



# Waterproofing of roofs

MAXELASTIC PUR | PUR -HW | PUR THERMOCOAT Systems MAXELASTIC TRANS -W System







Waterproof coating suitable for roofing by polyurethane-based elastomeric continuous liquid membrane



**DRIZORO®, S.A.U.** is a Spanish company founded in 1977, starting its activity as a manufacturer of chemical products for construction. It is now a benchmark for the sector in solutions for civil engineering and building, in the fields of water-proofing, restoration, protection and finishing of concrete structures.

From our Headquarters and Production Center in Torrejón de Ardoz (Madrid) all the operations of the different departments are directed; production, R & D, laboratory, technical, sales, marketing and administration.

### COMMITMENT TO QUALITY AND THE ENVIRONMENT

Our strong commitment to Quality and the Environment policies, drive us to the implementation of an Integrated Management System based on ISO 9001:2015 and ISO 14001:2015 standards, and certified by Bureau Veritas Quality International.

### COMMITMENT TO RESEARCH, DEVELOPMENT AND INNOVATION

Our continuous commitment to research and development policies, investing both in human resources and in technical means, allows us to offer the market solutions based on the high quality and latest technology systems, and provide innovative solutions supported also by a proven and tested experience under the most adverse conditions throughout the entire world geography.



### **TECHNICAL SUPPORT**

Our Technical and Commercial Department and Sales Department, consisting of technical professionals with extensive experience in the sector, offers advice in a personalized manner both in the design phase and in the execution phase, with the aim of reaching an optimal prescription and implementation of our proposed products and systems.

### **DRIZORO® TECHNICAL SOLUTIONS**







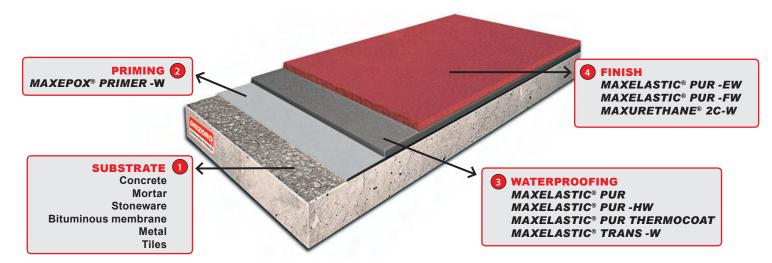








### **DESCRIPTION OF DRIZORO® ROOFING SYSTEMS**



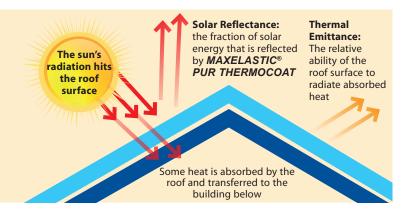
Durability, conservation and energy efficiency of a building depends to a large extent on the conditions of the roof, due to its susceptibility to water leaks. Thus, current market for roofing asks for waterproofing solutions based on in-situ applied continuous liquid membranes that allow a great adaptability to site conditions.

The **MAXELASTIC® PUR** polyurethane-based system range, composed of primer layer, waterproofing liquid membrane and topcoat, provides suitable continuous roofing adapted to both mechanical specifications and weather requirements, ensuring the watertightness and long lasting for the building. Thus, **MAXELASTIC® PUR** and **MAXELASTIC® PUR** –**HW** 

systems, based on high-quality, colored polyurethane resins, are composed of different products used sequentially, and allow the waterproofing and protection of all types of roofs. Both systems have CE Marking according to the Guideline for European Technical Approval of "Liquid Applied Roofing Systems", *ETAG* 005.

The **MAXELASTIC® TRANS -W** system, based on high-quality, transparent aliphatic polyurethane resins, allows the waterproofing and protection of tiled roofs and terraces, maintaining the aesthetics of the surface provided by the tiling without requiring the elimination of it.

The **MAXELASTIC® PUR THERMOCOAT** system, due to its high values for solar reflectance and thermal emittance, contributes to the cooling of the indoors, thus increasing comfort inside the building. Likewise, this system also improves energy efficiency since the surface reflects sunlight and dissipates heat, keeping the interior in suitable conditions when there is a high temperature outside.



### STRUCTURES OF THE SYSTEMS

	1	2	3	4	
TYPE	SUBSTRATE	PRIMING	WATERPROOFING	FINISH	
TRAFFICABLE ROOF	Concrete / Mortar	MAXEPOX® PRIMER -W	MAXELASTIC® PUR	MAXELASTIC® PUR -EW	C€
(PEDESTRIAN) Occasional use	Porous Tile / Bituminous membrane		MAXELASTIC® PUR -HW	Exposed	
TRAFFICABLE ROOF	Concrete / Mortar		MAXELASTIC® PUR	MAXELASTIC® PUR -EW	
(PEDESTRIAN) Intensive use	Porous Tile / Bituminous membrane		MAXELASTIC® PUR -HW	MAXURETHANE® 2C-W	
TRAFFICABLE ROOF	Concrete		MAXELASTIC® PUR	- MAXELASTIC® PUR-FW	
(WHEELED)			MAXELASTIC® PUR -HW		
GREEN ROOF	Concrete / Mortar		MAXELASTIC® PUR	MAXDRAIN® D20 GARDEN & DRIZORO® GEOTEXTILE  Exposed	
GREEN ROOF	Concrete / Mortal		MAXELASTIC® PUR -HW		
COOL ROOF	Concrete / Mortar / Metal		MAXELASTIC® PUR THERMOCOAT		
TERRACES AND BALCONIES	Porous-Glazed Tile / Stoneware	MAXPRIMER® PUR -W	MAXELASTIC® TRANS -W	Exposed	

## WATERPROOFING SYSTEM FOR ROOFS BY ELASTOMERIC POLYURETHANE-BASED LIQUID MEMBRANE



### TRAFFICABLE ROOF (PEDESTRIAN): Occasional use

### 4.- FINISH

4A- MAXELASTIC® PUR-EW, 2x 0,25 kg/m<sup>2</sup>.

4B-Exposed

### 3.- WATERPROOFING

3A-Standard: **MAXELASTIC® PUR**, 2x 0,8 kg/m². ETAG 005: **MAXELASTIC® PUR**, total consumption: 2,4-4,1 kg/m².

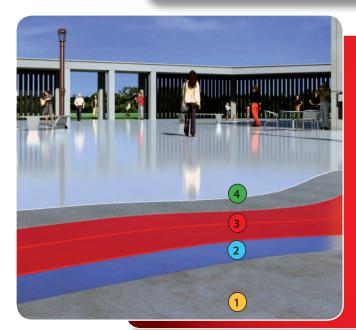
3B- Standard: *MAXELASTIC*® *PUR -HW*, 2x 0,8 kg/m². ETAG 005: *MAXELASTIC*® *PUR -HW*, total consumption: 2,0-3,0 kg/m².

### 2.- PRIMING

MAXEPOX® PRIMER -W, 1x 0,3 kg/m².

### 1.- SUBSTRATE

Concrete / Mortar / Bituminous membrane / Porous tile.



### TRAFFICABLE ROOF (PEDESTRIAN): Intensive use

### 4.- FINISH

**MAXELASTIC® PUR-EW**, 2x 0,25 kg/m<sup>2</sup>. **MAXURETHANE 2C-W**, 2x 0,25 kg/m<sup>2</sup>.

### 3.- WATERPROOFING

3A- Standard: **MAXELASTIC® PUR**, 2x 0,8 kg/m<sup>2</sup>. ETAG 005: **MAXELASTIC® PUR**, total consumption: 2 4-4 1 kg/m<sup>2</sup>

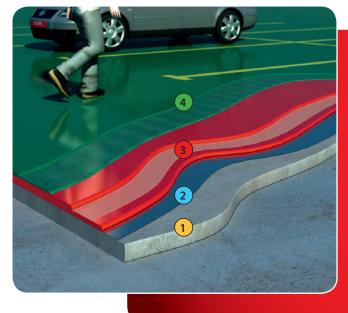
3B- Standard: **MAXELASTIC® PUR -HW,** 2x 0,8 kg/m². ETAG 005: **MAXELASTIC® PUR -HW**, total consumption: 2,0-3,0 kg/m².

### 2.- PRIMING

MAXEPOX PRIMER® -W, 1x 0,3 kg/m².

### 1.- SUBSTRATE

Concrete / Mortar / Bituminous membrane / Porous tile.



### TRAFFICABLE ROOF (WHEELED)

### 4.- FINISH

MAXELASTIC® PUR -FW, 2x 0,25 kg/m².

### 3.- WATERPROOFING

3A- ETAG 005: **MAXELASTIC® PUR**, total consumption: 4,1 kg/m<sup>2</sup>.

3B- ETAG 005: **MAXELASTIC® PUR -HW**, total consumption: 3,0 kg/m<sup>2</sup>

### 2.- PRIMING

MAXEPOX® PRIMER -W, 1x 0,3 kg/m².

### 1.- SUBSTRATE

Concrete

## WATERPROOFING SYSTEM FOR ROOFS BY ELASTOMERIC POLYURETHANE-BASED LIQUID MEMBRANE



### **GREEN ROOF**

#### 4.- FINISH

**MAXDRAIN® D20 GARDEN & DRIZORO® GEOTEXTILE** 

### 3.- WATERPROOFING

- 3A- Standard: ETAG 005: **MAXELASTIC® PUR**, total consumption: 4,1 kg/m².
- 3B- Standard: ETAG 005: *MAXELASTIC*® *PUR -HW*, total consumption: 3,0 kg/m².

### 2.- PRIMING

**MAXEPOX® PRIMER -W**, 1x 0,3 kg/m².

### 1.- SUBSTRATE

Concrete / Mortar



### **COOL ROOF**

### 3.- WATERPROOFING AND FINISH

MAXELASTIC® PUR THERMOCOAT, 2x 1,0 kg/m².

### 2.- PRIMING

MAXEPOX® PRIMER -W, 1x 0,3 kg/m².

### 1.- SUBSTRATE

Concrete / Mortar / Metal.



### **TERRACES AND BALCONIES (TRANSPARENT)**

### 3.- WATERPROOFING

MAXELASTIC® TRANS -W, 2x 0,6 kg/m<sup>2</sup>.

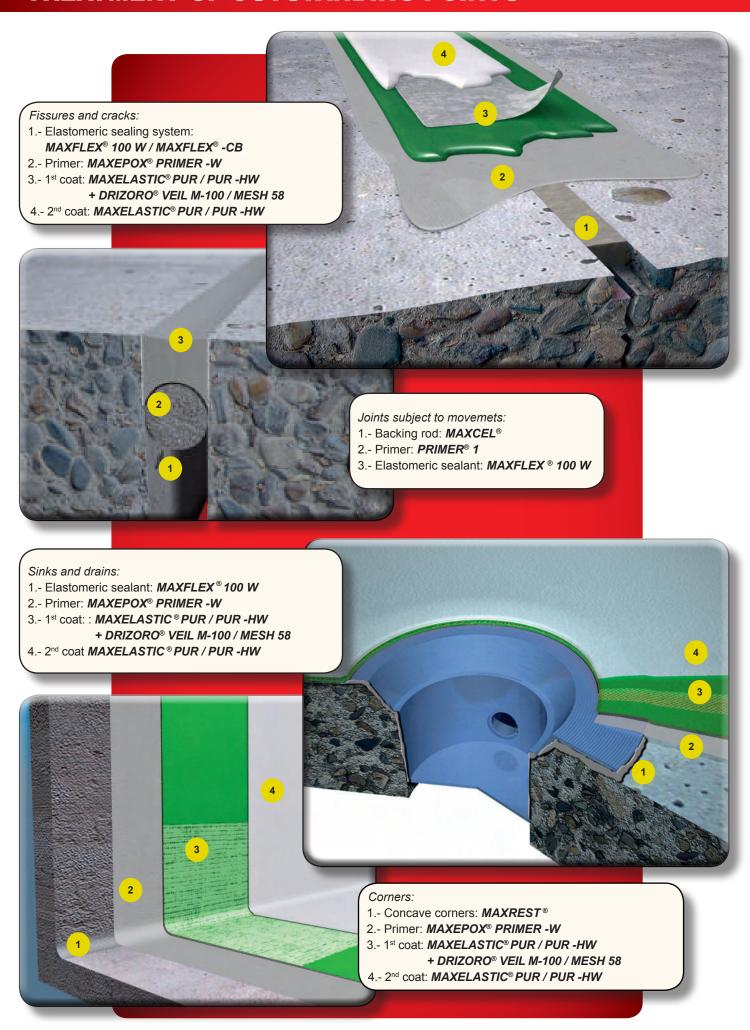
#### 2.- PRIMING

**MAXPRIMER® PUR-W**, consumption: 0,15 kg/m<sup>2</sup>.

### 1.- SUBSTRATE

Porous-Gazed tile / Stoneware.

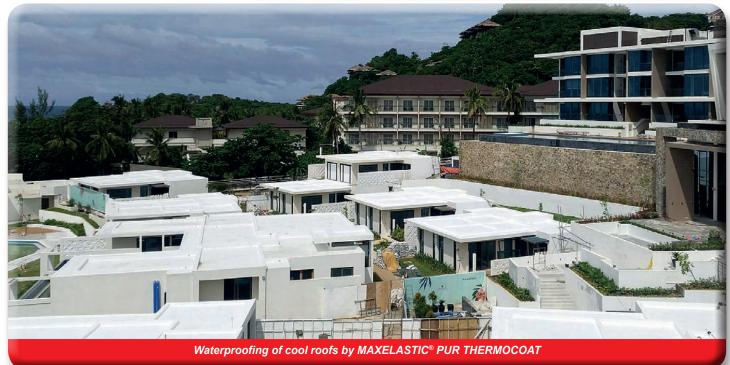
### TREATMENT OF OUTSTANDING POINTS



## **JOB REFERENCES**

DRIZORO®, S.A.U. offers its customers a series of tests carried out by the main external laboratories that guarantee the performance of the MAXELASTIC® PUR, MAXELASTIC® PUR -HW and MAXELASTIC® TRANS -W systems. Thus, these tests validate the waterproofing properties, elasticity, resistance to abrasion, CE marking, etc...





## ADVANTAGES FOR DRIZORO® ROOFING SYSTEMS

**CONTINUOUS COATING WITHOUT JOINTS** or connections, fitting to the geometry of the substrate.

**HIGH ELASTICITY** even in extreme weather conditions of high and low temperatures, **WORKING TEMPERATURE RANGE FROM -40 °C TO 100 °C.** 

Excellent **CRACK-BRIDGING ABILITY**. Absorbs thermal movements of substrate as well as vibrations.

**EASY TO APPLY,** by brush, roller or air-less gun.

Suitable for **PERMANENT IMMERSION** applications.

**UV RAYS AND ABRASION RESISTANT**. Suitable for pedestrian and wheeled traffic.

Good CHEMICAL RESISTANCE to DE-ICING SALTS, SEAWATER, WASTEWATER, DILUTED ALKALI AND ACID SOLUTIONS.



## **Complementary products**

	DESCRIPTION	CONSUMPTION	PACKAGING	APPLICATION FIELDS				
DE	RIMING	T.OA						
	<b>MAXPRIMER® PUR -W</b> Water-based, two-component, transparent aliphatic polyurethane primer.	0,15-0,20 kg/m²	5 kg pre-weighed sets	Priming for <b>MAXELASTIC TRANS -W</b> to be applied on porous and non-porous tiled surfaces.				
	<b>MAXEPOX® PRIMER -W</b> Water-based epoxy primer for epoxy or polyurethane systems on concrete or mortars.	0,3 kg/m²	10 kg and 20 kg pre-weight sets	Priming for epoxy or polyurethane roofing systems to be applied on concrete or mortars with certain level of humidity.				
CC	CONTINUOUS LIQUID MEMBRANE SYSTEMS							
	<b>MAXELASTIC® PUR</b> Polyurethane elastomeric membrane for waterproofing of roofs and outdoors areas.	Standard: 1,2-1,8 kg/m² ETAG 005: 2,4-4,1 kg/m²	25 kg drums	One-component, solvent-based aromatic polyurethane elastomeric, waterproofing and protective liquid membrane for roofs and outdoor areas. Available in 5 different colours				
	<b>MAXELASTIC® PUR -HW</b> Water-based, hybrid polyurethane elastomeric membrane for waterproofing of roofs and outdoors areas.	Standard: 1,6-2,0 kg/m <sup>2</sup> ETAG 005: 2,0-3,0 kg/m <sup>2</sup>	25 kg drums	Elastomeric waterproofing for all types of roof and outdoor areas: flat roofs, balconies, terraces, façades, etc. Waterproofing under tiled floor in indoor or outdoor areas. Waterproofing of roofs on asphaltic membranes				
	MAXELASTIC PUR® THERMOCOAT Water-based, polyurethane elastomeric liquid membrane for thermal insulation and waterproofing of roofs and outdoors areas	2,0-3,0 kg/m²	22 kg drums	Elastomeric waterproofing for all types of roof and outdoor areas provided with very high solar reflectance and thermal emittance.				
	<b>MAXELASTIC® TRANS -W</b> Transparent, one-component, water-based aliphatic polyurethane elastomeric liquid membrane for waterproofing of roofs and outdoors areas.	1,0-1,2 kg/m²	5 kg and 25 kg drums	Waterproofing of roofs, terraces, balconies and outdoor areas covered with ceramic tiles and subject to pedestrian traffic. Waterproofing and protection of transparent covers and roofs made of glass, plastic or polycarbonate.				
FII	FINISHING							
	MAXURETHANE® 2C -W	0,20-0,25 kg/m² per coat	5 kg and 22,35 kg drums	Protection against UV radiation and suitable pedestrian trafficable coating on roofs previously waterproofed with MAXELASTIC® PUR or MAXELASTIC® PUR HW				
	MAXELASTIC® PUR -EW One-component, water-based aliphatic polyurethane, elastomeric liquid membrane for waterproofing and protection of roofs and outdoor areas.	0,20-0,25 kg/m <sup>2</sup> per coat	22 kg drums	Protection against UV radiation for roofs previously waterproofed with <b>MAXELASTIC® PUR HW</b> . Protection and finishing of water-based polyurethane or epoxy systems applied outdoors				
	MAXELASTIC PUR -FW One-component, water-based aliphatic polyurethane elastomeric liquid membrane resistant to abrasion and UV for waterproofing and protection of roofs and outdoor areas subjected to car traffic.	0,20-0,25 kg/m² per coat	10 kg and 22 kg drums	Abrasion protection against car traffic on MAXELASTIC® PUR –HW in parking decks, access ramps, slabs, etc. Protection and decorative finish on outdoor floors over concrete, mortars, tiles, fibre-cement, etc., subject to high abrasion conditions and wearing by pedestrian or car traffic.				
CA	CATALYSTS AND SOLVENT							
	MAXELASTIC® PUR CAT Catalyst for fast drying/curing of MAXELASTIC® PUR system.	4 % w/w	1 I cans	Waterproofing jobs carried out with <b>MAXELASTIC® PUR</b> under both low temperature and/or high relative humidity conditions.				
	<b>MAXELASTIC® CAT -W</b> Catalyst for fast drying/curing of <b>MAXELASTIC® PUR -HW</b> , and other water-based coatings	1-2% w/w	0,5 I cans	Waterproofing jobs carried out with <i>MAXELASTIC</i> ® <i>PUR -HW</i> under both low temperature and/or high relative humidity conditions.				
	<b>MAXSOLVENT®</b> Special mixture of organic solvents and thinner.		25 I and 5 I metallic drums	Diluting of solvent-based waterproof coatings such as <b>MAXELASTIC® PUR</b>				
EL	ELASTOMERIC SEALING SYSTEMS							
	<b>MAXFLEX® 100 W</b> Low modulus, one-component, polyurethane elastomeric sealant.	100 ml/m per 10x10 mm joint	600 ml bags and 300 ml cartridges	Low modulus, one-component, polyurethane-based elastomeric sealant for permanent immersion conditions and weathering resistant.				
	MAXFLEX CB Self-adhesive, cold applied, butyl-rubber based waterproofing tape reinforced with non-woven fabric		10 m length rolls	Sealing of expansion joints, cracks and corners (8,5 cm wide). In waterproofing jobs with liquid applied waterproofing systems.				
RE	INFORCING VEILS FOR ROOFING SYST	EMS						
	DRIZORO® VEIL Alkali-resistant glass fiber/polyester non-woven veil.			Reinforcement of liquid resin-based coatings. Available in different types and weights: DRIZORO® VEIL G-45 / E-45 / M-100 / E-100				
	<b>DRIZORO® MESH</b> Alkali-resistant glass fiber woven mesh			Reinforcement of waterproof coating. Avaliable in different types: <i>DRIZORO® MESH</i> 58 / 140				
Pk	PROTECTION							
	<b>MAXDRAIN® D-20 GARDEN</b> HDPE drainage sheet with conical nodules of, high compressive strength and high drainage capacity for protection in garden and green roofs		Rolls of 2 m x 20 m	Protection and drain in terraces, landscape inverted roofs, elevated concrete decks with planted areas, and roof gardens.				
	<b>DRIZORO® GEOTEXTILE</b> Non-woven geotextile fabric made of polypropylene fibbers bonded by needle punching and later heat-bonded		Rolls	Mechanical protection of synthetic membranes against perforations and wear. Filtration and retention of fine-grained particles by flowing water. Drainage and conduction of liquids and gases: water and air evacuation.				



### DRIZORO, S.A.U.

C/ Primavera, 50-52 Parque Industrial Las Monjas - 28850 TORREJÓN DE ARDOZ - MADRID (Spain) Phone: (34) 91 676 66 76 - (34) 91 677 61 75 FAX: (34) 91 675 78 13

Email: info@drizoro.com - Web: www.drizoro.com