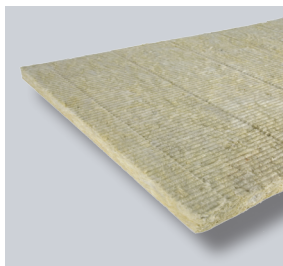


TECHNICAL DATA SHEET

ND SM-25 Substrate Panels



ND SM-25 Substrate Panels

Hydrophilic (water-absorbing) mineral wool panel with a thickness of approx. 25 mm and a density of approx. 80 kg/m³. In addition to the high water retention the panels act as a substrate substitute in accordance with the FLL*-Guidelines for Green Roofs (2018).

Through direct contact of the substrate panels with the substrate layer, the vegetation is able to regulate its own water balance, as nature intended. When the substrate panels become saturated, surplus water is discharged into the ND Drainage System. By using the ND SM-25 Substrate Panels, there is no build-up of hydrostatic pressure against the waterproofing membrane.

Application

The ND SM-25 Substrate Panels are a component of the Nophadrain Extensive Green Roof System - lightweight, medium pitched and steep pitched roof constructions. By using these panels in combination with the ND Vegetation Blankets - Sedum, the weight of the total composition of an extensive green roof can be reduced to approx. 35 kg/m².

Properties

- Material: hydrophilic mineral wool
- Density: approx. 80 kg/m³
- Water retention capacity: approx. 15 l/m² = 80 % volume
- Air volume: approx. 16 %
- pH value: approx. 7 - 8
- Weight: dry approx. 2 kg/m², saturated approx. 17 kg/m²
- Product fulfills the requirements of hEN13162:2012+A1:2015
- Reaction to fire (hEN 13501-1:2010-01): Class A1

Product	Dimensions (L x W x H)	Packaging
ND SM-25 Substrate Panels	approx. 1,200 x 1,000 x 25 mm	approx. 9.6 m ² , package

* Forschungsgesellschaft Landschaftsentwicklung Landschaftsbau e.V. - www.fll.de a German research association

NOPHADRAIN[®]
SMART GREEN ROOF SYSTEMS

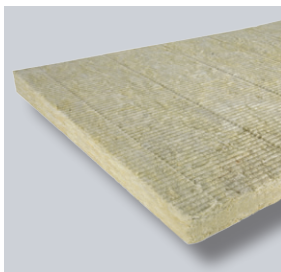
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TECHNICAL DATA SHEET

ND SM-50 Substrate Panels



ND SM-50 Substrate Panels

Hydrophilic (water-absorbing) mineral wool panel with a thickness of approx. 50 mm and a density of approx. 80 kg/m³. In addition to the high water retention the panels act as a substrate replacement for the growing medium used in green roof compositions. By using these panels in combination with the ND Vegetation Blankets - Sedum, the weight of the total composition of an extensive green roof can be reduced to approx. 52 kg/m². The panels are a substrate substitute in accordance with the FLL*-Guidelines for Green Roofs (2018).

Through direct contact of the water reservoir roll with the substrate layer, the vegetation is able to regulate its own water balance, as nature intended. When the water reservoir rolls become saturated, surplus water is discharged into the ND Drainage System. By using the ND SM-50 Substrate Panels, there is no build-up of hydrostatic pressure against the waterproofing membrane.

Application

The ND SM-50 Substrate Panels are a component of the Nophadrain Extensive Green Roof System - lightweight, medium pitched and steep pitched roof constructions.

Properties

- Material: hydrophilic mineral wool
- Density: approx. 80 kg/m³
- Water retention capacity: approx. 30 l/m² = 80 % volume
- Air volume: approx. 16 %
- pH value: approx. 7 - 8
- Weight: dry approx. 4 kg/m², saturated approx. 34 kg/m²
- Product fulfills the requirements of hEN13162:2012+A1:2015
- Reaction to fire (hEN 13501-1:2010-01): Class A1

Product	Dimensions (L x W x H)	Packaging
ND SM-50 Substrate Panels	approx. 1,200 x 1,000 x 50 mm	approx. 4.8 m ² , package

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