The OneStone™ Wall System

The OneStone™ system is a modular concrete retaining wall system that is used to stabilize and contain earth embankments, large or small.

The OneStone™ system is based on the principles and designs of the PisaStone system developed in the 1970’s. Since then, hundreds of successful installations were completed. During this period the requirements of designers, installers and owners were further refined and identified.

There are many applications for OneStone™ retaining walls. Most examples can be divided into two configurations: landscape applications and or structural applications.

In landscape applications, the primary purpose of retaining walls is aesthetic in nature. Some examples of OneStone™ landscape uses are: raised patios for outdoor kitchens and living spaces, slope management, erosion control, run-off water management, planters, garden areas, and terraced or privacy walls. Most landscape applications call for walls under 1.0m (3’) in height, with minimal loads being applied to the wall, therefore most landscape walls do not require geogrid.

In structural applications, the primary function of retaining walls is to provide structure and strength to steep slopes or cuts. Some common structural uses for OneStone™ retaining walls are high walls, some in excess of 4.0m (12’); walls required to support parking, roads, or highways; and erosion protection along streams or lakes. In all of these cases, geosynthetic reinforcement is used.

The OneStone™ system is supported by Abbotsford Concrete Products and Risi Stone Systems. Abbotsford Concrete Products will make every attempt to answer your general questions and they will gladly provide customers with answers for site-specific applications. The Vespa.RS design software also helps to provide solutions for specific site designs. Unique applications often necessitate the assistance of a professional engineer. Risi Stone Systems can provide these solutions through its Engineering Design Assistance program.
The OneStone™ system has a number of features that make the system unique. Each of these features has been developed to give a OneStone™ retaining wall the advantages of increased beauty, simplified installation, and greater strength. These features benefit the owner by lowering the entire cost of the retaining wall, both during installation and well into the future.

**Modular Retaining Wall System**
Wall is flexible, yet retains its structural characteristics.
- The wall can absorb minor movements due to frost or settlement.
- Requires minimal embedment below grade.

A compacted granular base is all that is required.
- Reduces the cost by not requiring an expensive structural footing.
- Ensures maximum resistance to overturning forces.
- Saves time and money.

**Manufactured From 35 MPA (5000 PSI) Concrete**
- Provides wall with greater durability.
- Less susceptible to freeze-thaw deterioration.
- Less likely to be broken by handling or in transit.

**Integrated Interlock**
Interlocking mechanism moulded into the units so there are no separate pins or clips.
- Installation rates increase.
- Ensures maximum shear connection between units.

Units are dry-stacked.
- Lower costs because no mortar is used in the construction.
- Minimal training is required to achieve excellent installation results.

Units are self-aligning and self-battering.
- 3/4” setback per course or 5.3º batter.
- Once the first course is laid flat and levelled, there is no need for continual measuring and adjusting.

Creates a continuous interlock throughout the wall face.
- Makes a stronger, more damage-resistant wall.

**Chamfered Face**
The face of the OneStone™ stone is chamfered on the top and sides only.

**Size and Weight**
The 34 Kg (75 Lbs) units are well-balanced, easy to handle.
- Units can be installed by a single person.
- Manufacturing method ensures a uniform height for each unit.
- Courses remain at fixed elevations and should only require minimal shimming.

**OneStone™ with Geogrid Reinforcement**
Ability to construct higher walls.
- Can utilize site soil to infill the geogrids, consequently lowering disposal and extra material charges.
- Can use the same facia throughout a site on lower conventional SRWs and higher geogrid reinforced SRWs.

**90° Corner Units**
Manufactured to speed construction.
- Offers a finished appearance to the wall.
- Initiates the correct running bond pattern.
- Increases the strength of corners.
- Saves time during installation.

**Technical Support and Engineering Design Assistance**
Technical expertise developed over forty years through experience and testing is available to customers.
- Ensures that retaining walls are correctly designed and constructed.
- Advanced software is available to help designers generate stable retaining wall structures.
## Block Details

<table>
<thead>
<tr>
<th>OneStone™ System Units</th>
<th>Width mm / inches</th>
<th>Height mm / inches</th>
<th>Depth mm / inches</th>
<th>Weight Kg / Lbs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Standard</strong></td>
<td>458 / 18&quot;</td>
<td>203 / 8&quot;</td>
<td>305 / 12&quot;</td>
<td>34 / 75</td>
</tr>
<tr>
<td><strong>Split-Face</strong> (Left &amp; Right)</td>
<td>458 / 18&quot;</td>
<td>203 / 8&quot;</td>
<td>305 / 12&quot;</td>
<td>34 / 75</td>
</tr>
<tr>
<td><strong>Corner</strong></td>
<td>458 / 18&quot;</td>
<td>203 / 8&quot;</td>
<td>229 / 9&quot;</td>
<td>35 / 77</td>
</tr>
<tr>
<td><strong>Cap</strong></td>
<td>610 / 24&quot;</td>
<td>80 / 3 1/8&quot;</td>
<td>330 / 13&quot;</td>
<td>33 / 73</td>
</tr>
</tbody>
</table>

True dimensions are in Imperial, Metric dimensions are soft conversions.

### Colors

Abbotsford Concrete Products manufactures OneStone™ in six attractive color blends that can be used individually or can be combined with each other to create a unique palette to complement any project.
Patterns

Offset Runner Bond  
100% Standard

Pattern One  
50% Standard | 25% Left Split-Face | 25% Right Split-Face

Pattern Two  
34% Standard | 33% Left Split-Face | 33% Right Split-Face

Pattern Three  
34% Standard | 33% Left Split-Face | 33% Right Split-Face
Where Function & Style Meet

Abbotsford Concrete Products Ltd. has been an innovative industry leader in the manufacturing of Segmental Systems for more than two decades. Our state of the art manufacturing facility ensures that you receive the best products, which meet or exceed strict ASTM or CSA Standards.

www.pavingstones.com   |   Toll Free: 1.800.663.4091