

CASE STUDY



Client:

Historic Scotland

Location:

Skara Brae, Mainland Orkney, Scotland

Product:

TurfCarpet™

Application:

Erosion Control



THE BRIEF:

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.



CASE STUDY



THE SOLUTION:

After consultation with our 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



TurfCarpet™ installed

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CONCLUSION:

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 and visual appearance. The vigorous rhizomatous 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.



TURFCARPET™ PRODUCT SPECIFICATIONS

TURFCARPET™	
Applications	Landscape architecture Grass sculptures Erosion control Green roofs Temporary flooring
Felt Specification	700g per m ² with or without internal polypropylene scrim
Turf Specification	Hard wearing/fine lawn/drought tolerant Wildflower mixtures Low maintenance
Roll Width	1.2 metres, or wider for specific applications
Roll Length	Variable dependant on site measurement and handling ability
Final Thickness	Approx 20mm
Weight	Approximately 12 kg per m ² when lightly moist Approximately 22 kg per m ² when saturated