

# Case Study

## Protection against continuous soil erosion

Client: Historic Scotland  
Location: Skara Brae, Mainland Orkney, Scotland  
Product: TURFCARPET™  
Application: Erosion Control

### ISSUE

The UNESCO World Heritage site of Skara Brae is Europe's most complete and best preserved Neolithic village. Inhabited more than 5000 years ago, the 10 dwelling, stone and earth built settlement pre-dates Stonehenge and the Great Pyramids and is of profound archeological importance. Skara Brae is one of Orkneys most visited ancient monuments, but its vegetated embankments are subject to continuous soil erosion by annually increasing visitor numbers and the scouring salt-laden winds of this spectacular but exposed Atlantic Coast location. Historic Scotland, the Custodians, needed to protect the site from the harsh environmental conditions and relentless foot traffic using a natural, hard-wearing solution, whilst avoiding invasive excavations and heavy machinery on site.

### SOLUTION

After consultation with experienced technicians, TURFCARPET was proposed as being the most appropriate product to providing a durable, tolerant and environmentally sympathetic solution for naturalisation within the historic environment. An RTF (Rhizomatous Tall Fescue) turfgrass blend was identified as being perfect for the application due to its deep-rooting characteristics, drought and salt tolerance, low maintenance and ability to maintain good winter colour. The RTF grass seed blend was pre-grown to a mature state on the special soilless and extremely

strong biodegradable felt before being delivered to site. The TURFCARPET was pinned in place on the prepared areas to ensure that it moulded and bonded firmly to the contours of Skara Brae to encourage healthy root growth through the backing felt and into the site soils to provide a hardy, strong and resilient natural grassed finish.



Prior to installation



Ground preparation prior to installation

# Case Study

Protection against  
continous soil erosion

Client: Historic Scotland  
Location: Skara Brae, Mainland Orkney, Scotland  
Product: TURFCARPET™  
Application: Erosion Control

## BENEFITS

After a period of routine maintenance and irrigation, the grass roots quickly established through the backing felt and into the soil substrate, providing vastly improved erosion control, resistance to wear

lateral growth characteristics of the RTF provide inherent rapid recovery from abrasion of the grass by pedestrians and help to sustain and protect the integrity of the historic structure.



 **TERRAM**  
Geosynthetics you can trust

™ indicates a trade mark of Fiberweb plc or a Fiberweb Group company, many of which are registered in a number of countries around the world

Fiberweb Maldon, Fiberweb Geosynthetics Ltd.  
Blackwater Trading Estate • The Causeway  
Maldon • CM9 4GG • United Kingdom  
Tel: +44 (0) 1621 874200 Fax: +44 (0) 1621 874299  
e.mail: [info@terram.com](mailto:info@terram.com) • [www.terram.com](http://www.terram.com)

A **fiberweb** BUSINESS