Revision date: 09/11/22

HYDROGARD PUA

ELASTOMERIC 100% PURE POLYUREA WATERPROOF COATING

DESCRIPTION

Hydrogard PUA, 100% pure, polyurea coating is applied as both a waterproof and protective coating for use in areas subject to structural movement. The coating comprises of two liquid components; Isocyanates and amines which are highly reactive and designed to be mixed and spray applied to a wide variety of substrates. Hydrogard PUA provides excellent elasticity and is an aromatic high density polyurea.

USES

Hydrogard PUA is suitable for a wide variety of applications including metal roofs, structural concrete decks, asbestos substrates, expanded polystyrene and extruded polystyrene. The coating is particularly suited to structures that may require high levels of elasticity due to high expansion movements during temperature change.

ADVANATAGES

- Rapid drying times – Under 15 seconds
- High elasticity with exceptional during ability
- Certified for zero fall application
- Adaptable to varying substrate contours
- Up to 250m^2 covered per hour with experienced applicators

Property	Value
Application Temperature	Grey, White, Red
Application Thickness	1.5mm (Metal) 2mm (Concrete)
Tensile Strength at 23°C	13MPa
Elongation at 23°C	>600%
Elongation at -40°C	>350%
Tack-Free Time at 23°C	13-26 seconds
Cured time at 23°C	12 hours
Shore A hardness at 23°C	>75
Shore D hardness at 23°C	>35
VOC Content	0 (Solids content 100%)
Adherence to concrete	>2 MPa
Maximum moisture content of substrate	5% humidity

COMPLIANCE

Hydrogard PUA is certified by the British Board of Agrément.

www.premcrete.com | 02380 276166 | sales@premcrete.com
44 Macadam Way, West Portway, Andover, Hampshire, SP10 3XW

PROCEDURE

Concrete Substrate: All substrates must achieve a pull-off strength of 1.5N/mm^2 (MPa) minimum. Any excessive surface undulations should be repaired with Eponite GP (epoxy repair mortar). All concrete surface laitance or release agents must be removed and an open the pore surface achieved by grit blasting, milling or sanding. (to achieve a Concrete Surface Preparation index -CSP- 3 to 6, depending on the final use). Concrete substrates should be a minimum of 28 days to ensure a fully cured concrete structure and in all situations the maximum level of humidity allowed for the substrate should be verified, depending on the primer used. Ensure the surface is clean and free from all surface contaminants such as dust or other substances from prior preparation works. Apply the Hydrogard PUA Primer in accordance with the technical datasheet. Hydrogard PUA Primer is available in varying temperature grades – Ensure the appropriate primer is used and consult with Premcrete technical department for guidance. Spray apply the Hydrogard PUA to the recommended 2mm thickness. It is recommended that this achieved by two coats at 1mm thickness. Where UV protection is required, spray apply Hydrogard PUV as a UV-protective finishing coat.

Metal Substrate: Metal substrates should be prepared by shot- or sandblasting. For applications such as metal tanks or similar, must achieve an SP10 according to SSPC norms/NACE 2/2nd quality according to UK norm/DS 2.5 French norm/SA 2 1/5 Sweden norm. Ensure the integrity of all overlaps and sealing details where Preflex PU or Hydroband 1000 have been used. All substrates must be thoroughly cleaned using ketone-based solvent. Apply Hydrogard PUA Primer-M to the entire substrate. Consult the technical specifications of this product. Apply Hydrogard PUA by spray application at a minimum recommended thickness of 1.5mm. Where UV protection is required, spray apply Hydrogard PUV as a UV-protective finishing coat.

JOINTING AND REPAIRS

Where recoat time has exceeded 24hrs, preparation of the terminated coating will be required and where damage has occurred the affected area should be cut and removed with the following guidance applicable to both the joining and repair of affected areas. The connecting edge of Hydrogard PUA should be sanded to a width of 300mm to ensure adhesion with the following coat. All dust generated from preparation works must be removed, and Hydrogard PUA Primer should be applied to the sanded coating with a silica sand applied onto the primer to promote further adhesion. Allow the primer to dry as stated within the technical datasheet and apply Hydrogard PUA in accordance with the previous guidance.

JOINTING AND REPAIRS

Hydrogard PUA must be spray-applied by approved spray equipment, to ensure the required mixing of the two liquid components (isocyanates and amines). The requirements for the spray application are as follows:

- Isocyanate heater temperature: 78°C
- Amine heater temperature: 65°C
- Hose Temperature: 72°C
- Pressure: 2.700 psi (approx. 185 bar)
- Mixing Chamber: GU-07008-1

PACKAGING & COVERAGE

Component A: Isocyanate 225kg
Component B: Amines 225kg
Based on application at 2kg/M^2 each set will cover 225M^2.

STORAGE & SHELF LIFE

Hydrogard PUA has a 12-month shelf life when stored in dry conditions with temperatures between 5°C – 35°C. Once the drum is opened the product should be used within 3 months. Mechanically mix the component B once opened.

HEALTH & SAFETY

See separate material safety datasheet.