

FL 150

FILTER SHEET



FL 150 is a black needle punched non-woven geotextile that weighs 150 g/m². It is made of polypropylene fibres. Being polypropylene, the fibres used in the production of the FL and SL engineered fabrics:

- Demonstrate extreme durability
- Exhibit excellent resistance to naturally occurring acids and alkalis
- Possess low moisture absorption properties
- Exhibit excellent resistance to microorganisms and do not rot

Its low weight by unit area combined with its hydraulic properties are the result of R&D programme that makes this product the ideal choice for filtration applications in extensive green roof build-ups (i.e. depth of growing medium < 150 mm) as advised in the German FLL Guidelines.

Use

Usage of the FL 150 layer include:

- Retaining engineered soil without clogging owing to the hydraulic properties of high permeability and fine pore size
- Inhibition of the leaching of fine particles from the growing medium to the drainage area
- Preventing the clogging of the diffusion holes on a drainage board
- Ensuring the continuous circulation of air and water in the green roof build-up

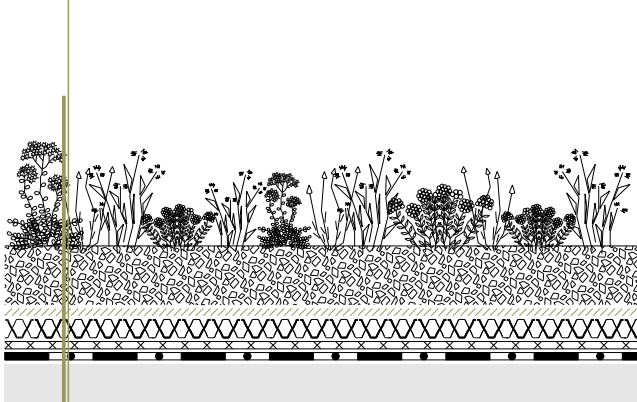
Application area

FL 150 filter layer is primarily used to serve filtration purposes in an extensive green roof build-up where it is rolled out over the drainage layer. An overlapping of at least 150 mm is required between the adjacent filter sheets. Openings must be cut in the filter sheet above the roof outlets.

Size (L x W x H)	100 x 2 x Ø0.4 m
Weight	30 kg
Material	Polypropylene (PP)
Colour	Black
CBR puncture	1.5 kN
Cone drop test	20 mm
Tensile strength	
Warp (MD)	8.5 kN/m
Weft (CMD)	8.5 kN/m
Elongation at break	
Warp (MD)	75%
Weft (CMD)	80%
Environmental aspect	Fully recyclable

Installation example

Carefully selected vegetation
 SDS extensive substrate
 FL 150 filter layer
 SedumDrain® 25 water reservoir & drainage layer
 PL 300 protection layer
 Root-resistant waterproofing
 Insulation



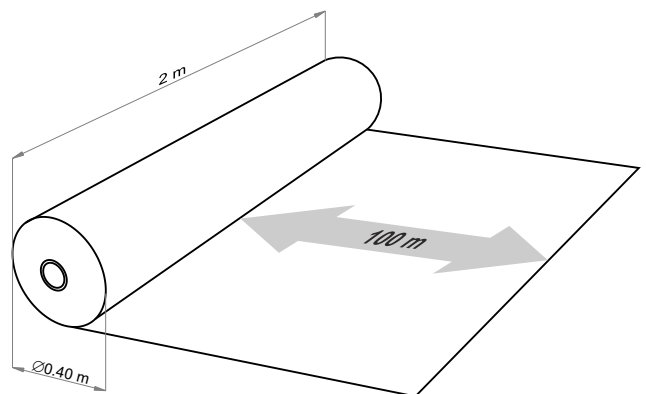
Specification suggestion

ArchiGreen® FL 150 is a black separation sheet made of polypropylene. It is primarily used to serve filtration purposes in an extensive green roof build-up where it is rolled out over the drainage layer. This product is CE-marked. Size: 100 x 2 x Ø0.4 m (L x W x H) [EN ISO 9863]. Weight: 30 kg [EN ISO 9864]. Effective pore size: 0.1 mm [EN ISO 12956]. Static puncture i.e. CBR test: 1.5 kN [EN ISO 12236]. Dynamic perforation test i.e. cone drop test: 20 mm [EN ISO 13433]. Tensile strength warp (MD): 8.5 kN/m; weft (CMD): 8.5 kN/m [EN ISO 10319]. Elongation at break warp (MD): 75 %; weft (CMD): 80 % [EN ISO 10319]. Water permeability normal to the plane - velocity index V_{H50} : 90 mm/s [EN ISO 11058]. Microbiological resistance test: Minimum 25 years as per conditions set in the standard [EN 12225:2000]. Filtration performance of the sheet exceeds the requirements set forth in the German FLL Guidelines. Delivery and installation is in accordance with manufacturer's instructions.



Microbiological resistance EN 12225
 25-year functionality warranted

Technical illustration



Tools required

For safety purposes a hook cutter is advised when cutting the non-wovens. Never cut directly on the waterproofing or the root barrier.

Packaging unit

FL 150 is despatched in rolls of 2 x Ø0.4 m each with the FL 150 filter sheet being rolled on cardboard tubes and the whole roll is wrapped in a black polyethylene bag which is secured by a black cap on both ends of the tube. Weight: 30 kg/roll