ASHRIDGE

COLOR/CHARACTERISTICS: Ashridge Chopped is a Class III Quartzitic Sandstone that is mostly blue/grey in color with some brown.

FEATURES:
- Heights: 4” - 12”
- Lengths: Random up to 24”
- 50/50 blend of split-face and bed-face

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
- DENSITY: 161.77 lb/ft³
- SPECIFIC GRAVITY: 2.592
- ABSORPTION: .59%

ASTM C 170
- COMpressive STRENGTH: 27721 psi
# Baltic Buff

**COLOR/CHARACTERISTICS:** A natural sandstone buff with brown swirls

## Specifications:

### ASTM C 97

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oven Dry Density</td>
<td>154.4 lb/ft³</td>
<td>Class I Sandstone</td>
</tr>
<tr>
<td>SSD Density</td>
<td>142.7 lb/ft³</td>
<td>Class I Sandstone</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>2.16</td>
<td>Class I Sandstone</td>
</tr>
<tr>
<td>Absorption</td>
<td>5.93%</td>
<td>Class I Sandstone</td>
</tr>
</tbody>
</table>

### ASTM C 99

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modulus of Rupture</td>
<td></td>
</tr>
<tr>
<td>Perpendicular &amp; Dry</td>
<td>950 psi</td>
</tr>
<tr>
<td>Parallel &amp; Dry</td>
<td>500 psi</td>
</tr>
<tr>
<td>Perpendicular &amp; Wet</td>
<td>710 psi</td>
</tr>
<tr>
<td>Parallel &amp; Wet</td>
<td>410 psi</td>
</tr>
</tbody>
</table>

### ASTM C 170

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength</td>
<td></td>
</tr>
<tr>
<td>Perpendicular &amp; Dry</td>
<td>12,900 psi</td>
</tr>
<tr>
<td>Parallel &amp; Dry</td>
<td>7,500 psi</td>
</tr>
<tr>
<td>Perpendicular &amp; Wet</td>
<td>11,100 psi</td>
</tr>
<tr>
<td>Parallel &amp; Wet</td>
<td>7,000 psi</td>
</tr>
</tbody>
</table>

### ASTM C 153

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion Resistance</td>
<td></td>
</tr>
<tr>
<td>Initial Mass (Average)</td>
<td>217.15</td>
</tr>
<tr>
<td>Mass after 1,000 revolutions (Average)</td>
<td>199.53</td>
</tr>
<tr>
<td>Index Abrasion Resistance (Average)</td>
<td>4.51</td>
</tr>
</tbody>
</table>

### ASTM C 666

**Freeze/Thaw Testing:** These results are available upon request. It is a long report so did not include on this particular page due to lack of space.

*This information is based on test results by CTL Group*
# Baltic Buff Freeze/Thaw Testing Results

**ASTM C215, Dynamic Modulus of Elasticity during ASTM C666 Freeze/Thaw Testing:**

<table>
<thead>
<tr>
<th>Number of Cycles</th>
<th>0</th>
<th>33</th>
<th>63</th>
<th>99</th>
<th>135</th>
<th>171</th>
<th>207</th>
<th>303</th>
</tr>
</thead>
</table>

**Sample Dimensions**

| Length, m | 0.282 | 0.282 | 0.282 | 0.282 | 0.282 | 0.282 | 0.282 | 0.282 |
| Width, m   | 0.078 | 0.078 | 0.078 | 0.078 | 0.078 | 0.078 | 0.078 | 0.078 |
| Depth, m   | 0.077 | 0.077 | 0.077 | 0.077 | 0.077 | 0.077 | 0.077 | 0.077 |
| Cross-Sectional Area, m² | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 | 0.006 |
| Poisson’s Ratio (assumed) | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Radius of Gyration, K | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 | 0.022 |
| K/L | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 | 0.08 |
| Correction Factor per Table 1 of ASTM C215 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 | 1.49 |
| Constant per Eq. 1 of ASTM C215 | 888.1 | 888.1 | 888.1 | 888.1 | 888.1 | 888.1 | 888.1 | 888.1 |
| Mass of Test Sample, kg | 3.83 | 3.84 | 3.84 | 3.84 | 3.84 | 3.85 | 3.85 | 3.86 |

**Non-Destructive Evaluation per ASTM C215**

| Average Transverse Resonant Frequency, Hz | 1313 | 1223 | 1236 | 1236 | 1236 | 1236 | 1243 | 1230 |
| Dynamic Modulus of Elasticity | 5.9 | 5.1 | 5.2 | 5.2 | 5.2 | 5.2 | 5.3 | 5.2 |

**Notes:**
1. As requested, Poisson’ Ratio was assumed to be 0.2 based on internet research.
2. This report represents specifically the samples submitted.
3. This report may not be reproduced except in its entirety.
BLACK HILLS RUSTIC

COLOR/CHARACTERISTICS: Browns, tans, golds with tints of black and auburn tones

FEATURES:
- Full Veneer: 50% seam-face, 50% bed-face
- ThinCut™ Veneer: 50% seam-face, 50% bed-face

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
DENSITY: 155.34 lb/ft³
ABSORPTION: 3.0%

ASTM C 170
COMPRESSIVE STRENGTH: 23,814 psi  CLASS III QUARTZITE

ASTM C 880
FLEXURAL STRENGTH: Perpendicular: 3,065 psi

ASTM C 97
BULK SPECIFIC GRAVITY 2.561  CLASS II QUARTZITIC SANDSTONE

*This information is based on test results by Pacific Materials Laboratory
BLUE RIVER

COLOR/CHARACTERISTICS: Gray with some variegation

FEATURES:
  Random Height: 100% Split-face
  Dimensional: Sawn heights, split-face and ends

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>ASTM C 880</th>
<th>Perpendicular: 2,304</th>
<th>Parallel: 2,303</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEXURAL STRENGTH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASTM C 170</th>
<th>Perpendicular Area 4.512</th>
<th>PS 17,778</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPRESSIVE STRENGTH</td>
<td>Parallel Area 4.553</td>
<td>PS 19,034</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASTM C 97</th>
<th>2.68</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>ABSORPTION: 0.34%</td>
</tr>
</tbody>
</table>

*This information is based on test results by PSI, Inc. in St. Louis, MO.*
**BLUE SANDSTONE**

**COLOR/CHARACTERISTICS:** Primarily blue/gray in color, with some rust and brown color throughout the stone.

The test results below exceed the minimum requirements of ASTM C 616-97 (see table below for reference).

**SPECIFICATIONS:**

<table>
<thead>
<tr>
<th>ASTM C 97</th>
<th>Class</th>
<th>Requirement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Density: 159.83 lb/ft³</td>
<td>Class II Quartzitic Sandstone</td>
<td></td>
<td>159.83 lb/ft³</td>
</tr>
<tr>
<td>Specific Gravity: 2.561</td>
<td>Class III Quartzite</td>
<td></td>
<td>2.561</td>
</tr>
<tr>
<td>Absorption: 0.97%</td>
<td>Class III Quartzite</td>
<td></td>
<td>0.97%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASTM C 99</th>
<th>Class</th>
<th>Requirement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modulus of Rupture: 2,639 psi</td>
<td>Class III Quartzite</td>
<td></td>
<td>2,639 psi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASTM C 170</th>
<th>Class</th>
<th>Requirement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive Strength: 23,814 psi</td>
<td>Class III Quartzite</td>
<td></td>
<td>23,814 psi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASTM C 241</th>
<th>Class</th>
<th>Requirement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abrasion Resistance: 52.58</td>
<td>Class III Quartzite</td>
<td></td>
<td>52.58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASTM C 880</th>
<th>Class</th>
<th>Requirement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexural Strength:</td>
<td>Perpendicular: 3,065 psi</td>
<td>Class II Quartzitic Sandstone</td>
<td>3,065 psi</td>
</tr>
<tr>
<td></td>
<td>Parallel: 21.13 Mpa</td>
<td></td>
<td>21.13 Mpa</td>
</tr>
</tbody>
</table>

**X-RAY DIFFRACTION MINERALOGICAL ANALYSIS**

<table>
<thead>
<tr>
<th>Class</th>
<th>Requirement</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Free Silica Content: 93%</td>
<td>Class II Quartzitic Sandstone</td>
<td></td>
</tr>
</tbody>
</table>

**STATIC COEFFICIENT OF FRICTION**

<table>
<thead>
<tr>
<th>Dry</th>
<th>Wet</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.21</td>
<td>.94</td>
</tr>
</tbody>
</table>
BOONVILLE BLEND

COLOR/CHARACTERISTICS: Range of light brown, tan, grays and dark brown

FEATURES:
   Heights: 2" - 6"
   Lengths: Random up to 16"

Available in ThinCut™ only

SPECIFICATIONS:

ASTM C 97
SPECIFIC GRAVITY: 2.33
ABSORPTION: 2.7%

ASTM C 99
MODULUS OF RUPTURE: 2,939 psi
ORIENTATION/CONDITION: Parallel to the Rift/Dry

ASTM C 170
COMPRESSIVE STRENGTH: 12,000 psi

*This information is based on test results by Geotechnology, Inc. in St. Louis, MO.
BRENTWOOD

COLOR/CHARACTERISTICS: Range of chocolate to light brown, buff and gray. Some pieces have a beautiful texture resembling wood rings on a tree.

FEATURES: Natural bed heights that range between 4” - 9” in height, with the split-face and natural edge exposed.

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
DENSITY: 151.55 lb/ft³
SPECIFIC GRAVITY: 2.429
ABSORPTION: 1.81%
CLASS II QUARTZITIC SANDSTONE
CLASS III QUARTZITE

ASTM C 99
MODULUS OF RUPTURE: 1,554 psi
CLASS III QUARTZITE
10.71 Mpa

ASTM C 170
COMPRESSIVE STRENGTH: 11,403 psi
CLASS III QUARTZITE
78.61 Mpa

ASTM C 241
ABRASION RESISTANCE: 52.58
CLASS III QUARTZITE

ASTM C 880
FLEXURAL STRENGTH:
Perpendicular: 3,065 psi
Parallel: 21.13 Mpa

X-RAY DIFFRACTION MINERALOGICAL ANALYSIS
FREE SILICA CONTENT: 93%
CLASS II QUARTZITIC SANDSTONE

STATIC COEFFICIENT OF FRICTION
DRY: 1.21
WET: .94
BROOKHAVEN

COLOR/CHARACTERISTICS: Light gray with some buff variegation

FEATURES:
- Random Height: 100% Split-face
- Dimensional: Sawn heights, split-face and ends

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
SPECIFIC GRAVITY: 2.55  ABSORPTION: 2.66%

ASTM C 99
MODULUS OF RUPTURE: 1,866 lb/in²

ASTM C 170
COMPRESSIVE STRENGTH:

<table>
<thead>
<tr>
<th></th>
<th>Perpendicular</th>
<th>Area 9.45 in²</th>
<th>13,350 psi</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parallel</td>
<td>Area 9.54 in²</td>
<td></td>
<td>12,800 psi</td>
</tr>
</tbody>
</table>

ASTM C 880
FLEXURAL STRENGTH: Parallel to the Rift/Dry: 1,748 psi

Testing was performed in general accordance with the following ASTM Standards. This information is based on December 2017 test results by Professional Service Industries and Geotechnology.

*C 99 and C 880 were performed under the dry condition, horizontal to the rift.
CANADIAN LEDGE

COLOR/CHARACTERISTICS: Class III Quartzitic Sandstone with a range of colors from light buff to dark brown and rust shades

FEATURES:
- 3” - 5” Heights, Random Lengths
- 50% snapped to 50% natural edge

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
DENSITY: 155.43 lb/ft³
SPECIFIC GRAVITY: 2.561
ABSORPTION: 1.6%

ASTM C 170
COMPRESSIVE STRENGTH: 23,814 psi

ASTM C 880
AVERAGE FLEXURAL STRENGTH: 3,065 psi

STATIC COEFFICIENT OF FRICTION: DRY: 1.21 WET: .94
CASTLEWOOD

COLOR/CHARACTERISTICS: Buff colored limestone

FEATURES:
Uniform heights of 4” – 6” or 13” – 15”
Average depth is 24” - 30”
Average length: 4 ft. – 5 ft.

SPECIFICATIONS:

ASTM C 97*
SPECIFIC GRAVITY:  Dry: 2.542  Wet: 2.684
ABSORPTION:  2.1%

ASTM C 99**
MODULUS OF RUPTURE: 1,500  PARALLEL
MODULUS OF RUPTURE: 1,680  PERPENDICULAR

ASTM C 170**
COMPRESSIVE STRENGTH: 11,960 psi

FREEZE/THAW SOUNDNESS RATIO*  98% Retained

*Information is based on test results by Kansas Department of Transportation
**Information is based on test results by Tetra Tech, Inc.
**CHATEAU BAY**

**COLOR/CHARACTERISTICS:** Overall tones are light & dark gray with some buff variegation and some stone has a blue/grey color to the stone

**FEATURES:**
- Random Height: 100% Split-face
- Dimensional: Sawn heights, split-face and ends

Available in Full Veneer & ThinCut™

**BLUE RIVER SPECIFICATIONS:**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Perpendicular</th>
<th>Parallel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASTM C 880</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLEXURAL STRENGTH:</td>
<td>2,304</td>
<td>2,303</td>
</tr>
<tr>
<td><strong>ASTM C 170</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMRESSIVE STRENGTH:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perpendicular:</td>
<td>4.512</td>
<td>PS 17,778</td>
</tr>
<tr>
<td>Parallel:</td>
<td>4.553</td>
<td>PS 19,034</td>
</tr>
<tr>
<td><strong>ASTM C 97</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPECIFIC GRAVITY:</td>
<td>2.68</td>
<td></td>
</tr>
<tr>
<td>ABSORPTION:</td>
<td>0.34%</td>
<td></td>
</tr>
</tbody>
</table>

**BROOKHAVEN SPECIFICATIONS:**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Perpendicular</th>
<th>Parallel</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ASTM C 880</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FLEXURAL STRENGTH:</td>
<td>2,304</td>
<td>2,303</td>
</tr>
<tr>
<td><strong>ASTM C 170</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>COMRESSIVE STRENGTH:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Perpendicular:</td>
<td>4.512</td>
<td>PS 17,778</td>
</tr>
<tr>
<td>Parallel:</td>
<td>4.553</td>
<td>PS 19,034</td>
</tr>
<tr>
<td><strong>ASTM C 97</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SPECIFIC GRAVITY:</td>
<td>2.68</td>
<td></td>
</tr>
<tr>
<td>ABSORPTION:</td>
<td>0.34%</td>
<td></td>
</tr>
</tbody>
</table>

*This information is based on test results by PSI, Inc. in St. Louis, MO.*
CHESTNUT HILL

COLOR/CHARACTERISTICS: Brown and rust with red tones

FEATURES:
- Full Veneer: 100% Seam-face/Bed-face
- ThinCut™ Veneer: 50% Seam-face, 50% Bed-face

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
DENSITY: 155.34 lb/ft³
ABSORPTION: 3.0%

ASTM C 170
COMPRESSIVE STRENGTH: 23,814 psi  CLASS III QUARTZITE

ASTM C 880
FLEXURAL STRENGTH: Perpendicular: 3,065 psi

ASTM C 97
BULK SPECIFIC GRAVITY 2.561  CLASS II QUARTZITIC SANDSTONE

*This information is based on test results by Pacific Materials Laboratory
CRAB ORCHARD

COLOR: Tan with dark brown veining

SPECIFICATIONS:

ASTM C 97
SPECIFIC GRAVITY: 2.53
ABSORPTION: 1.2%

ASTM C 99
MODULUS OF RUPTURE: 3,225 psi
ORIENTATION/CONDITION: Parallel to the Rift/Dry

ASTM C 170
COMPRESSIVE STRENGTH: 29,300 psi
ORIENTATION/CONDITION: Parallel to the Rift/Dry
**DEER HAVEN**

**COLOR/CHARACTERISTICS:** Light tan to brown with some gray tones

**FEATURES:**
- 100% Bed-face material with random heights from 3” to 6”
- Random lengths

Available in Full Veneer & ThinCut™

**SPECIFICATIONS:**

**ASTM C 97**
- BULK SPECIFIC GRAVITY: 2.387
- BULK SPECIFIC GRAVITY, SSD: 2.459
- APPARENT SPECIFIC GRAVITY: 2.5718
- ABSORPTION: 3.0%

**ASTM C 170**
- COMPRESSIVE STRENGTH: 7,500 psi

**ASTM C 880**
- FLEXURAL STRENGTH: Perpendicular: 3,065 psi

*This information is based on test results by Pacific Materials Laboratory*
» DOVE GRAY

COLOR/CHARACTERISTICS: Overall tone is light gray with some occasional darker gray variegation through the stone

SPECIFICATIONS:

ASTM C 97
- DRY WEIGHT: 1025.7 g
- SSD WEIGHT: 1045.3 g
- WET WEIGHT: 641.7 g
- DENSITY: 158.6 lbs/ft³
- ABSORPTION: 1.91%

ASTM C 170
- COMPRESSIVE STRENGTH: 11,960 psi

ASTM C 99
- MODULUS OF RUPTURE: 1,500 PARALLEL
- MODULUS OF RUPTURE: 1,680 PERPENDICULAR

*This information is based on test results by Tetra Tech, Inc.*
EASTERN WEATHERED SANDSTONE

COLOR/CHARACTERISTICS: Eastern Weathered Sandstone is a naturally occurring sandstone material, weathered naturally by the effects of its environment. Colors range from gray to brown and mossy covered.

SPECIFICATIONS:

ASTM C 97
SPECIFIC GRAVITY: 2.33
ABSORPTION: 2.7%

ASTM C 99
MODULUS OF RUPTURE: 2.939 psi
ORIENTATION/CONDITION: Parallel to the Rift/Dry

ASTM C 170
COMPRESSIVE STRENGTH: 12,000 psi
ORIENTATION/CONDITION: Parallel to the Rift/Dry
**FOND DU LAC**

**COLOR/CHARACTERISTICS:** Range of light buff to light gray.

**FEATURES:** Range of heights from 2” to 6” with random lengths up to 40”
100 % split-face material

Available in Full Veneer & ThinCut™

**SPECIFICATIONS:**

**ASTM C 97**
DENSITY: 1673 (pcf)
SPECIFIC GRAVITY: 2.683
ABSORPTION: 0.6%

**ASTM C 99**
MODULUS OF RUPTURE: 3,390 PARALLEL
MODULUS OF RUPTURE: 3,430 PERPENDICULAR

**ASTM C 170**
COMPRESSIVE STRENGTH: 19,080 (psi) PARALLEL
COMPRESSIVE STRENGTH: 24,310 (psi) PERPENDICULAR

**ASTM C 880**
FLEXURAL STRENGTH: Perpendicular: 2,470 (psi) Parallel: 2,470 (psi)
GUNSMOKE GRAY

COLOR/CHARACTERISTICS: Gray with darker variegation

FEATURES:
  Random Height: 100% Split-face
  Dimensional: Sawn heights, split-face and ends

WEIGHT: 145 per cu. ft., so depending what thickness you are looking at using, will determine what it correlates to on a square foot basis.

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
SPECIFIC GRAVITY: 2.121
ABSORPTION: 6.13%

ASTM C 99*
MODULUS OF RUPTURE: 801 psi

ASTM C 170*
COMpressive StRENGTH: 8,138 psi

Testing was performed in general accordance with the following ASTM Standards. This information is based in October 2003 test results by Construction Consulting & Testing, Inc.

*C 99 and C 170 were performed under the dry condition, perpendicular to the bedding planes.
INDIANA LIMESTONE

Request this file by emailing info@semcostone.com because this testing data report has several pages and is easier to email.
MOJAVE LEDGE

COLOR/CHARACTERISTICS: Wide range of color & texture, including white, tans, browns, golds and rusts

FEATURES:
Up to 50% may be angled slightly and/or dramatically. Random heights 1.5” to 3”
Random lengths 8” to 20”

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
BULK SPECIFIC GRAVITY:  2.387  CLASS II QUARTZITIC SANDSTONE
DENSITY:  155.34 lbs./ft³

ABSORPTION:  3.0%

ASTM C 170
COMPRESSIVE STRENGTH:  7500 psi  CLASS III QUARTZITE

*This information is based on test results by Pacific Materials Laboratory
MOUNTAIN RIDGE

COLOR/CHARACTERISTICS: Gray, blue & buff tones

FEATURES:
  Random Height: 100% Split-face
  Dimensional: Sawn heights, split-face and ends

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Perpendicular</th>
<th>Parallel</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C 170</td>
<td>PSI (gross) 12,547</td>
<td>PSI (gross) 12,310</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard</th>
<th>Specific Gravity</th>
<th>Absorption</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C 97</td>
<td>2.61</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

*This information is based on test results by PSI, Inc. in St. Louis, MO.*
## OHIO STONE

<table>
<thead>
<tr>
<th></th>
<th>DENSITY</th>
<th>ABSORPTION</th>
<th>COMpressive Strength</th>
<th>MODULUS OF RUPTURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOUTHERN &amp; RUSTIC BUFF</td>
<td>167.6 lb/ft³</td>
<td>0.99%</td>
<td>14,336 psi</td>
<td>1,266.6 psi</td>
</tr>
<tr>
<td>CANYON GRAY</td>
<td>169 lb/ft³</td>
<td>0.276%</td>
<td>15,344 psi</td>
<td>1,175.2 psi</td>
</tr>
<tr>
<td>BUCKSKIN BUFF</td>
<td>155 lb/ft³</td>
<td>3.72%</td>
<td>14,313 psi</td>
<td>889.4 psi</td>
</tr>
<tr>
<td>OHIO FIELDSTONE</td>
<td>166 lb/ft³</td>
<td>0.568%</td>
<td>12,282 psi</td>
<td>1,160.7 psi</td>
</tr>
<tr>
<td>OHIO RED SANDSTONE</td>
<td>132 lb/ft³</td>
<td>6.58%</td>
<td>7,224 psi</td>
<td>1,524.2 psi</td>
</tr>
<tr>
<td>GRAY GORGE &amp; GRAY GORGE TAN</td>
<td>169 lb/ft³</td>
<td>0.868%</td>
<td>11,876 psi</td>
<td>1,732.6 psi</td>
</tr>
</tbody>
</table>
PINE RIDGE

COLOR/CHARACTERISTICS: Brown and rust with red tones

FEATURES:
- Full Veneer: 100% Seam-face/Bed-face
- ThinCut™ Veneer: 50% Seam-face, 50% Bed-face

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
- DENSITY: 161.77 lb/ft³
- SPECIFIC GRAVITY: 2.592
- ABSORPTION: 0.59%
## PLATINUM FALLS

**COLOR/CHARACTERISTICS:** Light to dark grays & blues

**FEATURES:**
- 100% Bed-face with a natural back
- Sawn Heights: 2", 3", 4"
- Lengths: Random up to 24"

Available in ThinCut™ only

**SPECIFICATIONS:**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C 97</td>
<td>Density</td>
<td>142.8 lb/ft³</td>
</tr>
<tr>
<td>ASTM C 97</td>
<td>Absorption</td>
<td>1.5534%</td>
</tr>
<tr>
<td>ASTM C 99</td>
<td>Modulus of Rupture</td>
<td>890 psi</td>
</tr>
<tr>
<td>ASTM C 170</td>
<td>Compressive Strength</td>
<td>7,500 psi</td>
</tr>
<tr>
<td>ASTM C 97</td>
<td>Bulk Specific Gravity</td>
<td>2.3872</td>
</tr>
</tbody>
</table>

*This information is based on test results by Pacific Materials Laboratory*
PREMIUM FIELDSTONE BLEND

COLOR/CHARACTERISTICS: Premium Fieldstone Blend is a naturally occurring sandstone material, weathered naturally by the effects of its environment. Harvested from the hills of Southern Missouri and Northern Arkansas, it is then shipped to our fabrication facility in Perryville Missouri, where it is fabricated into ThinCut™ building stone veneer.

FEATURES:
50% Natural beds with weathered edge, 50% Split-face
Heights: 3" - 7"
Lengths: Random up to 16'
Color: Range of brown, gold and rust with occasional white & red through the stone
Available in ThinCut™ only and has finished ends

SPECIFICATIONS:

ASTM C 97
SPECIFIC GRAVITY: 2.121
ABSORPTION: 6.13%

ASTM C 99*
MODULUS OF RUPTURE: 801 psi

ASTM C 170*
COMPRESSIVE STRENGTH: 8,138 psi

Testing was performed in general accordance with the following ASTM Standards. This information is based on test results by Construction Consulting & Testing, Inc.

*C 99 and C 170 were performed under the dry condition, perpendicular to the bedding planes.
## ROCKPORT BLEND

**COLOR/CHARACTERISTICS:** Light & dark gray, blue & buff tones

**FEATURES:**
- Random Height: 100% Split-face
- Dimensional: Sawn heights, split-face and ends

Available in Full Veneer & ThinCut™

### MOUNTAIN RIDGE SPECIFICATIONS:

**ASTM C 170**

<table>
<thead>
<tr>
<th>Strength</th>
<th>Perpendicular</th>
<th>Parallel</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPRESSIVE</td>
<td>PSI (gross)</td>
<td>PSI (gross)</td>
</tr>
<tr>
<td>PS 12,547</td>
<td>12,310</td>
<td></td>
</tr>
</tbody>
</table>

**ASTM C 97**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>2.61</td>
</tr>
<tr>
<td>ABSORPTION</td>
<td>4.0%</td>
</tr>
</tbody>
</table>

*This information is based on test results by PSI, Inc. in St. Louis, MO.*

### BLUE RIVER SPECIFICATIONS:

**ASTM C 880**

<table>
<thead>
<tr>
<th>Strength</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEXURAL STRENGTH</td>
<td>2,304 Perpendicular, 2,303 Parallel</td>
</tr>
</tbody>
</table>

**ASTM C 170**

<table>
<thead>
<tr>
<th>Strength</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPRESSIVE</td>
<td>PS 17,778</td>
</tr>
<tr>
<td>PS 19,034</td>
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</tr>
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</table>

**ASTM C 97**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPECIFIC GRAVITY</td>
<td>2.68</td>
</tr>
<tr>
<td>ABSORPTION</td>
<td>0.34%</td>
</tr>
</tbody>
</table>

*This information is based on test results by PSI, Inc. in St. Louis, MO.*
RUSTIC CEDAR

COLOR/CHARACTERISTICS: Buff with some blue and gray veining

FEATURES:
- Random Height: 100% Split-face
- Dimensional: Sawn heights, split-face and ends

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>ASTM C 97</th>
<th>DENSITY: 154.6 lb/ft³</th>
<th>ABSORPTION: 3.54%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ASTM C 170</th>
<th>DRY CONDITION</th>
<th>WET CONDITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPRESSIVE STRENGTH</td>
<td>Parallel: 17,002 psi</td>
<td>Parallel: 11,919 psi</td>
</tr>
<tr>
<td></td>
<td>Perpendicular: 21,591 psi</td>
<td>Perpendicular: 19,787 psi</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ASTM C 880</th>
<th>DRY CONDITION</th>
<th>WET CONDITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>FLEXURAL STRENGTH</td>
<td>Parallel: 1,743 psi</td>
<td>Parallel: 1,248 psi</td>
</tr>
<tr>
<td></td>
<td>Perpendicular: 922 psi</td>
<td>Perpendicular: 834 psi</td>
</tr>
</tbody>
</table>

Testing was performed in general accordance with the following ASTM Standards. This information is based on test results by The Council of North America, Inc.
SILVERDALE

COLOR/CHARACTERISTICS: Limestone buff in color with some light yellow variegation throughout the stone

SPECIFICATIONS:

ASTM C 97
DENSITY: 134.19
SPECIFIC GRAVITY: 2.151 lb/ft³
ABSORPTION: 7.51%

ASTM C 99
MODULUS OF RUPTURE: 822 psi (5.67 MPa)

ASTM C 170
COMPRESSIVE STRENGTH: 5047 psi (34.79 MPa)

ASTM C 880
FLEXURAL STRENGTH: 725 psi (5.00 MPa)

ASTM C 241
ABRASION RESISTANCE: 3.18

Testing was performed in general accordance with the following ASTM Standards. Test results by SGS U.S. Testing Company, Inc.
SILVER MIST

COLOR/CHARACTERISTICS:
100% Split-Face
Gray tones with some veining throughout the stone

FEATURES:
Heights: 4” – 10’
Lengths: Random lengths
Available in Full Veneer & ThinCut™

SPECIFICATIONS:

- AVERAGE PSI: 11,750 (psi)
- ABSORPTION: 5.2%
- OVEN DRY SPECIFIC GRAVITY: 2.23
- SSD SPECIFIC GRAVITY: 2.34
- APPERENT SPECIFIC GRAVITY: 2.52
- OVEN DRY DENSITY: 138.6 lbs/ft³
- SSD DENSITY: 145.8 lbs/ft³
- APPERENT DENSITY: 156.7 lbs/ft³

Testing was performed in general accordance with the following ASTM Standards.
This information is based on test results by Koehler Engineering.
STONEYBROOK

COLOR/CHARACTERISTICS:
100% SPLIT FACE LIMESTONE: Gray with a touch of blue & mauve
100% BED FACE LIMESTONE: Range of lavenders, browns, gray & mauve

FEATURES:
100% Split-face – Range of heights from 2" to 6" with random lengths up to 40"
100% Bed-face – 6", 8", 12" and 18" heights with random lengths up to 40"
(ThinCut™ cannot exceed 10.5" heights)

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C 97</td>
<td>Density: 176.5 (pcf)</td>
</tr>
<tr>
<td></td>
<td>Specific Gravity: 2.83</td>
</tr>
<tr>
<td></td>
<td>Absorption: 0.2%</td>
</tr>
<tr>
<td>ASTM C 99</td>
<td>Modulus of Rupture: 2,630 (Parallel)</td>
</tr>
<tr>
<td></td>
<td>Modulus of Rupture: 2,980 (Perpendicular)</td>
</tr>
<tr>
<td>ASTM C 170</td>
<td>Compressive Strength: 24,500 (Parallel) (psi)</td>
</tr>
<tr>
<td></td>
<td>Compressive Strength: 21,030 (Perpendicular) (psi)</td>
</tr>
<tr>
<td>ASTM C 880</td>
<td>Flexural Strength: Perpendicular: 1,660 (psi) Parallel: 1,890 (psi)</td>
</tr>
</tbody>
</table>
TIMBER CREEK

COLOR/CHARACTERISTICS: Buff with some light and dark gray veining

FEATURES:
Dimensional: Sawn heights, split-face and ends
Available in Full Veneer & ThinCut™

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>ASTM C 97</th>
<th>DENSITY: 166.5 lb/ft³</th>
<th>ABSORPTION: 2.668%</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>ASTM C 170</th>
<th>DRY CONDITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPRESSION STRENGTH</td>
<td>Perpendicular: 22,600 psi</td>
</tr>
</tbody>
</table>

Testing was performed in general accordance with the following ASTM Standards. This information is based on test results by Geotechnology, Inc. in St. Louis, MO.
TUSCAN TAN

COLOR/CHARACTERISTICS:
100% Split-Face
Tan and cream colors, some gray tones with some veining throughout the stone

FEATURES:
Heights: 4” – 10”
Lengths: Random lengths

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 568
AVERAGE PSI: 6,670 (psi)
ABSORPTION: 8.8%
OVEN DRY SPECIFIC GRAVITY: 2.08
SSD SPECIFIC GRAVITY: 2.26
APPARENT SPECIFIC GRAVITY: 2.54
OVEN DRY DENSITY: 129.5 lbs/ft³
SSD DENSITY: 140.8 lbs/ft³
APPARENT DENSITY: 158.4 lbs/ft³

Testing was performed in general accordance with the following ASTM Standards. This information is based on test results by Koehler Engineering.
URBAN COPPER

COLOR/CHARACTERISTICS: 100% split-face stones with a warm and mellow blend of whites, creams, and yellows with a hint of copper, blue and gray veining.

FEATURES:
Height: Approximately 3” with an average of 20% to 30% of 6” to 8” jumpers mixed in
Length: Random lengths between 4” – 18”

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
DRY WEIGHT: 364.4 g
IMMERSED WEIGHT: 224.5 g
SSD WEIGHT: 368.8 g
ABSORPTION: 1.2%
SPECIFIC GRAVITY: 2.53

ASTM C 99
MODULUS OF RUPTURE: 3,225 lb/in² PARALLEL

ASTM C 170
COMPRESSIVE STRENGTH: 29,300 (psi) PARALLEL

Testing was performed in general accordance with the following ASTM Standards. This information is based on test results by Geotechnology, Inc. in St. Louis, MO.
URBAN GREIGE

COLOR/CHARACTERISTICS: 100% split-face stones with a color range of light to dark gray.

FEATURES:
Height: Approximately 3’ with an average of 20% to 30% of 6” to 8” jumpers mixed in
Length: Random lengths between 4” – 18”

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
DRY WEIGHT: 364.4 g
IMMERSED WEIGHT: 224.5 g
SSD WEIGHT: 368.8 g
ABSORPTION: 1.2%
SPECIFIC GRAVITY: 2.53

ASTM C 99
MODULUS OF RUPTURE: 3,225 lb/in² PARALLEL

ASTM C 170
COMPRESSIVE STRENGTH: 29,300 (psi) PARALLEL

Testing was performed in general accordance with the following ASTM Standards.
This information is based on test results by Geotechnology, Inc. in St. Louis, MO.
WEATHERED FIELDSTONE

COLOR/CHARACTERISTICS: Weathered Fieldstone is a naturally occurring sandstone material, weathered naturally by the effects of its environment. Harvested from the hills of Southern Missouri and Northern Arkansas, it is then shipped to our fabrication facility in Perryville Missouri, where it is fabricated into building stone veneer, full bed depth and ThinCut™ veneer.

FEATURES:
- Random Height: 100% Split-face
- Dimensional: Sawn heights, split-face and ends

Available in ThinCut™

SPECIFICATIONS:

- ASTM C 97
  - SPECIFIC GRAVITY: 2.121
  - ABSORPTION: 6.13%

- ASTM C 99*
  - MODULUS OF RUPTURE: 801 psi

- ASTM C 170*
  - COMPRRESSIVE STRENGTH: 8,138 psi

Testing was performed in general accordance with the following ASTM Standards. This information is based on test results by Construction Consulting & Testing, Inc.

*C 99 and C 170 were performed under the dry condition, perpendicular to the bedding planes.
WESTON CREAM

COLOR/CHARACTERISTICS: Light buff cream colored

FEATURES:
- Random Height: 100% Split-face
- Dimensional: Sawn heights, split-face and ends

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Standard</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C 97</td>
<td>DENSITY: 135.61 lb/ft³</td>
<td>SPECIFIC GRAVITY: 2.173</td>
</tr>
<tr>
<td></td>
<td>ABSORPTION: 6.51%</td>
<td></td>
</tr>
<tr>
<td>ASTM C 99</td>
<td>MODULUS OF RUPTURE: 883 psi</td>
<td>6.09 Mpa</td>
</tr>
<tr>
<td>ASTM C 170</td>
<td>COMPRESSIVE STRENGTH: 5,686 psi</td>
<td>39.20 Mpa</td>
</tr>
<tr>
<td>ASTM C 241</td>
<td>ABRASION RESISTANCE: 5.06</td>
<td></td>
</tr>
<tr>
<td>ASTM C 880</td>
<td>FLEXURAL STRENGTH:</td>
<td>Perpendicular: 1,053 psi</td>
</tr>
</tbody>
</table>
WESTON SHELL

COLOR/CHARACTERISTICS: Shades of buff to tan. Sea shells have been preserved for millions of years in this unique limestone

FEATURES:
100% Split-face with random heights from 4” to 12” (ThinCut™ cannot exceed 10.5”) Random lengths from 10” to 30”

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
BULK SPECIFIC GRAVITY: 2.16
DENSITY: 134.6 lbs./ft³
ABSORPTION: 6.1%

ASTM C 170
COMPRESSION STRENGTH: 5,800 psi PARALLEL
COMPRESSION STRENGTH: 6,010 psi PERPENDICULAR

ASTM C 99
MODULUS OF RUPTURE: 1,050 PARALLEL
MODULUS OF RUPTURE: 810 PERPENDICULAR
## Willowbrook Blue

**Color/Characteristics:** Willowbrook Blue is blue/grey in color with some brown and rust variegation.

**Features:**
- 50% Bed-face, 50% Split-face
- Heights: 3” – 7”
- Lengths: Random
- Available in Full Veneer & ThinCut™

**Specifications:**

<table>
<thead>
<tr>
<th>Test Standard</th>
<th>Property</th>
<th>Value</th>
<th>Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C 97</td>
<td>Density: 159.83 lb/ft³</td>
<td></td>
<td>Class II Quartzitic Sandstone</td>
</tr>
<tr>
<td></td>
<td>Specific Gravity: 2.561</td>
<td></td>
<td>Class III Quartzite</td>
</tr>
<tr>
<td></td>
<td>Absorption: 0.97%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASTM C 99</td>
<td>Modulus of Rupture: 2,639 psi</td>
<td></td>
<td>Class III Quartzite</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>18.19 Mpa</td>
</tr>
<tr>
<td>ASTM C 170</td>
<td>Compressive Strength: 23,814 psi</td>
<td></td>
<td>Class III Quartzite</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>164.17 Mpa</td>
</tr>
<tr>
<td>ASTM C 241</td>
<td>Abrasion Resistance: 52.58</td>
<td></td>
<td>Class III Quartzite</td>
</tr>
<tr>
<td>ASTM C 880</td>
<td>Flexural Strength:</td>
<td>Perpendicular: 3,065 psi</td>
<td>Class II Quartzitic Sandstone</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Parallel: 21.13 Mpa</td>
<td></td>
</tr>
</tbody>
</table>

**X-Ray Diffraction Mineralogical Analysis**
- Free silica content: 93%

**Static Coefficient of Friction**
- Dry: 1.21
- Wet: .94
## WILLOWBROOK BROWN

**COLOR/CHARACTERISTICS:** Willowbrook Brown has shades of brown & tan, speckled with dark brown

**FEATURES:**
- 50% Bed-face, 50% Split-face
- Heights: 3” – 7” Lengths: Random

Available in Full Veneer & ThinCut™

**SPECIFICATIONS:**

<table>
<thead>
<tr>
<th>Standard</th>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM C 97</td>
<td>DENSITY:</td>
<td>159.83 lb/ft³</td>
</tr>
<tr>
<td></td>
<td>SPECIFIC GRAVITY:</td>
<td>2.561</td>
</tr>
<tr>
<td></td>
<td>ABSORPTION:</td>
<td>0.97%</td>
</tr>
<tr>
<td></td>
<td>CLASS II QUARTZITIC SANDSTONE</td>
<td></td>
</tr>
<tr>
<td>ASTM C 99</td>
<td>MODULUS OF RUPTURE:</td>
<td>2,639 psi</td>
</tr>
<tr>
<td></td>
<td>CLASS III QUARTZITE</td>
<td>18.19 Mpa</td>
</tr>
<tr>
<td>ASTM C 170</td>
<td>COMPRESSIVE STRENGTH:</td>
<td>23,814 psi</td>
</tr>
<tr>
<td></td>
<td>CLASS III QUARTZITE</td>
<td>164.17 Mpa</td>
</tr>
<tr>
<td>ASTM C 241</td>
<td>ABRASION RESISTANCE:</td>
<td>52.58</td>
</tr>
<tr>
<td></td>
<td>CLASS III QUARTZITE</td>
<td></td>
</tr>
<tr>
<td>ASTM C 880</td>
<td>FLEXURAL STRENGTH:</td>
<td>Perpendicular: 3,065 psi</td>
</tr>
<tr>
<td></td>
<td>Parallel: 21.13 Mpa</td>
<td></td>
</tr>
<tr>
<td>X-RAY DIFFRACTION MINERALOGICAL ANALYSIS</td>
<td>FREE SILICA CONTENT: 93%</td>
<td>CLASS II QUARTZITIC SANDSTONE</td>
</tr>
<tr>
<td>STATIC COEFFICIENT OF FRICTION</td>
<td>DRY:</td>
<td>1.21</td>
</tr>
<tr>
<td></td>
<td>WET:</td>
<td>.94</td>
</tr>
</tbody>
</table>

**FREE SILICA CONTENT:** 93%
WIND RIVER

COLOR: Tan, pink, rust and dark brown in color

SPECIFICATIONS:

ASTM C 97
SPECIFIC GRAVITY: 2.53
ABSORPTION: 1.2%

ASTM C 99
MODULUS OF RUPTURE: 3,225 psi
ORIENTATION/CONDITION: Parallel to the Rift/Dry

ASTM C 170
COMPRESSIVE STRENGTH: 29,300 psi
ORIENTATION/CONDITION: Parallel to the Rift/Dry
YUKON LEDGE

COLOR/CHARACTERISTICS: Deep rust to dark brown seam-face

FEATURES:
- Random heights 1” to 4”
- Random lengths 5” to 20”

Available in Full Veneer & ThinCut™

SPECIFICATIONS:

ASTM C 97
BULK SPECIFIC GRAVITY: 2.387  CLASS II QUARTZITIC SANDSTONE
DENSITY: 155.34 lbs./ft³

ABSORPTION: 3.0%

ASTM C 170
COMPRESSIVE STRENGTH: 7,500 psi  CLASS III QUARTZITE

*This information is based on test results by Pacific Materials Laboratory