

# OUR FILTER SHEATHS



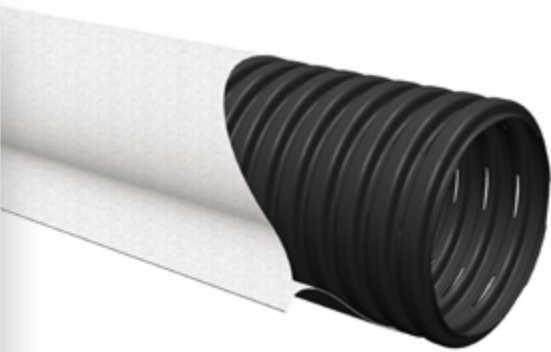
## CHOOSING THE RIGHT FILTER SHEATH

The filter sheath plays an important part in keeping fine particles from penetrating the interior of the perforated drainage pipe and causing drain obstructions. Soils, composed of different types of particles (silt, sand, clay or gravel), may have low permeability. The granulometric analysis, recommended by Soleno, determines the filtration openings required for the filter sheath to be used before undertaking a drainage project.

## ADVANTAGES AND BENEFITS OF A NON-WOVEN GEOTEXTILE

- Due to their three-dimensional construction and filtration openings, non-woven geotextiles are versatile and allow the filtration of different soil types, unlike a woven geotextile which is limited to a single soil type.
- The main functions of non-woven geotextiles in an agricultural drainage application are filtration and drainage.
- Non-woven geotextiles follow the movements of the drain while maintaining their physical, mechanical and hydraulic properties; unlike knitting, they do not stretch or deform.
- Nonwoven textiles provide excellent tearing resistance.
- Its smaller openings prevent infiltration by fine particles.
- Non-woven geotextiles resist UV rays.

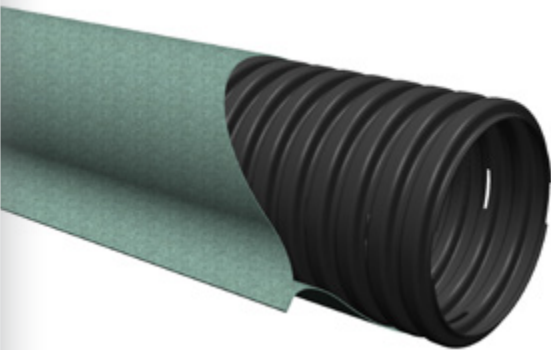




### NONWOVEN POLYESTER - 100 MICRONS

#### Filter sheath for perforated and filtered drain with 100-microns openings

The nonwoven filter sheath, with 100-microns openings, is recommended when the results of the granulometric analysis clearly indicate a **sandy or silty soil** or when a draining sand is used as backfill around the drain.



### NONWOVEN POLYPROPYLENE - 250 MICRONS

#### Filter sheath for perforated and filtered drain with 250-microns openings

The nonwoven filter sheath, with 250-microns openings, is recommended when the results of the granulometric analysis clearly indicate a **soil rich in fine and medium sand**.

#### More efficient for filtration and permittivity

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**Better water flow rate** than other products such as 100-microns filter sheath. The latter prevents silting in a **sandy or silty soil**.

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**Superior rupture resistance**, which reduces the risk of tearing and ensures that the product retains its properties.

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**Cleaning drains is much easier** than with a 450-microns polyester filter sheath which is often more difficult to clean due to silting.



### WOVEN POLYESTER - 450 MICRONS

#### Filter sheath for perforated and filtered drain with 450-microns openings

The woven filter sheath, with 450-microns openings, is recommended when the results of the granulometric analysis clearly indicate a **soil containing coarse sand to gravel**.



## CHOOSE THE BEST COMBINATION

The choice of the preferred combination (type of drain perforations and filter sheath filtration openings) will depend on the results of the **granulometric analysis**.

TYPES OF SOILS	LEVEL OF D85 (particles size)				PRESENCE OF IRON OCHRE*
	Less than 20	Between 21 and 120	Between 121 and 400	More than 400	
Clay soil	(2) (2)				
Sandy or silty soil		(2)	(2)		(M3) (3)
Soil rich in fine and medium sand		(3) (M3)	(3) (M3) (3)		(M3) (3)
Soil containing coarse sand to gravel				(3) (M3)	(M3)

\* Soleno recommends colorimetry and pH tests to determine the degree of contamination due to iron ochre.

**SEVERAL FACTORS INFLUENCE THE CHOICE OF PRODUCT TO USE. TO SELECT THE RIGHT DRAINAGE PRODUCT, CONSULT OUR ONLINE TOOL [THEPERFECTDRAIN.COM](http://THEPERFECTDRAIN.COM)**



# COMPLETE RANGE OF PERFORATED OR NON-PERFORATED DRAINS

Our drains are available in the following **standard diameters** and **lengths**:

LENGTHS	DIAMETERS			
	100 mm (4 in)	150 mm (6 in)	200 mm (8 in)	250 mm (10 in)
30 m (98.4 ft)			① ② ② ② ②	
75 m (246.0 ft)	① ② M3 M3 M3 M3			
120 m (393.7 ft)			① ② ② ② ② ① ② ② ②	
300 m (984.3 ft)		① ② ② M3 M3		
600 m (1968.5 ft)	① ② ③ M3 M3 M3			
1200 m (3937.0 ft)	① ② ③ ③ M3 M3 ③ ③ M3 M3 ③			

\* 300 mm (12 in) diameter available on request. \*\* Available in 30 and 45 m lengths, for 100 mm (4 in) and 150 mm (6 in) diameters, consult price list available at [soleno.com/en/resource-center](http://soleno.com/en/resource-center)

## LEGEND

- ① Non-filtered drain
- 100-microns
- 250-microns
- 450-microns
- SoliFlex
- 1 : Type 1 drain
- 2 : Type 2 drain
- 3 : Type 3 drain
- M3 : Mega 3 drain
- SoliFlex 250-microns

