

CBP Engineering Corp.

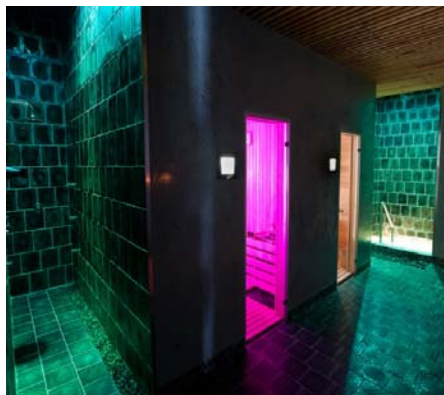
► **Beautiful All  
Natural Flooring  
and Wall Tile**

## Decorative Cast Basalt Tiles

.....



► **From the  
Earth .....**



► **..... to your  
next masterpiece**

## CAST BASALT

Basalt is a neovolcanic eruptive rock which melts at approximately 2250°F, and can be cast in a similar way to cast iron.

Basalt rock, with special chemical and mineralogical structure, is melted in a furnace similar to an open hearth furnace. The molten magma flows through a homogenizing drum and is cast by means of casting ladles - like cast iron - into chill molds (static cast). After a carefully controlled annealing process the resultant cast material, "Cast Basalt" retains the rocks typical qualities color and weight but it has a unique addition of a intricate cooling pattern visible in the tile.

The greatest advantage of Cast Basalt tile is its extraordinary abrasion resistance which in many cases surpasses that of ordinary floor tile. Moreover, basalt tile has nearly unlimited durability and is resistant to all liquid spills of every concentration. Basalt tile is F.D.A. approved for use in the food industry.



**A Natural Basalt Formation in  
The Czech Republic**



**Raw Basalt Rock**

► **To Order Call: 1-800-468-1180**



**Columnar Basalt in a Quarry**

**Mineral Composition**

- Pyroxene, Magnetite, Olivine, Glass

**Chemical Composition (Typical)**

- |                           |              |
|---------------------------|--------------|
| • Silica $SiO_2$          | 45% approx.  |
| • Alumina $Al_2O_3$       | 12% approx.  |
| • Calcium Oxide $CaO$     | 11% approx.  |
| • Magnesium Oxide $MgO$   | 10% approx.  |
| • Iron Oxide $FeO_3$      | 13% approx.  |
| • Sodium Oxide $Na_2O$    | 3% approx.   |
| • Titanium Oxide $TO$     | 3% approx.   |
| • Potassium Oxide $K_2O$  | 1.5% approx. |
| • Phosphorus $P_2O$       | 1.5% approx. |
| • Manganese Oxide $MnO_5$ | 5% approx.   |

**Elemental Qualities of Cast Basalt**

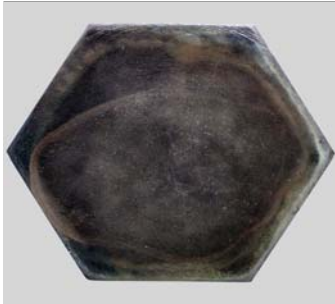
- |                        |   |
|------------------------|---|
| • Specific Gravity     | 2.90 - 3.0 g/cm <sup>3</sup>  |
| • Compressive Strength | approx. 450 MPa -min  |
| • Bending Strength     | approx. 40 MPa -min   |
| • Tensile Strength     | approx. 10 MPa -min   |
| • Thermal Conductivity | .7 K-Cal/m <sup>2</sup> /hg °C (1.7w/m-1K-1)  |
| • Specific Heat        | 0.2 BTU/lb.°C   |
| • Thermal Expansion    | 20-100° C (77 x 10 <sup>-7</sup> ) deg -1- 20-400° C<br>(86 x 10 <sup>-7</sup> ) deg -1 |
| • Abrasion Resistance  | 3-3.5cm <sup>3</sup> /50 cm <sup>2</sup> - Din 52 108                                   |
| • Hardness             | 8.5 mohs scale  |

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**Plain Tile**  
**Available Sizes:**

8" x 8" x 7/8"  
8" x 4" x 7/8"  
10" x 10" x 7/8"  
10" x 5" x 7/8"



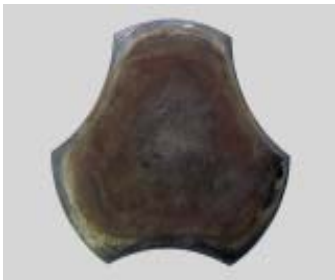
**Hex Tile**  
**Available Sizes:**

8" (inner circle) x 1 1/8"  
Also half size



**Florentina Tile**  
**Available Sizes:**

9 3/4" x 6 3/4" x 1"



**Charlotta Tile**  
**Available Sizes:**

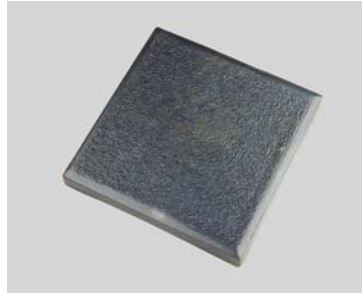
10" Round x 1"

Sizes are approximate

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**Nika Anti-Slip Tile**  
**Available Sizes:**

**8" x 8" x 1"**  
**10" x 10" x 1"**



**Kostka Paver Tile**  
**Available Sizes:**

**6" x 6" x 1 1/2"**



**Corner Tile:**

**Available Sizes:**

**Height/Width/Thick/Long**

**8" x 2 1/4" x 7/8" x 8" - Flat top**

**8" x 2 1/4" x 7/8" x 10" - Flat top**

**8" x 2 1/4" x 7/8" x 10" - Beveled**

**8" x 2 1/4" x 1 1/4" x 10" - Beveled**

**3 1/2" x 5" x 7/8" x 10" - Beveled**

**5" x 2 1/4" x 1 1/4" x 10" - Beveled**

**4" x 2 1/4" x 7/8" x 8" - Beveled**



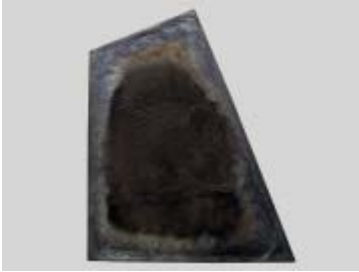
**Jitka Anti-Slip Tile**  
**Available Sizes:**

**8" x 8" x 1 1/8"**



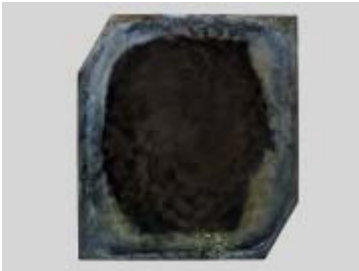
Sizes are approximate

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**Thales Alpha Tile**  
**Available Sizes:**

**Clockwise from top:**  
**4" x 10" x 8" x 8"**



**Thales Beta Tile**  
**Available Sizes:**

**Clockwise from top:**  
**8" x 8" x 3" x 8" x 8" x 3"**



**Thales Delta Tile**  
**Available Sizes:**

**Clockwise from top:**  
**8' x 4" x 11" x 4" x 8"**



**Thales Gamma Tile**  
**Available Sizes:**

**9" x 10" x 10" x 8"**

Sizes are approximate

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**Thales Omega Tile**  
**Available Sizes:**

**Clockwise from top:**  
**3" x 3" x 5" x 5" x 6" x 6"**



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**Thales Knossos Tile**  
**Available Sizes:**

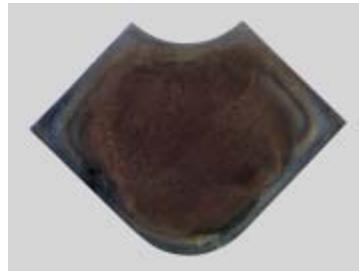
**10" x 10" x 1 1/8"**



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**Mava 1 Tile**  
**Available Sizes:**

**8" x 8" (outer) x 7/8"**



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**Mava 2 Tile**  
**Available Sizes:**

**8" x 8" (outer) x 7/8"**



Sizes are approximate

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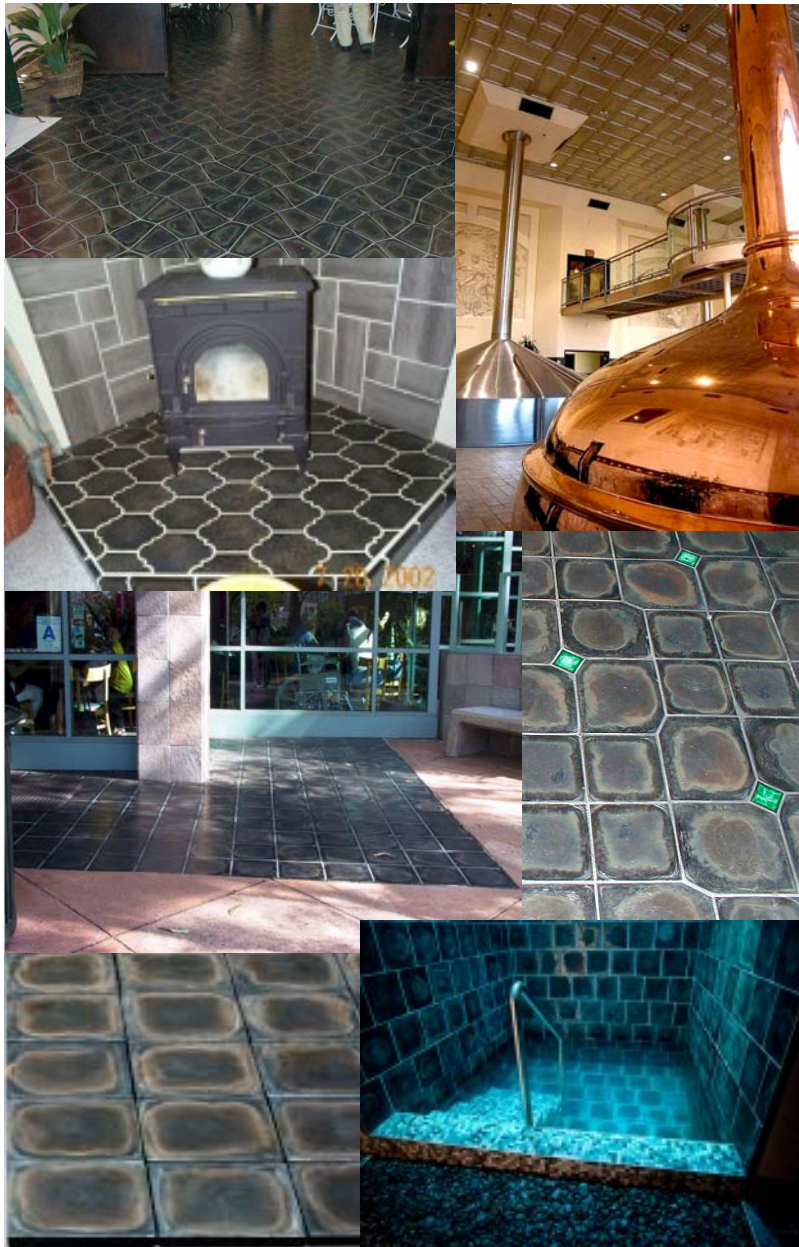
## Various Project References

**Cast Basalt Tile is a naturally beautiful and versatile option. There are many applications for our specialty basalt tile products such as interior flooring, exterior decorative flooring and wall tile. The architectural beauty of cast basalt tiles are unsurpassed by any other tile. The earthen appearance of the natural molten lava is simply breathtaking.**

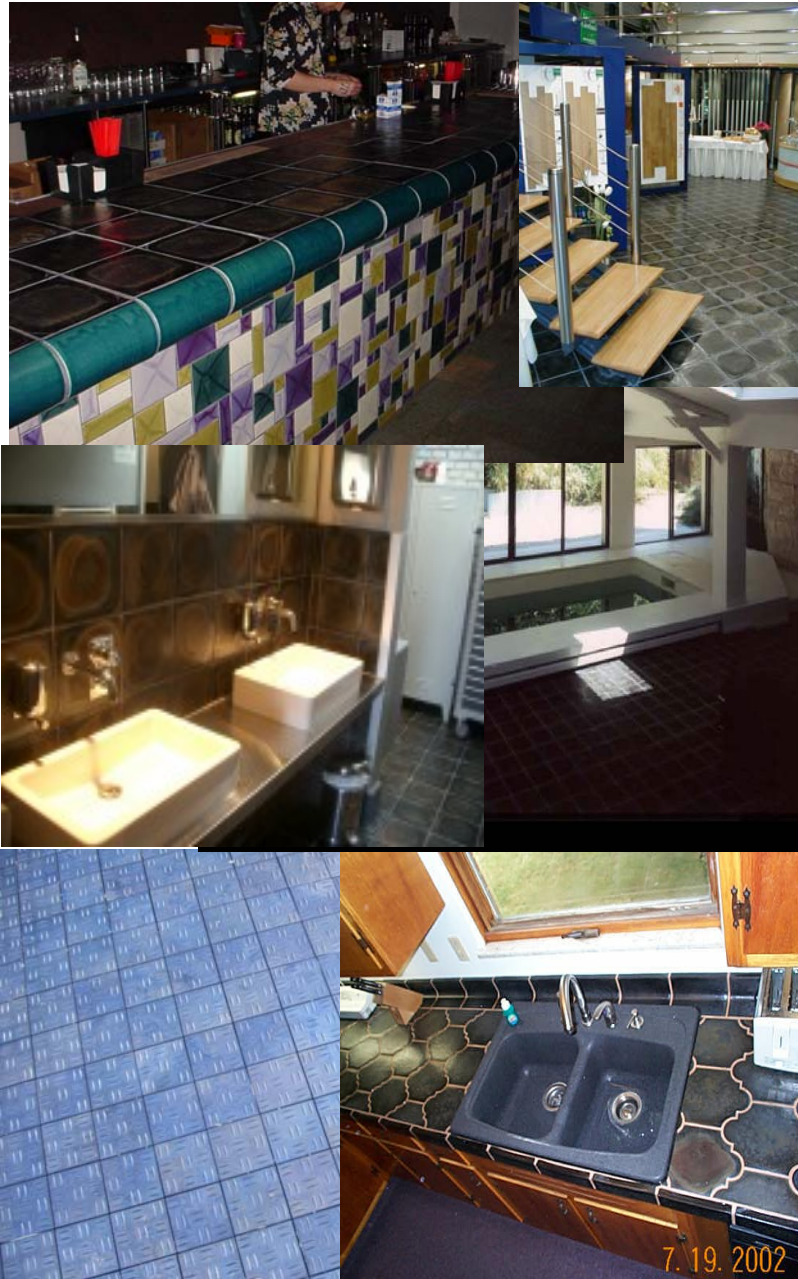


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**185 Plumpton Ave**  
**Washington, PA 15301 USA**  
**800-468-1180 P**  
**724-229-1185 F**  
**mail@cbpengineering.com**  
<http://www.cbpengineering.com/products/specialty-tile-products/>

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