The following charts assume the use of a coated polyester geo-grid with a minimum long term design strength of TDS-1350 pH (10.9 k n/m) or TDL = 900 PLF (7.3 k n/m).

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### CELTIK® WALL

**BELGARD® HARDSCAPES**

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**Celtik 90 & 135 Units – 8' Setback**

<table>
<thead>
<tr>
<th>Case</th>
<th>Height</th>
<th>2.19'</th>
<th>2.48'</th>
<th>2.62'</th>
<th>3.01'</th>
<th>3.84'</th>
<th>4.38'</th>
<th>4.87'</th>
<th>5.10'</th>
<th>5.40'</th>
<th>5.83'</th>
<th>6.13'</th>
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<tbody>
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<td>1</td>
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</tr>
</tbody>
</table>

**Silty Sand**: $\phi = 30^\circ, \gamma = 120$ pcf

---

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---

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**Celtik® Wall**

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HARDSCAPES

[Image of Celtik® Wall diagram]

**Celtik 90 & 135 Units - 8' Setback**

**SAND/GRAVEL:** $\phi = 34^\circ, Y = 120$ pcf

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Height</th>
<th>2.19'</th>
<th>2.46'</th>
<th>2.92'</th>
<th>3.21'</th>
<th>3.59'</th>
<th>3.84'</th>
<th>4.30'</th>
<th>4.67'</th>
<th>5.10'</th>
<th>5.40'</th>
<th>5.83'</th>
<th>6.13'</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Case 2</th>
<th>Height</th>
<th>2.19'</th>
<th>2.46'</th>
<th>2.92'</th>
<th>3.21'</th>
<th>3.59'</th>
<th>3.84'</th>
<th>4.30'</th>
<th>4.67'</th>
<th>5.10'</th>
<th>5.40'</th>
<th>5.83'</th>
<th>6.13'</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Case 3</th>
<th>Height</th>
<th>2.19'</th>
<th>2.46'</th>
<th>2.92'</th>
<th>3.21'</th>
<th>3.59'</th>
<th>3.84'</th>
<th>4.30'</th>
<th>4.67'</th>
<th>5.10'</th>
<th>5.40'</th>
<th>5.83'</th>
<th>6.13'</th>
</tr>
</thead>
</table>

The following charts assume the use of a coated polyester geo-grid with a minimum long term design strength of (TDS-1350 PH (10.9 k n/m) or TDL = 900 PLF (7.3 k n/m)

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**CELTIK® WALL**

**BELGARD® HARDSCAPES**

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**CELTIK 90 & 135 UNITS – NEAR VERTICAL SETBACK**

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<tr>
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<th>Height</th>
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<th>2.4’</th>
<th>2.9’</th>
<th>3.1’</th>
<th>3.8’</th>
<th>4.3’</th>
<th>4.9’</th>
<th>5.1’</th>
<th>5.4’</th>
<th>5.8’</th>
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<td><strong>CASE 1</strong></td>
<td></td>
<td>2.19’</td>
<td>2.48’</td>
<td>2.92’</td>
<td>3.27’</td>
<td>3.68’</td>
<td>4.26’</td>
<td>4.87’</td>
<td>5.10’</td>
<td>5.40’</td>
<td>5.83’</td>
<td>6.13’</td>
</tr>
<tr>
<td><strong>CASE 2</strong></td>
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<td>2.18’</td>
<td>2.48’</td>
<td>2.92’</td>
<td>3.27’</td>
<td>3.68’</td>
<td>4.26’</td>
<td>4.87’</td>
<td>5.10’</td>
<td>5.40’</td>
<td>5.83’</td>
<td>6.13’</td>
</tr>
<tr>
<td><strong>CASE 3</strong></td>
<td>2.5’</td>
<td>2.19’</td>
<td>2.48’</td>
<td>2.93’</td>
<td>3.21’</td>
<td>3.65’</td>
<td>4.38’</td>
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<td>5.10’</td>
<td>5.40’</td>
<td>5.83’</td>
<td>6.13’</td>
</tr>
</tbody>
</table>

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Atlanta, GA 30312
Phone: 877-BELGARD