

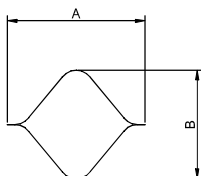
NEXLER NexGreen Road 440/75/13

Cellular reinforcing and stabilising geogrid

TECHNICAL DATA

PROPERTIES OF DIMPLED MEMBRANE	
Composition	high-density polyethylene (HDPE)
Colour	black
Density	> 0,935 g/cm ³
Nominal tape thickness after texturisation	1,3 (± 0,2) mm
Grid height	75 mm
Cell dimensions (Figure 1)	A360/B250
Distance between welds in folded position	440 mm
Joint connection method	spot welding
Surface area of a single unfolded cell	< 450 cm ²
Number of cells	22 pcs./m ²
Dimensions of the grid (module) when unfolded	1,44 m x 4,00 m
Grid area when unfolded	5,76 m ²
Resistance to weather conditions	100%
Chemical resistance	yes
MECHANICAL PROPERTIES	
Tensile strength of strips (without perforation)	15 (± 3) kN/m
Tensile strength of strips (with perforation)	> 10 kN/m
Compressive strength of the joint (tested on unperforated tape)	> 9,6 kN/m
Peel strength of the joint (tested on unperforated tape)	> 6 kN/m
OTHER DATA	
Grid weight	4,8 kg
Temperature of use	from +5°C to +30°C

Figure 1 - cell dimensions



PROPERTIES

- Flexible, adapts to the surface
- Ease of installation
- Universal use
- Resistance to weather and environmental conditions
- Durability
- Possibility of using different fills – aggregate, humus, substrate, post-recycling material
- Allows free flow of moisture and water
- Easy to transport and store



FLEXIBLE



VARIOUS FILLS



MOISTURE AND WATER FLOW



EASY AND QUICK INSTALLATION

APPLICATION

- Green roofs
- Roads and traffic-loaded surfaces
- Railways
- Retaining structures
- Protection and strengthening of banks
- Erosion protection
- Reservoirs and dams
- Channels
- Solid waste landfills
- Liquid waste tanks
- Temporary roads



GREEN ROOFS



ROADS AND TRAFFIC-LOADED SURFACES



RAILWAYS



RETAINING STRUCTURES



EROSION PROTECTION



LANDFILLS AND WASTE TANKS



CHANNELS, RESERVOIRS AND DAMS



PROTECTION AND STRENGTHENING OF BANKS

PACKAGING

Poland

- Number of modules per pallet: 120 pcs.
- Pallet size: 1,2 m x 1,2 m

Export

- Number of modules per pallet: 120 pcs.
- Pallet size: 1,2 m x 1,2 m

METHOD OF USE

CONDITIONS OF USE

Works should not be carried out during precipitation.

SUBSTRATE PREPARATION

The substrate on which **NexGreen Road 440/75/13** is laid should be even, clean and free of sharp protruding edges, and properly compacted. Stones, wood and organic parts should also be removed. Spread a suitable geotextile, e.g. NEXLER NexGreen Geo 110, on the prepared substrate. For escarpments and slopes – dig anchor trenches at the foot of the slope, as well as at the top of the slope, in which the geogrid will be fixed.

PRODUCT CONTROL

Check the production date on the packaging before use. The product should not be incorporated beyond its shelf life. The geogrid to be embedded must not have any visible mechanical damage, cracks, tears or deformations. All welds of the geogrid should be checked, the joints must not be damaged, torn or ruptured. A geogrid that tears when stretched should not be used.

PRODUCT PREPARATION

NexGreen Road 440/75/13 is a ready-to-use product.

APPLICATION METHOD

Green roofs:

Perimeter drain and drain lines: The geogrid should be installed by stretching it over a suitably prepared substrate. When stretching the geogrid, ensure that it is evenly distributed and tensioned. The individual modules should be combined on an ongoing basis. Once the geogrid has been properly laid out, its cells can be filled with suitably selected aggregate.

Pitches on roofs: The geogrid should be installed by stretching it over a suitably prepared substrate. The installation of the geogrid should start from the top of the slope, anchoring it at the top with installation bars. Anchoring is necessary to prevent the geogrid from moving during further installation. When stretching the geogrid, ensure that it is evenly distributed and tensioned. The individual modules should be combined on an ongoing basis. Fill the geogrid cells in the direction from the foot of the slope to the top of the slope.

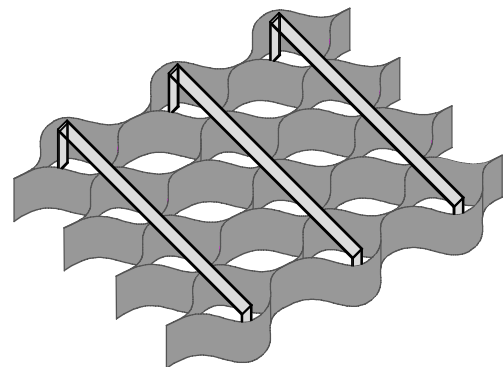
Escarpments and slopes: The geogrid should be installed by stretching it over a suitably prepared substrate. The installation of the geogrid should start from the top of the slope, anchoring it at the top. Anchoring is necessary to prevent the geogrid from moving during further installation. When stretching the geogrid, ensure that it is evenly distributed and tensioned. On an ongoing basis, join together the individual modules should and attach the installation to the substrate. After the geogrid has been properly anchored in the ground, backfill the anchor trenches first. At the very end, fill the cells of the geogrid. Fill in a direction from the foot of the slope to the top of the slope.

Horizontal surfaces: The geogrid should be installed by stretching it over a suitably prepared substrate. When stretching the geogrid, ensure that it is evenly distributed and tensioned. On an ongoing basis, join together the individual sections should and attach the installation to the substrate. Once the geogrid has been properly laid out and anchored, its cells can be filled.

Retaining structure: The slope reinforcement consists of properly stacked layers of filled geogrid. On the prepared substrate, together with the laid NexGreen Geo 110 or NexGreen Geo Safe 350 geotextile (depending on the required strength of the geotextile), the construction can proceed. Installation should start from the bottom of the slope, placing the geogrid in the designed position. Once the geogrid has been stretched, use separation and installation bars to stabilise it (Figure 2). Fill the properly laid geogrid with suitable material, remove the separation bars and carefully compact the material. Remove excess material before laying the next layer of geogrid. Analogically, proceed to lay the next layer of geogrid. Lay successive layers of geogrid in a staggered manner. Every few levels of geogrid, spread a layer of geotextile according to the design guidelines.

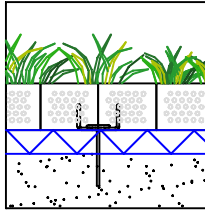
The retaining structure must be constructed in accordance with the technical design, which specifies the number of levels of geogrid, its parameters and the additional reinforcement necessary to ensure the stability of the wall. Properly designed drainage is required to ensure the stability of the wall.

Figure 2 - separation and installation bars



Fix the geogrid to the substrate with iron or polymer bars (Figure 3). Connecting geogrids between each other should be done with clamps or metal staples. Fill the geogrid with suitable material according to the design guidelines. The size and type of aggregate should be selected according to the application. When filling the geogrid, care should be taken to ensure that there are no voids and the material is compacted evenly.

Figure 3 - fixing to the substrate (from the detail)



▪ CONTROL OF PERFORMANCE

When laying **NexGreen Road 440/75/13**, ensure that the geogrid adheres evenly to the substrate, with no visible bulges. Check anchoring and panel joints. After backfilling the laid geogrid, distribute the material used for this purpose evenly.

TOOLS AND TOOL CLEANING

Multi-purpose (segmented) knife, shears.

STORAGE AND TRANSPORT

The shelf life of the product is 24 months from production date specified on the packaging. Store in dry rooms. The product must be protected from heat and direct sunlight.

NOTES

Works should be carried out in accordance with technical conditions, manufacturer's instructions, health and safety standards and regulations.

The remaining content of the product and container should be handed over to authorized companies.

GENERAL RECOMMENDATIONS

Technical data and information on the method of use are given for a temperature of $23^{\circ}\text{C} \pm 2^{\circ}\text{C}$ and a relative air humidity of 55%.

Protect the geogrid from mechanical damage during further construction work, avoid damage and cracks.

IMPORTANT INFORMATION

Please refer to the detailed conditions of use of the product before use.

We guarantee the quality of our materials as part of our terms of sale and delivery. For buildings with special requirements that are not covered by this manual, we provide our Customers with our own professional advisory service.

The manufacturer has no influence on the improper use of the material, its use for other purposes or under conditions other than those described above. The guarantee only covers the quality of the delivered product. The correct and therefore effective use of the product is not subject to our control.

Neither the manufacturer nor his authorized representative may be held liable for any loss incurred as a result of improper use or storage of the product.

Employees of the company are authorized to provide technical information only and solely in accordance with this Technical Data Sheet. Information other than that contained in this sheet should be confirmed in writing.

If you have any doubts, consult the manufacturer.

Once we have issued a new Technical Data Sheet, this manual is no longer valid.

CONTACT DETAILS

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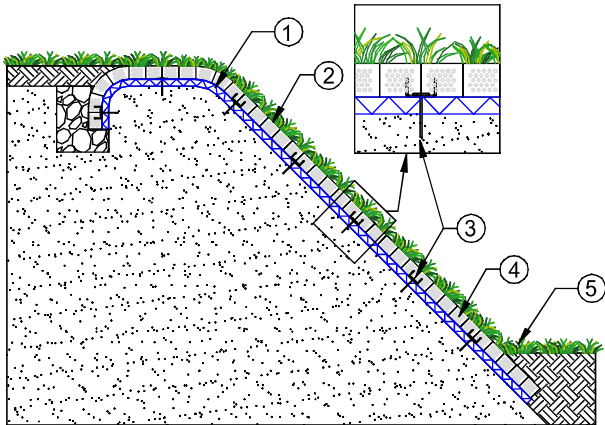
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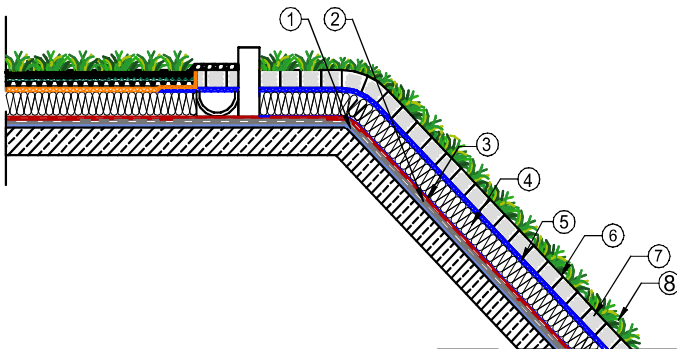
DETAILS

Slope



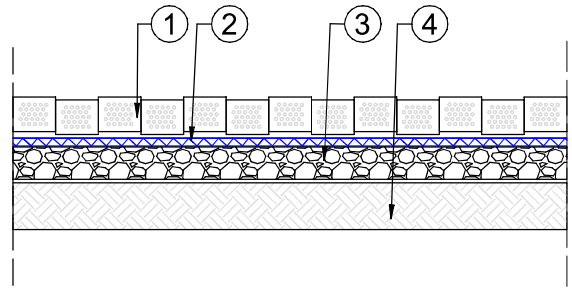
1. Filtration and separation geotextile NEXLER NexGreen Geo 110
2. Geogrid NEXLER NexGreen Road 440/75/13
3. Anchors
4. Geogrid fill
5. Grass vegetation

Green roof



1. Bituminous primer NEXLER BITFLEX Primer or NEXLER Penetrator G7
2. Heat-weldable underlayer bituminous felt NEXLER PREMIUM PYE PV200 S30 FF or NEXLER PJ PYE PV200 S40 FF
3. Weldable bituminous felt resistant to plant root overgrowth NEXLER Green Roof PYE PV250 S50
4. Thermal insulation with XPS boards
5. Protection and separation geotextile NEXLER NexGreen Geo Safe 350
6. Geogrid NEXLER NexGreen Road 440/75/13
7. Geogrid fill
8. Grass vegetation

Geogrid for aggregate surfaces



1. Geogrid NEXLER NexGreen Road 440/75/13 with filling
2. Filtration and separation geotextile NEXLER NexGreen Geo 110
3. Aggregate drainage
4. Native soil