AQUADRAIN® G10

DESCRIPTION
AQUADRAIN® G10 is a two-part prefabricated drainage composite consists of a high strength HDPE geonet core with a non-woven polypropylene filter fabric bonded to one side. AQUADRAIN G10 is designed for horizontal and vertical applications requiring a high compressive strength core with exceptional fabric strength properties.

The HDPE geonet core provides high compressive strength and moderate water flow. The non-woven fabric allows water, or other liquids to pass into the drainage core while restricting the movement of soil particles. The fabric is bonded to the core to minimize fabric intrusion into the core from backfill pressure.

APPLICATIONS
AQUADRAIN G10 is designed to replace aggregate drainage between split-slab construction and backfill aggregate drainage against below-grade foundation walls. Applications include foundation walls, retaining walls, bridge abutments, tunnels, earth-covered structures, and planters. Additionally, AQUADRAIN G10 can be used for sub-surface drainage in split-slab construction of decks, plazas and balconies.

INSTALLATION
For horizontal installation between split-slab construction, such as under heavy vehicular traffic areas of parking and plaza decks. Place AQUADRAIN G10 with the non-woven filter fabric side up. When AQUADRAIN G10 is used with a waterproofing membrane, a protection course material must first be installed over the waterproofing membrane. Butt adjacent rolls; lap filter fabric and use adhesive to bond adjacent fabrics in accordance with manufacturer’s installation instructions.

Do not drive motorized vehicles directly on drain board prior to topping material being placed. Keep direct exhaust from compactors away from drain board. Other trades should be careful not do damage or disrupt the drainage system as well. Protect drain from sunlight during transportation and storage. AQUADRAIN G10 is resistant to chemicals found in normal soil conditions. Contact CETCO for assistance on projects involving contaminated soils.

PACKAGING
AQUADRAIN G10 is available in standard 1.22 m X 22.8 m (4’ X 75’) rolls; 27.8 sq. m. (300 sq. ft.) per roll.
# AQUADRRAIN® G10
## SUBSURFACE GEONET DRAINAGE COMPOSITE

### TECHNICAL DATA

<table>
<thead>
<tr>
<th>PROPERTY</th>
<th>TEST METHOD</th>
<th>TYPICAL VALUE</th>
<th>METRIC VALUE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NONWOVEN FILTER FABRIC PROPERTIES</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Material</td>
<td>N/A</td>
<td>Nonwoven Polypropylene</td>
<td>Nonwoven Polypropylene</td>
</tr>
<tr>
<td>Weight</td>
<td>ASTM D3776</td>
<td>4 oz/yd²</td>
<td>136 g/m²</td>
</tr>
<tr>
<td>Grab Tensile Strength</td>
<td>ASTM D4632</td>
<td>100 lbs.</td>
<td>0.45 kN</td>
</tr>
<tr>
<td>Puncture Strength</td>
<td>ASTM D3787</td>
<td>65 lbs.</td>
<td>0.29 kN</td>
</tr>
<tr>
<td>Trapezoidal Tear</td>
<td>ASTM D4533</td>
<td>40 lbs.</td>
<td>0.17 kN</td>
</tr>
<tr>
<td>Burst Strength</td>
<td>ASTM D3786</td>
<td>185 psi</td>
<td>1,270 kPa</td>
</tr>
<tr>
<td>Elongation</td>
<td>ASTM D4632</td>
<td>50%</td>
<td>50%</td>
</tr>
<tr>
<td>Apparent Opening Size</td>
<td>ASTM D4751</td>
<td>70 U.S. std. sieve</td>
<td>0.212 mm</td>
</tr>
<tr>
<td>Permeability</td>
<td>ASTM D4491</td>
<td>0.20 cm/sec</td>
<td>0.20 cm/sec</td>
</tr>
<tr>
<td>Flow Rate</td>
<td>ASTM D4491</td>
<td>140 gpm/ft²</td>
<td>5,704 l/min/m²</td>
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</tbody>
</table>

### DRAINAGE CORE PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Test Method</th>
<th>Value</th>
<th>Metric Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Material</td>
<td>N/A</td>
<td>HDPE</td>
<td>HDPE</td>
</tr>
<tr>
<td>Thickness</td>
<td>ASTM D1777</td>
<td>1/4 (0.25) inch</td>
<td>6.4 mm</td>
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<tr>
<td>Compressive Strength</td>
<td>ASTM D1621 (mod)</td>
<td>40,000 lbs./ft²</td>
<td>1,915 kPa</td>
</tr>
<tr>
<td>Flow Capacity</td>
<td>ASTM D4716</td>
<td>8.5 gpm/ft. of width</td>
<td>106 l/min/m of width</td>
</tr>
</tbody>
</table>

### DRAINAGE COMPOSITE PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Metric Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roll Length</td>
<td>75 ft.</td>
<td>22.8 m</td>
</tr>
<tr>
<td>Roll Width</td>
<td>4 ft.</td>
<td>1.22 m</td>
</tr>
<tr>
<td>Roll Weight</td>
<td>70 lbs.</td>
<td>32 kg</td>
</tr>
</tbody>
</table>

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**SPLIT-SLAB CONSTRUCTION**

AQUADRRAIN published flow performance and load values are determined by applicable industry testing methods. Specific project performance requirements and product selection should be determined by the project designer. Do not drive vehicles directly on drainage composite prior to concrete or backfill placement. Repair damaged or disrupted drainage system prior to backfill or cover material placement. Product should not be used as a surface material exposed to sunlight. AQUADRRAIN is resistant to chemicals found in normal soil conditions. Additional geotextile filter fabric may be required for use around discharge pipes and other detailing.

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**PLAZA DECK - PAVERS**

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UPDATED: JUNE 2015

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FORM: TDS_AQUADRRAIN_G10_AM_EN_201909_V1