

Monarflex

Geomembrane Containment Linings



A Lake in an 'Oasis'

When the designers of the Oasis Forest Holiday village proposed a vast 33,000m² watersports lake as the centrepiece for the new leisure resort it posed engineering problems that required both a high quality containment product and skilled installation. Monarflex was therefore chosen to supply and install Gridline 500.

Oasis Forest Holiday Village

The Oasis Forest Holiday Village at Whin Fell in Cumbria is a major holiday development by the Rank Organisation. Located in an area of Outstanding Natural Beauty.

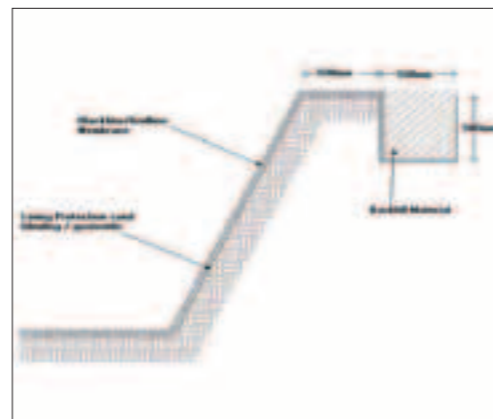
It features a 33,000m² lake dug to approximately 1.5m from the sandy soil. Containment of the water called for a robust product that would withstand both the rigours of construction and its use as a watersports lake.

The project ran to a strict installation schedule and posed some complex site problems. Because of its size, the design also required supervision by a panel engineer.

The high quality of Monarflex's product and its proven fabrication and installation skills meant it was the natural choice for supplying and installing a geomembrane liner for the lake.

Gridline 500 was chosen as it is tear resistant and has high tensile strength. Monarflex delivered it to the site in 800m² factory-fabricated panels, leaving only simple joints to be welded on site. This meant minimal disruption to the other trades. An anchor trench secured the membrane at the shoreline and the lake was then back-filled with stabilised sand and cement for protection.

Throughout the project Monarflex worked closely with the designers, Symonds Travers Morgan, and it was completed on schedule and within budget.



VITAL STATISTICS

Material:	Gridline 500
Area of Geomembrane:	33,000m ²
Duration of Project:	Approx. 3 months
Client:	Rank Leisure
Consulting Engineer:	Symonds Travers Morgan
Landscape Architect:	Roger Griffiths Associates
Contractor:	Tarmac

Product Specification

Reinforced

GRIDLINE

- Multi-layer, incorporating polyester reinforcing
- Exceptional tensile strength and tear resistance
- Thickness quoted is minimum i.e. inside reinforcing grid
- Various grades available for different applications

Specifying GRIDLINE

The following wording should be used when specifying GRIDLINE:

The membrane shall be GRIDLINE geomembrane, supplied and installed by the manufacturer, Monarflex Geomembranes Ltd. GRIDLINE is a high performance membrane consisting of both blown and flat extruded layers of virgin LDPE with a non-woven polyester scrim, combined to give an homogeneous sheet with the following properties.

Add relevant properties from data sheet.

The membrane shall be installed by the manufacturer using an extrusion welding method under an internationally recognised QA procedure such as ISO 9001:2000 and certificates of conformity to the above shall be supplied.

Non-reinforced

BLACKLINE

- Multi-layer, including blown and flat extruded film
- Chemical and UV resistant
- Outstanding multiaxial elongation
- Exceptional puncture resistance
- Various grades available for different applications

Specifying BLACKLINE

The following wording should be used when specifying BLACKLINE:

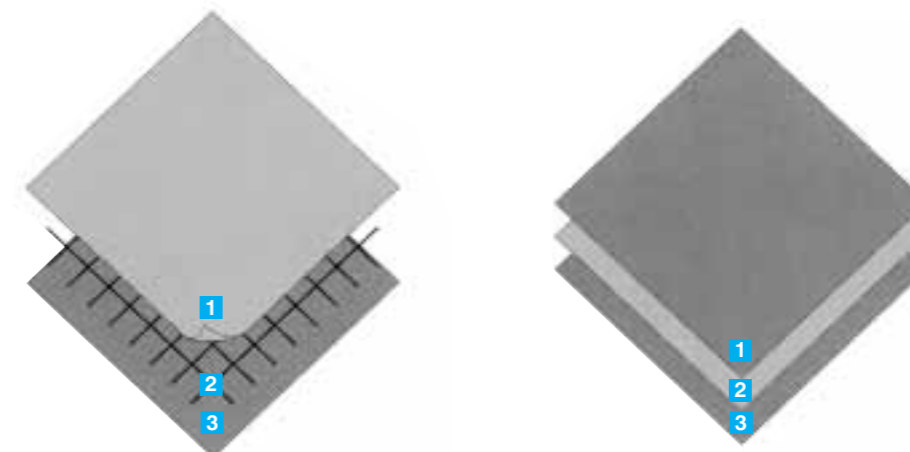
The membrane shall be BLACKLINE geomembrane, supplied and installed by the manufacturer, Monarflex Geomembranes Ltd. BLACKLINE is a high performance membrane consisting of both blown and flat extruded layers of virgin LDPE combined to give an homogeneous sheet with the following properties.

Add relevant properties from data sheet.

The membrane shall be installed by the manufacturer using an extrusion welding method under an internationally recognised QA procedure such as ISO 9001:2000 and certificates of conformity to the above shall be supplied.

MONARFLEX PRODUCTS ALSO INCLUDE:

- Roof Underlay
- Vapour Barriers
- Breather Membranes
- Tarpaulins
- DPMs
- Radon Barriers
- Scaffold Sheeting
- Protective Underlays
- Bridge Cleaning Sheeting



- 1 Extruded
- 2 Polyester Reinforcing
- 3 Blown

Product Name	BL 500	BL 750	BL 1000	GL 500	GL 750	Test Method
Thickness	0.5mm	0.75mm	1.0mm	0.5mm	0.75mm	
Tensile Strength (KN/m)	8.9	13.2	17.7	10	10	ASTM D638
Puncture Resistance						
At Puncture (N)	180	270	360	240	294	FTMS-101c-2031
At Penetration (N)	248	371	495	-	-	FTMS-101c-2031

