

Fortrac® geogrids make it possible: 25 m high mechanically stabilised earth wall in Iserlohn



Location: Iserlohn, Germany
Client: Lobbe Holding GmbH&Co.
Design: IBH – Ingenieurbüro
Dipl.-Ing. Herold, Weimar
Contractor: Lobbe
Year of construction: 2000/2001
Products: Fortrac® R140/30-30MP
Fortrac® 80/20-30MP
Fortrac® 55/20-30MP



Approximately 110.000 m² of Fortrac® geogrids were used to construct a noise protection wall in Iserlohn. The noise protection was required since a new housing area was projected next to the motorway A46. The wall was also required to create an area which could be used for the construction of houses, since the difference in elevation in the area was approximately 18m.

The solution

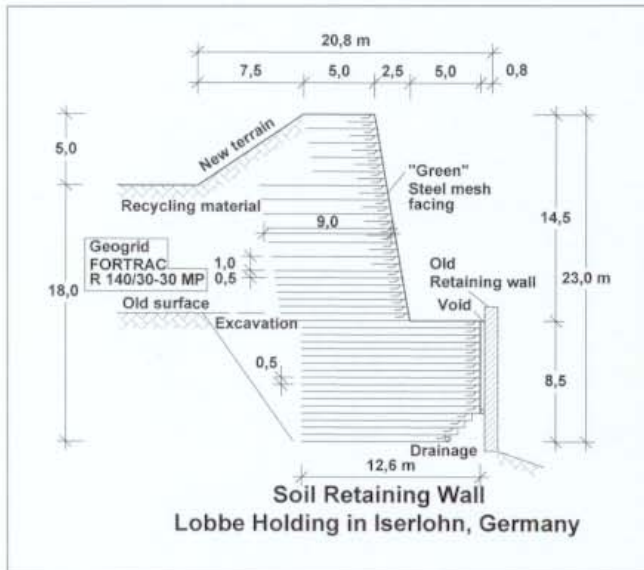
The solution chosen by the client was a mechanically stabilised earth wall (MSEW)

reinforced with different Fortrac® geogrid types, and with a maximum height of 25m and a length of approximately 350m. This maximum height was unique in Germany for this type of wall.

The wall was finished with a green facing, by using an erosion control mat with seams. The inclination of the lower part of the wall was 90° (vertical) and the higher (green) part was 80°.

Since concrete recycling material was used as fill material, the high pH level (approx. 12) justified the use of PVA yarns with high chemical resistance in Fortrac® geogrids.

Fortrac® geogrids make it possible: 25 m high mechanically stabilised earth wall in Iserlohn



Due to the existence of an old retaining wall, the MSEW was extended up to the base level of the old wall in order to eliminate the earth pressures on this wall.

The advantages

- Very flexible solution, in construction, engineering and landscaping.
- Minimal settlements, not susceptible to potential differential settlements.

- Excellent integration in the environment.
- Fortrac® allows the use of local fill or recycled construction waste.
- Creates a maximum area for housing.
- Very economical solution.



HUESKER Synthetic GmbH

Fabrikstraße 13-15 • D-48712 Gescher
Telefon: 0 25 42 701-0 • Fax: 0 25 42 701-499
Internet: www.huesker.com • E-mail: info@huesker.de

