



Tensar's TensarTech GreenSlope system was used to build the 70° slope, maximising car parking space, with a natural, vegetated finish helping it to blend into the surrounding landscape.

What the doctor ordered

Tensar's TensarTech GreenSlope system allowed low quality site-won fill to be used in a reinforced soil slope to maximise car parking for a new Glasgow health centre.

CLIENT'S CHALLENGE

Morgan Sindall needed to build a 250m long, 3m high reinforced soil slope bounding the car park to Eastwood Health and Care Centre in Glasgow. Low quality cohesive fill, excavated from elsewhere on the site, was to be used to form the slope, which also had to have a natural, vegetated finish.

TENSAR SOLUTION

Tensar's TensarTech GreenSlope reinforced soil system enabled the 70° slope to be built over a very wet winter, which made handling the moisture-sensitive fill particularly challenging. A granular band behind the slope face provided temporary and permanent drainage, enabling all of the fill to be compacted to design requirements.

Eastwood Health and Care Centre

Reinforced soil slopes

📍 Glasgow, UK

BENEFITS

Enabling
the use of site-won fill in a reinforced soil slope

Allowing construction
during challenging winter weather

Maximising development space
with a soft-engineering finish



The TensarTech Greenslope system was hydroseeded to encourage wildflower and heathers to grow.

PROJECT BACKGROUND

Eastwood Health and Care Centre, in the Clarkston area of Glasgow, is home to five GP practices and provides a range of community services, including physiotherapy and speech therapy.

The three storey building is set in landscaped grounds and is arranged around two courtyards. Designed by Hoskins Architects, the use of natural daylight and ventilation contributed towards the building being awarded a BREEAM Excellent rating.

Tensar, working for design and build contractor Morgan Sindall, was brought in to design (and supply materials for) the 250m long, 3m high reinforced soil slope running along the edge of, and maximising the space for, the health centre car park.

A major challenge for Morgan Sindall and specialist installer Foster Contracting was the site-won fill selected to build the slope. This cohesive, moisture-sensitive clay had become saturated during extremely wet weather, which was set to continue during construction, making it difficult to handle and compact.

Tensar proposed its TensarTech GreenSlope reinforced soil system, which can form vegetated slopes up to 70°. The system incorporates uniaxial geogrid to reinforce fill behind the slope face. The grid is connected to durable steel mesh units, covered with an erosion protection layer that, for this scheme, was hydroseeded to encourage wildflower and heathers to grow.

Additionally, Tensar's engineers included a granular layer to be installed between the slope face units and the fill. This not only assisted with temporary and permanent drainage but also enabled saturated fill behind to be compacted to design requirements, without fear of damaging the slope face.

Developer:

hub West Scotland

Design and build contractor:

Morgan Sindall

Specialist installer:
Foster Contracting

Client:

**East Renfrewshire Council
and Greater Glasgow and
Clyde NHS**

“Incorporating a granular layer behind the face ensured the slope could be built more easily using the selected low quality fill in the extremely wet weather, saving time and money and providing a natural, vegetated finish.”

Craig Roberts

Product & Technology Manager
Walls and Slopes

Tensar International Limited

Units 2-4 Cunningham Court Shadsworth Business Park
Blackburn. United Kingdom BB1 2QX

T. +44(0)1254 262431 | Visit: [tensarinternational.com](https://www.tensarinternational.com)

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