

Case Study

application
location
product

Landscape Separator
Grand Rapids, MI
Mirafi® 140NL

job owner
date of installation

Homeowner
Summer 2018

TenCate develops and produces materials that function to increase performance, reduce costs and deliver measurable results by working with our customers to provide advanced solutions.

THE CHALLENGE

A homeowner in Grand Rapids, MI wanted to install a landscape separator in their backyard. Separation of landscape cover and underlying soils is an age-old problem. Whether you are using wood mulch, stones, or processed rubber on a playground, the underlying soils will percolate up into the landscape cover over time. The presence of soil provides a growth media for unwanted weeds and, if left unchecked, the soils will eventually overwhelm the landscape cover the homeowner wants to see.

THE DESIGN

Many geotextiles will work in this application. Depending on expected loading and the underlying soil, the appropriate geotextile may be chosen relatively easily. In this case, light foot traffic was the design load, the base was sand, and the installation did not require the use of machinery. Due to these factors, a very lightweight nonwoven geotextile fabric was needed. TenCate Mirafi® 140NL geotextile was chosen. In cases where fine soils are encountered, a monofilament such as Mirafi® FW woven geotextiles would be required. In cases of heavy traffic or where heavier equipment will be used for installation, a Mirafi® HP geotextile may be a better choice.



View of the area to be treated, prior to weed killer application.



Geotextile in place. Bags of mulch were used to hold the textile in place prior to mulch placement.

THE CONSTRUCTION

The area was prepared by leveling and removing weeds and unwanted brush. A weed killer was used to reduce the potential for weeds to come up from below the geotextile. It is important to note that while a geotextile will greatly reduce the growth of weeds from below, these weeds will not be completely eliminated. The geotextile was simply laid flat over the entire area and wood mulch was applied at an adequate depth.

THE PERFORMANCE

The Mirafi® 140NL provided the separation desired and actually reduced the thickness of mulch that was required. Fortunately, this reduced project costs to the homeowner. The desired aesthetic will remain much longer through the use of a geotextile. Further, the area has remained level over the course of the summer while withstanding a high amount of foot traffic.



The geotextile was cut out around a tree that was in the area.



The mulch placed on the geotextile.

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