

C.B.P. ENGINEERING CORP.

DESIGN * MANUFACTURING * INSTALLATION
 ABRASION-RESISTANT CONVEYING AND MATERIALS HANDLING SYSTEMS
 A subsidiary of The Greenbank Group, Inc.



Cast Basalt Tiles

- for abrasion, corrosion and low friction resistant applications

C.B.P. Engineering Corp., 185 Plumpton Avenue, Washington, PA 15301 USA

Tel: 800-468-1180 Fax: 724-229-1185

Email: info@cbpengineering.com URL: www.cbpengineering.com

Automotive and Commercial use

The Automotive industry worldwide utilizes specially designed water channelling basalt tiles for their high usage performance skid pan® testing tracks for trucks, vans and cars.



Across North America basalt tiles are also widely used both commercially and privately due to their **decorative appearances, aesthetics, durability and longevity.**



Installed on site or in our factory

Basalt tiles can be bedded and jointed in cement or special bonding agents such as epoxy.

CBP Engineering can assist you in the technical analysis to optimise the matching of mortars and cements to meet the applications at your plant.

CBP Engineering also offers on site installation services providing skilled labor and supervision.

CBP Engineering can fabricate steel chutes, hoppers and bunkers and fit pre-cut tailored tiles in our factory prior to delivery at your facility.



General Technical Data

Specific Gravity: 2.9—3.0
 Compressive Strength: 78,000 lb/in²
 Tensile Strength: 5,100 lb/in²
 Bending Strength: 6,500 lb/in²
Hardness: 8.5 Mohs scale
 (726 Vickers 60 Rockwell)
 Dielectric Strength: 100Kv/in
 Thermal Expansion:
 75 - 80 x 10⁻⁷ °C up to 500 °C
 Specific Heat: .2
Porosity: 0 (% by weight)

Co-efficient of Friction:
 (Basalt to mild steel)
 .245 unpolished
 .215 after use has polished surface

Dimensions nominal Standard Curved Basalt Tiles (Millimetres)

- 200 x 100 x 22
- 200 x 200 x 22
- 200 x 100 x 30
- 200 x 200 x 30
- 250 x 125 x 30
- 250 x 250 x 30
- 300 x 150 x 30
- 300 x 300 x 30
- 200 x 100 x 50
- 200 x 200 x 50
- 200 x 100 x 75
- 300 x 100 x 75

Also available with
 countersunk central 5/8" hole
 for welding

Chamfered Basalt Tiles For large curvatures

	mm
Length	200
Width front	100
Width back	110
Thickness	30

**Special shapes and sizes
 Available to order.**



Cast Basalt Tiles

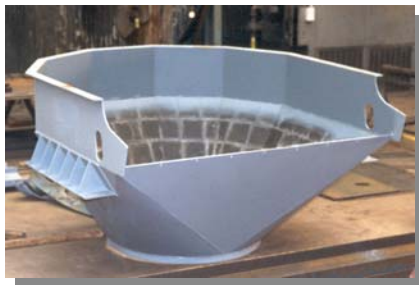
- for abrasion, corrosion and low friction resistant applications

C.B.P. Engineering Corp., 185 Plumpton Avenue, Washington, PA 15301 USA

Tel: 800-468-1180 Fax: 724-229-1185

Email: info@cbpengengineering.com URL: www.cbpengengineering.com

For almost a century cast basalt tiles have been successfully engineered and installed worldwide to provide a long-lasting lining and enhancement to operational life cycle for plant and equipment. CBP Engineering Corp. has successfully serviced industries such as Power, Coal, Steel, Cement, Pulp & Paper & Mineral Processing utilizing Cast Basalt to enhance and improve the operational life of their plant.



Basalt Lined Conveyor Head Chute



A Power Station Coal Bunker completely lined in cast basalt tiles

Compared with chutes of mild steel or other metal construction, where the steel suffers from corrosion as well as abrasion, experience has shown that **basalt tiles would last at least 15 times the life of an unprotected chute.**

Furthermore, as basalt wears it improves its own coefficient of friction giving a smooth, non stick finish, as the material passing over the basalt gradually gives it a high polish.

In direct contrast to some other types of linings that promote sticking of wet materials, friction is reduced by the more use the Basalt gets.

Basalt can be cast to or cut to fit the most difficult shapes and provides a cost effective solution to many wear problems.

Cast Basalt Tiles

Cast Basalt is one of the Earth's oldest and most natural materials. The Basaltic Rock/Slag is combined with crystallizing agents to form the various shapes needed for lining plant equipment.

When cast it has two exceptional qualities:

1. **Abrasive resistance**, applied correctly, basalt tiles have a wear life expectancy many times higher than that of traditional linings.

2. **Chemical resistance**, Basalt tiles are highly resistant to most chemicals and very effective as a chemical resistant barrier.

For lining Chutes, bunkers, hoppers, drag chains and sluiceways at fossil fuel power stations, Basalt has become [the world standard](#).

Basalt is an all around **cost effective and adaptable lining** material that extends the life of equipment where affected by erosion. Most basalt applications will have a 10-15 year life before replacement.



Cast Basalt lining of ash sluiceway



Basalt combined with Alumina Ceramic in a Sugar Beet trough

C.B.P. ENGINEERING CORP.

DESIGN * MANUFACTURING * INSTALLATION
ABRASION-RESISTANT CONVEYING AND MATERIALS HANDLING SYSTEMS
A subsidiary of The Greenbank Group, Inc.

CBP
ENGINEERING
CORP.
DELIVERING SOLUTIONS

Delivering Solutions