

## **CAPILLARY MAT**

Capillary Mat is a thick geotextile mat made from mechanically consolidated, needle punched, fine-denier, polyester fibers. It offers exceptional water storage capacity, superior to that of many dimpled plastic drainage sheets, and it wicks water vertically in excess of 6.5". It also has extraordinary mechanical strength and puncture resistance.

The unique combination of water retention, capillarity, and mechanical strength makes Capillary Mat ideal for use on low-slope green roofs with granular media or entangled fiber drainage, as well as for all green roofs with steeper slopes. Its extraordinarily dense structure assures that it will not compress under long-term loading and will retain its hydraulic properties. All rolls are electrically scanned for metal debris and broken punching needles.



## PHYSICAL CHARACTERISTICS

| Property                                | Test Method        | US                      | Metric                |
|---|--------------------|-------------------------|-----------------------|
| Dry Weight (typical)                    | ASTM D5261         | 28 oz/yd²               | 950 g/m²              |
| Thickness (typical)                     | ASTM D5729         | 3/16 in                 | 5 mm                  |
| Water Retention (marv)                  | ASTM E2398         | 0.1 gal/ft <sup>2</sup> | 4.2 l/m²              |
| Saturated Density (marv)                | ASTM E2398         | 1.1 lb/ft²              | 5.2 kg/m <sup>2</sup> |
| Capillary Rise (typical after 24 hours) | conductivity probe | 6.5 in                  | 165 mm                |
| Static Puncture CBR (marv)              | ASTM D6241         | 1120 lb                 | 5000 N                |
| Pin Puncture (marv)                     | ASTM D4833         | 280 lb                  | 1250 N                |
| Elongation (marv)                       | ASTM D4632         | 50%                     | 50%                   |
| Grab Tensile (marv)                     | ASTM D4632         | 560 lb                  | 2500 N                |
| Trapezoidal Tear (marv)                 | ASTM D4533         | 200 lb                  | 900 N                 |
| Roll Dimensions (typical)               | -                  | 6 ft x 50 ft            | 1.8 m x 15.3 m        |
| Roll Area (typical)                     | -                  | 300 ft <sup>2</sup>     | 28 m²                 |
| Roll Weight (typical)                   | -                  | 60 lb                   | 27kg                  |

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

## **INSTALLATION**

Since Capillary Mat becomes very heavy when saturated with water, all rolls are shipped individually wrapped in waterproof plastic bags. Store the rolls in a dry location or under a waterproof tarp.

Unroll Capillary Mat, overlapping adjacent sheets approximately six inches. Cut with a heavy-duty shears or with a utility knife. Spray with water to prevent uplift during windy conditions. Apply granular drainage media or planting media directly over the mat.

For uniform green roof irrigation with granular drainage or single-layer green roof systems, install drip tubing directly over Capillary Mat. The mat's capillarity will wick water in all directions, including up slopes.