



LITE-SOIL

All in ONE: Air-Soil-Water

Tender texts for green roofs:

Textile water storage and underground irrigation

TECHNICAL CHARACTERISTICS

Our products are made of long-time proven nonwovens, which are optimized for any type of soil. Up to 90% of the volume consists of interconnected air pores, which can store water and redistribute it by capillary action. All the water is thus immediately available to plants. Our products are available in 3 different materials:

		weight	thickness
PP	PP (100% polypropylene fibers) durable, reusable and sustainable	360 g/m ²	3 mm
		600 g/m ²	5 mm

			PP	
			3 mm	5 mm
LITE-STRIPS	Units	Weight in Kg: Bio1/Bio5/PP		
70 x 12 mm	1 m ³ BB	50/45/50		X
70 x 12 mm	5 x 50 l Box	12/11/12		X
70 x 12 mm	250 l Box	12/11/12		X
70 x 12 mm	60 l Box	3,8/3,5/3,8		X
LITE-NET Standard (Roll C20 = meshes Ø 13 cm)				
175: 1,75 x 16,3 m	28 m ²	6/5/6		X
175: 1,75 x 16,3 m	3 pcs. á 28 m ²	18/14/18		X
350: 3,5 x 16,3 m	57 m ²	10/11		X
520: 5,2 x 16,3 m	85 m ²	14/16		X
520 XL: 5,2 x 25,9 m	275 m ²	300		X
BLUELITE-NET COMPONENTS				
BLUELITE-COVER	16 pcs. á 25 m	25	X	
BLUELITE-TUBE**	100 m	14	X	
BLUELITE-RING	10 pcs. á Ø 50 cm	4	X	
BLUELITE-NET SYSTEM: LITE-NET Standard Roll PP + BLUELITE-TUBE				
BLUELITE-NET SYSTEM**	55 m ²	25		X
BLUELITE-NET SYSTEM**	85 m ²	38		X
BLUELITE-NET SYSTEM**	1200 m ²			X

** Drip irrigation tube:

A. Rivulis D5000

B. Rainbird XFD

C. Rainbird XFS

* Specifications are maximum sizes. Recommendation: For optimal results and easier installation, reduce the laying width e.g., instead of 5.2 m only 4 - 4.5 m (area reduction approx. 10 - 15%).

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Status July 2026, other sizes and materials on request





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Tender texts for permanent green roofs by means of near-root water storage made of nonwovens (LITE-STRIPS / LITE-NET), as well as underground irrigation (BLUE-LITENET):

1. **LITE-NET** Standard, rolls: Water storage and distribution net
2. **LITE-STRIPS**: Water storage and aeration close to the roots in strip form
3. **BLUELITE-NET**: Water-saving underground irrigation

1. LITE-NET rolls:

Für die unterirdische Luft- und Wasserversorgung in je 3 Größen und 2 Dicken, aus dauerhaftem Wasserspeichervlies geschnitten.
Verlegung in Wurzeltiefe.



PP

Designation declaration, e.g. for PP 520 C20/6:

- PP:** There are basically 3 material variants: Bio1, Bio5 or durable PP (polypropylene)
520: Bei einer auseinandergezogenen Breite von 520 cm ergibt sich die größtmögliche Fläche
C20: Durch die Schnittlänge von 20 cm ist der Maschenweite Ø ca. 13 cm, Netzfläche ca. 85 m², (bei C14 ist die Schnittlänge 14 cm, die Maschenweite Ø ca. 9 cm, die Netzfläche ca. 75 m²)
C20 ist Standard, C14 ist für oberflächige Böschungsbegrünung.
/6: Dicke ca. 6 mm. Bei C20 gibt es 6 oder 8 mm Varianten.

1.1 LITE-NET Standard roll PP C20/5:

Net-shaped water storage nonwovens as a **permanent** vegetation aid, installed underground for conducting, distributing and temporarily storing water and air at the root level, cut from PP - needle nonwoven (approx. 600 g/m², UV stabilized, thickness approx. 5 mm, pore content/water

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storage $\geq 85\%$, pore opening width $< 80 \mu\text{m}$ (EN ISO 12956), maximum tensile force $\geq 40 \text{ kN/m}$ (EN ISO 10319)). Rootable drainage net with **mesh size $\varnothing$ approx. 13 cm**, can be pulled apart to at least 5 times the width.

Delivery form:

- a. PP 175 C20/5: **Net area max. 28 m^2** (or **3 pcs. á 28 m^2**) with appr. $1,75 \times 16,3 \text{ m}$. roll with width appr. $0,4 \text{ m}$, length appr. 20 m , $\varnothing$ ca. $0,35 \text{ m}$, weight appr. $4,8 \text{ kg}$.
- b. PP 350 C20/5: **Net area max. 57 m^2** with appr. $3,5 \times 16,3 \text{ m}$. roll with width appr. $0,8 \text{ m}$, length appr. 20 m , $\varnothing$ ca. $0,35 \text{ m}$, weight appr. $9,6 \text{ kg}$.
- c. PP 520 C20/5: **Net area max. 85 m^2** with appr. $5,2 \times 16,3 \text{ m}$. roll with width appr. $1,2 \text{ m}$, length appr. 20 m , $\varnothing$ ca. $0,35 \text{ m}$, weight appr. $14,4 \text{ kg}$.
- d. PP 520 X20/5 XL: **Net area max. 275 m^2** , appr. $5,2 \times 52,9 \text{ m}$. Roll with a width of appr. $1,2 \text{ m}$, length appr. 65 m , diameter appr. $0,35 \text{ m}$, weight appr. $14,4 \text{ kg}$.

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2. LITE-STRIPS PP:

As substrate improvement and water storage close to the roots for lawns, made of durable PP nonwoven/felt (polypropylene):



PP



Water storage nonwoven in strip form (approx. 70/12/5 mm) for mixing into the soil as irrigation close to the roots and vegetation aid as well as for improving substrate permeability and against compaction, cut from **durable** PP needle-punched nonwoven (approx. 600 g/m², UV stabilized, thickness approx. 5 mm, pore content/water storage $\geq$ 85%, water storage capacity up to approx. 10 l/kg, pore opening width $<$ 80 μ m (EN ISO 12956), maximum tensile strength $\geq$ 40 kN/m (EN ISO 10319)).

Mixing ratio, for lawns approx. 0.5 to 1.0 l per m², for green roofs approx. 1.0 - 2.0 l/m², for raised planting beds 5-10 l per m², approx. 10-20 l per tree pit, approx. 3 % vol. for large volumes, 5 - 10 % of vol. for smaller plant pots.

Delivery form: 1 m³ (ca. 50 kg), 5 x 50l, 250l or 60l.

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3. BLUELITE-NET:

For **water-saving underground** irrigation of lawns, athletic fields, golf courses, green roofs, slopes, etc.

(system consisting of 2 components, a distribution net and a nonwoven-covered drip tube laid on top of it):



3.1 LITE-NET Standard roll PP (component 1):

C20/5 (1.1)

+

3.2 BLUELITE-TUBE (component 2):

Geotextile-wrapped drip irrigation pipe comprising:

a. Rivulis D5000 PCAS hose, 16 mm (13.8 mm inner Ø, 15.83 mm outer Ø), operating pressure 0.5–3.5 bar, wall thickness 40 mil (1.02 mm), emitter spacing 30 cm, flow rate 1.5 l/h, required filtration: 120 mesh, maximum lateral length 163 m at 3.5 bar.

b. Rain Bird XFD hose, 16 mm (13.6 mm inner Ø, 16.1 mm outer Ø), wall thickness 1.2 mm (49 mil), operating pressure 1.38–4.14 bar, flow rate 1.6 l/h, required filtration: 120 mesh, water temperature up to 37.8 °C, ambient temperature up to 51.7 °C, maximum lateral length 175 m at 4.14 bar (max. 32 m at 1.4 bar, max. 112 m at 2.1 bar).

c. Rain Bird XFS hose, 16 mm (13.6 mm inner Ø, 16.1 mm outer Ø), wall thickness 1.2 mm (49 mil), operating pressure 1.38–4.14 bar, flow rate 1.6 l/h, required filtration: 120 mesh, water temperature up to 37.8 °C, ambient temperature up to 51.7 °C, maximum lateral length 175 m at 4.14 bar (max. 32 m at 1.4 bar, max. 112 m at 2.1 bar).

Protective sleeve with water distribution function made of durable PP needle-punched nonwoven fabric (approx. 360 g/m², UV-stabilized, thickness approx. 3.3 mm, pore opening size < 90 µm (EN ISO 12956)), tensile strength ≥ 25 kN/m (EN ISO 10319), width approx. 5 cm, for installation on LITE-NET drainage geotextile mesh at a spacing of approx. 50–60 cm (fastening with ground staples if required).

Roll length: approx. 100 m.

Supply format: 55, 85 or 1200 m².

or

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3.3 BLUELITE-COVER (component 2, without drip irrigation tube):

Protective and distribution nonwoven cover for drip irrigation pipes, made of durable PP needle nonwoven (approx. 360 g/m², UV stabilized, thickness approx. 3.3 mm, pore opening width < 90 µm (EN ISO 12956)), maximum tensile force ≥ 25 kN/m (EN ISO 10319), width approx. 5 cm, for insertion of own or individual irrigation tubes for laying on LITE-NET drainage nonwoven net with spacing approx. 50 -60 cm (if required, fastening by means of plug-in bracket).

Roll length appr. 25 m.

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