

DANOPOL DW H 1.2

Single Ply PVC-p 1.2 mm membrane. Suitable for drinking water tanks. Hot-air welded.

**EPD[®]**

EPD S-P-00691

DANOPOL DW H 1.2 is a synthetic PVC plasticized membrane without reinforcement. It's suitable for drinking water tanks and is welded with hot air. U.V. resistant.

Presentation

- Length (cm): 2000
- Length measurement standard: EN 1848-2
- Width (cm): 150
- Width measurement standard: EN 1848-2
- Thickness (mm): 1.2
- Product code: 210058

Technical Data

Concept	Value	Standard
Mass per unit area (nominal) (kg/m ²)	1.6	-
Longitudinal & transversal dimensional stability	< 3.0	EN 1107-2
Water vapour permeability (m)	20.000 ± 30%	EN 1931
Flexibility at low temperature (°C)	< -30	EN 495-5
Reaction to fire	E	EN 13501-1
Resistance to root penetration	Pasa	EN 13948
Longitudinal resistance to tearing (nail shank) (N)	> 60	EN 12310-2
Transversal resistance to tearing (nail shank) (N)	> 50	EN 12310-2

Concept	Value	Standard
Overlaps resistance (Shear of overlaps) (N/50mm)	> 300	EN 12317-2
Overlaps resistance (Peeling of overlap) (N/50mm)	> 40	EN 12316-2
Resistance to root penetration	Pasa	EN 13948

Additional Technical Data

Concept	Value	Standard
Visible defects	Pasa	EN 1850-2
Density (kg/m³)	1250	-
Straightness (mm)	< 50	EN 1848-2

Environmental Information

Concept	Value	Standard
Post-consumer recycled content (%)	NDP	-
Pre-Consumer recycled content (%)	NDP	-
Manufactured in	Fontanar - Guadalajara (España)	-

Standards and Certification

- Complies with Royal Decree RD 3/2023, of January 10, which establishes the technical-sanitary criteria for the quality of drinking water, its control and supply.
- These tests have been carried out by external auditors and are regularly verified by factory self-checks.

Scope

- Waterproofing of drinking water tanks (suitable for outdoor use) in accordance with Royal Decree 3/2023, of January 10, which establishes the technical-sanitary criteria for the quality of drinking water.

Instruction for Use

Preparation of the substrate:

- The surface of the base substrate shall be resistant, uniform, smooth, clean, dry and free of foreign bodies.
- Polyester geotextiles, type Danofelt PY 300 or higher, shall be used as a separating or protective layer.
- DANOSA recommends a solution that is not adhered to the substrate, welding the overlaps with a

hot air machine and pressure roller.

Laying of the waterproofing membrane:

- The joint between sheets shall be made by thermoplastic welding with a hot air welder. The overlaps shall be at least 5 cm and the welding of the lower sheet with the upper one shall be at least 4 cm. Immediately after welding, the joint shall be pressed with a roller, thus ensuring a homogeneous joint. To check the joints, a blunt metal needle (with a rounded tip with a radius between 1 mm and 3 mm) shall be used to physically check the joints by passing it along the edge of the joint.
- On the vertical and horizontal perimeter, laminated plates mechanically fixed to the substrate shall be used in order to weld the waterproofing sheet on its surface. If the tank is more than 2 metres deep, it is recommended that intermediate laminated sheets be used on the vertical face to ensure the flatness of the sheet.
- A laminated profile fixed to the vertical face should be used to crown the tank, and the sheet should then be welded to its surface. The profile shall be sealed with ELASTYDAN 40 PU Grey polyurethane mastic or equivalent, never in contact with the sheet or the water contained in the tank.
- In the case of chemical welding using a THF-based solvent, simultaneously apply a layer of solvent with a brush and then press the joint area with a bag filled with sand for a few seconds.

Indications and Important Recommendations

- The fastening element must be suitable for the material of which the support is made. The tensile strength of the fastener to the load-bearing support shall be checked to ensure proper mechanical attachment. The fasteners must withstand a permissible tensile load greater than 600 N per anchorage point. As the membrane is the outermost element of the waterproofing system, its stability against dynamic wind pressure must be calculated according to the shape of the building, its height above ground, its topographical situation, and the specific roof area.
- In renovation projects on old waterproofing, it may be necessary to remove existing materials or to use suitable separating layers.
- A range of ancillary products is available for use with the membrane (Elastydan PU 40 Grey sealant, GLUE-DAN PVC adhesive, laminated profiles, corners, corners, corners, cups, pipe penetrations, etc.).
- The weldability and quality of the weld depend on atmospheric conditions (temperature, dampness), welding conditions (temperature, speed, pressure, pre-cleaning) and on the surface condition of the membrane (cleanliness, dampness). Therefore, the hot air machine must be adjusted to obtain a correct assembly.
- To avoid chemical incompatibilities, a DANOFEEL PY 300 or higher geotextile separating layer shall be placed between the membrane and the geotextile: Bituminous products, synthetic TPO/FPO and EPDM, extruded (XPS) or expanded (EPS) polystyrene-based products, rigid or foamed PU, etc.
- After the surface has cooled down, the welds shall be carefully checked by means of a punch. If any irregularity is detected in a hot air weld, it shall be reworked with the same procedure as described above.
- Appropriate safety measures must be taken as welding work can give off fumes which can be irritating.

Handling, storage and preservation

- The product must be stored in a dry place protected from rain, sun, heat and low temperatures.
- The product will be used on a first-come, first-served basis.
- This product is not toxic or flammable.
- Easy to cut to adapt the dimensions to the work.
- 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.

- No welding work should be carried out when the ambient temperature is lower than -5°C for hot air welding, nor lower than + 5°C for welding with THF or with Adhesives.
- It shall be kept in its original packaging, in a horizontal position and all rolls parallel (never crossed), on a flat and smooth support.
- Danosa recommends consulting the safety data sheet for this product, which is permanently available at danosa.com, Knowledge 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.
- For further information, please contact our Technical Department.

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**