

Polyurethane continuous membrane for
waterproofing

DESMOPOL

T e c n o p o L certifications



What are DESMOPOL membranes ?

Waterproofing membranes Desmopol are products that when applied, resulting in a polymerized coating layer forming a completely waterproof membrane. Durable and resistant to U.V. and atmospheric agents, guaranteeing the tightness. System Desmopol is compatible with most protections for walkability, being able to get well, covered with decorative requirements of a more intensive use.

We can use Desmopol as a protection in:

- Community terraces
- Vaults.
- Balconies.
- Solariums.
- Galerias.
- Corridors.
- Places.
- Parks.
- Stands.
- Shopping centers.
- Andenes



• **Application with spray machine**

Required equipment:

- High pressure 280 bar (4.000 psi)
- Stretch hoses 64m.

To be used:

- For most projects
- Great application volume above 1,000 m² per day

• **Manual application**

Required equipment:

- Brush or roller
- Rubber rake

Basic requirements



Possible components of the deck

- **eligible areas**

- Mortars
- Concrete
- Tiles, tiles, etc.

- **Armor reinforcement**

- Armor Glass fiber reinforcement
- Reinforcement of Polypropylene Fittings

- **The primers and surface preparation.**

- Surfaces with low porosity?
- Porous surfaces?
- Damp surfaces?
- Equalization?

- **The waterproofing membrane potential.**

- Desmopol
- Desmopol - Poliurea
- Desmopol - T
- Setipol

- **Possible protections**

- Polyurethanes.
- Slurrys.
- Colored aggregates,
- Chips, etc



Preparation of the work

- **Peripherals and auxiliary**

The rehabilitation is important to assess and verify in advance the status of peripherals and ancillary cover, such as drains, perimeter walls, meetings with facades, buildings, etc.. to proceed with putting them before the installation of new waterproofing. The re-waterproofing of deck is not effective if there are leaks by capillarity from these elements

- **Equalization**

In rehabilitation work is necessary to check the slopes and if necessary, to repair it to be compatible with the requirements of the work.

- **Superficial cohesion**

In the tiled roof rehabilitation, will erase all the tiles that are not attached and replaced to keep the flat of the deck structure, will also make sure that the tile grout is properly executed. When work is carried out directly on old waterproofing waterproofing systems, we recommend verifying the adherence of the same and eliminate the bad old waterproofing. In light protection systems, it is very important to verify that the new waterproofing will not be affected by the remnants of old product present.

- **Irregularities**

Depending on the chosen finish and especially when you want a light protection is important to proceed with the adjustment of the support to obtain a smooth surface. If there are cracks or fissures, these should be repaired prior to sealing.

Treatment of singular points

- **Meeting with downspouts.**

In rehabilitation work, once the pan ready, proceed to put an armor that exceed approx. 10 cm. the diameter of the downpipe, which permeate the membrane to adhere to the stand.

- **Expansion joints.**

Fill the joint with polyurethane caulk, then apply a band armed with geotextile waterproofing. This should cover between 10 and 15 cm on each side of the board.

- **Fissures and cracks.**

Passive and active cracks cracks over 3 mm. wide. After the opening drive to stamp polyurethane with elastic putty and apply waterproof coatings after drying of the putty prior compatibility test

- **Edges.**

The edges should be rounded angles or kill the edge.

- **skirtings**


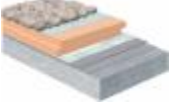
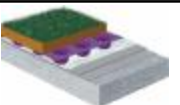





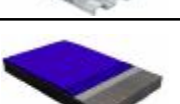
Treatment is needed for skirtings before carrying out the proofing.

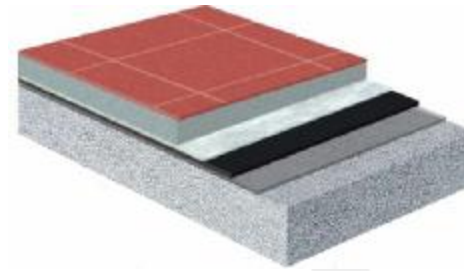
- **Wiring / Sleeving**

Considered the cables and feedthroughs of the covers as singular elements, and must be treated before the waterproofing works

Sistemas y composición de las membranas

• View support system as:

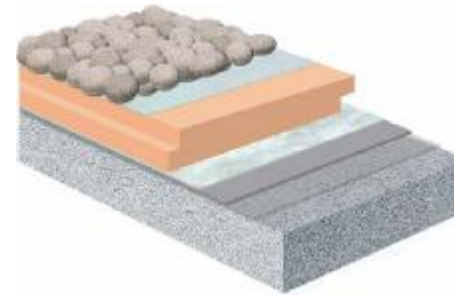
SYSTEMS	SYSTEMS DESCRIPTION	
DT-1 System		Conventional roof under tile
DT-2 System		Cover inverted
DT-3 System		Conventional indoor garden
DT-4 System		Cover boulder conventional
DT-5 System		Flat walkable roof
DT-6 System		Transparent cover
DT-7 System		Polyurethane foam roof
DT-8 System		Cover sheet
DT-9 System		Swiming pools, artificial lakes, fountais, sewage treatments...



DT-1 System

- Conventional roof under tile

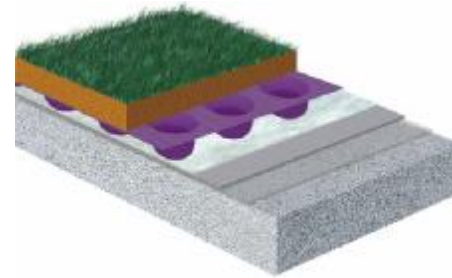
Substrate	System Creation	Approx. consumption
Concrete Mortar Cement glue Thinned concrete Tile Resille	Repair of joints and cracks DESMOSEAL MASILLA PU , applied locally in the expansion joints and cracks with a spatula and leveled gun.	depends on the application
	Primer DESMOPOL PRIMER , Applied with spray machine or roller	0,250 Kg/m ²
	Membrana impermeabilizante DESMOPOL-2C gunwash (GH-833 equipment) or roll, geotextile mesh reinforced rods in half and meetings.	1.5 to 2 Kg/m ²
	Separation Layer GEOTEXTILE PP, First quality Polipropilene	250 gr/m ²
	Compression sheet MORTAR, applied locally in the expansion joints and cracks with a spatula and leveled gun.	1,5 to 2 cm/m ²
	Ceramic finish INDIFERENT, Placed directly in the compression plate	



DT-2 System

- Cover inverted

Substrate	System Creation	Approx. consumption
Concrete Mortar Cement glue Thinned concrete Tile Resille	Repair of joints and cracks DESMOSEAL MASILLA PU , applied locally in the expansion joints and cracks with a spatula and leveled gun.	depends on the application
	Primer DESMOPOL PRIMER , Applied with spray machine or roller	0,250 Kg/m ²
	Waterproofing membrane DESMOPOL gunwash (GH-833 equipment) or roll, geotextile mesh reinforced rods in half and meetings.	1.5 a 2 Kg/m ²
	Separation Layer GEOTEXTILE PP, First quality Polipropilene	250 gr/m ²
	Thermal insulation POLIESTIRENE, placed EST extruded tongued and grooved boarding with each layer above the geotextile.	1,5 to 2 cm/m ²
	Finish recording INDIFERENT, placed directly on the insulating plate	2 to 4 cm Boulder



DT-3 System

- Conventional indoor garden

Substrate	System Creation	Approx. consumption
Concrete Mortar Cement glue Thinned concrete Tile Resille	Repair of joints and cracks DESMOSEAL MASILLA PU , applied locally in the expansion joints and cracks with a spatula and leveled gun.	depends on the application
	Primer DESMOPOL PRIMER , Applied with spray machine or roller	0,250 Kg/m ²
	Waterproofing membrane DESMOPOL gunwash (GH-833 equipment) or roll, geotextile mesh reinforced rods in half and meetings.	2.5 a 3 Kg/m ²
	Separation Layer GEOTEXTILE PP, First quality Polipropilene	250 gr/m ²
	Drainage POLYETHYLENE, Plate embossed polyethylene drainage least 500 g/m ²	500 gr/m ²
	Topsoil REGARDLESS, placed directly on the plate draining	



DT-4 System

- **Cover boulder conventional**

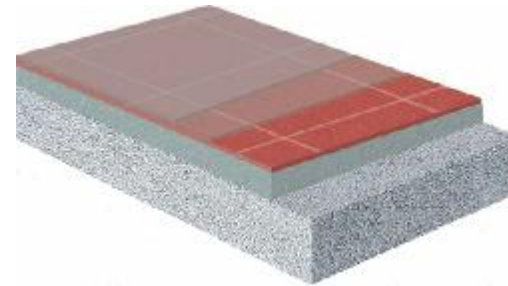
Substrate	System Creation	Approx. consumption
Concrete Mortar Cement glue Thinned concrete Tile Resille	Repair of joints and cracks DESMOSEAL MASILLA PU , applied locally in the expansion joints and cracks with a spatula and leveled gun.	depends on the application
	Primer DESMOPOL PRIMER , Applied with spray machine or roller	0,250 Kg/m ²
	Waterproofing membrane DESMOPOL gunwash (GH-833 equipment) or roll, geotextile mesh reinforced rods in half and meetings.	1.5 a 2 Kg/m ²
	Separation Layer GEOTEXTILE PP , First quality Polipropilene	250 gr/m ²
	Top coating Boulder , from 2 to 4 cm placed above the layer antipunzonante	



DT-5 System

- Flat walkable roof

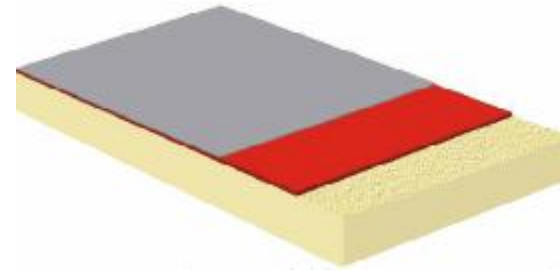
Substrate	System Creation	Approx. consumption
Concrete Mortar Cement glue Thinned concrete Tile Resille	<p>Repair of joints and cracks DESMOSEAL MASILLA PU, applied locally in the expansion joints and cracks with a spatula and leveled gun.</p>	depends on the application
	<p>Primer DESMOPOL PRIMER, Applied with spray machine or roller</p>	0,250 Kg/m ²
	<p>Waterproofing membrane DESMOPOL gunwash (GH-833 equipment) or roll, geotextile mesh reinforced rods in half and meetings.</p>	2 Kg/m ²
	<p>Adhesion layer DESMOPOL ADY applied over the entire medium to be treated.</p>	0,250 Kg/m ²
	<p>Separator system COLOR QUARTZ QUARTZ or applied to saturation</p>	2 to 3 Kg/m ²
	<p>Finish layer DESMOPOL ADY, applied directly to rubber roller or drag on the entire surface</p>	0,400 to 0,500 Kg/m ²



DT-6 System

- **Transparent cover**

Substrate	System Creation	Approx. consumption
Parket Tile Resille	<p>Reparación de juntas y grietas DESMOSEAL MASILLA PU, aplicada localmente en las juntas de dilatación y las grietas con pistola y nivelados a espátula.</p>	depends on the application
	<p>Primer DESMOPOL PRIMER- T, applied with a roller or rag.</p>	0,250 Kg/m ²
	<p>Waterproofing membrane DESMOPOL-T gunwash (GH-833 equipment) or roll, geotextile mesh reinforced rods in half and meetings.</p>	1 to 1,5 Kg/m ²
	<p>Adhesion layer DESMOPOL ADY applied over the entire medium to be treated.</p>	0,250 Kg/m ²
	<p>Layer Slip: (optional) Cargo that is added to DESMOPOL-T in the ratio of 7%, if the load dump support slip be nuanced.</p>	2 to 3 Kg/m ²



DT-7 System

- **Polyurethane foam roof**

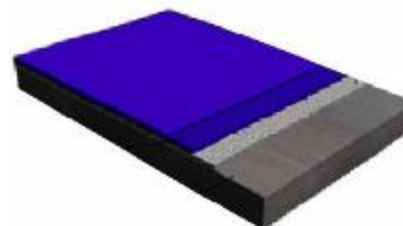
Substrate	System Creation	Approx. consumption
Poliurethane foam	Surface Drainage Cleaning and degreasing of the entire surface.	
	Thermal insulation F-2091.1 FOAM applied with high pressure reactor equipment to 3 cm. Thickness and density D/50	1,5 Kg/m ²
	Waterproofing membrane DESMOPOL or SETIPOL gunwash (GH-833 equipment) or roll, geotextile mesh reinforced rods in half and meetings.	1 Kg/m ²
	Finish layer DESMOPOL ADY , applied directly to rubber roller or drag on the entire surface	0,150 Kg/m ²



DT-8 System

- **Cover sheet**

Substrate	System Creation	Approx. consumption
Sheet Galvanized Lacquered veneer Cement plate	Surface Drainage Cleaning and degreasing of the entire surface.	
	Primer EPOXI ZINC FOSFATE applied with spray machine or roller	0,250 Kg/m ²
	Waterproofing membrane DESMOPOL gunwash (GH-833 equipment) or roll, geotextile mesh reinforced rods in half and meetings.	1 Kg/m ²
	Finish layer (optional) DESMOPOL ADY, applied directly to rubber roller or drag on the entire surface	0,150 Kg/m ²



DT-9 System

- Swimming pools, artificial lakes, fountains...

Sustrato	Creación sistema	Rendimiento aproximado
Concrete Mortar Cement glue Thinned concrete Tile Resille	Repair of joints and cracks DESMOSEAL MASILLA PU , applied locally in the expansion joints and cracks with a spatula and leveled gun.	depends on the application
	Primer DESMOPOL PRIMER , applied with spray machine or roller	0,250 Kg/m ²
	Waterproofing membrane DESMOPOL gunwash (GH-833 equipment) or roll, geotextile mesh reinforced rods in half and meetings.	2.5 to 3 Kg/m ²
	Finish layer DESMOPOL ADY-2C , applied directly to roller or airless spray gun on the whole surface	0,250 to 0,300 Kg/m ²

The information given, serve as a recommendation and information, based on laboratory testing and our current knowledge, the different conditions of work may have variations in the information given, so our warranty is limited to the product supplied. For questions, contact our technical department.

Waiting times between coats

- Before to apply **DESMOPOL** above **DESMOPOL PRIMER**

Support temperature	Minium	Maxium
+ 10 °C	8 Hours	24 Hours
+ 20 °C	3 Hours	
+ 30 °C	2 Hours	
+ 45 °C	1 Hours	

- Before to apply **DESMOPOL** above **DESMOPOL**

Support temperature	Minium	Maxium
+ 10 °C	24 Hours	76 Hours
+ 20 °C	8 Hours	
+ 30 °C	6 Hours	
+ 45 °C	4 Hours	

Given that it has removed any remaining dust and other contaminants, otherwise they must open pore.

Waiting times between coats

- Before to apply **DESMOPOL ADY** above **DESMOPOL**

Support temperature	Minium	Maxium
+ 10 °C	6 Hours	76 Hours
+ 20 °C	5 Hours	
+ 30 °C	4 Hours	
+ 45 °C	3 Hours	

Curing details

- Applied product ready for use

Temperature	Resistance to rain after	Resistance to pedestrian traffic	Resistance to road traffic
+ 10 °C	60 minutes	48 Hours	Not resistant without addition of dry
+ 20 °C		24 Hours	
+ 30 °C		20 Hours	
+ 45 °C		12 Hours	

Technical data

Classification according to the guide EOTA

CONCEPTS	VALUES	CLASIFICACION
Minimum lifetime warranty product	10 years 25 years	W2 W3
Climatic area	Severe / Moderate	S/M
Tilt dek	<5%	S1
Minimum temperature support	-20 °C	TL3
Maximum temperature support	+60 °C	TH2

Technical data of the liquid product 95% dry matter Xiol

UNITS	METHOD	RESULT
Viscosity Cp	ASTM D2 196-86	2.500
Specific weigh gr/cm ³	ISO 2811 / din 53217 / ASTM D 1475	1,3 – 1,4
Flash Point h	ASTM D 93 / Copa cerrada	42

Techncal data of Membrane

UNITS	METHOD	RESULT
Hardness Shore D	ISO R 868 / DIN 53 505/ASTM D2240	70
Tensile 23 °C Kg./cm2 (N/mm2)	DIN 52455 / ASTM D412	55
Percentaje of elasticity at +23 °C %	DIN 52455 / ASTM D412	>600
Percentaje of elasticity at -25 °C %	DIN 52455 / ASTM D412	>450
Water vapor transmission gr./m2 HR	ASTM E 96 (metodo agua)	0,8
Adhesion to concrete Kg/cm2 (N/2)	ASTM D4541	>20 (>2)
QUV Best de resistencia a la intemperie a 4 h UV a 60 °C (UVB lámpara) & 4 nr COND a 50 °C		