### BELGARD · TANDEM WALL™
#### REINFORCED GEOGRID DEPTHS (NO SURCHARGE)

**Notes:** Calculations assume a unit weight of 120 LBS/CF. Assumed $\phi$ angles for earth pressure calculations are: Select Granular = 34°, Silty Sand = 30°, and Sandy Lean Clay = 26°. Non critical structures with safety factor >1.5. Sliding calculations assume 6" crushed stone leveling pad as compacted foundation material. The information provided is for preliminary design use only. A qualified Professional Engineer shall be consulted. Belgard accepts no liability for the improper use of these tables.

**GEOGRID STRENGTH SHALL BE EQUIVALENT TO MIRAFI 2XT OR GREATER**

- **8" LOW PERMEABLE SOIL**
- **REINFORCED ZONE**
- **GRID DEPTH**
- **WALL HEIGHT**

<table>
<thead>
<tr>
<th>WALL HEIGHT</th>
<th>MIN GRID DEPTH</th>
</tr>
</thead>
<tbody>
<tr>
<td>7.86' - 7.27'</td>
<td>7.0'</td>
</tr>
<tr>
<td>6.69' - 5.52'</td>
<td>6.0'</td>
</tr>
<tr>
<td>4.93' - 4.35'</td>
<td>5.0'</td>
</tr>
<tr>
<td>3.76' - 3.18'</td>
<td>4.0'</td>
</tr>
<tr>
<td>2.59'</td>
<td>3.0'</td>
</tr>
</tbody>
</table>

**SANDY LEAN CLAY 26° $\phi$ ANGLE AND NO SURCHARGE. WALLS UNDER 2.59' TOTAL HEIGHT MAY BE CONSTRUCTED AS GRAVITY WALLS.**

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**SILTY SAND 30° $\phi$ ANGLE AND NO SURCHARGE. WALLS UNDER 2.59' TOTAL HEIGHT MAY BE CONSTRUCTED AS A GRAVITY WALL.**

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<td>4.0'</td>
</tr>
<tr>
<td>3.18'</td>
<td>3.0'</td>
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</tbody>
</table>

**SELECT GRANULAR 34° $\phi$ ANGLE AND NO SURCHARGE. WALLS UNDER 3.18' TOTAL HEIGHT MAY BE CONSTRUCTED AS A GRAVITY WALL.**

**BELGARD.COM**

details@belgard.com

877-235-4273
### Geogrid Strength

Shall be equivalent to Mirafi 2XT or greater reinforced grid depth.

### 250 PSF Surcharge

Walls under 2.01' total height may be constructed as gravity walls.

### Silty Sand 30° θ Angle and 250 PSF Surcharge

Walls under 2.59' total height may be constructed as a gravity wall.

### Select Granular 34° θ Angle and 250 PSF Surcharge

Walls under 2.59' total height may be constructed as a gravity wall.

### Belgard - Tandem Wall™

**Reinforced Geogrid Depths**

(250 PSF Live Load)

<table>
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<tr>
<th>Height</th>
<th>7.86' - 7.27'</th>
<th>6.69' - 6.10'</th>
<th>5.52' - 4.93'</th>
<th>4.35' - 3.76'</th>
<th>3.18' - 2.01'</th>
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**Notes:** Calculations assume a unit weight of 120 LBS/CF. Assumed θ angles for earth pressure calculations are: Select Granular = 34°, Silty Sand = 30°, and Sandy Lean Clay = 26°. Non-critical structures with safety factor >1.5. Sliding calculations assume 6" crushed stone leveling pad as compacted foundation material. The information provided is for preliminary design use only. A qualified Professional Engineer shall be consulted. Belgard accepts no liability for the improper use of these tables.

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SANDY LEAN CLAY 26° \( \phi \) ANGLE AND 3H:1V BACK SLOPE. WALLS UNDER 2.01' TOTAL HEIGHT MAY BE CONSTRUCTED AS GRAVITY WALLS.

<table>
<thead>
<tr>
<th>MIN GRID DEPTH</th>
<th>8.0'</th>
<th>7.0'</th>
<th>6.5'</th>
<th>5.0'</th>
<th>4.5'</th>
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SILTY SAND 30° \( \phi \) ANGLE AND 3H:1V BACK SLOPE. WALLS UNDER 2.01' TOTAL HEIGHT MAY BE CONSTRUCTED AS A GRAVITY WALL.

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SELECT GRANULAR 34° \( \phi \) ANGLE AND 3H:1V BACK SLOPE. WALLS UNDER 2.59' TOTAL HEIGHT MAY BE CONSTRUCTED AS A GRAVITY WALL.

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BELGARD · TANDEM WALL™
REINFORCED GEOGRID DEPTHS (3H:1V BACK SLOPE)

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