Clay pavers are strong, durable, and color safe (non-fading), and provide a value added option on any project.

**Accessibility**

Clay pavers comply with ADA requirements for slip resistance, surface level and vibration levels.

**Bond Patterns**

A wide variety of bond patterns is possible. For vehicular applications the Herringbone pattern is recommended.

- Running Bond
- Stack Bond
- Spanish Bond
- Basket Weave
- Herringbone

**ASTM Specifications**

General Shale pavers comply with the following ASTM Specifications.
- 1-1/4” and 2-1/4” pavers comply with ASTM C 902 Standard Specification for Pedestrian and Light Traffic Paving Brick; for use in rigid and flexible base applications.
- 2-1/4” pavers comply with ASTM C 1272 Standard Specification for Heavy Vehicular Paving Brick; for use in rigid base applications only.

**Physical Property Requirements**

<table>
<thead>
<tr>
<th></th>
<th>ASTM C 902</th>
<th>ASTM C 1272</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td>Class SX 8,000 psi</td>
<td>Type R: 8,000 psi</td>
</tr>
<tr>
<td></td>
<td>Type F: 10,000 psi</td>
<td></td>
</tr>
<tr>
<td>Cold Water Absorption</td>
<td>8%</td>
<td>6%</td>
</tr>
<tr>
<td>Modules of Rupture Requirement (MOR)</td>
<td>None</td>
<td>Type R: 1,200 psi</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Type F: 1,500 psi</td>
</tr>
</tbody>
</table>

**Dimensional Tolerances (8” Dimension)**

<table>
<thead>
<tr>
<th></th>
<th>C 902</th>
<th>C 1272</th>
</tr>
</thead>
<tbody>
<tr>
<td>PS ± 1/4”</td>
<td>PS ± 1/4”</td>
<td>PS ± 1/4”</td>
</tr>
<tr>
<td>PX ± 1/8”</td>
<td>PX (Flexible Only)</td>
<td>± 1/8”</td>
</tr>
<tr>
<td>PA No Limit</td>
<td>PA No Limit</td>
<td></td>
</tr>
</tbody>
</table>

General Shale Pavers conform to PS (straight edge pavers) or PA (tumbled pavers) tolerances.
**Abrasion Requirements**

- **Type I – Wire Cut**
  - Public sidewalks and driveways
- **Type II – Mud, Slurry, Heavily Textured**
  - Heavily traveled residential walkways and driveways
- **Type III – Sand Coated**
  - Single family residential floors and patios

**Vehicular Applications**

In most applications C 902 pavers are acceptable. C 1272 are only required for heavy vehicles AND heavy traffic volume (Refer to General Shale Technical Bulletin Vehicular Paver Specification.doc).

**General Thickness Requirements**

<table>
<thead>
<tr>
<th>Unit / Base</th>
<th>Residential</th>
<th>Commercial</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Patio</td>
<td>Walks</td>
</tr>
<tr>
<td>1-1/4” Flexible Base</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>1-1/4” Rigid Base</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2-1/4” Flexible Base</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>2-1/4” Rigid Base</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Recommended Paving Design Sections**

(Note: For more applications / details visit the General Shale website [www.generalshale.com](http://www.generalshale.com) Technical Resource section.)
**Aggregates**

<table>
<thead>
<tr>
<th>Base Stone</th>
<th>Sand – Setting Base</th>
<th>Sand - Jointing</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM D 2940</td>
<td>ASTM C 33</td>
<td>ASTM C 144</td>
</tr>
<tr>
<td>DOT Road Base</td>
<td>Course Concrete Sand</td>
<td>Masonry Sand (Use after initial compaction with concrete sand)</td>
</tr>
</tbody>
</table>

**Drainage**

Slope surface a minimum of 1/4” per foot (2% slope) for adequate water run-off and drainage.

**Geotextile**

Prevents aggregates from mixing or migrating into base. Recommended for soft clay base materials.

**Cutting Pavers**

Wet saw is recommended; splitters are okay for smaller jobs. Do not use concrete blades, use a soft matrix blade specifically intended for clay pavers.

**Mortared Pavers**

Use Type – S mortar. Latex additives can help improve bond strength, workability and durability. Tool joints when “thumb print” hard using a concave jointing tool.

**Estimating Materials**

**Pavers**

4.5 Pavers per sq. ft. Figure approximately 5% for waste and breakage.

**Sub Base Aggregate**

3/4” crusher run. For every 100 sq. ft. of area figure 2 tons material for 4” thick base.

**Setting Sand / Bed Sand**

For every 125 sq. ft. of area figure 1 ton of sand for jointing and 1” thick setting bed.