

# ROOT BARRIER

*Root Barrier* is a 30 mil (0.030") thick plastic sheet designed to protect waterproofing membranes from damage by green roof plants. Made from linear-low-density polyethylene (LLDPE), it provides exceptional flexibility, tear strength, and puncture resistance. It is highly resistant to environmental stresses on green roofs including air pollution, summer heat, and winter cold, and does not contain any recycled resins or plasticizers that can lead to premature aging or plant toxicity.

Standard roll sizes are 10 ft x 50 ft and are supplied as a 6 ft long roll for easily handling by one person. For safe shipping and storage, rolls have a sturdy core and are covered with a protective wrapper. Other sizes and thicknesses are available on special order.



## PHYSICAL CHARACTERISTICS

Property	Test Method	US	Metric
Thickness (typical)	ASTM D5199	0.030 in	0.75 mm
Density (maximum)	ASTM D792	0.14 lb/ft <sup>2</sup>	0.7 kg/m <sup>2</sup>
Tensile Strength at Break (marv)	ASTM D6693	125 lb/in	22 N/mm
Elongation at Break (marv)	ASTM D6693	800%	800%
Pin Puncture (marv)	ASTM D4833	45 lb	200 N
Tear Resistance (marv)	ASTM D1004	16 lb	71 N
Oxidative Induction Time (marv)	ASTM D3895	> 100 min	> 100 min
Oven Ageing, 85°C for 90 Days	ASTM D5271	pass	pass
UV Resistance, 1600 Hours	GRI GM11	pass	pass
Low Temperature Impact (typical)	ASTM D746	< 70° C	< 70° C
Dimensional Stability (typical)	ASTM D1204	< 2%	< 2%
Environmental Stress Cracking (marv)	ASTM D5397	> 400 hr	> 400 hr
Vapor Permeability (typical)	ASTM E96	0.029 gr/ft <sup>2</sup> /hr/in	0.019 g/m <sup>2</sup> /day/mm
Roll Size (typical)	-	10 ft x 50 ft	3.1m x 15.3m

(marv = minimum average roll value; allow 10-15% additional material for overlaps)

## INSTALLATION

Rolls are shipped individually wrapped with a sunlight-resistant, waterproof, protective plastic wrapper. Store the rolls in a dry location or under a waterproof tarp. Minimize field seaming with careful layout. Unroll *Root Barrier* in any direction, unfold, drag into position, and overlap with the adjacent sheet. For optimal performance, sheets should be welded with a hot-air or heated-wedge seamer, in which case a six-inch overlap will suffice. If welding is not feasible, overlap sheets approximately three feet and use our *Root Barrier Tape* under the upper edge of the overlap.