

ATTENTION!
**THE MEMBRANE SPILLTEX® MUST BE SOAKED IN A
CONTAINER WITH PURE WATER FOR 5-7 MINUTES
BEFORE USE.**

MANUAL

on the use of filter barrier cloth for shallow rivers
Spilltex® – 2/15



Yekaterinburg, 2021

1. Description

The Spilltex® filter barrier cloth – 2/15 for shallow rivers (hereinafter – Spilltex® cloth) is a fabricated rectangular cloth made of natural cotton fabric modified with a microgel solution based on natural polysaccharides Biomicrogel® with a different number of layers in height. This cloth is reinforced with slings and equipped with eyelets (D=18 mm) and special pockets for weights. It is used to capture and collect any types of petroleum products (diesel fuel, gasoline, grease, oils) within a sump.

Operating principle:

1. Spilltex® cloth is laid in the way of the water contaminated with petroleum products. It blocks the flow.
2. Spilltex® cloth allows water to pass through and holds oil products that the Spilltex® cloth collects on its surface.
3. The collected oil products are removed by any available methods (with nets, skimmers, and etc.).

Component parts:

1. Spilltex® filter cloth for shallow rivers – 1 pc.
2. Pegs 200 mm – 1 set.
3. Pegs 400 mm – 1 set.
4. Weights (900mm) – 1 set.
5. Racks (1500 mm) – 1 set.

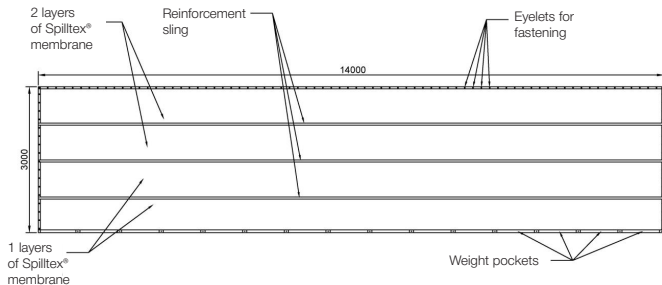


Figure 1. The Spilltex® filter cloth – 2/15 for shallow rivers.

2. Preliminary procedures and installation

2.1 Place selection and organization of the sump

To organize a sump on a river, a place with the most solid ground along the banks is selected. The banks should be at least 0.7 m in height. An excavator expands the flowing part of the river by 0.5-1 m in each direction and bury it by 0.3-0.7 m (Figures 2 and 3).

After the earthworks are complete before the installation of Spilltex® cloth, the sump is getting settled until the water flow is stabilized: the absence/minimization of suspended particles in the water volume, in order to prevent premature clogging of the filter surface of Spilltex® cloth.

2.2 Spilltex® cloth activation

The Spilltex® membrane is used only in wet form!

The cloth is soaked in a container with pure water (free from diesel fuel, grease, oils, and other oil products) for 5-7 minutes. Spilltex® cloth is completely submerged in the water. If it's impossible to do, the cloth is soaked in parts. The uniformity of wetting the surface of Spilltex® cloth is controlled by visual inspection. The dry surface of the Spilltex® membrane exposed to petroleum products reduces the efficiency of Spilltex® cloth.

Do not wring out Spilltex® cloth after the soaking procedure!

2.3 Spilltex® cloth installation

At least three men are required to install Spilltex® cloth. Two men stretch Spilltex® cloth from the opposite river banks. The third man fixes Spilltex® cloth in the working position:

1. Spilltex® cloth is attached to the river banks with pegs (200 mm/ 400 mm) through eyelets in upper and side positions;
2. Weights (900 mm) are placed into the pockets that are in the lower Spilltex® cloth position. Then they are evenly distributed on the bottom of the sump, so that the lower (single-layered) part of Spilltex® cloth is completely on the bottom;
3. Racks (1500 mm) are installed vertically behind Spilltex® cloth at a distance of 0.4 – 0.7 m from each other. They are attached to the bottom of the sump at a depth of at least 10 cm. The racks are installed at the boundary of the sump depth, so that the ground layer formed at the burial depth serves as a support to provide better resistance of Spilltex® cloth to the river flow (Figures 2 and 3).

In order to avoid high resistance and/or damage of the cloth in rivers with fast flow, drainage holes are made under the Spilltex® cloth. The number and size of drainage holes are determined on-site experimentally.

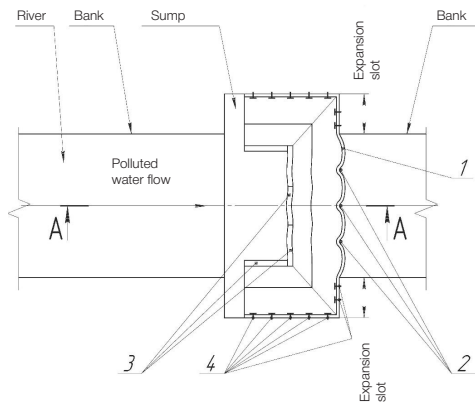
3. Disposal

Dispose the used Spilltex® filter barrier cloth – 2/15 in accordance with existing legislation

Depending on the contamination degree of the Spilltex® cloth with petroleum products and in accordance with the legislation of the Russian Federation, the following FCCW codes are applied:

- 4 43 212 56 61 4 filter cloth made of natural fibers contaminated with petroleum products in an amount of less than 15%.
- 4 43 212 51 61 3 cotton filter cloth contaminated with petroleum products in an amount of 15% or more.





A-A(1:20)

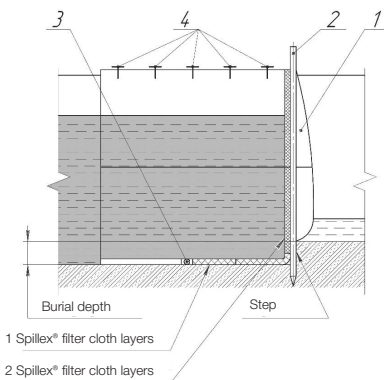


Figure 2. Installation scheme of Spilltex® filter cloth – 2/15 for shallow rivers at the outlet of the sump.
 1-filter barrier cloth; 2-racks (1500 mm);
 3-pockets with weights (900 mm); 4-pegs (200/400 mm).

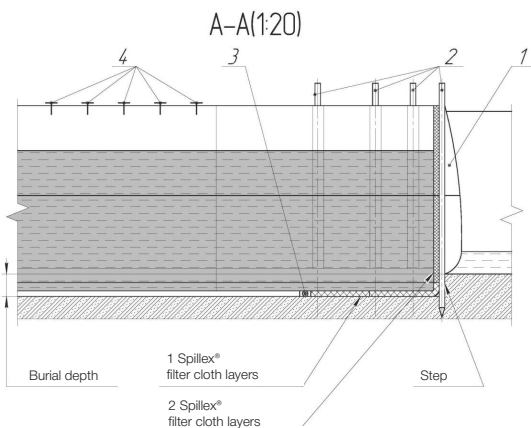
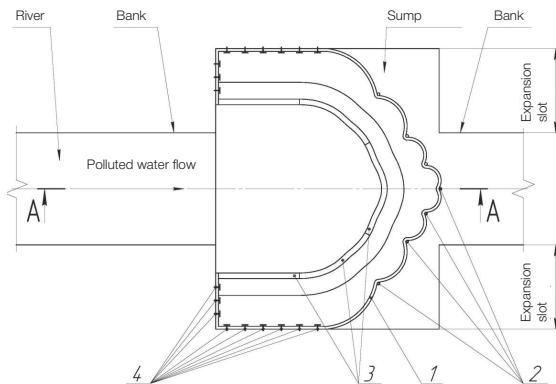


Figure 3. Installation scheme of the Spilltex® filter barrier cloth – 2/15 for shallow rivers at the outlet of the sump.
 1-filter barrier cloth; 2-racks (1500 mm);
 3-pockets with weights (900 mm); 4-pegs (200/400 mm).