HYPERDESMO®-
COLD CURE POLYUREA 2K

CE
ETA – 18/0946

Cold Cure polyurea, for waterproofing & protection, fire retardant (optional)

DESCRIPTION

HYPERDESMO®-COLD CURE POLYUREA 2K is a two-component, roller or squeegee-applied polyurea based liquid membrane. The material cures rapidly and forms a bubble free membrane in less than 2 hours. It produces a highly durable, fire retardant (optional), waterproofing membrane with strong adhesion to many types of surfaces. It is classified as M2 according to the French SNPE standards and B2 according to the German DIN 4102 (fire retardant version).

Apply with brush, roller, squeegee or airless spray in one or two coats with minimum total consumption of 1.5-2 kg/m^2.

COMPLIANCE - CERTIFICATION

- CE: ETA-18/0946
- Root resistance according to CEN/TS 14416
- French SNPE standards (M2)*
- German DIN 4102 standard (B2)*

  * Fire retardant version

RECOMMENDED FOR

Waterproofing and protection of:

- Tiles (under),
- polyurethane insulation foams,
- bathrooms,
- verandas and balconies,
- roofs, also roofs of high fire risk plants, e.g. power, chemicals, etc.,
- light roofing made of metal or fibrous cement,
- asphalt membranes.

LIMITATIONS

- Not recommended for unsound substrates.

When exposed to UV, a slight discoloration of the membrane is probable. This will not affect, in any way, the fire retarding and waterproofing properties of the final coat.

FEATURES & BENEFITS

- Fast curing
- Roller applied
- Fire retardant (optional)
- Bubble and defect-free result.
- Low temperature application
- Excellent adhesion to almost any type of surface, with or without the use of special primers.
- Resistance to cold: The film remains elastic even down to -40 °C.
- Excellent mechanical properties, high tensile and tear strength, high abrasion resistance.
- Water vapor transmission: The film breathes so there is no accumulation of humidity under the coat.

APPLICATION PREREQUISITES

Can be successfully applied on:

Concrete/steel reinforced concrete or otherwise, fibrous cement, mosaic, cement roof tiles, old (but well adhered) acrylic and asphalt coats, wood, corroded metal, galvanized steel. For information about other substrates, please contact our tech department.

Concrete substrate conditions (standard):

- Hardness: R_{28} = 15 Mpa.
- Humidity: W < 10%.
- Temperature: 5-35 °C.
- Relative humidity: < 85%.

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Primer selection for special conditions and substrates:
Please refer to the ***Primer Selection Table***.

APPLICATION PROCEDURE

Clean the substrate using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. Cement laitance, loose particles, mould release agents, cured membranes must also be removed. Surface irregularities should also be filled.

Priming:
Apply the required primer following the guidelines above.

Mixing:
Use a low speed (300 rpm) mixer for the two components. Add SOLVENT-01 5-10% for application by spraying.
Attention: Pot life of mix, 20-30 minutes.

Application:
Apply with roller, brush or airless spraying (200-250 bar) in one or two coats. Do not exceed 48 hours between coats.

CONSUMPTION

First coat: 0,8-1 kg/m^2.
Second coat: 0.8-1 kg/m^2.
Minimum total consumption: **1.5-2 kg/m^2**.

CLEANING

Clean tools and equipment first with paper and then using SOLVENT-01. Rollers will not be re-usable.

PACKAGING

14 kg (12,5+1,5) Recommended
28 kg (25+3)

SHELF LIFE

Can be kept for 12 months minimum in the original unopened pails in dry places and at temperatures of 5-25 °C. Once opened, use as soon as possible.

SAFETY INFORMATION

Contains volatile flammable solvents. Apply in well-ventilated, no smoking areas, away from naked flames. In closed spaces use ventilators and carbon active masks. Keep in mind that solvents are heavier than air so they float near the floor. The MSDS (Material Safety Data Sheet) is available on request.

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CLASSIFICATION ACCORDING TO EOTA GUIDELINE (EUROPEAN ORGANISATION OF TECHNICAL APPROVAL)

REQUIREMENTS	HYPERDESMO COLD CURE POLYUREA-2K	HYPERDESMO COLD CURE POLYUREA-2K + HYPERDESMO-ADY
External fire performance	Broof (t1)	
Fire reaction	Euroclass E	
Expected working life	W3 (25 years)	W2 (10 years)
Climatic zone of use	S (Severe)	
User loads	P1	P3
Roof slopes	S1 to S4	
Minimum surface temperatures	TL3 (-20ºC)	
Maximum surface temperatures	TH4 (90ºC)	

TECHNICAL SPECIFICATIONS

In liquid form (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield)	cP	ASTM D2196-86, @ 25 ºC	1,500-2,500
Specific weight	gr/cm^3	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 ºC	1.30-1.40
Flash point	ºC	ASTM D93, closed cup	42
Tack free time, @ 77 ºF (25 ºC) & 55% RH	hours	-	1-3
Recoat time	hours	-	2-6
Pot life of mix	min	-	±20

In cured form (after application):

PROPERTY	UNITS	METHOD	STANDARD VERSION-SPECIFICATION	FIRE RETARDANT VERSION-SPECIFICATION
Fire class	-	French SNPE German DIN 4102	-	M2 B2
Service temperature	ºC	-	-40 to 80	-40 to 80

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Max. temperature short time (shock)	°C	-	200	200
Hardness	Shore A	ASTM D2240 / DIN 53505 / ISO R868	70	60
Tensile strength at break @ 23 °C	(N/mm^2)	ASTM D412 / EN-ISO-527-3	> 8	> 4
Elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	> 400	> 400
Water vapor transmission	$gr/m^2.hr$	ASTM E96 (Water Method)	0.8	0.8
Adhesion to concrete	kg/cm^2 (N/mm^2)	ASTM D4541	> 20 (> 2)	> 20 (> 2)
Tensile set (after 300% elongation)	%	ASTM D412	< 3	< 3
QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) & 4hr COND @ 50 °C)	-	ASTM G53	passed (2000 hours)	passed (2000 hours)
Hydrolysis (8% KOH, 15 days @ 50°C)	-	-	no significant elastomeric property change	no significant elastomeric property change
Hydrolysis (H_2O, 30 day-cycle 60-100 °C)	-	-	no significant elastomeric property change	no significant elastomeric property change
HCL (PH=2, 10 days @ RT)	-	-	no significant elastomeric property change	no significant elastomeric property change

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