

DANOLOSA NOx

Photocatalytic porous concrete slab on the basis of extruded polystyrene machining.



ETE 18/ 0328

DANOLOSA NOX 95 is an insulating slab consisting of porous concrete, which acts as a mechanical protection over an extruded polystyrene base, resulting in a durable and practical insulated surface. With NOx reducing photocatalytic effect treatment.

Presentation

- Length (cm): 50
- Width (cm): 50
- Colour: White
- Thickness (mm): 75
- Logistic class: (C) Products usually in stock, maximum availability in less than 7 days
- Product code: 711012

Technical Data

Concept	Value	Standard
Compressive strength of concrete 28 days (concentrated load on Ø 20 cm) (kN)	>30	-
Bending Tensile Strength (kN)	>3,5	-
Compression behavior at 25% (\geq MPa)	0.31	UNE-EN 1339
Compression behavior at 5%	0.3	UNE-EN 1339
External fire behaviour	Broof(t1)	UNE-EN 1339
Point load strength to 250 N	Sin defectos	DIT 550/10; DIT 551/10
Compression strength (KN/m ²)	300	-

Additional Technical Data

Concept	Value	Standard
water absorption by diffusion 50 % (%)	<3	-
water absorption by diffusion 60 % (%)	2,7	-
water absorption by diffusion 80 % (%)	1,5	-
Water absorption by immersion (%)	≤ 1,5	-
Breaking load of concrete	1,3	-
Thermal conductivity XPS	0.034	EN 12667 - EN 12939
Deformation under load of 40 KPa (%)	< 5	-
Density of insulating	35	EN 1602
Dimensions of concrete (mm)	490 x 490 (±1)	UNE-EN 1339
Dimensions XPS (mm)	500 x 500 (±2)	-
Insulation thickness (mm)	40 (±1)	-
Thickness of concrete (mm)	33(+/- 3)	UNE-EN 1339
Dimensional Stability XPS	≤ 5	-
Mass (kg)	15	-
Reaction to fire insulation (Euroclass)	E	UNE-EN 13501-1
Fire performance of concrete (Euroclass)	A	-
Compressive strength of concrete 3 days (MPa)	9.4	-
Compressive strength of concrete 21 days (≥ MPa)	11.6	11.6
Compressive strength of concrete 28 days (MPa)	12.5	UNE-EN 12390-3: 2009
Concrete flexural strength (MPa)	13	UNE-EN 1339

Environmental Information

Concept	Value	Standard
Manufactured in	Fontanar - Guadalajara (España)	-

Concept	Value	Standard
Performance in photocatalytic purification of nitrogen oxides (%)	>8 (Clase 3)	UNE 127197-1

Standards and Certification

- DIT 550R/16 "ESTERDAN PENDIENTE ZERO".
- DIT 550R/20 "DANOPOL PENDIENTE ZERO"
- Material contemplated in the CTE and CEC.

Scope

- Technical roofs on supports (plots).
- Insulating and filtering slab for accessible roofs.
- Technical walkways on non-accessible roofs finished in gravel.
- Renovation and transformation of non-accessible roofs.
- Support surface for equipment on non-trafficable roofs and installations in general.

Advantages & Benefits

- Lightens the weight of the tyre compared to other types of heavy protections.
- High resistance to compression, allows people to transit.
- Adds thermal insulation and walkable paving to the roof.
- High filtering capacity, allows installation and transit in adverse weather conditions.
- Paving joints are not needed thanks to the 1-2 mm "reduction" of the porous concrete layer with respect to the XPS insulating base.
- Allows for the placement of benches and supports to place equipment and facilities.
- Protects waterproofing.
- Yield in the photocatalytic purification of NO_x > 8% (Class 3).
- It can be disassembled, facilitating access to the waterproofing.
- Simple installation.

Instruction for Use

Preparation of the support:

Once the waterproofing is done, the roof should be smooth, uniform and clean. **Danolosa application:**

- It is applied without any gripping material, deposited with care, preferably over a geotextile antipunching layer covering the waterproofing or directly on it, lying on the insulation face.
- Slabs will be placed without any expansion joint.
- On hipper ends and valleys the slab should be accordingly cut using a water-cooled low r.p.m. radial machine.
- A small space (3-5 mm) must exist, to allow dilatations coming from, for example, skylights, etc...
- It should be carried on pallets.
 - Not considered as dangerous goods for transport.

Indications and Important Recommendations

- A separating layer type DANOFELT® PY 300 must be placed between the PVC waterproofing and the tile.
- It is not necessary to use filler in the joints.
- Do not use hammers to fit or level the parts.
- Its use on plots is restricted to supports with a square head of at least 200 mm.
- For the cutting of the DANOLOSA, it is recommended to use a water-cooled low r.p.m. radial machine, type DU-200-L.
- The apparition of portlantita efflorescences on porous concrete, characterized by changing the colour of the tile, does not mean the decline of its performance.
- Variations in tone in the raw materials of porous concrete may also vary the tone between tiles of the same colour.

Handling, storage and preservation

- The cutting machines must be in a ventilated room.
- Keep away from flames and sources of heat.
- Keep in ventilated areas, preferably in premises with fire prevention systems, as remnants of ethanol (traces) may be released in the production process.
- Goods not considered hazardous.
- It must be transported on pallets.

Notice

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