POLYDAN PRO NOX FM 40/GP

High-quality SBS elastomeric 5 kg/m² capping sheet. White reflective, Air purifier. Mechanically Fixed.

ETE 06/0058

High quality bituminous SBS modified capsheet reinforced with a heavy non-woven polyester felt specifically designed for mechanical fixing. The upper surface is finished with a white solar reflective mineral chipping, coated with a special photocatalytic treatment for taking Nitrogen Oxides out of the atmosphere; converting them into by-products that are washed away by rainwater. The underside has a quick-melt thermofusible film. Designed for torch-applied applications and Safe2Torch details using hot-air.

Presentation

- Length (cm): 1000
- Width (cm): 100
- Colour: White
- Thickness (mm): 2.5 (Overlap)
- Surface (m²): 10
- Product code: 141939

Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m²)	4	-
External fire behaviour	Broof(t1)	UNE-EN 1187; UNE-EN 13501-5
Durability flexibility	-5 ± 5	-
Creep durability (ºC)	100 ±10	UN-EN 1110
Elongation at break longitudinal (%)	45 ±15	UNE-EN 12311-1
Elongation at transverse break (%)	45 ±15	UNE-EN 12311-1

Concept	Value	Standard
Water vapour resistance factor (μ)	>20.000	UNE-EN 1931
Low temperature flexibility (ºC)	<-25	UNE-EN 1109
Reaction to fire	E	UNE-EN 11925-2; UNE-EN 13501-1
Resistance to static loading (kg)	>20	UNE-EN 12730
Resistance to root penetration	No Pasa	UNE-EN 13948
Longitudinal tensile strength (N / 5cm)	900 ± 250	UNE-EN 12311-1
Transverse tensile strength (N / 5cm)	650 ± 250	UNE-EN 12311-1
Longitudinal resistance to tearing (nail shank) (N)	280 ± 30	UNE-EN 12310-1
Transversal resistance to tearing (nail shank) (N)	320 ± 20	UNE-EN 12310-1
Resistance to impact, A (mm)	>1500	UNE-EN 12691
Resistance to impact, B (mm)	>1500	-
Joint Strength: Welding Shear	650 ± 250	UNE-EN 12317-1
Hazardous substances	NPD	-

Addtitional Technical Data

Concept	Value	Standard
Adhesion of granules (%)	<30	UNE-EN 12039
Dimensional stability at elevated temperatures (longitudinal) (%)	<0.3	UNE-EN 1107-1
Dimensional stability at high temperatures (transversal) (%)	<0.3	UNE-EN 1107-1
Creep resistance at high temperatures (ºC)	>100	UN-EN 1110
Durabilidad UV; calor y agua: Flexibilidad a baja temperatura (ºC)	-5 ± 5	-
Durabilidad UV; calor y agua: Fluencia a alta temperatura (ºC)	100 ± 10	-

Environmental Information

Concept	Value	Standard
Volatile organic compounds (COV's) (μg/m³)	50 (A+)	ISO 16000-6:2006

Concept	Value	Standard
Post-consumer recycled content (%)	35	-
Solar reflectance index (IRS) with WHITE REIMPER COATED	101	-

Standards and Certification

- Avis Technique 5/03-1698 “Polydan Plus FM”.
- In accordance with the UNE-EN 13707 standard ‘Flexible sheets for waterproofing - Reinforced bitumen sheets for roof waterproofing - Definitions and characteristics’.
- Complies with CE marking requirements.
- ETE 06/0058 “Polydan Plus FM”.

Scope

- Capsheet in multi-layer waterproofing systems.
- Self-protected single-layer membrane mechanically fixed on deck roof, both in new construction and renovation.

Advantages & Benefits

- High resistance to static and dynamic piercing.
- Self-healing and rot-proof.
- Good absorption of structural movements.
- The mineral finish gives the membrane UV resistance.
- High dimensional stability.
- High tensile strength and high elongation at break.
- High resistance to tearing.
- Total impermeability to water and water vapour.
- Allows for adaptation to any type of geometry.
- Photocatalytic purification of NOx gases > 8% (Class 3).

Support

- Deck-type metal roof.
- Refurbishment of adhered, mechanical fixed or loose laid old bituminous membranes.
- Compatible thermal insulation products.
- Concrete subsrates.
- Mortar subsrates.

Instruction for Use

Deck surfaces must be dry, clean and free from sharp projections such as nail heads and concrete nibs. When bonding the substrate should be prepared using a primer either Impridan 100, CURIDAN, MAXDAN or MAXDAN CAUCHO at the recommended rate prior to installation of the waterproofing system. The membrane may be laid in conditions normal to roofing work and must not be laid in rain, snow or heavy fog, nor if the temperature falls below 5ºC, unless precautions against condensation have been taken. The roofing layers must always be installed with staggered overlaps and in such a manner that no counter-

seams in the direction of the outlets are made. The first layer of the waterproofing system (if necessary) is installed either fully bonded or partially bonded. Fully bonded torch-applied membranes should only be used with non-combustible substrates and with surfaces designed to enable the torch application of subsequent layers. When partially bonded either a layer of GLASDAN 800 P PERFORADO or other suitable venting layer is loose-laid across the substrate edge to edge before applying the first layer. The POLYDAN 48 P PARKING is laid over the first layer (if necessary) or over the venting layer in the same direction, and fully bonded. The top layer is installed with side laps a minimum of 80 mm and end laps 100 mm wide. Laps between the membrane and any base sheets should be offset by a minimum of 300 mm. Bonding is achieved by melting the lower surface by torching and pressing the membrane down. Care must be taken not to overheat the membrane.
In general, the installation of the rolling layer on-site is done as soon as possible, in order to prevent possible punctures of the waterproofing membrane. The material will be gathered in such a way that the waterproofing is not punctured and using suitable protection. Before the placement of the rolling layer, special care will be taken not to work and/or travel on top of the waterproofing, in order to prevent possible mechanical damage to the waterproofing membrane. Otherwise suitable protection must be used (mortar layers, anti-puncture geotextile sheets, etc.). If the pavement is asphalt, the following precautions must be adopted: The spreader used will be on wheels and in the case of crawlers the tracks will be rubber. The travelling speed of the spreader on top of the waterproofing will be less than 10 km/h, breaking and brusque acceleration will be avoided to prevent damage to the waterproofing. Turns while stopped will be avoided and turns must have a large radius. The compacter will move behind the spreader and will always travel over the asphalt layer.

Indications and Important Recommendations

- In case of new construction and renovation, possible chemical incompatibilities with APP plastomer-modified bitumen sheets shall be taken into account.
- In case of refurbishment, chemical incompatibilities with old waterproofing systems consisting of PVC membranes, modified tar-based mastics or any other, shall be taken into account, and it may be necessary to remove them completely or to use suitable separating layers.
- If it is necessary to adhere to metallic or slightly porous elements, a bituminous primer (IMPRIDAN 100) shall be applied to the entire surface to be welded beforehand.
- On exposed self-protected roofs, occasional water retention that could lead to sediment accumulation and damage to the waterproofing membrane shall be avoided.
- This product may form part of a waterproofing system, so all the documents referred to in the Danosa Solutions Manual must be taken into account, as well as all the regulations and legislation that must be complied with in this respect.
- Self-protected sheets finished in light colours perform better thermally.
- Self-protected sheets in coloured mineral or ceramic granules may have different colour shades depending on the different production batches. The mineral granule may darken naturally over time.
- Not suitable as cap sheet on green roofs; use GARDEN variant.
- Possible incompatibility between thermal insulation and waterproofing shall be checked.
- Special attention must be paid to the execution of the singular points, such as parapets (meetings with vertical and emergent elements), drains, expansion joints, etc.
- Polyurethane foam shall not be sprayed directly on top of the waterproofing without the use of a suitable separating layer (geotextiles, mortar layers, polyethylene film, etc).
- If expansion that could affect the sheet is expected, a geotextile separating layer (Danofelt PY 200) shall be used between the sheet and the extruded polystyrene insulation panels, so that each product expands independently.
- It is possible that over time, due to external agents, the photocatalytic feature of the membrane may diminish.
- NOTE: For more information on the Danosa systems in which this product is used, please see the document "Waterproofing Solutions".

Maintenance Recommendations

- Please refer to DANOSA UK Technical Statement ‘Flat Roof Waterproofing – Cleaning and Maintenance Recommendations’

Warning

- Do not apply on wet or frozen surfaces.

Handling, storage and preservation

- Before moving the pallet, check the condition of the shrink-wrap and reinforce if necessary.
- The product must be stored in a dry place protected from rain, sun, heat and low temperatures.
- The product must be stored in an upright position.
- Handle with a crane with a protective net.
- Pallets shall not be stacked on top of each other.

Notice

- The information contained in this document and any other advice provided, are given in good faith, based on DANOSA's current knowledge and experience when products are properly stored, handled and applied, in normal situations and in accordance with the recommendations of DANOSA. The information applies only to the application (s) and the product (s) to which reference is expressly made. In case of changes in the parameters of the application, or in case of a different application, consult the DANOSA Technical Service before using the DANOSA products. The information contained herein does not exonerate the responsibility of the building agents to test the products for the application and intended use, as well as their correct application in accordance with current legal regulations. The product images used in our communications are indicative and may differ slightly in color and aesthetic appearance in relation to the final product.Orders are accepted in accordance with the terms of our current General Sales Conditions.DANOSA reserves the right to modify, without prior notice, the data reflected in this documentation.Website: **www.danosa.com** E-mail: **info@danosa.com** Telephone: **+34 949 88 82 10**