

HYPERDESMO®-T VERTICAL

Transparent, Thixotropic, fully aliphatic, polyurethane liquid membrane

DESCRIPTION

HYPERDESMO®-T VERTICAL is a one component high solids, polyurethane fluid, which cures with the humidity in the atmosphere. The material is based on the Hyperdesmo-T technology with a modified rheology so as to be applied when thixotropy is required. Being aliphatic, it does not yellow/discolor when exposed to sunlight.

It is based on pure elastomeric, hydrophobic, aliphatic polyurethane resin, which results in excellent mechanical, chemical, thermal, UV and natural element resistance properties.

Consumption

As a binder for marble stone carpets: 10% by weight of the stones. Apply by rubber spatula.

As a gap filler for marble stone carpets: 1 Kg/m², apply by rubber spatula for filling and finish off by roller for final finish.



Although **HYPERDESMO®-T VERTICAL** looks coloured, especially when it is in large containers, it is stressed that the end result is, indeed, transparent.

RECOMMENDED FOR

- Wall binder for vertical applications of marble stone carpet.
- Gap filler in marble stone carpets
- Pigmented, as a paint for vertical or complex fittings.

Also suitable for sealing concrete: Applied in thick, bubble-free, coats.

LIMITATIONS

- Not recommended for unsound substrates,
- non-porous substrates, such as ceramic tiles and marble, must be primed with **PRIMER-T** first.

FEATURES & BENEFITS

- No thinning is required but SOLVENT-01 may be used.
- Excellent weather and UV resistance.
- Excellent thermal resistance, the product never turns soft. Max service temperature 80 °C, max shock temperature 200 °C.
- Resistance to cold: The film remains elastic even down to -40 °C.
- Excellent mechanical properties.
- Good chemical resistance.
- Water vapor transmission.
- Can also be applied in thick, bubble-free, coats.

APPLICATION PREREQUISITES

Can be successfully applied on:

Tiles, concrete, cement roof tiles, wood, corroded metal, galvanized steel. For information about other substrates, please contact our tech department.

Concrete substrate conditions (standard):

- Hardness: R₂₈ = 15 Mpa.
- Humidity: W < 10%.
- Temperature: 5-35 °C.
- Relative humidity: < 85%.

Primer selection for special conditions and substrates:

Please refer to the **Primer Selection Table**.

HYPERDESMO®-T VERTICAL

APPLICATION PROCEDURE

Clean the surface using a high-pressure washer, if possible. Remove oil, grease and wax contaminants. If used for concrete sealing, cement laitance, loose particles, mould release agents, cured membranes must also be removed. Fill surface irregularities with the necessary product.

Priming:

Priming is required when application is on **non-porous** substrates, such as ceramic tiles. In this case, PRIMER-T is used. It is applied with a clean cloth without leaving any pools of fluid (apply as if wiping the surface).

Consumption

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As a gap filler for marble stone carpets: 1 Kg/m², apply by rubber spatula for filling and finish off by roller for final finish

CLEANING

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

PACKAGING

1 lt, 4 lt.

SHELF LIFE

Can be kept for 9 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 creep on the floor. The MSDS (Material Safety Data Sheet) is available on request.

TECHNICAL SPECIFICATIONS

In liquid form (before application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Viscosity (Brookfield)	cP	ASTM D4287, @ 25 °C	3,000-4,500
Specific weight	gr/cm ³	ASTM D1475 / DIN 53217 / ISO 2811, @ 20 °C	0.95-1.05
Solids	%	internal	80-85
Flash point	°C	ASTM D93, closed cup	30
Tack free time, @ 77 °F (25 °C) & 55% RH	hours	-	6
Recoat time	hours	-	6-24

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In cured form (after application):

PROPERTY	UNITS	METHOD	SPECIFICATION
Service temperature	°C	-	-40 to 80
Max. temperature short time (shock)	°C	-	200
Hardness	Shore D	ASTM D2240 / DIN 53505 / ISO R868	40
Tensile strength at break @ 23 °C	Kg/cm ² (N/mm ²)	ASTM D412 / EN-ISO-527-3	35 (3,5)
Percent elongation @ 23 °C	%	ASTM D412 / EN-ISO-527-3	> 300
Water vapor transmission	gr/m ² .hr	ASTM E96 (Water Method)	0.8
QUV Accelerated Weathering Test (4hr UV, @ 60 °C (UVB-Lamps) & 4hr COND @ 50 °C)	-	ASTM G53	passed (3,000 hours)
Thermal resistance (100 days @ 80 °C)	-	EOTA TR011	passed

Chemical (hydrolysis) resistance:

Potassium Hydroxide, 8%	10 days @ 50 °C	unaffected
Sodium Hypochlorite, 5%	10 days	unaffected
Water absorption	-	< 1.4%

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