Pico Lab

Weed Control Fabric

01 / Product Definition

Core Structure & Weed Suppression

Constructed from high-strength woven polypropylene (PP) or nonwoven geotextiles, this fabric acts as a physical barrier to block sunlight, inhibiting weed germination and growth at the source. Its robust structure resists UV degradation and mechanical wear, ensuring long-term performance in outdoor environments.

Permeable & Eco-Friendly Solution

It maintains optimal soil permeability, allowing water, air, and nutrients to penetrate freely and nourish plant roots. As a chemical-free alternative, it reduces maintenance costs for landscaping, agriculture, and civil engineering, promoting a sustainable and low-carbon ecological environment.

Durable & Tear-Resistant
High tensile strength for extended service life under heavy use.

Chemical-Free Weeding
Safe for crops, soil health, and the surrounding ecosystem.

Water & Air Permeable
Preserves soil moisture balance and microbial activity.

(2) How It Works

1. **Fabric Installation**
   Precision-cut landscape fabric is laid over prepared soil beds, ensuring full coverage and secure anchoring with landscape staples to prevent shifting during installation and seasonal weather fluctuations.
2. **Light Blocking & Weed Suppression**
   Woven polypropylene creates a light-tight barrier, halting photosynthesis for germinating weed seeds and blocking existing root growth, drastically cutting invasive plant competition for nutrients and space.
3. **Water & Air Exchange**
   Micro-porous construction allows critical water infiltration and oxygen flow to plant roots, sustaining soil moisture levels and beneficial microbial life without causing waterlogging or root rot.
4. **Long-Term Ground Protection**
   Shields soil from erosion, compaction, and extreme temperature swings, preserving its fertility, structure, and drainage capacity to support vigorous plant growth for years with minimal degradation.

(3) Key Benefits

Effective Weed Control
Stops 90%+ of weed growth naturally, eliminating tedious hand-weeding and harmful chemical herbicides for a low-effort garden.

Permeable Surface
Retains soil's ability to absorb water and air, fostering strong root development and preventing standing water or runoff.

Soil Stabilization
Reinforces soil on hillsides and walkways, preventing erosion and maintaining the landscape's structural stability over time.

Reduced Maintenance
Cuts down on ongoing upkeep costs and time spent on garden care, freeing resources for other landscaping priorities.

Durable Performance
UV-protected fabric resists sun damage, rot, and tear, delivering reliable performance for 5 to 10 years in outdoor settings.

Easy Installation
Lightweight and flexible material can be quickly cut to size, rolled out, and secured with staples for hassle-free setup.

Sustainable Solution
Supports organic gardening practices, reduces plastic waste, and promotes a healthier, more eco-friendly outdoor ecosystem.

Applications and Technical Specifications

04 Applications

Landscape & Garden Areas
Elevates visual appeal while controlling erosion in residential and public green spaces, fostering a stable foundation for vibrant plant growth.

Agriculture & Horticulture
Preserves soil moisture, suppresses weed growth, and protects root systems in crop fields, nurseries, and greenhouse environments.

Gravel & Aggregate Surfaces
Stabilizes loose stone paths, driveways, and parking areas, preventing rutting and material displacement under regular use.

Commercial & Urban Landscaping
Durable solution for high-traffic corporate campuses, urban plazas, and parks, engineered to withstand environmental stressors.

05 Technical Specifications

Model	Width (m)	Material	g/m²	Packaging	Key Feature
WF100-05	0.5	PP Woven	100	50m Roll	UV Treated
WF100-10	1.0	PP Woven	100	50m Roll	UV Treated
WF100-15	1.5	PP Woven	100	50m Roll	UV Treated
WF100-20	2.0	PP Woven	100	50m Roll	UV Treated

Note: Specifications are nominal and subject to manufacturing tolerances. All products meet ISO 9001 standards and feature enhanced UV inhibitors for extended outdoor durability against weathering.