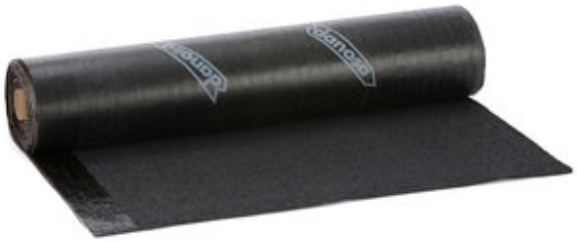
POLYDAN 180-60/GP ELAST.



BBA 10/4787 (1)

Bituminous SBS modified capsheet reinforced with a heavy non-woven polyester felt. The upper surface is finished with mineral chipping. The underside has a quick-melt thermofusible film. Designed for torch-applied applications and Safe2Torch details using hot-air.

Presentation

- Length (cm): 800
- Width (cm): 100
- Thickness (mm): 3.9 (Overlap)
- Surface (m^2): 8
- Product code: 141489

Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m^2)	5.6	-
External fire behaviour	Broof (t1, t4)	UNE-EN 1187; UNE-EN 13501-5
Durability flexibility	-10 ± 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
Low temperature flexibility (ºC)	<-25	UNE-EN 1109
Reaction to fire	E	UNE-EN 11925-2; UNE-EN 13501-1
Longitudinal tensile strength (N / 5cm)	900 ± 250	UNE-EN 12311-1

Concept	Value	Standard
Transverse tensile strength (N / 5cm)	650 ± 250	UNE-EN 12311-1
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 (%)	20 (-20/+10)	UNE-EN 12039
Dimensional stability at elevated temperatures (longitudinal) (%)	<0.5	UNE-EN 1107-1
Dimensional stability at high temperatures (transversal) (%)	<0.5	-
Creep resistance at high temperatures (ºC)	>100	UN-EN 1110

Environmental Information

Concept	Value	Standard
Volatile organic compounds (COV's) (µg/m³)	50 (A+)	ISO 16000-6:2006
Post-consumer recycled content (%)	35	-

Standards and Certification

- DTA “Polydan monocouche “.
- BBA 10/4787 Product Sheet 1 "GLASDAN ELAST, ESTERDAN ELAST AND POLYDAN ELAST ROOF WATERPROOFING MEMBRANES".
- 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".
- ETE 06/0062 "Esterdan Plus FM Bilayer".
- EOTA Guide 006.

Scope

- Basement wall waterproofing.
- Capsheet of two-layer membranes with mineral self-protection for waterproofing boards.
- Capsheet membrane in waterproofing systems for carpark areas (parking roofs, rolling surfaces, etc.), where the agglomerate can be poured directly on top of the membrane.

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

Advantages & Benefits

- High movement capability.
- The higher grammage of the polyester reinforcement gives the sheet higher mechanical performance in tensile, static and dynamic piercing.
- Suitable for waterproofing buried structures (basement walls).
- Suitable for waterproofing structures subject to vehicular traffic (road and railway decks, rolling and carpark roofs,, etc.) with a favourable technical evaluation (check relevant certifications).
- High tensile strength and high elongation at break.
- High resistance to static and dynamic piercing.
- Rot-proof.
- Very stable in the long term.
- Has good piercing protection from possible mechanical damage, derived from the occasional pedestrian traffic typical of flat roofs.

Instruction for Use

- The membrane should not be installed in adverse weather conditions. It must not be laid in rain, snow, or heavy fog, nor if the temperature falls below 5°C, unless precautions against condensation have been taken.
- Do not apply on wet or frozen surfaces.
- At falls in excess of 5° (1:11), precautions against slippage should be allowed and mechanical fixing should be installed.
- The membrane layers must always be installed with staggered overlaps and in such a manner that the laps fall in the direction toward the outlets.
- Attachment of reinforced bituminous membrane roofing may be achieved by full bonding, by partial bonding, or loose laid (ballasted) with guidance from danosa technical services; the choice should depend upon the type of substrate and the required resistance to wind uplift pressure.

For single layer application direct to deck:

- Deck surfaces must be dry, clean, and free from sharp projections such as nail heads and concrete nibs.
- When torching polydan directly to a suitable substrate, the substrate should be prepared using a primer; either bitumen primer hm, curidan, maxdan or maxdan caucho at the recommended rate prior to installation of the waterproofing system.
- Fully bonded torch-applied membranes should only be used with non-combustible substrates.
- For field applications:
  A: Roll the membrane into position, allowing for 80mm side overlaps and 100mm head overlaps and cut to length. All overlaps and cross joints should be staggered by a minimum of 300mm.
  B: Using a length of 100mm pipe (cut fractionally short of roll width) as an insert tube, roll back the membrane for a portion of the length (approximately 50%).
  C: Heat activate the membrane by torching in a vee area between the roll and substrate.
  D: Roll can be pushed forward by foot or by other suitable equipment. Apply downwards pressure when moving the roll to extrude a molten bead of bitumen from edges.
- For detail applications
  A: Place the membrane into position, allowing for 80mm side overlaps and 100mm head overlaps and cut to length ensuring all overlaps and cross joints are staggered by a minimum of 300mm.
  B: Heat activate the membrane by torching between the membrane and substrate.

C: Apply pressure and consolidate the bond to the substrate, ensuring a molten bead of bitumen is extruded from the edges.

For system application including underlay:

- Fully bonded torch-applied membranes should be installed over non-combustible underlays.
- It is possible to install a torch-receivable underlay into hot bitumen, and then torch apply a capping sheet which should be specifically designed for torching, such as polydan. Bonding is achieved by melting the lower surface by torching and pressing the membrane down. Care must be taken not to overheat the membrane.
- For field applications:
  A: The cap sheet should be laid along the same direction as the underlay membrane, offset by a minimum of 300mm to ensure sufficient staggering of laps between layers.
  B: Roll the membrane into position, allowing for 80mm side overlaps and 100mm head overlaps and cut to length. All overlaps and cross joints should be staggered by a minimum of 300mm.
  C: Using a length of 100mm pipe (cut fractionally short of roll width) as an insert tube, roll back the membrane for a portion of the length (approximately 50%).
  D: Heat activate the membrane by torching in a vee area between the roll and substrate.
  E: Roll can be pushed forward by foot or by other suitable equipment. Apply downwards pressure when moving the roll to extrude a molten bead of bitumen from edges.
- For detail applications
  A: The cap sheet should be laid along the same direction as the underlay membrane, offset by a minimum of 300mm to ensure sufficient staggering of laps between layers.
  B: Place the membrane into position, allowing for 80mm side overlaps and 100mm head overlaps and cut to length ensuring all overlaps and cross joints are staggered by a minimum of 300mm.
  C: Heat activate the membrane by torching between the membrane and substrate.
  D: Apply pressure and consolidate the bond to the substrate, ensuring a molten bead of bitumen is extruded from the edges.
- When using a fully torched system, including glasdan 800 p perforado and esterdan 30p elast, see additional installation instructions within the appropriate datasheets.

Indications and Important Recommendations

- During the spreading process, low curvature turns and sudden braking of the spreader will be avoided, limiting its speed.
- In the case of new construction and renovation work, the possible chemical incompatibilities with SBS elastomer-modified bitumen sheets must 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.
- Certain precautions must be taken when pouring the asphalt agglomerate if it is poured directly on top of the waterproofing.
- The asphalt paver shall be wheeled and, if tracked, shall be fitted with rubber pads.
- The asphalt agglomerate shall be laid at temperatures between 130ºC and 180ºC.
- 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.
- There is no chemical incompatibility between the Danosa range of SBS elastomeric bitumen and APP plastomeric bitumen membranes.
- Access walkway membranes are available for roof areas with heavy foot traffic.
- Not suitable as cap sheet on green roofs; use GARDEN variant.
- A separating layer (DANOFELT or DANODREN) shall be laid before laying the heavy protection (paving, gravel, topsoil, etc.), except in the case of asphalt paving which is poured directly on the waterproofing.
- 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).
- 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’

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.
- The product will be used on a first-come, first-served basis.
- This product should not be installed when the temperature is below -5ºC.
- This product is not toxic or flammable.
- For further information, please contact our Technical Department.
- Waterproofing work must not be carried out when weather conditions may be detrimental, in particular when it is snowing or there is snow or ice on the roof, when it is raining or the roof is wet, surface dampness >8% according to NTE QAT, or when a strong wind is blowing.
- Pallets shall not be stacked on top of each other.
- For high storage, the racks must have three cross members, or braces under the wooden pallet skids.
- For handling with a crane, use a protective net as indicated on the pallet label.
- Danosa recommends consulting the safety data sheet for this product, which is permanently available at danosa.com, Knowlegde Portal, or it can be requested from our Technical Department.
- In all cases, the Occupational Safety and Hygiene standards, as well as the standards of good construction practice, must be taken into account.

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

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