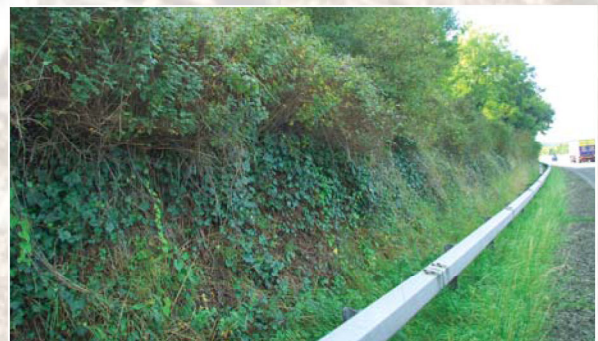


Soil Panel

Engineered Green Slopes



For a Natural Finished Face

The Engineering Principle
Two types of Soil Panel have been developed and used since the patented system was introduced in 1995.

Soil Panel SN

The Soil Nailing (SN) version is typically used in applications where the creation of extra space requires existing embankments to be cut back forming steep sloping faces. Stability and structural support to these slopes is provided by soil nailing the newly excavated face and attaching the heavily galvanised steel Soil Panel cages to the protruding nails across the exposed face. The internal face of the panel forms part of the structural support to the embankment face and the outer, geotextile lined face allows filling with growing medium for vegetation establishment, or for containment of stone where required.

The panels are flat packed and hinge outward once connected to the soil nails. Growing medium is then placed into the panel and is either pre-seeded or hydra seeded or planted later during growing seasons. An alternative is to fill the Soil Panel with stone, this is often chosen due to lack of light or where a zero maintenance requirement is preferred.

Soil Panel RS

The Reinforced Soil (RS) version, is used where new embankments are being created or built up, or for creating level areas on otherwise sloping sites. In this case the Soil Panel is connected to the reinforcing ladders within the compacted soil block. As in the Soil Nailing system Soil Panel provides structural support to the reinforced soil block and allows filling with growing medium or stone as appropriate to the particular application.



Engineering for the Environment

The prime advantage of the system is the separation of the growing medium from the structural requirements of a reinforced soil block, which requires heavy compaction of the structural filling.

Soil Panel allows the structural specification for the reinforced soil block to be met, and provides a separate top soil zone unaffected by the compacted backfill. Growing medium can be firmly consolidated within the panel to create the horticultural element necessary for proper vegetation growth and root establishment.

The system can provide natural looking vegetated embankments capable of reaching heights in excess of ten metres.

Additionally Soil Panel provides excellent protection to structural elements from accidental impact or fire damage, the absence of U.V. light degradable geosynthetic fabrics further enhances durability. These advantages are not available on other systems.

10 Good Reasons for Choosing Soil Panel

- British design and manufacture in accordance with BS EN ISO 9002
- Highways Agency approved system
- Variety of face finishes; vegetated or stone
- Assured establishment and sustainable growth of vegetation
- Unique, innovative system supported by full design and build service
- Protection of structural elements in the event of collision or fire damage
- No special foundations required
- Minimises muck away, saves on Landfill Tax
- Factory assembled units and latest construction techniques for speed and economy
- A proven system, successfully used in a wide variety of applications



The Complete Package

Phi Group is the largest retaining wall specialist in the UK. Manufacturing, supplying and building timber crib retaining walls, concrete crib retaining walls, soil nailing, soil panels and modular block reinforced earth systems.

Based in Cheltenham with regional offices in Harrogate and Dunfermline the company is at the forefront of retaining structure technology balancing engineering demands with environmental consideration.

From concept to construction, Phi Group offers a complete design, supply and construction service undertaken by our in house chartered engineers, and backed up by full indemnity insurance.

Phi Group's own directly employed experienced construction teams, operate nationwide completing the total design, supply and build package, thus affording, optimum peace of mind and minimum risk, to client and contractor alike.



Link-up
Supplier Number: 20441

Phi Group has full Link-up accreditation, enabling the company to provide engineering solutions to the Railway sector.



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Phi Group are approved by Constructionline, pre-qualified to work within the public sector.



Phi Group belong to the RIBA CPD Providers Network.

Phi Group

Retaining Structures



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