# TECTUM® I Diaphragm Design Data

## Fastener Spacing Schedule

<table>
<thead>
<tr>
<th>Type</th>
<th>Panel Size</th>
<th>Test No.</th>
<th>Joist</th>
<th>Span</th>
<th>Fasteners</th>
<th>Field Spacing</th>
<th>Perimeter</th>
<th>Adhesive</th>
<th>Grout</th>
<th>ULT/LF</th>
<th>DSN/LF</th>
</tr>
</thead>
<tbody>
<tr>
<td>T-I Plank</td>
<td>3” x 31” x 96”</td>
<td>88-3113-1</td>
<td>Steel</td>
<td>48”</td>
<td>S-25/2” Washer</td>
<td>3/Joist/Panel</td>
<td>16” o.c.</td>
<td>No</td>
<td>None</td>
<td>825</td>
<td>275</td>
</tr>
<tr>
<td>T-I Plank</td>
<td>3” x 31” x 96”</td>
<td>88-3113-1</td>
<td>Steel</td>
<td>48”</td>
<td>S-25/2” Washer</td>
<td>3/Joist/Panel</td>
<td>16” o.c.</td>
<td>T &amp; G + Joist</td>
<td>None</td>
<td>1350</td>
<td>450</td>
</tr>
<tr>
<td>T-I LS</td>
<td>2-1/2” x 31” x 120”</td>
<td>94-30037D</td>
<td>Steel</td>
<td>60”</td>
<td>3¾” 14 Gauge Scr/2”w</td>
<td>2/Joist/Panel</td>
<td>10” o.c. sides + ends</td>
<td>T &amp; G + Joist</td>
<td>None</td>
<td>1170</td>
<td>389</td>
</tr>
<tr>
<td>T-I LS</td>
<td>3” x 31” x 144”</td>
<td>94-30037D</td>
<td>Steel</td>
<td>72”</td>
<td>4-1/2” 14 Gauge Scr/2”w</td>
<td>2/Joist/Panel</td>
<td>12” o.c. sides + ends</td>
<td>T &amp; G + Joist</td>
<td>None</td>
<td>860</td>
<td>286</td>
</tr>
<tr>
<td>T-I LS</td>
<td>5” x 31” x 96”</td>
<td>95-30270</td>
<td>Wood</td>
<td>52”</td>
<td>3-1/2” 14 Gauge Scr/2”w</td>
<td>2/Joist/Panel</td>
<td>12” o.c. sides + ends</td>
<td>T &amp; G + Joist</td>
<td>None</td>
<td>964</td>
<td>321</td>
</tr>
<tr>
<td>T-I LS5</td>
<td>3” x 31” x 144”</td>
<td>02-030070B</td>
<td>Steel</td>
<td>72”</td>
<td>4-1/2” 14 Gauge Scr/2”w</td>
<td>2/Joist/Panel</td>
<td>12” o.c. sides + ends</td>
<td>T &amp; G + Joist</td>
<td>None</td>
<td>1631</td>
<td>542</td>
</tr>
<tr>
<td>T-I Tile</td>
<td>2” x 23-1/2” x 143”</td>
<td>88-3113-1</td>
<td>Steel</td>
<td>72”</td>
<td>112 Ts/112 x Ts</td>
<td>24” o.c.</td>
<td>112 Ts</td>
<td>No</td>
<td>4 Sides</td>
<td>925</td>
<td>313</td>
</tr>
<tr>
<td>T-I Tile</td>
<td>2” x 31-1/2” x 95”</td>
<td>88-3113-1</td>
<td>Steel</td>
<td>96”</td>
<td>168 Ts/112 x Ts</td>
<td>32” o.c.</td>
<td>168 Ts</td>
<td>No</td>
<td>4 Sides</td>
<td>575</td>
<td>200</td>
</tr>
<tr>
<td>T-I RT/TG</td>
<td>2” x 31-1/2” x 96”</td>
<td>91-3222</td>
<td>Steel</td>
<td>96”</td>
<td>000-5-14-2+5-25/2”w</td>
<td>32” o.c. + 2/Joist</td>
<td>S-25@16”+3/end</td>
<td>T &amp; G + Per</td>
<td>Long Edge</td>
<td>696</td>
<td>231</td>
</tr>
<tr>
<td>T-I Tile</td>
<td>2” x 31-1/2” x 95”</td>
<td>94-30037H</td>
<td>Steel</td>
<td>96”</td>
<td>000-5-14-2+5-25/2”w</td>
<td>2/Joist</td>
<td>10-1/2” o.c.</td>
<td>Joist</td>
<td>Long Edge</td>
<td>835</td>
<td>278</td>
</tr>
<tr>
<td>T-I Tile5</td>
<td>2” x 31-1/2” x 96”</td>
<td>02-030070A</td>
<td>Steel</td>
<td>96”</td>
<td>218 Ts/3-1/4” 14 Gauge Scr/2”w</td>
<td>2/Joist/Panel</td>
<td>12” o.c. sides + ends</td>
<td>Joist</td>
<td>Long Edge</td>
<td>1530</td>
<td>509</td>
</tr>
</tbody>
</table>

**Notes:**
1. Adhesives must meet the requirements of AFG-01. A 3/8” bead of adhesive is to be used. Approximately 38 linear feet of adhesive per quart tube.
2. All panels were installed with staggered ends except Tectum® I tile with 168 bulb tees and Tectum® III tile on truss tees.
3. Specific adhesive used on test assemblies was Miracle Construction Adhesive SFA-66.
4. Values over wood joists are conservative when supports are steel.
5. See Technical Bulletin T-77 for more information. Call for assistance when designing and detailing this Tectum® Roof Deck system.

Contact Armstrong Techline for test report data — techline@armstrongceilings.com