Drainage Composite 3811R is a prefabricated drainage composite designed to protect the waterproofing membrane and provide continuous free flow of water in horizontal applications such as green roofs, plaza decks, planters and earth sheltered structures.

**PRODUCT DESCRIPTION**

Drainage Composite 3811R is a high quality prefabricated drainage composite designed to protect the waterproofing membrane and provide continuous free flow of water in horizontal applications such as green roofs, plaza decks, planters and earth sheltered structures.

**USES**

To create an open flow path to evacuate water from the system even under high loads.

**AREAS OF APPLICATION**

- Green Roofs
- Plaza Decks
- Planters
- Sheltered Structures

**CHARACTERISTICS / ADVANTAGES**

- Excellent resistance to biological and chemical degradation
- Ideal for soil environments
- Compatible with electronic leak detection systems
## PRODUCT INFORMATION

**Chemical Base**
- Post-industrial recycled polypropylene drainage core of fused, entangled filaments and a polypropylene geocomposite fabric bonded to the top side and a PA6 & polyester geocomposite fabric bonded to the bottom side
- Entangled filaments are molded into an open square waffle pattern

**Recycled Content**
- 40%

**Packaging**
- 39" x 100 ft (1.0 m x 30.5 m) roll, 77 lbs (34.9 kg) per roll

**Appearance / Color**
- Top Fabric: Black
- Core: Black
- Bottom Fabric: Gray

**Shelf Life**
- N/A

**Storage Conditions**
- N/A

**Thickness**
- 0.45" (11.43 mm)

**Unit weight**
- Core Weight: 16 oz/yd² (542.6 g/m²)
- Top Fabric
  - 4.5 oz/yd² (152.6 g/m²)
- Bottom Fabric
  - 3.54 oz/yd² (120 g/m²)

(US Standard Test Method, ASTM D-5261)

## TECHNICAL INFORMATION

### Resistance to Static Puncture

<table>
<thead>
<tr>
<th></th>
<th>Top Fabric</th>
<th>Bottom Fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70 lbs (0.31 kN)</td>
<td>35 lbs (155 N)</td>
</tr>
</tbody>
</table>

(US Standard Test Method, ASTM D-4833)

### Tensile Strength

<table>
<thead>
<tr>
<th></th>
<th>Top Fabric</th>
<th>Bottom Fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120 lbs (0.54 kN)¹</td>
<td>125 lbs (556 N)¹</td>
</tr>
</tbody>
</table>

¹ Machine Direction and Cross Machine Direction

(US Standard Test Method, ASTM D-4632)

### Elongation at Break

<table>
<thead>
<tr>
<th></th>
<th>Top Fabric</th>
<th>Bottom Fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>50%</td>
<td>40%</td>
</tr>
</tbody>
</table>

(US Standard Test Method, ASTM D-4632)

### Resistance to Tearing (nail shank)

<table>
<thead>
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<th></th>
<th>Top Fabric</th>
<th>Bottom Fabric</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>50 lbs (0.22 kN)</td>
<td>40 lbs (177.9 N)</td>
</tr>
</tbody>
</table>

(US Standard Test Method, ASTM D-4533)

### Water permeability

<table>
<thead>
<tr>
<th></th>
<th>Top Fabric</th>
<th>Bottom Fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1.8 sec⁻¹</td>
<td>2.5 sec⁻¹</td>
</tr>
</tbody>
</table>

(US Standard Test Method, ASTM D-4491)

### Design Considerations

<table>
<thead>
<tr>
<th></th>
<th>Compressive Load¹</th>
<th>No failure²</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&gt;30,000 psf (1436 kN/m²)</td>
<td></td>
</tr>
</tbody>
</table>

¹ ASTM D-1621 modified and ASTM D-4716.
² Failure defined as reaching yield point or no continued measurable flow under stated load.

### Opening size

<table>
<thead>
<tr>
<th></th>
<th>Top Fabric</th>
<th>Bottom Fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>70 US Sieve (0.212 mm)</td>
<td>45 US Sieve (0.357 mm)</td>
</tr>
</tbody>
</table>

(US Standard Test Method, ASTM D-4751)

### Flow Rate

<table>
<thead>
<tr>
<th></th>
<th>Top Fabric</th>
<th>Bottom Fabric</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>120 gal/min/ft² (81.5 L/sec/m²)</td>
<td>185 gal/min/ft² (125.6 L/sec/m²)</td>
</tr>
</tbody>
</table>

(US Standard Test Method, ASTM D-4491)
APPLICATION INSTRUCTIONS

APPLICATION

Drainage Composite 3811R is installed by an authorized Sika Sarnafil Waterproofing Applicator. The drainage composite is loosely laid over the completed waterproofing system. Butt drainage composites together and unfold the 3” (76 mm) fabric overlap onto the top of the adjacent composite to provide continuity. Tape or adhere all fabric overlaps, and tape all butt end joints. Cut drainage composite neatly to fit around penetrations and projections.

MAINTENANCE

Standard maintenance of Sarnafil systems should include regular inspections of flashings, drains and termination sealants at least twice a year and after each storm.

AVAILABILITY/WARRANTY

AVAILABILITY

From Sika Corporation – Roofing Authorized Applicators for use within Sarnafil systems.

WARRANTY

Upon successful completion of the installed roof by the Sika Authorized Applicator, Sika Corporation will provide a warranty to the Building Owner via the Sika Authorized Applicator.

BASIS OF PRODUCT DATA

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

OTHER RESTRICTIONS

See Legal Disclaimer.

ENVIRONMENTAL, HEALTH AND SAFETY

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental, toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.
LEGAL DISCLAIMER

• KEEP CONTAINER TIGHTLY CLOSED
• KEEP OUT OF REACH OF CHILDREN
• NOT FOR INTERNAL CONSUMPTION
• FOR INDUSTRIAL USE ONLY
• FOR PROFESSIONAL USE ONLY

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