



# Flexible drainage pipes

PRODUCTS



Voluminous pre-wrapped drainage fiber filters have been developed in the 1960s in Northern Germany and their application is well researched, proven and tested.

Produced from a mixture of different fibers. The voluminous PP filter can be adapted to the soil structure by selecting the appropriate filter thickness and the filter pore size. The PP filter meets the Dutch KOMO standard (our certificate no.: K42287/05) with different pore sizes (from 450-700  $\mu\text{m}$ ) as well as other international standards.

Advantages of the PP filter:

Wrapped voluminous fiber filter envelopes are the most efficient filters in subsurface drainage systems

- The filter can be produced according to a required specification. The permeability of the filter can be precisely defined by blending different fibers

- The filter offers a higher efficiency against silting up as the correct filter can be used for different types of soil
- Higher infiltration rate of ground water into the pipe compared with a non-wrapped pipe or a pipe wrapped with a "thin" filter as the penetration resistance is reduced along the pipe resulting in faster soil drainage
- Uniform filter along the whole pipe
- Filters are easy and cost effective to produce
- Easy cost efficient and trouble free transportation and installation of the wrapped drainage pipes

Areas of application:

- Agricultural drainage
- Drainage in road construction, airports, sports grounds
- Drainage in Civil Engineering
- Drainage in pipeline construction



**PP 450 filter** | The O90 Test value of this filter is 450  $\mu\text{m}$  and holds back 90% of all soil particles bigger than 450  $\mu\text{m}$ . It consists of a blend of synthetic fibers and can be used for several soil types and circumstances and is manufactured according to the KOMO Standard.



**PP 700 filter** | The O90 Test value of this filter is 700  $\mu\text{m}$  and holds back 90% of all soil particles bigger than 700  $\mu\text{m}$ . The PP 700 filter consists of a different blend of synthetic fibers than the PP 450 filter and is mainly used for loamy sands, sandy soils and peaty soils. It is manufactured according to the KOMO standard.



**PP 1000 filter** | The O90 Test value of this filter is 1000  $\mu\text{m}$  and holds back 90% of all soil particles bigger than 1000  $\mu\text{m}$ . The PP 1000 filter consists of coarse high class synthetic fibers and is a non degradable filter that is mainly used in soils with an high iron ochre content.



**Coir fiber 700 filter** | The O90 Test value of this filter is 700  $\mu\text{m}$  and holds back 90% of all soil particles bigger than 700  $\mu\text{m}$ . Coir fiber filters are degradable after a long time and have been successfully used in areas where a high quantity of iron ochre is in the ground.



**Straw filter** | Made from straw, the filter is degradable so that the soil creates its own „natural“ filter. This filter is mainly used in soils which have a tendency for primary siltation after the installation of the drainage pipe.



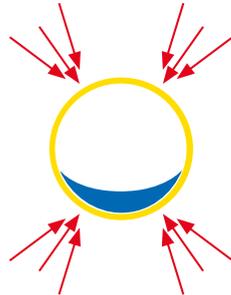
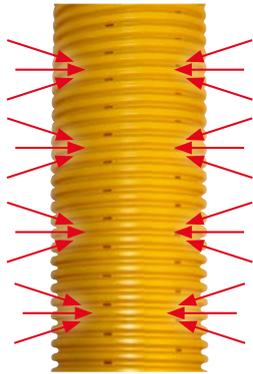
**Thin Geotextiles filters** | Thin Geotextiles filters used as drainage filters are manufactured by a variety of manufacturers in many versions (Cerex, Typar, knitted sock envelope).

On request of the customer RBM Drain Filter will wrap pipes with these filters. Most thin filters have a O90 test value of less than 300  $\mu\text{m}$  and are mostly used for temporally applications in the drainage field but they should not at all be used in soil containing iron ochre.

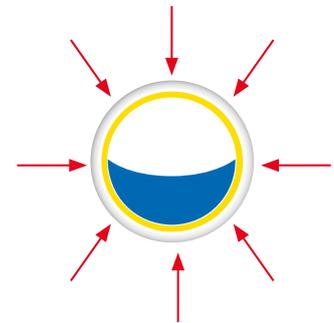
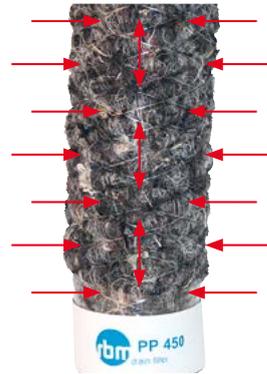


Voluminous specified filter blankets of PP 450, PP 700, PP 1000 and Coir fiber for all diameter of drainage pipes produced according to the KOMO Standard.

Higher infiltration rate of ground water into the pipe compared with a non-wrapped pipe or a pipe wrapped with a „thin“ filter as the penetration resistance is reduced along the pipe by using a voluminous fiber filter



On a naked drainage pipe the water has to travel through the compacted soil into the individual holes to enter the pipe.



On a wrapped drainage filter pipe the water will travel easily into all pores of the filter and from there into the holes of the pipe.  
The drain water discharge into the ditch or collector is up to 4 times higher!



**RBM Drain Filter GmbH**  
Member of Roess Nature Group  
Am Bahnhof 54  
27239 Twistringen · Germany  
Tel. +49 (0) 4243 9288-80  
Fax +49 (0) 4243 9288-79  
info@ahmeyer.com