

## DANODREN H 15

Nodular sheet of high density polyethylene (HDPE).



DANODREN H25 is a high density polyethylene (HDPE) brown nodular sheet. Its main use is for protection and eventual vertical drainage.

### Presentation

- Length (cm): 2800
- Width (cm): 210
- Colour: Brown
- Thickness (mm): 7.5
- Product code: 314304

### Technical Data

Concept	Value	Standard
Longitudinal elongation (%)	>30	EN 12311-2
Transverse elongation (%)	≥ 20	EN 12311-2
Durability of the tightness against chemical agents (10 kPa)	Pasa	EN 1847 / EN 1928
Durability of the tightness against artificial aging (10 kPa)	Pasa	EN 1296 / EN 1928
Watertightness in liquid state (10 kPa)	Pasa	EN 1928
Reaction to fire	F	EN 13501-1
Shear strength (N / 50mm)	170 ± 30	-
Compression strength (kPa)	180 ±20%	UNE-EN-ISO 604

Concept	Value	Standard
Longitudinal tensile strength (N / 5cm)	>= 300	-
Transverse tensile strength (N / 5cm)	>= 175	-
Resistance to a static load (kg)	>=20	UNE EN 12730
Resistance to tearing (nail shank) (N)	300 ± 100	EN 12310-1
Peel strength (N / 50mm)	NPD	UNE-EN 12317-2
Temperature resistance max. (°C)	80	-
Min temperature resistance (°C)	-30	-
Hazardous substances	NPDPND	-

### Additional Technical Data

Concept	Value	Standard
Number of nodules (nodules/m <sup>2</sup> )	1907	-
Volumen de aire entre nódulos (L/m <sup>2</sup> )	5.9	-

### Environmental Information

Concept	Value	Standard
Volatile organic compounds (COV's) (µg/m <sup>3</sup> )	NPD	ISO 16000-6:2006
Recycled content afterword the consumer (%)	80	-
Recycled content before the consumer (%)	20	-
Solar Reflectance Index (IRS)	NPD	-
Manufactured in	Fontanar	-

### Standards and Certification

- CTE DB-HE: Technical Building Code. Basic Document: Habitability. Energy saving
- Conforms to UNE-EN 13967 of plastic and rubber anti-capillary sheets, including plastic and rubber sheets used for sealing buried structures.
- BUREAU VERITAS company registration according to EN-ISO 14001 granted to DANOSA's manufacturing plant in Fontanar (Guadalajara).
- BUREAU VERITAS company registration according to EN-ISO 9001 granted to DANOSA's manufacturing plant in Fontanar (Guadalajara).
- EU Regulation 305/2011. Construction products.

## Scope

- Protection of the waterproofing of buried walls in buildings and civil works, such as cut-and-cover tunnels and subways.
- Protection of above-ground screeds.
- Renovation of basements and underground constructions affected by damp.
- Combined with layers of filter materials it can provide adequate drainage.

## Advantages & Benefits

- In cases of renovation, an air gap is created between the damp affected wall and the new finish, allowing it to ventilate and dry.
- Easy and quick to install.
- Rot-proof.
- Inalterable against chemical agents present in the soil (sulphates, chlorides, etc).
- Provides permanent drainage.
- Protects the wall from damp and allows water to drain, limiting its hydrostatic pressure.
- Protects the waterproofing sheet from possible piercing caused by fill earth.
- Resistant to breakage, impact and does not deform.

## Instruction for Use

Walls :

- The surface of the substrate and singular points must be uniform, clean, dry and free of foreign bodies.
- The substrate for DANODREN H can be a waterproofing film.
- DANODREN H is laid with the nodules facing the substrate. The sheets should be overlapped by 12 cm horizontally and 20 cm vertically.
- The upper part is anchored with the DANODREN metal profile and mechanically fixed. In this way, the drainage sheeting is protected against dumping, backfilling and subsequent compacting of the trench and water ingress. This fastening must be 10 cm above the waterproofing membrane.
- The corners and corners are finished off by bending the sheet.
- Lay the drainage pipe.

Screeds: When there is no hydrostatic pressure or the screed is above the water table, DANODREN H is spread with the nodules against the ground. The sheets should be overlapped by 12 cm.

Damp areas: In case of rehabilitation, DANODREN H rolls are spread with the nodules against the wall.

Inverted roofs with continuous paving: In the case of walkable roofs with continuous paving, it will be laid on the thermal insulation with the nodules facing downwards and then the screed will be laid.

## Indications and Important Recommendations

- Store in a dry place, protected from rain, sun, high and low temperatures.
- The product is not toxic or flammable.
- The specific metal profile must be used.
- Specific fixings must be used.
- Its use in no case replaces the waterproofing sheet.

## 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 stored in an upright position.
- This product is not toxic or flammable.
- For further information, please refer to the product safety data sheet.

## 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**