

What are filter fences and how do they work?

Filter fences are semi-permeable structures used to hold back, slow and filter run-off. They can be sited within, or at edges of fields, and can be used for high erosion risk crops or on bare soils over winter. They are especially useful in sloping fields where runoff is a recurring issue.

Benefits:

- Slow the flow of run-off
- Reducing sediment loss from fields

Trapped soil, which is likely to be nutrient-rich, can be dug out and put back on the field

Please note: filter fences do not stop the generation of run-off and occurrence of soil erosion within the field. Good soil management is required to avoid erosion and runoff. Speak to a FWAG SW Adviser for soil husbandry advice.

Types of Filter Fencing



Coir Rolls are made from the waste coconut husks. They are relatively easily to move and install.



Filter Fence geotextile can be attached to fence posts

Ideas for the use of other materials that could also be effective in slowing and filtering surface run-off are welcome: please discuss with a FWAG SW Adviser.

Site Selection

The best sites for filter barriers are:

- Across run-off pathways
- Uphill of roads, culverts or other infrastructure vulnerable to deposition of mud
- Areas with light soils, susceptible to erosion or areas with heavy soils, susceptible to run-off
- In gateways during harvest if farm operations create temporary risk of run-off and erosion
- Along field margins to divert or disperse flow pathways
- At sites known to cause seasonal issues such as tracks, gateways and field corners

Management requirements

- Check the amount of accumulated silt regularly and remove when it reaches a level that would compromise the functioning or stability of the structure.
- Silt can be spread back onto the field and is likely to contain nutrients and organic matter, beneficial to your farm business.
- As vegetation establishes around filter barriers they can become more stable. However the fabric of the barriers is inherently biodegradable and will need replacing. This is likely to be after a number of years, for example, manufacturers of coir rolls state that they should last up to 5 years.

Filter fences and your farm business

Installing filter barriers in suitable locations can limit mud reaching roads and watercourses and therefore reduce the threat of pollution incidents. Filter fences should only hold water temporarily, after heavy rainfall, and can be sited in locations where they have minimal impact on your farming practices.

Consents and Licences

It is unlikely that consent is required for filter fences, however your FWAG SW adviser can give site specific advice on this. You may need consent from Natural England if the land is designated as a SSSI or in an agri-environment agreement.

