

# ELASTOSEAL H

**HYBRID POLYUREA, FLEXIBLE, FAST CURING, WATERPROOF COATING**



## DESCRIPTION

**ELASTOSEAL H** is a solvent free, two component, flexible, high build, fast curing, seamless, hybrid, high-performance spray applied protective and waterproofing coating membrane. It is very long-life cycles and high durability which designed for commercial construction, infrastructures and general waterproofing and protective coating of steel, concrete and wood surfaces.

**ELASTOSEAL H** can be applied in wide variety of substrates at high or low ambient temperature,

## RECOMMENDED USE

- Podium Decks
- For underneath planting or hard landscaping water proofing
- For Green roof waterproofing
- Waterproofing for large scale industrial, commercial and manufacturing facilities
- Tunnel lining
- Ponds, pool and water feature waterproofing

## FEATURES & ADVANTAGES

- 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 and steel
- 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- Prepolymer Component B- Polyol
Mixing ratio of Part or volume, A to Part B	1:1
Appearance @ 25°C	Part A – Amber liquid Part B- Grey liquid

Volume Solid, ASTM D 2697	100%
Shore D Hardness, ASTM D2240	45 +/- 5
Viscosity, ASTM D 4878 @ 25°C	Component A- 700-1300 cps Component B- 350-650 cps
Specific gravity, ASTM D 1217	Component A- 1.11 +/- 0.02 Component B- 1.01 +/- 0.02
Elongation at break, ASTM D412	>250% @2.5mm thickness
Tensile Strength, ASTM D412	15 MPa @2.5mm thickness
@100% Modulus, ASTM D412	5.5 MPa @2.5mm thickness
Bond Strength to primed concrete, ASTM D4541	>1.5 MPa, substrates failure occurred
Bond Strength to primed Steel, ASTM D4541	<8-12 MPa

## PROCESSING REQUIREMENTS

**ELASTOSEAL H** must be applied using a plural two com- ponent, 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	25-45 seconds @ 25°C (depend on the substrate temperature)
Tack Free Time	5 minutes @ 23°C ( depend on ambient temperature)

<b>COVERAGE</b>	1Liter / 1 Sqm @ 1mm Thickness DFT
<b>COLOR</b>	Grey RAL 7046

Post Curing Time	24 hours
Final Hardness	4 days
Application temperature	5 up to 50 °C
Application Relative Humidity	98%

**Note:** 1. These re typical values and should not be construed as specification

2. 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**.

### 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.

### PRIMER

All concrete must be primed with **ELASTOPOXY PRIMER HP**. Sound and dry concrete, should have an ambient substrate temperature of  $\geq 10^{\circ}\text{C}$ .

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

### APPLICATION

We recommend the used 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 data-sheet and in the CMCI Polyurea Method Statement.

Do not dilute **ELASTOSEAL H** and **ELASTOPOXY PRIMER HP** for any circumstances. The Recommended minimum applied thickness of **ELASTOSEAL H** is 1.5mm, using cross hatch pattern of spray. For more than 8-hour exposure of **ELASTOSEAL H**, 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 H**. 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.

### STORAGE

Stored in the original sealed drums in a dry place at the Temperature ranging  $10^{\circ}\text{C}$  up to  $30^{\circ}\text{C}$ .

Storage below the recommended minimum temperature may Result in freezing of isocyanate.

TSS/TDS/081021-B

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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.