How to Select and Specify Toilet Partitions Based on Building Type, Durability Factors and Code Compliance Requirements
• Honeycomb Construction
  – Painted metal
  – Stainless steel

• Bonded Construction
  – High pressure laminate

• Layered Construction
  – Compact laminate

• Homogeneous Construction
  – HDPE
  – SCRC
<table>
<thead>
<tr>
<th>Building Type</th>
<th>Painted Metal</th>
<th>Stainless Steel</th>
<th>HPL</th>
<th>HDPE</th>
<th>Compact Laminate</th>
<th>SCRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy Traffic</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
</tr>
<tr>
<td>Standard Use</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
</tr>
<tr>
<td>Prestige</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
<td>◆</td>
</tr>
</tbody>
</table>

- **Best Choice**
- **Good**
- **Poor**
Selection Criteria – Graffiti Resistance (ASTM D6578)

Number of Graffiti Markers Cleaned Out of 9 Marks Applied

- Higher readings perform better
- High Pressure Laminate (HPL), Compact Laminate (CL) and SCRC are the most graffiti resistant
Selection Criteria – Scratch Resistance (ASTM D2197)

- Higher readings perform better
- High Pressure Laminate (HPL), Compact Laminate (CL) and SCRC are the most scratch-resistant
Selection Criteria – Impact Resistance (ASTM D2794)

- Higher readings perform better
- Compact laminate is the hardest to dent
## Toilet Partition Material Price Comparisons

Note: Painted metal prices have increased, closing the price difference with high pressure laminate, which offers more design freedom.

Stainless steel is the most expensive, at about 2.7 times the price of painted metal or high pressure laminate.

<table>
<thead>
<tr>
<th>Material</th>
<th>Price Index</th>
<th>Painted Metal</th>
<th>High Pressure Laminate</th>
<th>HDPE (Untreated)</th>
<th>Compact Laminate</th>
<th>SCRC</th>
<th>Stainless Steel</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price Index</td>
<td>1</td>
<td>1</td>
<td>1.1</td>
<td>1.9</td>
<td>2.4</td>
<td>2.7</td>
<td>2.7</td>
</tr>
</tbody>
</table>
Mounting Configuration Options

- Overhead-Braced
- Floor-to-Ceiling
- Floor-Anchored
- Ceiling-Hung
Hardware Options

- More Durable
- Stainless Steel
  - Through Bolted
  - Concealed
- Full Height Institutional
- Aluminum
- Zamak
- Less Durable
- Less Expensive
- More Expensive
Privacy Options

Front views of gap-free partitions opened and closed

Maximum height compartment
In this example:

- Specifying a High Pressure Laminate with particle board substrate with steel core reinforced stiles.
- Mounting configuration is floor-anchored, overhead-braced.
- Language used and references cited serve as guideline examples for all toilet partition specifications.
MATERIAL DESCRIPTION

- Cores panels, doors, stiles, screens
- Surfaces
- Finished Thickness
- Stile Reinforcement
- Fabrication
- Fire-Resistance

HARDWARE FEATURES

- Materials
- Fastening
- Mounting
- Latching
- Hinges
- Compliance
- Emergency Access

Writing an Appropriate Specification
HARDWARE
Mounting Hinges, keepers latches, clothes hooks and their fasteners concealed inside compartment. Exposed hinges, keepers, latches, clothes hooks and their fasteners on exterior of compartment not acceptable with the exception of accessible compartments.

FASTENING
Hardware secured to door and stile by through-bolted, theft-resistant, pin-in-head Torx stainless steel machine screws into factory-installed, threaded brass inserts. Fasteners secured directly into core not acceptable.
• Model codes and standards for fire testing of toilet partition materials developed by:
  – ICC
  – NFPA

• Some jurisdictions have yet to adopt updated codes, but conventional wisdom suggests compliance is what a prudent person would do.
Interior Finish Compliance - Testing Requirements
Standard NFPA 286 test method with HDPE untreated panels mounted on fire test room walls.

HDPE untreated panels being tested as they would be installed as toilet partitions in the field.
### Material

<table>
<thead>
<tr>
<th>Material</th>
<th>Flame Spread Index</th>
<th>Smoke Developed Index</th>
<th>Interior Wall &amp; Ceiling Finish Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Painted Metal</td>
<td>5</td>
<td>0</td>
<td>Class A</td>
</tr>
<tr>
<td>High Pressure Laminate</td>
<td>60</td>
<td>195-300</td>
<td>Class B</td>
</tr>
<tr>
<td>Compact Laminate</td>
<td>15 / 30</td>
<td>20 / 55</td>
<td>Class A / B</td>
</tr>
<tr>
<td>SCRC</td>
<td>45</td>
<td>95-120</td>
<td>Class B</td>
</tr>
</tbody>
</table>

All Bobrick Partitions are fire-code compliant and qualify for at least Class B Interior Wall & Ceiling Finish Classification