

HYDROLASTIC AP560

Liquid Applied Hybrid Polyurethane Modified Waterproofing Coating

Description:

HYDROLASTIC AP560 is a cold-applied, one component new technology hybrid elastomeric waterproofing roof coating based on polyurethane dispersion. It forms a highly elastic, seamless membrane, with excellent protection from moisture and standing water. It shows very low water uptake & good crack bridging ability. It is suitable for use in tropical climatic conditions.

Uses:

- For exposed roof waterproofing solutions in both new construction and refurbishment projects.
- For reflective coating to enhance energy efficiency by reducing cooling costs.
- Wet areas & shower alcoves
- Balconies & deck areas
- Parapets & feature walls
- Anti-carbonation coating

Advantages:

- Non-toxic and VOC compliant water-based coating
- Forms a highly elastic, seamless membrane
- Excellent protection from moisture & standing water
- High UV resistance
- Resistance to extreme temperature condition.
- Resistance to ponded water condition.
- White roofs can contribute to reduction of heat inside the building structure
- Resistance to excellent low temperature flexibility.
- High strength & elasticity.

Instructions for Use:

Surface Preparation:

Careful surface preparation is always important to produce a well-sealed membrane with high durability.

All substrates must be cleaned and prepared using high pressure water jet, abrasive blast cleaning, scarifying equipment or other suitable approved mechanical methods.

Cementitious Substrates:

The substrate must be sound clean, dry & free from loose materials efflorescence, laitance, curing compounds, dirt, oil and grease. Ensure that the concrete surfaces are cured for at least 28 days and have a moisture content not exceeding 5% before coating the product.

For hard laitance or contamination, clean the concrete surface with mechanical preparation methods like captive blasting or sand blasting to achieve an open textured substrate.

Surface defects like voids, blow holes must be fully exposed and repaired using appropriate MATEX Concrete Repair Products. The substrate must be free of all mold, mildew, fungus and other growing organisms. High pressure jet water may be used to remove such growing organisms. Allow the cleaned surfaces to dry thoroughly.

Brick and stone:

Mortar joints must be sound and flush pointed. Use localised reinforcement over connection joints and prime before applying HYDROLASTIC AP560.

Bituminous Felt:

Use high pressure water treatment to remove dirt, debris or surfacing which has not adequately adhered to the substrate.

Metals:

Clean the surface of all grease, oil & foreign matter. Abrade the exposed surfaces to reach bright steel condition. Prime the substrate immediately to avoid formation of corrosion.

Paints/Coating:

Ensure the existing material is sound and firmly adhered. Remove any oxidized layers and use localised reinforcement over joints.

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Priming:

All porous substrates to be primed with HYDROLASTIC AP560 diluted with 10% water. In case of non-porous substrate, apply one coat of ARMOPRIME WB as a primer.

Mixing:

Prior to application, HYDROLASTIC AP560 must be properly stirred with a slow speed mixer to ensure homogeneity of the mix. Over mixing must be avoided to minimise air entrapment. Do not thin the product.

Application:

Ensure that surface preparation is followed thoroughly. HYDROLASTIC AP560 is applied in minimum 2 coats, depending on the substrate and system requirements. Before the following coat is applied, make sure that the previous coat is completely dry (6-8 hrs at 25°C). The total coating thickness must not be less than 0.5 mm (dft)

For additional mechanical strength either over the whole surface or at critical points such as joints, wall hanging, floor & exhaust vent pipes, antenna membership-solar etc, embed a layer of geotextile membrane between the two coats.

Standards:

- Requirements of LEED EQ Credit 4.2: Low – Emitting Materials: Paints & Coating: VOC< 100g/l
- USGBC LEED rating: conforms to LEED SS Credit: 7.2 – Heat Island Effect-Roof, SRI ≥ 78
- Conforms to Estidama Requirements for reflectivity
- Conforms to Dubai Green Buildings for reflectivity.
- ASTM D412
- ASTM C836/M
- EN 14891
- BS EN 12390 part 8

TECHNICAL PROPERTIES	
Appearance	White, Liquid Coating
Density	1.30 ± 0.03 kg/lit
Viscosity	8000-14000 cps
Solid Content by Weight	62 ± 3%
Application Temperature	+8°C to +40°C / 80%RH max
Flexibility	180°bend – no failure

Tensile Strength (ASTM D412)	>1.5 N/mm ²
Elongation (ASTM D412)	>400
Water Penetration (EN 12390, part 8)	NIL
Solar Reflection Index (E1980)	>90
VOC Content	1.0 g/liter
Shore Hardness (ASTM 2240)	55
UV Resistance	Pass
Service Temperature	-5°C to +80°C

APPLICATION INFORMATION	
Ambient Air Temperature	+8°C min/+40°C max
Relative Air Humidity	80% max
Substrate Temperature	+8°C min/+40°C max
Dew Point	Beware of condensation. Surface temperature during application must be at least +3°C above dew point.
Substrate Moisture	<5% moisture content. No rising dampness.

*Values indicated may vary depending on the environment and conditions of the material. Figures given are tested according to standard laboratory conditions.

Coverage:

One 20 kg unit of HYDROLASTIC AP560 achieves coverage of approximate 7.5-8.0 square meter (minimum 2 coats) at 1.0 mm dry film thickness.

*Coverage rate is an approximate value, and subject to actual site conditions.

Packaging:

HYDROLASTIC AP560 is a single component, available in 20 Kg. plastic pails.

Storage:

HYDROLASTIC AP560 stored in dry conditions in original packaging at temperatures between +5°C and +30°C. Protect from direct sunlight and frost.

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Shelf Life:

HYDROLASTIC AP560 can be utilized within 12 months minimum from date of production if stored properly in original, unopened and undamaged sealed packaging.

Cleaning:

Clean all tools and application equipment with water immediately after use. Hardened/ cured material can only be removed mechanically.

Notes:

- Do not apply with fog, imminent rain forecast or with weather humidity more than 80%.
- Ponding water is to be avoided for a minimum 72 hours once the membrane is applied.
- HYDROLASTIC AP560 should not be subjected to permanent water immersion.
- Do not apply on substrates having rising moisture.
- Application to be done preferably during falling ambient & substrate temperatures.
- It is recommended to carry out the compatibility test of primer with difficult substrates- bitumen, metal, old paints, etc. prior to application of the following coats.

Health and Safety:

Avoid contact with eyes and skin. Wear suitable protective clothing such as coveralls, goggles, dust mask and gloves. Use barrier cream. Ensure that there is adequate ventilation. Do not breathe vapour or spray mist.

FIRST AID:

- Eyes: In the event of accidental splashes, flush with warm water and seek medical advice.
- Skin: Wash skin thoroughly with soap and water
- Inhalation: Remove to fresh air, keep patient rested
- Ingestion: Do not induce vomiting. Seek immediate medical attention.

For further safety information, please refer to HYDROLASTIC AP560 Material Safety Data Sheet.

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