



# NEXLER NexGreen Geo Safe 350

## Protection and separation geotextile

### TECHNICAL DATA

<b>Composition</b>	polyester fibres
<b>Colour</b>	dark grey
<b>Mass per unit area</b>	350 g/m <sup>2</sup>
<b>Thickness</b>	1,6 mm
<b>Tensile strength</b> - longitudinal direction - transverse direction	≥ 5 kN/m ≥ 5 kN/m
<b>Elongation at break</b>	≥ 50%
<b>Resistance to static puncture</b>	≥ 1100 N
<b>Resistance to dynamic puncture</b>	≤ 29 mm
<b>Water permeability in the direction perpendicular to the surface</b>	50 (±15) l/(m <sup>2</sup> ·s) 0,050 (±0,015) m/s
<b>Characteristic pore size</b>	70 (±25) µm
<b>Roll width</b>	2 m
<b>Roll length</b>	50 m

### PROPERTIES

- Increased mechanical strength and resistance to damage and punctures achieved by calendering the geotextile
- Ability to store water, further increasing the retention of the entire system
- High filtration capacity even for fine particles due to reduced pore size
- Resistant to weather and environmental conditions
- Increased flexibility
- Very good drainage properties
- Elastic
- Resistant to the effects of fungi and bacteria



### APPLICATION

- Protection of waterproofing and thermal insulation against mechanical damage
  - In green roof systems
  - On ballasted roofs
  - On foundations, retaining structures, culverts and tunnels during excavation backfilling
- Improvement of water drainage from green roofs
- Separation and filtration layer in drainage systems to protect the drainage against mechanical damage and siltation
- Separation and filtration layer between structural elements and fractions of different grain size during construction
  - Footpaths, sidewalks, driveways and temporary roads
  - Ground-level terraces
- Erosion protection in combination with geogrids or geonets in slope and embankment construction
- Protective layer in swimming pools and ponds to protect geomembranes and foils from mechanical damage



## PACKAGING

### Poland

- Roll: 100 m<sup>2</sup>

### Export

- Roll: 100 m<sup>2</sup>

## METHOD OF USE

### CONDITIONS OF USE

Works should not be carried out during precipitation.

### SUBSTRATE PREPARATION

The substrate on which **NexGreen Geo Safe 350** is laid should be even, clean and free of sharp protruding edges which may damage the geotextile layer. The soil and subbase layers must be properly compacted, levelled and care must be taken to ensure that they are free of sharp fractions and organic materials (e.g. sharp stones, branches, glass).

### PRODUCT CONTROL

Check the production date on the packaging before use. The product should not be incorporated beyond its shelf life. The geotextile must be uniform along its entire length, without visible mechanical damage and delamination.

### PRODUCT PREPARATION

**NexGreen Geo Safe 350** is a ready-to-use product. When laying the geotextile over large areas, the geotextile should be cut so that the transverse overlaps are not positioned in a single line.

### APPLICATION METHOD

The geotextile should be laid in accordance with the technical design drawn up for the specific building, in accordance with the applicable standards and regulations.

**Green roofs and ground reinforcement:** When laying **NexGreen Geo Safe 350**, unroll from the roll while tensioning the unrolled layer. Weigh down the end of the roll to prevent the geotextile from moving. The geotextile must be laid out evenly over the prepared surface to ensure maximum contact with the substrate. Lay successive layers in the same direction maintaining a minimum overlap width of 20 cm.

**Protection of waterproofing of foundations and building structures:** Unroll **NexGreen Geo Safe 350** along the vertical edge of the structural element while tensioning the layer being unrolled to ensure laying it out evenly without wrinkles. Connect adjacent sections with an overlap minimum 20 cm wide. Use suitable anchoring elements for fixing, i.e. starter strips, dowels, pins. The anchoring elements must be selected according to the layering in such a way that the continuity of the waterproofing layer is not compromised (penetration) during their fixing.

**French drain:** Lay **NexGreen Geo Safe 350** in a single strip running along the bottom of the excavation or across using strips cut into suitable lengths. The excavation must have a slope for proper water flow. Select such width (length) of the geotextile that it allows subsequent tight surrounding of aggregate (gravel). Once the drainage pipe installation work has been completed, wrap the aggregate (gravel) with geotextile. Connect the edges of the geotextile mechanically, e.g. with steel pins. Then backfill with fill soil in accordance with the design specifications, ensuring adequate compaction to prevent soil settlement and maintain drainage capacity.

When connecting different sections, start laying **NexGreen Geo Safe 350** from the side where the excavation is at the lowest level. This will allow proper water flow over the overlaps without pulling them upwards.

### CONTROL OF PERFORMANCE

When laying **NexGreen Geo Safe 350**, ensure that the geotextile adheres evenly to the substrate, with no visible wrinkles or creases. Check that successive layers have not shifted and check overlap widths.

## TOOLS AND TOOL CLEANING

Multi-purpose (segmented) knife, shears, rotary cutter, angle grinder.

## STORAGE AND TRANSPORT

Store in dry rooms, in tightly closed original packaging. The product must be protected from direct sunlight. Do not allow the product to become soaked.

## NOTES

Works should be carried out in accordance with technical conditions, manufacturer's instructions, health and safety standards and regulations. After works are finished, hand over the remaining content of the product and the container to authorised companies.

## GENERAL RECOMMENDATIONS

Technical data and information on the method of use are given for a temperature of 23°C ± 2°C and a relative air humidity of 55%.

Do not lay the geotextile on a subbase with excessively sharp edges. Protect the geotextile from mechanical damage during further construction work (e.g. aggregate compaction), avoid punctures and tears.

**NexGreen Geo Safe 350** should be backfilled with soil/aggregate on the day of installation. Use natural soils that are not strongly acidic or strongly alkaline. During backfilling, care must be taken to ensure that the soil is not spread from too great a height, causing mechanical damage or rolling up of the geotextile.

## **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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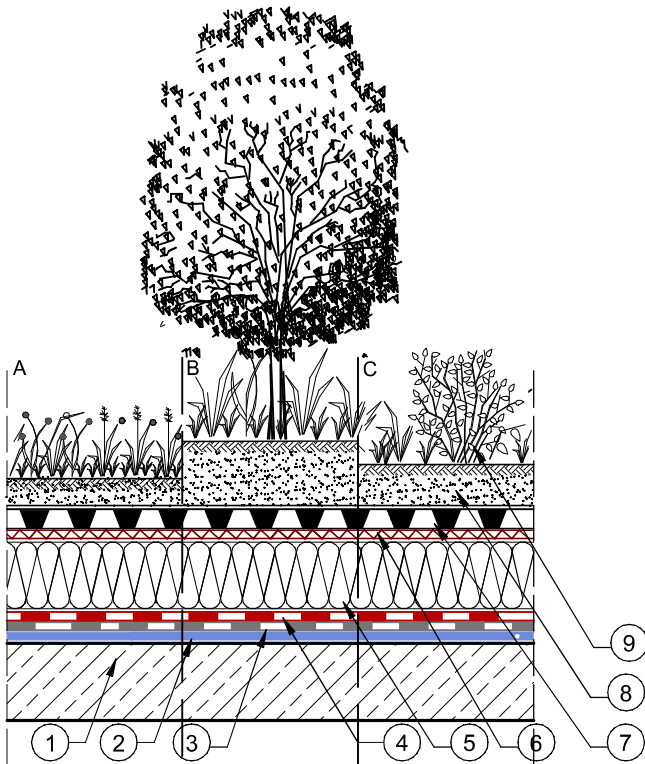
## **ISSUE DATE**

This Technical Data Sheet was issued on 02.04.2025.

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

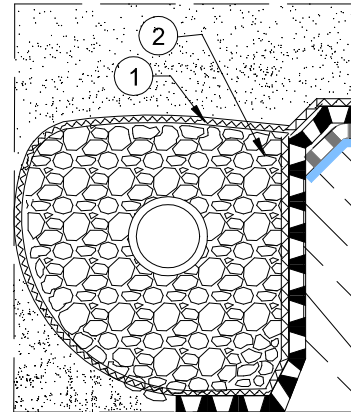
**DETAILS**

Green roof planted with extensive(A)/intensive(B)/semi-intensive(C) vegetation with thermal insulation, classic layering



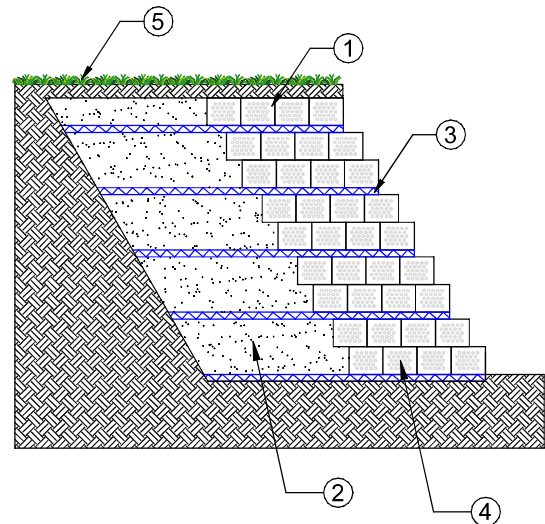
1. Concrete substrate constructed with a slope of min. 2%
2. Bituminous primer NEXLER BITFLEX Primer or NEXLER Penetrator G7
3. Vapour barrier made of NEXLER Alu S40 weldable bituminous felt
4. Thermal insulation - XPS boards
5. Self-adhesive underlayer bituminous felt NEXLER Plan PYE G200 S30 SP
6. Weldable bituminous felt resistant to plant root overgrowth NEXLER Green Roof PYE PV250 S50
7. Protection and separation geotextile **NEXLER NexGreen Geo Safe 350**
8. Perforated accumulation and drainage membrane integrated with geotextile NEXLER NexGreen Duo BB 20/150 P
9. Substrate layer selected according to type of greenery
10. Plant zone

**Surface drainage**



1. Protection and separation geotextile **NEXLER NexGreen Geo Safe 350**
2. Mineral filling

**Slope reinforced with geogrid**



1. Geogrid NEXLER NexGreen Road 440/75/13
2. Compacted sand bed
3. Protection and separation geotextile **NEXLER NexGreen Geo Safe 350**
4. Geogrid fill
5. Grass vegetation