

# CARBON BRICK



## DESCRIPTION:

Owing to its chemical inertness, and ability to be produced to close dimensional tolerances, carbon is an ideal material for lining process vessels where severe chemical or physical operating conditions are encountered. Carbon brick linings are used exclusively where fluorides and hydrofluoric acid are encountered, due to their ability to resist chemical attack from fluoride solutions - for example, phosphoric acid production.

## FEATURES AND BENEFITS:

- Chemical Resistance  
Resistance to practically all corrosive inorganic chemicals, except those which are strongly oxidising, such as oleum, concentrated chromic acid and concentrated nitric.
- Will resist concentrated boiling hydrofluoric acid.
- Inert  
Chemically inert. Will not taint or influence the composition of chemicals in contact with the lining.
- Thermal Shock Resistance  
Will withstand damage due to sudden change in temperature.
- High Temperature Resistance  
Can be used in most chemical processes where temperature is below 400°C. Above this temperature, strict control of atmospheric conditions must be enforced to ensure that the atmosphere is either reducing or neutral.

## METZ PRODUCT PACKAGE FOR CARBON BRICK INSTALLATIONS:

Complete range of proven products to form the engineered package for any application.

### Membranes

- natural and synthetic rubber
- polyvinyl fluoride film
- coal tar epoxy
- asphalt-modified polyurethane
- asphaltic mastic

### Bedding and Jointing

Specialty compounds based on:

- furane resin
- vinylester resin

Carbon-filled grades are available for use where applicable.

Consult Metz Pty Ltd.

## RECOMMENDED:

- Phosphoric Acid manufacturing plants
- Alkaline Pulp digesters - Pulp and Paper Industry
- Humidifying Towers - Sulphuric Acid manufacturing plants
- Stainless Steel Pickling Plants - utilising Hydrofluoric and/or Nitric acids.
- Benzene and Naphthalene washing plants.

## NOT RECOMMENDED:

- In contact with concentrated oxidizing acids.
- For temperatures above 400°C

## SIZES AND FITTINGS:

Many standard sizes available.

- Special pieces produced to client's requirements.
- Resin impregnated carbon brick also available.

## PHYSICAL PROPERTIES:

As a number of qualities are available, data on physical properties of various grades are available upon request.



