

Geosynthetic Bentonite Clay Liner

Sodium Bentonite Waterproofing Layer

Geosynthetic Clay Liner is a geocomposite of a layer of sodium bentonite encapsulated between two geotextiles to form a liner for numerous fluid containment and water barrier applications.

GCL uses non-woven geotextile in the upper layer to encapsulate the bentonite swelling clay as a carrier, and a woven geotextile layer beneath for dimensional stability. Needling punching the layers offers reinforced internal shear. HDPE film lamination offers the best sealing effectiveness.

Versatile Sealing Applications of GCL System

- Flood protection
- Underground waterproofing
- Water containment, ponds & lakes
- Landscape waterproofing
- Waterstop to foundation and basement structure
- Wetland creation

Benefits of GCL System

- Reduce construction costs by replacing compacted clay
- Self-sealing overlaps to ensure integrity
- Quick and easy to install, minimal substrate preparation
- Withstands differential settlement
- Flexible with the structure conformity
- Environmentally safe - no chemicals, additives & non-toxic
- Uniform peel strength provides multi-directional shear strength

Our Service

- Design, supply, and delivery
- Installation and site report
- Method statement and testing
- System commissioning



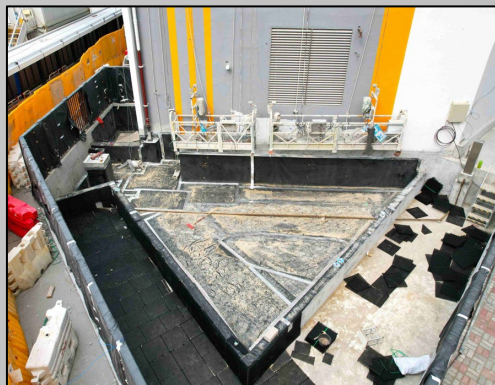
Installation of GCL



Pond Lining using GCL



ZIS Planter Waterproofing, PHD at Anderson Road Quarry Sites, July 2025 (HKHA20210573)



ZIS Planter Waterproofing, PHD at Wang Chiu Road, April 2026 (HKHA20210526)



Wetland Waterproofing, Development of Lok Ma Chau Loop, January 2022 (YL/2020/02)



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