POLYDAN PRO NOX 50/GP.

Top-quality SBS elastomeric 5 kg/m² capping sheet. White reflective, Air purifier. Torch Applied.



High quality bituminous SBS modified capsheet reinforced with a heavy non-woven polyester felt. The upper surface is finished with a white solar reflective mineral chipping, coated with a special photocatalytic treatment. The underside has a quick-melt thermofusible film. Designed for torch-applied applications and Safe2Torch details using hot-air welding.

Presentation

- Length (cm): 800
- Width (cm): 100
- Colour: White
- Thickness (mm): 3.5
- Surface (m²): 8
- Product code: 141912

Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m²)	5	-
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
Water vapour resistance factor (µ)	20.000	UNE-EN 1931

Concept	Value	Standard
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)	PND	UNE-EN 12310-1
Transversal resistance to tearing (nail shank) (N)	PND	UNE-EN 12310-1
Resistance to impact, A (mm)	>1000	UNE-EN 12691
Resistance to impact, B (mm)	>1500	-
Joint Strength: Welding Shear	650 ± 250	UNE-EN 12317-1
Hazardous substances	NPD	-
Resistance to root penetration	No pasa	UNE-EN 13948

Addtitional Technical Data

Concept	Value	Standard
Density (kg/m³)	1428	-
Adhesion of granules (%)	<30	UNE-EN 12039
Creep resistance at high temperatures (ºC)	>100	UN-EN 1110

Environmental Information

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

Concept	Value	Standard
Rendimiento en la purificación fotocatalítica de óxidos de nitrógeno (%)	>8 (Clase 3)	UNE 127197-1
Manufactured in	Fontanar - Guadalajara (España)	-

Standards and Certification

- 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.
- DTA 5/09-2088 "Glasdan ELAST-Esterdan ELAST-Polydan ELAST".
- DTA "Esterdan FM".
- DTA 5/15-2483 “Polydan Plus FM“.
- ETE 06/0062 "Esterdan Plus FM Bilayer".
- EOTA Guide 006.

Scope

- Capsheet in multi-layer waterproofing systems.
- Capsheet in single-layer waterproofing systems.

Advantages & Benefits

- Long life expectancy.
- High dimensional stability.
- High tensile strength and high elongation at break.
- High resistance to tearing.
- High resistance to static and dynamic piercing.
- Total impermeability to water and water vapour.
- Rot-proof.
- Air purification systems. Green technoly to get rid of NOx particles.
- Very stable in the long term.
- Photocatalytic purification of NOx gases > 8% (Class 3).

Support

- 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.

- Where the membranes are adhered to insulation boards, the resistance to wind uplift will be dependent on the cohesive strength of the insulation and the method by which it is secured to the roof deck. This should be taken into account when the insulation material is selected.
- At falls in excess of 5º (1:11) precautions against slippage, and requirements for mechanical fixing should be observed.
- 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.
- Attachment of reinforced bituminous membrane roofing maybe achieved by full bonding, by partial bonding or loose laid (ballasted); the choice should depend upon the type of substrate and the required resistance to wind uplift pressure.
- The first layer is installed over the substrate, full bonded, partially bonded, or loose laid (ballasted).
- 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.
- It is possible to install a torch-receivable first layer in hot bitumen, and then torch apply the second or capping sheet, which should be specifically designed for torching. Bonding is achieved by melting the lower surface by torching and pressing the membrane down. Care must be taken not to overheat the membrane.
- The first layer is installed with side laps of 60 mm and end laps of 75 mm. The top layer/cap sheet is laid over the first layer in the same direction, and fully bonded. The top layer/cap sheets are installed with side laps for the mineral surfaced membranes determined by the selvedge edge and for sanded or plastified top layers a minimum of 75 mm and end laps 100 mm wide.
- 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. The first layer is fully bonded over the venting layer in the direction with side laps of 80 mm and end laps of 75 mm. The top layer/cap sheet is laid over the first layer in the same direction, and fully bonded. The top layer/cap sheets are installed with side laps for the mineral surfaced membranes determined by the selvedge edge and for sanded or plastified top layers a minimum of 75 mm and end laps 100 mm wide. Loose-laid is possible in ballasted systems.
- A separating layer is loose-laid over the substrate to act with overlaps of 100 mm. The first layer is loose-laid over the separation layer with side laps of 60 mm and end laps of 80 mm wide. The laps are sealed by torch welding. The top layer is laid over the first layer in the same direction, and fully bonded. The top layer/cap sheets are installed with side laps for the mineral surfaced membranes determined by the selvedge edge and for sanded or plastified top layers a minimum of 75 mm and end laps 100 mm wide.
- The waterproofing system is ballasted with a proper finishes. In all systems, laps between the membrane and any base sheets should be offset by a minimum of 300 mm.

NOTE: Attachment of reinforced bituminous membrane roofing san also be achieved by mechanical fastening with screws and stress plates or by nailing. Mechanical fastening of membranes is possible by installing a specially manufactured membrane mechanically fastened with screws and stress plates along the lap, with joints then sealed by torching, with subsequent layers fully bonded. Nailing fastening of membranes is possible by installing a sacrificial specially manufactured layer mechanically fastened with screws and stress plates, or alternatively nails, with subsequent layers fully bonded.

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

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