Lite-Net

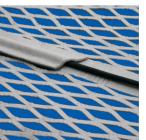
Lite-Nets offer a very high water and air discharge capacity and are used for the **aeration and irrigation** of plant roots. The nets can be easily covered with soil and also connected up to the surface. Exposed to the elements, the Lite-Net can absorb air and water which will be discharged and distributed down at the **root** level.

In the case of **slope greening**, the net is applied directly at surface slope to offer high water storage capacity. The extremely flexible net adapts perfectly to all terrains, thereby **improving erosion control**.

Lite-Net Plus

Our Lite-Net Plus irrigation system has been developed for the underground irrigation of athletic fields, green roofs and lawns to safe both water (up to 70%) and money. Lite-Net Plus consists of an irrigation pipe which feeds the water into a nonwoven distribution net which spreads water extensively and consistently at the root level. The nonwoven Lite-Net Plus can be placed in soil at any depth to best meet plant needs. This includes placing Lite-Net Plus in many formations or layers. The result: a wide variety of plants are provided with the air and moisture they need to grow and thrive.





Lite-Net

Lite-Net Plus

"Let's create a greener world!"



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Lite-Drain Aeration and Irrigation Systems

The latest innovation for sustainable plant growth



Lite-Drain

When integrated into the soil, the tree-dimensional **Lite-Drain** improves the distribution of air and water in the soil, thereby increasing **stable and consistant growth**.

Lite-Drains are strips cut from thick nonwoven geotextiles (Lite-Strip) and nets (Lite-Net). The water storage nonwovens consist of fine fibres, offering an extremely high voids content of up to 90%, and are made from environmentally friendly, high strength and rot resistant polypropylene. Other biologically degradable materials are also available.

Lite-Strip

Lite-Strips mainly act as a **water storage** medium. In this case, the thick nonwoven strips are mixed into the soil. Up to 90% of the nonwoven volume can be filled with water, thereby helping the plants to survive long periods of drought.

In **roof gardening** applications, the high water storage capacity of the light nonwoven strips results in **low weight** compared to conventional materials, such as expanded clay beads.

In the **aerification of athletic fields** and other lawns, the strips are inserted vertically into the ground. Water and air from the surface is discharged at a lower level. This new form of aerification reduces "felting" of the roots which can in turn grow deeper.



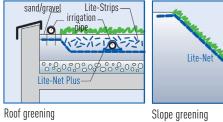
Lite-Strip

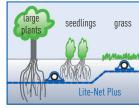
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Key Advantages

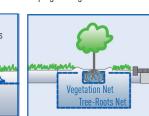
- + large water storage / drainage capacity
- + optimal soil aeration
- + simple installation
- + three-dimensional installation possible
- + improved vegetation growth
- + cost-effective
- 🕂 light weight
- 🕂 erosion control
- particularly suitable for challenging conditions, such as erosion, drought, deserts, silting and slopes

Potential Applications





Plant roots may easily grow through the Lite-Net!



Aeration and irrigation of trees in cities / moving large trees



Aeration and irrigation of trees in cities / moving large trees



Slope greening



Roof greening



Irrigation of athletic fields and other lawns



Aeration of golf courses



Air and water storage in raised planting beds

Investigation of the Vienna University of Natural Resources and Life Sciences

In order to investigate the irrigation efficiency of Lite-Drains, the University of Natural Resources and Life Sciences, Vienna carried out a series of laboratory and field tests.



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After 24 hours the nonwoven net stores 6 times more water than coir mats

The growth factor of nonwoven nets is 50% higher than that of coir mats

Nonwoven strips mixed with soil stores 8 times more water than expanded clay beads (LECA)



Test slope at the Vienna University



Vegetation of coir mat (left) and Lite-Net (right) after 3 months of extreme drought

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