



Background

The project involved the construction of avalanche defences at Neskaupstaður, Iceland. These defences comprised a 14m high catching earth dam and 13 No. 10m high breaking earth mounds (splitters) in the run out zone of snow avalanches. The defences formed the first phase of avalanche protection works to the town of Neskaupstaður on the east coast of Iceland.

Challenge

Reinforced Earth Company (RECo) were initially contacted by the project consultant to assist in developing the design and specification. The project was tendered and subsequently awarded to Arnarfell ehf in 1999.

Solution

Both the catching earth dam and the splitters comprised a 76° steep face to the upstream side of the mounds. This steep face was formed using RECo's TerraTrel system, a galvanized steel mesh facing utilising galvanized steel high adherence reinforcing strips. Graded rock fill, obtained from blasting operations at the job site, provided the structural fill to the TerraTrel structures.

The TerraTrel system was chosen for these defences because of its speed of erection, robustness and proven ability to withstand significant impact loading.

CASE STUDY

Neskaupstaður Avalanche Barrier

Iceland

Reinforced Earth TerraTrel™ Retaining Walls

Client: FSR / Ríkiskaup
Consultant: Linuhonnun
Contractor: Arnarfell ehf
Construction: 2000

System: TerraTrel™
Wall Area: 7930m²
Max. Height: 14m
Design Load: Pedestrian
Design Life: 120 years



REINFORCED EARTH
SUSTAINABLE TECHNOLOGY

6 Hollinswood Court - Stafford Park 1 - Telford - TF3 3DE
Tel. 01952 201901 - Fax. 01952 201753
www.reinforcedearth.co.uk