# **GardNet**®



A SIKA COMPANY

#### **GENERAL DESCRIPTION**

GardNet is an expandable polyethylene sheet strip assembly, connected by a series of offset, full-depth, ultrasonic welded seams aligned perpendicular to longitudinal axis of strips which, when expanded, form walls of a flexible, 3-dimensional, cellular soil confinement system. Each section of GardNet is 8 cells wide by a multiple of cells long. The assembly also consists of stainless steel cables, stainless steel and plastic washers, and copper stops.

#### **BASIC USE**

GardNet is typically used for confinement of LiteTop® Growing Media on sloped Garden Roof® Assembly applications.

### **INSTALLATION**

- GardNet is used on slopes equal to/greater than 3:12 (14 degrees). In certain instances, slopes less than 3:12 may require GardNet; contact Hydrotech for assistance
- Slopes greater than 12:12 (45 degrees) are possible with special design considerations.
- GardNet is only supplied on projects in which Hydrotech's MM6125® assembly is also supplied for the entire project including non GardNet areas.
- GardNet projects require specific input by Hydrotech to determine GardNet depth, cable sizing and spacing.
- Architect or other appropriate project design professional is responsible for designing the building connection to which
  GardNet is attached. Hydrotech will provide cable spacing and loadings for use by the design team professional to develop
  the building connection.
- All components in a GardNet assembly must be provided by Hydrotech including LiteTop engineered Growing Media, cables, stops, Dow STYROFOAM™ and related drainage elements. Substitutions are not allowed.

#### **TECHNICAL DATA**

| PROPERTY   | TEST METHOD | RESULTS  |  |
|--|-------------|--|--|
| COLOR  |             | Black  |  |
| CELL WALL THICKNESS in. (mm)   | ASTM D5199  | 0.05 (1.27) (-5,+10%)  |  |
| SHEET STRIP HEIGHT in. (mm)  |             | 3, 4, 6, 8, 12<br>(75,100,150, 203, 305)   |  |
| SECTION COVERAGE sq.ft. (sq.m.) nominal each section is 8 cells wide (approx. 8.7 ft expanded) |             | 18 cell section - 136 (12.6)<br>21 cell section - 159 (14.8)<br>25 cell section - 189 (17.6)<br>29 cell section - 219 (20.3)<br>34 cell section - 257 (23.9) |  |
| POLYETHYLENE DENSITY lb./cu.ft. (g/cm3)  | ASTM D1505  | 58.4-60.2 (0.935-0.965)  |  |
| POLYETYLENE ENVIRONMENTAL<br>STRESS CRACK RESISTANCE (ESCR)                                    | ASTM D1693  | 3,000 hours  |  |
| SEAM PEEL STRENGTH lbforce (N)   |             | 240 (1060) — 3 in. strip<br>320 (1420) — 4 in. strip<br>480 (2130) — 6 in. strip<br>640 (2840) — 8 in. strip<br>960 (4260) — 12 in. strip                    |  |
| SEAM HANG STRENGTH lb. (kg)<br>7 days/1 hr. temp. cycling — ambient to 160°F                   | ASTM E41    | 160 (72.5)   |  |
| CARBON BLACK CONTENT %   |             | 1.5 – 2.0  |  |

PRODUCT DATA SHEET GardNet

## **LEED INFORMATION**

|                                | Credit 4 | Credit 5      |   |
|--------------------------------|----------|---------------|---|
| Recycled Content (% by weight) | 0        |               |   |
| Manufacture Location           |          | Weyauwega, Wl |   |
| Extraction/Harvesting Location |          | Weyauwega, Wl |   |
| VOC Content (g/L)              |          |               | 0 |

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