Colors

- Mission (MI)
- Desert Rose
- Imperial Red
- Red Varitone
- Chestnut
- Ebony
- Mauna Loa
- Teal Brown
- Brown Varitone
- Tan Terra
- Carib
- Monterey
- Burgundy
- Royal Plum
- Vintage
- Inca
- Ivory
- Copper
- Goldenrod
- Mojave
- Glacier

Table 1 – Physical Data

608 Specification: Manufactured to meet ASTM C652 Grade SW Type HBS

Nominal Wall Thickness

<table>
<thead>
<tr>
<th>4”</th>
<th>6”</th>
<th>8”</th>
</tr>
</thead>
</table>
| R Values
| “Calculated” | 
| Includes inside and outside Air Films. |
| Sources: ASHRAE Standard 90.1, Oregon & Washington State Energy Codes |
| Cells uninsulated with 30% grouted I 2 I 2 |
| Cells insulated with Perlite and 30% grouted | 2.22 | 2.96 | 3.38 |
| Cells solid grouted | 1.33 | 1.61 | 1.79 |
| 30% grouted brick furred 2’ O.C. plus 1/2” gyp board with cavity between furring insulated with: |
| 3/4” Extruded Polystyrene | 4.22 | 4.59 | 4.71 |
| 1 1/2” Extruded Polystyrene | 6.42 | 6.79 | 6.91 |
| 3/4” Polyisocyanurate | 5.12 | 5.49 | 5.61 |
| 1 1/2” Polyisocyanurate | 8.17 | 8.54 | 8.66 |
| 1/2” gyp board adhered to 2 1/2” polyisocyanurate adhered to uninsulated brick 30% grouted | 19.52 | 19.89 | 20.01 |

Fire Ratings

per IBC Table 720.1 (2)
| Grouted solid or filled with Perlite | 1 I 3 I 4 |
| Not continuously grouted | 0 I 1 I 2 |

Weight of Walls

Approximately in pounds per ft^2 of wall area
| Ungrouted | 25 | 36 | 48 |
| Grout @ 48” V&H (48” O.C. vertical and horizontal) | 28 | 42 | 57 |
| Grout @ 24” V&H | 32 | 48 | 66 |
| Solid Grout | 37 | 57 | 78 |

Compressive Strength (varies by color). Consult your Mutual Materials Representative

Percent Solid
| 63 | 52 | 57 |

Grout or Perlite

Cubic foot per foot of vertical cell | .048 | .076 | .111 |
| Cubic foot per foot of bond beam | .038 | .065 | .113 |

Table 2 – Metric Conversions

4” Structural Brick

Actual Unit Dimensions

| 3 1/2” | 90 mm |
| 4 1/2” | 115 mm |
| 5 1/2” | 140 mm |
| 7 1/2” | 190 mm |

5” Structural Brick

Actual Unit Dimensions

| 3 1/2” | 90 mm |
| 3 1/2” | 90 mm |
| 11 1/2” | 290 mm |
| 11 1/2” | 290 mm |

6” Structural Brick

Actual Unit Dimensions

| 3 1/2” | 90 mm |
| 3 1/2” | 90 mm |
| 11 1/2” | 290 mm |
| 11 1/2” | 290 mm |

8” Structural Brick

Actual Unit Dimensions

| 3 1/2” | 90 mm |
| 3 1/2” | 90 mm |
| 11 1/2” | 290 mm |
| 11 1/2” | 290 mm |

* Not all colors shown here are stocking products; please consult additional products.互相を参照してください。* Not all colors shown here are stocking products; please consult additional products. Mutually Mutual Materials Representative. Additional production time should be allowed. These color photographs show the general appearance of colors and textures. The actual product shipped is not guaranteed to duplicate each shade and texture shown here. Final color/texture selections should be made from actual samples.
### Structural Brick

For product information and customer service call 1-888-MUTUAL8 (688-8250).
For Distributors outside Washington, Oregon, Idaho and Montana call 1-800-477-7137.

**Table 1 – Physical Data**

| ASTM Specification: Manufactured to meet ASTM C652 Grade SW Type HBS |
| Nominal Wall Thickness | 4” | 6” | 8” |
| R Values | Calculated |
| Includes inside and outside Air Films. |

**Sources:**
- ASHRAE Standard 90.1, Oregon & Washington State Energy Codes
- 30% grouted brick furred 2’ O.C. plus 1⁄2“ gyp board with cavity between furring insulated with:
  - 3⁄4” Extruded Polystyrene: 4.22 4.59 4.71
  - 11⁄2” Extruded Polystyrene: 6.42 6.79 6.91
  - 3⁄4” Polyisocyanurate: 5.12 5.49 5.61
  - 11⁄2” Polyisocyanurate: 8.17 8.54 8.66
  - 1⁄2” gyp board adhered to 2 1⁄2” polyisocyanurate adhered to uninsulated brick 30% grouted: 19.52 19.89 20.01

**Fire Ratings**
- per IBC Table 720.1 (2)
- Grouted solid or filled with Perlite: 1 3 4
- Not continuously grouted: 0 1 2

**Weight of Walls**
- Approximately in pounds per ft² of wall area
- Ungrouted: 25 36 48
- Grout @ 48” V&H (48” O.C. vertical and horizontal): 28 42 57
- Grout @ 24” V&H: 32 48 66
- Solid Grout: 37 57 78

**Compressive Strength (varies by color). Consult your Mutual Materials Representative f’m / Refer to IBC table 2105.2.2.1.1**

**Percent Solid**
- 63 52 57

**Grout or Perlite**
- Cubic foot per foot of vertical cell: 0.048 0.076 0.111
- Cubic foot per foot of bond beam: 0.038 0.065 0.113

**Table 2 – Metric Conversions**

### Colors

- Coral (MI)
- Desert Rose (MI)
- Imperial Red (MI)
- Red Varitone (MI)
- Chestnut (MI)
- Ebony (MI)
- Mauna Loa (MI)
- Teal Brown (MI)
- Brown Varitone (MI)
- Tan Terra (MI)
- Carib (NC)
- Monterey (MI)
- Burgundy (MI)
- Royal Plum (MI)
- Vintage (MI)
- Inca (NC)
- Ivory (MI)
- Copper (NC)
- Goldenrod (MI)
- Mojave (NC)
- Glacier (MI)

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For additional production time should be allowed. These color photographs show the general appearance of colors and textures. The actual product shipped is not guaranteed to duplicate each shade and texture shown here. Final color/texture selections should be made from actual samples.

Visit www.mutualmaterials.com for more information.
Structural Brick

Kla-All™ Hollow-Core Units

Color & Shape Selection Guide

Colors

- Mission (MI)
- Desert Rose
- Imperial Red
- Red Varitone
- Chestnut
- Ebony
- Mauna Loa
- Teal Brown
- Brown Varitone
- Tan Terra
- Carib
- Monterey
- Burgundy
- Royal Plum
- Vintage
- Inca
- Ivory
- Copper
- Goldenrod
- Mojave
- Glacier

Table 1 – Physical Data

<table>
<thead>
<tr>
<th>Color</th>
<th>Mission (MI)</th>
<th>Mission (NC)</th>
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</thead>
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<td>Amber Rose</td>
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</tr>
<tr>
<td>Desert Rose</td>
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<td>-</td>
</tr>
<tr>
<td>Imperial Red</td>
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<tr>
<td>Red Varitone</td>
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<td>-</td>
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<tr>
<td>Chestnut</td>
<td>-</td>
<td>-</td>
</tr>
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<td>Ebony</td>
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<td>-</td>
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<tr>
<td>Mauna Loa</td>
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<td>-</td>
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<tr>
<td>Teal Brown</td>
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<tr>
<td>Brown Varitone</td>
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<td>Tan Terra</td>
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<td>-</td>
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<td>Carib</td>
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<td>Monterey</td>
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<tr>
<td>Burgundy</td>
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<td>Royal Plum</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Vintage</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Inca</td>
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<td>-</td>
</tr>
<tr>
<td>Ivory</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Copper</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Goldenrod</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Mojave</td>
<td>-</td>
<td>-</td>
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<tr>
<td>Glacier</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Table 2 – Metric Conversions

<table>
<thead>
<tr>
<th>Color</th>
<th>Mission (MI)</th>
<th>Mission (NC)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coral</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

Cover photo:
Union Hill High School • Camas, Washington
Imperial Red and Burgundy

For product information and customer service call 1-888-MUTUALØ (688-8250).
For Distributors outside Washington, Oregon, Idaho and Montana call 1-800-477-7137.

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**Kla-All™ Series: Structural Brick & Shapes**

Mutual Materials® Structural Bricks are hollow clay units used in load- and non-load-bearing reinforced masonry, and provide structure and finish in a single-wall system. In addition to the shapes shown below, Mutual Materials can manufacture custom units including sills, wall caps, rated archstones, starter, back, and bullnose. Please contact your Sales Representative to discuss specific requirements.

**Sizes are in inches. Not all sizes shown are available as stocking products, additional production time should be taken into account. Consult your Sales Representative for availability.**

**Shapes**

*Shapes are also available in 15˚, 30˚, 60˚ and 75˚. Consult your Sales Representative for availability.*

**Fittings**

**Corner Details**

Mutual Materials can manufacture custom units including sills, wall caps, rated archstones, starter, back, and bullnose. Please contact your Sales Representative to discuss specific requirements.

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Kla-All™ Series: Structural Brick & Shapes

Sizes are in inches. Not all sizes shown are available as stocking products; additional production time should be taken into account. Consult your Sales Representative for availability.

Mutual Materials® Structural Bricks are hollow clay units used in load- and non-load-bearing reinforced masonry, and provide structure and finish in a single-wall system. In addition to the shapes shown below, Mutual Materials can manufacture custom units including sills, wall caps, caddies, buttresses, lintels, and half-buttresses. Please contact your Sales Representative to discuss specific requirements.

Fittings

Shapes

Corner Details

Wall Elevation & Section Example

www.mutualmaterials.com

Shapes are also available in 15˚, 30˚, 60˚ and 75˚.

Wall Elevation & Section Example

Reinforcement conditions vary. Consult a structural engineer.

www.mutualmaterials.com
Kla-All™ Series: Structural Brick & Shapes

Mutual Materials® Structural Bricks are hollow clay units used in load- and non-load-bearing reinforced masonry, and provide structure and finish in a single-wall system. In addition to the shapes shown below, Mutual Materials can manufacture custom units including sills, wall caps, radial stretchers, starters, and lintels. Please contact your Sales Representative to discuss specific requirements.

Sizes are in inches. Not all sizes shown are available as stocking products, additional production time should be taken into account. Consult your Sales Representative for scheduling.

**Fittings**

- 3 1/2" x 3 1/2" x 1 1 1/2" 4" Stretcher
- 4 1/2" x 3 1/2" x 1 1 1/2" 5" Stretcher
- 5 1/2" x 3 1/2" x 1 1 1/2" 6" Stretcher
- 7 1/2" x 3 1/2" x 1 1 1/2" 8" Stretcher
- 5 1/2" x 2 1/2" x 1 1/2" 6" Stretcher
- 3 1/2" x 2 1/2" x 1 1/2" 4" Stretcher
- 7 1/2" x 2 1/2" x 1 1/2" 8" Stretcher

**Shapes**

- 6" 45˚ Squint
- 6" L-Corner
- 8" L-Corner
- 4" L-Corner
- 6" 45˚ Corner
- 8" 45˚ Corner

**Corner Details**

- 4 x 4 x 4 Lintel
- 6 x 4 x 4 Lintel
- 6 x 8 x 4 Lintel
- 8 x 8 x 4 Lintel

**Wall Elevation & Section Example**

* Reinforcement conditions vary. Consult a structural engineer.

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Kla-All™ Series: Structural Brick & Shapes

Sizes are in inches. Not all sizes shown are available in stock products, additional production time should be taken into account. Consult your Sales Representative for scheduling.

Mutual Materials® Structural Bricks can be utilized in load-bearing, non-load-bearing walls and exterior non-load-bearing walls, and provide structural and finish in a single-wall system. In addition to the shapes shown below, Mutual Materials can manufacture custom units including sills, wall caps, caddie, radial stretchers, starters, labels, and bullnose. Please contact your Sales Representative to discuss specific requirements.

Fittings

Sizes are in inches. Not all sizes shown are available in stock products, additional production time should be taken into account. Consult your Sales Representative for scheduling.

Shapes

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Corner Details

Sizes are in inches. Not all sizes shown are available in stock products, additional production time should be taken into account. Consult your Sales Representative for scheduling.

Wall Elevation & Section Example

Reinforcement conditions vary. Consult a structural engineer.

BOND BEAMS

Sizes are in inches. Not all sizes shown are available in stock products, additional production time should be taken into account. Consult your Sales Representative for scheduling.

Chamfer

(available in 4", 6" or 8" nominal widths)

Bullnose

(available in 4", 6" or 8" nominal widths)
Table 1 – Physical Data

<p>| ASTM Specification: Manufactured to meet ASTM C652 Grade SW Type HBS |</p>
<table>
<thead>
<tr>
<th>Nominal Wall Thickness</th>
<th>R Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>30% grouted brick furred</td>
<td>1.52 1.89 2.01</td>
</tr>
<tr>
<td>Insulated with Perlite and 30% grouted</td>
<td>2.22 2.96 3.38</td>
</tr>
<tr>
<td>Cells solid grouted</td>
<td>1.33 1.61 1.79</td>
</tr>
<tr>
<td>3/4&quot; Extruded Polystyrene</td>
<td>4.22 4.59 4.71</td>
</tr>
<tr>
<td>1 1/2&quot; Extruded Polystyrene</td>
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</tr>
<tr>
<td>3/4&quot; Polyisocyanurate</td>
<td>5.12 5.49 5.61</td>
</tr>
<tr>
<td>1 1/2&quot; Polyisocyanurate</td>
<td>8.17 8.54 8.66</td>
</tr>
<tr>
<td>1/2&quot; gyp board adhered to 2 1/2&quot; polyisocyanurate adhered to uninsulated 30% grouted brick</td>
<td>19.52 19.89 20.01</td>
</tr>
</tbody>
</table>

Fire Ratings

Per IBC Table 720.1 (2):
- Grouted solid or filled with Perlite: 1 3 4
- Not continuously grouted: 0 1 2

Weight of Walls

Approximately in pounds per ft² of wall area:
- Ungrouted: 25 36 48
- Grout @ 48” V&H (48” O.C. vertical and horizontal): 28 42 57
- Grout @ 24” V&H: 32 48 66
- Solid Grout: 37 57 78

Compressive Strength (varies by color). Consult your Mutual Materials Representative f’m / Refer to IBC table 2105.2.2.1.1
- Percent Solid: 63 52 57

Cubic foot per foot of vertical cell: .048 .076 .111

Cubic foot per foot of bond beam: .038 .065 .113

Table 2 – Metric Conversions

<table>
<thead>
<tr>
<th>4&quot; Structural Brick</th>
<th>Actual Unit Dimensions</th>
</tr>
</thead>
<tbody>
<tr>
<td>5&quot; Structural Brick</td>
<td>Actual Unit Dimensions</td>
</tr>
<tr>
<td>6&quot; Structural Brick</td>
<td>Actual Unit Dimensions</td>
</tr>
<tr>
<td>8&quot; Structural Brick</td>
<td>Actual Unit Dimensions</td>
</tr>
</tbody>
</table>

inches | millimeters
--- | ---
3 1/2 | 90
4 1/2 | 115
5 1/2 | 140
7 1/2 | 190
3 1/2 | 90
3 1/2 | 90
3 1/2 | 90
11 1/2 | 290
11 1/2 | 290
11 1/2 | 290
11 1/2 | 290

1 The physical data stated in this section are averages of all colors offered. Specific data may be obtained for each color.
2 Nominal 5" wall thickness is available through special order only.

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