactures its products at their manufacturing facility in Saudi Arabia as per the Quality Procedures certified to conform with quality Management System described in ISO 9000 series

CMCI provides a comprehensive technical support system for its full range of high performance construction products CMCI also offers full technical field support to consultants, Architects, contractors, applicators and End Users.

The Technical Specification information and recommendations given are based on the current technical knowledge and the user or his representative is recommended to check the suitability of the product CMCI reserves the right to amend the technical characteristic of the product as part of ongoing research and development. As the work execution is beyond the direct and continuous control of CMCI no guaranty and or responsibility is assumed on the performance of work completion executed with use of our products.

APPLICATION

We recommend the use of highly trained CMCI applicator for this type of application. All Applicators should have a suitable equipment and expertise and will follow the procedures detailed in this datasheet and in the CMCI Polyurea Method Statement.

Do not dilute **ELASTOSEAL P** and **ELASTOPOXY PRIMER** for any circumstances. The Recommended minimum applied thickness of **ELASTOSEAL P** is 1.5mm, using cross hatch pattern of spray. For more than 8-hour exposure of **ELASTOSEAL P**, prior proceeding with the succeeding coat it is highly advised to wipe the surface with **POLYACTIVATOR** to reactive the coating. Allow the solvent to dry prior to spray a fresh **ELASTOSEAL P**. Note: All solvent must be avoided to directly contact with drinking water. In the case of prolonged product storage prior to use, mix thoroughly the amine component with a drum mixer until a homogenous mixture and color is obtained.

FOR AESTHETICS & COLOR STABLE TOP COAT

If aesthetics is of importance, then Elastoseal P shall be top-coated with Cemdeck Aliphatic, a UV resistant and color stable aliphatic polyurethane coating.

TSS/TDS/270421-A

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