

PROTECTION MESH

Protection Mesh is a thin, high-strength woven geotextile made from non-biodegradable monofilament polypropylene. Unlike typical green roof protection mats which are made of non-woven fibers, the woven mesh does not retain any water and is highly breathable. These characteristics make it ideal for use over rigid polystyrene insulation used in protected membrane (inverted) roofs where long-term contact with damp fabrics can result in loss of insulation thermal value.

For protected membrane green roofs it is also important to have a drainage and ventilation layer above the mesh to prevent insulation saturation. For green roof systems with drainage plates, Drainage Plate will drain the green roof above and protect the insulation below. For green roof systems with granular media drainage, FlexDrain will retain water in the Capillary Mat above and protect the insulation below.



PHYSICAL CHARACTERISTICS

| Property | Test Method | US | Metric |
|---------------------------------|-------------|---------------------------|-----------------------|
| Dry Weight (typical) | ASTM D5261 | 6 oz/yd ² | 200 g/m ² |
| Thickness (typical) | ASTM D5729 | 1/64 in | 0.4 mm |
| Water Retention (marv) | ASTM E2398 | 0.002 gal/ft ² | 0.08 l/m ² |
| Saturated Density (marv) | ASTM E2398 | 0.06 lb/ft ² | 290 g/m ² |
| Flow Rate (marv) | ASTM D4491 | 18 gpm/ft ² | 6 lpm/m ² |
| Permittivity (marv) | ASTM D4491 | 0.3 sec ⁻¹ | 0.3 sec ⁻¹ |
| Apparent Opening Size (typical) | ASTM D4491 | 70 mesh | 210 μ |
| Static Puncture CBR (marv) | ASTM D6241 | 950 lb | 4200 N |
| Elongation (marv) | ASTM D4632 | 15% | 15% |
| Grab Tensile (marv) | ASTM D4632 | 250 lb | 1100 N |
| Trapezoidal Tear (marv) | ASTM D4533 | 60 lb | 270 N |
| Roll Dimensions (typical) | - | 6 ft x 150 ft | 1.8 m x 30.5 m |
| Roll Surface Area (typical) | - | 900 ft ² | 56 m ² |
| Roll Weight (typical) | - | 50 lb | 23kg |

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

INSTALLATION

Rolls of Protection Mesh should be protected from sunlight when stored for any length of time.

Unroll Protection Mesh over the insulation, overlapping adjacent sheets approximately six inches. Cut with a heavy-duty shears or with a utility knife. Then apply Drainage Plates or Flex Drain directly over the mesh with the dimpled side facing downward.