

### DANODREN G-20

HDPE Nodular 20mm drainage layer.



The DANODREN G-20 is a black nodular layer, made of high density polyethylene (HDPE).

#### Presentation

- Length (cm): 2000
- Width (cm): 200
- Colour: Black
- Thickness (mm): 20
- Surface (m<sup>2</sup>): 40
- Product code: 314041

#### Technical Data

Concept	Value	Standard
Compression strength (kPa)	>180	UNE EN ISO 604
Horizontal flow drain (L/s.m)	10	-
Temperature resistance max. (°C)	80	-
Min temperature resistance (°C)	-30	-

#### Additional Technical Data

Concept	Value	Standard
Number of nodules (nodules/m <sup>2</sup> )	400	-

## Scope

- Drainage of above-ground screeds, when there is no hydrostatic pressure or the screed is above the water table.
- Protection of the waterproofing of buried walls and floors in both building and civil works.
- Protection of waterproofing in underground works in general: diaphragm walls, treatment on the outside of the wall, tunnels, service galleries, underfloors, etc.
- It is mainly used as a protective layer on deep elements and as permanent formwork, both on vertical and horizontal surfaces, thanks to its superior mechanical resistance.

## Advantages & Benefits

- Cheaper to lay compared to traditional coarse gravel layer.
- High long-term compressive strength.
- High tensile strength.
- In the case of open-air tunnels, service galleries, diaphragm walls, treatment of the outer back wall, etc., it facilitates the drainage of water from the ground, in place of the traditional layer of coarse gravel, achieving a sufficient drainage flow.
- Ease of paving and laying.
- Easy to install.
- Long life expectancy.
- Rot-proof.
- Chemically unchanged when in contact with chemical agents present in the soil (sulphates, chlorides, etc).
- The high stiffness of the membrane protects the waterproofing sheet from any piercing caused by backfill soil.
- Allows accumulated water to drain, limiting hydrostatic pressure and avoiding direct contact of dampness with the wall.

## Instruction for Use

- The substrate surface must be solid, uniform, smooth, cleaned, dry and free from foreign bodies. Fully extend the PVC membrane, pierce it in proportion to the diameter of the drain, insert the nozzle into the pipe by hot air welding the crown to the membrane and insert the drain basket.

## Indications and Important Recommendations

- It is advisable to lay the drainage pipe on walls as the protection with the drainage sheet is being extended.
- 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.
- Not watertight.
- Acts like a drainage when saturated.
- Appropriate precautions shall be taken so as not to pierce the waterproofing during the laying of the product.
- The following fasteners should be used: Danodren fasteners (nail with nodule filler button); "shot" type with plastic washer.
- A metal profile in two-metre-long pieces shall be used to anchor the system.
- Can't be used as waterproofing.

## Handling, storage and preservation

- 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 is not toxic.
- 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.
- Danosa recommends consulting the safety data sheet for this product, which is permanently available at [danosa.com](http://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

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