SERGEO Nonwoven 160-300 GSM®

Needle-Punched Polypropylene Nonwoven Geotextile | 160, 200 and 300 GSM

TECHNICAL DATA SHEET (TDS)

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Product Description

SERGEO Nonwoven® is a range of needle-punched polypropylene nonwoven geotextiles in three weights: 160, 200 and 300 g/m². Each is made from 100% new raw material. They serve filtration, separation, drainage, protection and reinforcement in civil engineering and infrastructure projects. The fabric is corrosion-resistant and environmentally friendly.

Typical Applications

- Municipal roads
- Urban construction
- River slope protection
- Landscape greening
- Artificial lakes
- Subgrade reinforcement
- Anti-seepage protection layers

Features & Benefits

- High filtration accuracy that retains soil particles and allows water to pass without clogging
- Stable vertical permeability for drainage and filtration
- Acid and alkali resistant
- Corrosion-resistant
- Anti-oxidation and anti-aging
- Strength retention of at least 80% after long-term burial
- Tough and suited to complex geological environments
- Made from 100% new raw material

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Product Information

Item	160	200	300
Product Name	SERGEO Nonwoven 160	SERGEO Nonwoven 200	SERGEO Nonwoven 300
Product Code	SVX-SGN160-300M2	SVX-SGN200-300M2	SVX-SGN300-300M2
Product Type	Needle-punched nonwoven geotextile		
Material	Polypropylene		
Colour	White		
Nominal Mass per Unit Area	160 g/m²	200 g/m²	300 g/m²
Roll Width	3.0 m	3.0 m	3.0 m
Roll Length	100 m	100 m	100 m
Coverage	300 m²	300 m²	300 m²
Approximate Net Roll Weight (fabric only)	48 kg	60 kg	90 kg
Packing Colour	Black	Green	White

Technical Properties

Property	Unit	160	200	300
Mass per unit area	g/m²	160	200	300
Thickness	mm	1.6-1.9	2.0-2.4	2.8-3.2
Tensile strength	kN/m	≥4.9	≥6.5	≥9.5
Elongation at break	%	30-80	30-80	30-80
CBR puncture strength	kN	≥1.20	≥1.40	≥1.80
Tear strength	kN	≥0.15	≥0.18	≥0.25
Apparent pore size (O90)	mm	0.07-0.20	0.07-0.20	0.07-0.20
Vertical permeability coefficient	cm/s	K×(10^{-1} to 10^{-3}), K = 1 to 9.9		
Strength retention after long-term burial	%	≥80	≥80	≥80

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Technical Note

The values presented in this Technical Data Sheet represent the declared product specifications. Actual production batch test results are documented separately in the test report for the corresponding batch and may vary within applicable manufacturing tolerances while remaining compliant with the declared specification.

Installation Guidelines

1. Prepare a firm, clean, level surface free from sharp projections and loose debris.
2. Unroll the geotextile onto the prepared surface, free from wrinkles and folds.
3. Overlap adjacent rolls as the project specification requires.
4. Cover the geotextile with the specified material promptly after laying.
5. Protect the geotextile from damage during construction activities.
6. Repair any damaged areas before covering.
7. Carry out installation in accordance with good construction practice and project specifications.

Storage

Store in dry, covered conditions, raised off the ground and protected from prolonged direct sunlight and physical damage. Rolls should not be stacked more than three high. When stored correctly, the product has no fixed shelf life.

Standards & Compliance

Performance characteristics are determined in accordance with GB/T 17638-2017 for 160, 200 and 300 g/m². A certificate of conformity and a quality inspection report are available on request.

Packaging

The product is supplied in roll form. Each roll is packed in an outer waterproof woven bag. The packing colour is listed in Product Information.

Health & Safety

Use appropriate personal protective equipment (PPE) during handling and installation. Follow all applicable local health, safety and environmental regulations. Refer to the Safety Data Sheet (SDS), where available, before use.

Technical Support

SERVAX provides technical assistance for product selection, application recommendations and installation guidance. For project-specific advice, please contact our technical team at info@servaxsolutions.com or visit www.servaxsolutions.com.

Disclaimer

The information contained in this Technical Data Sheet is based on laboratory testing, manufacturer data and practical experience and is provided in good faith to assist users in selecting and applying the product. As site conditions, storage, handling and methods of application are beyond the control of SERVAX Solutions FZE, no warranty is implied other than the quality of the product supplied. Users are responsible for verifying the suitability of the product for their intended application and for complying with project specifications and applicable standards.

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