

**Monarflex**

A member of the Icopal Group

## **MONARFLEX® Blackline membranes** **- flexible and easy to install**



Four good reasons to choose  
MONARFLEX® Blackline geo-membranes:

- ☒ Ideal for small complicated jobs
- ☒ Flexible even at low temperatures
- ☒ Difficult to puncture
- ☒ Resistant to stress cracking
- ☒ Easy to handle and flexible to work with

*MONARFLEX® Geo-membranes*  
*- the reliable choice*

## Technical data

Available sizes	Roll weight	Thickness	Tensile strength	Elongation at break	Tensile strength at yield	Puncture resistance	Brittleness temperature
<b>MONARFLEX® Blackline 400</b>							
2 x 25M	19 kg	0,40 mm	7 kN/m	MD 540% TD 610%	MD 8,9 N/mm <sup>2</sup> TD 7,8 N/mm <sup>2</sup>	140 N	< -30°C
4 x 25M	37,5 kg						
<b>MONARFLEX® Blackline 500</b>							
4 x 25M	51 kg	0,50 mm	8,9 kN/m	MD 540% TD 610%	MD 8,9 N/mm <sup>2</sup> TD 7,8 N/mm <sup>2</sup>	180 N	< -30°C
4 x 100M	191 kg						
<b>MONARFLEX® Blackline 750</b>							
4 x 25M	74 kg	0,75 mm	13,2 kN/m	MD 540% TD 610%	MD 8,9 N/mm <sup>2</sup> TD 7,8 N/mm <sup>2</sup>	270 N	< -30°C
4 x 100M	282 kg						
<b>MONARFLEX® Blackline 1000</b>							
4 x 25M	96 kg	1,00 mm	17,7 kN/m	MD 540% TD 610%	MD 8,9 N/mm <sup>2</sup> TD 7,8 N/mm <sup>2</sup>	360 N	< -30°C
4 x 50M	188 kg						
4 x 100M	371 kg						

### Application

Geo-membranes are used in civil engineering works either for separation of different layers of material or for preventing fluids like water or chemicals in undermining the structure of the construction. Geo-membranes can be used for:

- separation layer for the structure of roads, bridges, tunnels, railways etc.
- protection of the ground water from percolation from landfills.
- environmental protection from chemicals from petrol stations and chemical industries.
- sealing of fertilizer tanks.
- sealing of water reservoirs, ornamental lakes, waste water, lakes, rain water lagoons etc.

### Features

MONARFLEX® Blackline membranes are composed by several layers of low density polyethylene (LDPE) ensuring a flexible and puncture resistant membrane. Polyethylene is very easy to work with and maintain its flexibility even at low temperatures. Their UV resistance is remarkable and they are resistant to a large number of chemicals.

### Installation

MONARFLEX® Blackline membranes are produced and delivered in 4M wide rolls and can easily be welded together to larger sections. We recommend the Monarflex extrusion welding technique. Installation of geo-membranes must only be done by professionals. For more details, please contact us.



Please visit [www.monarflex.com](http://www.monarflex.com) for further information