# CLIMATE DECLARATION FOR WATERPROOFING SYSTEMS WITH BITUMINOUS SHEET

Functional unit: waterproofing of 1 m<sup>2</sup> during 30 years

-EPD®

The climate declaration shows the emissions of greenhouse gases, expressed as CO<sub>2</sub>-equivalents. It is based on verified results from a lifecycle assessment (LCA) performed as basis for an EPD<sup>®</sup>, in accordance with ISO 14025.

### Information about the product

The waterproofing solutions with monolayer or bilayer bituminous membrane that DANOSA proposes are formed by the range of asphalt sheets of bitumen modified with SBS-type elastomeric polymers. The function of the waterproofing systems is mainly to protect the building against water in its various forms: rain, humidity, snow and hail. In addition, depending on the system, the solution ensures thermal insulation over time, make the roof accessible to pedestrians and / or vehicles and / or enable the use of vegetation systems on the roof.



#### Information about the company

DANOSA was established in 1964 with the philosophy of manufacturing products and offering innovative solutions to improve the quality of life. More than 500 million m<sup>2</sup> of materials manufactured and distributed, and a consolidated presence in the five continents guarantee our commitment acquired with the quality and service over forty years of work. The best guarantee of this commitment are the certifications that the product has achieved: CE marking, ER of BUREAU VERITAS, IQ-Net, the "Avis Techniques" of C.S.T.B. (France) and the "Homologação Documents" of the Portuguese (Portugal).

DANOSA is a pioneer company in the communication and improvement of the environmental performance of the life cycle of its products through the publication of Environmental Product Declarations of its DANOPOL ranges (waterproofing membrane for roofing) and DANOPREN (extruded polystyrene panel), in addition to this EPD. DANOSA is certified with ISO 9001 Quality Management Systems since 2012 (registration number: ES044036-1) and ISO 14001 certification of Environmental Management Systems (registration number ES069274-1).

## **Climate declaration**

The table on the next page shows the carbon footprint of the product, calculated as kg carbon dioxide equivalents (GWP, 100 years).

## Other environmental impacts

For the full EPD, see www.environdec.com.



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EPD PROGRAMME: THE INTERNATIONAL EPD®SYSTEM REGISTRATION NO: S-P-01493 VALIDITY: 2024-02-24   PCR: 2012:01 (V2.3) UN CPC: 5453 PCR REVIEW CONDUCTED BY: TECHNICAL COMMITTE OF THE INTERNATIONAL EPD SYSTEM   INDEPENDENT VERIFICATION OF THE DECLARATION AND DATA, ACCORDING TO ISO 14025: EXTERNAL VERIFIER: TECNALIA R&I CERTIFICACIÓN ACCREDITED / APPROVED BY: ENAC   CLIMATE DECLARATIONS FROM DIFFERENT PROGRAMS MAY NOT BE COMPARABLE THIS CLIMATE DECLARATION ONLY ADDRESSES ONE IMPACT CATEGORY AND DOES NOT ASSESS OTHER POTENTIAL SOCIAL, ECONOMIC AND ENVIRONMENTAL IMPACTS ARISING FROM THE PROVISION OF THIS PRODUCT. THESE ASPECTS MAY BE OF EQUAL OR GREATER IMPORTANCE THAN THE IMPACT CATEGORY DISPLAYED										
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Waterproofing system		Product stage	Construction process stage		Use stage	End of life stage			Reuse, recovery and recycling potential	
		A1-A3	A4	A5	B1-B7	C1	C2	С3	C4	D
EXT1	Bilayer Adhered System Roof garden	2.645+00	2.505.01	1 295 100	0	0	1.065.01	7.025.02	1 265 01	E 29E 01
NTV2	Bilayer Adhered System Non accessible Self- protected	3.04E+00	2.50E-01	1.26E+00	0	0	1.902-01	7.02E-03	1.30E-01	-5.56E-01
TPP1 NTG1	Bilayer Adhered System Accessible Private	· 3.42E+00	2.41E-01	1.28E+00	0	0	1.73E-01	6.18E-03	1.20E-01	-5.48E-01
	Bilayer Adhered System Non accessible Gravel									
TVA1	Bilayer Adhered System Vehicles Asphaltic Agglomerate	4.25E+00	2.76E-01	1.28E+00	0	0	2.19E-01	7.86E-03	1.53E-01	-6.13E-01
TVH1	Bilayer Adhered System Vehicles Concrete									
TPC1	Bilayer Adhered System Accessible Private									
TPC2	Bilayer Adhered System Accessible Public									
NTV1	Monolayer Adhered System Non accessible Self-protected	2.33E+00	5.23E-02	6.78E-01	0	0	1.30E-01	4.66E-03	9.05E-02	-3.13E-01
NTV5	Monolayer System Fixed mechanically Non accessible Self- protected	2.42E+00	4.96E-02	6.59E-01	0	0	1.21E-01	4.35E-03	8.44E-02	-3.11E-01
NTV6	Bilayer System Fixed mechanically Non accessible Self- protected	3.89E+00	2.59E-01	1.20E+00	0	0	1.70E-01	6.09E-03	1.18E-01	-4.68E-01