



Product Information Sheet

March 2014

ACCSIL Acid Bricks/Pavers/Tiles

Description

ACCSIL Engineering Bricks/Pavers/Tiles are very high strength engineering ceramic products available in a variety of shapes suitable for vessel linings, chimneys, pits and floors. The excellent chemical and abrasion resistance is combined with high strength and low porosity. When used in conjunction with a corrosion resistant mortar, the ACCSIL Engineering Bricks/Pavers/Tiles provide long term protection from aggressive environments.

Typical Uses

Depending on the area, application and environment, various sizes of bricks, pavers, tiles and specials are available. Please contact ACCS Ltd with further information to correctly specify brick type.

Advantages

Highly vitrified, ACCSIL Engineering Bricks/Pavers/Tiles provide excellent resistance to a large range of aggressive environments, particularly sulphuric and nitric. Their ceramic nature also provides mechanical resistance to enhance service lifetimes.

Chemical Resistance

Full details are available on ACCS website: www.protectivelinings.co.uk. ACCSIL Engineering Bricks/Pavers/Tiles are silica-based and are therefore not designed for hydrofluoric environments, in these instances, we would recommend our ACCSIL Carbon-based Engineering Bricks/Pavers.

Surface Preparation

For all pre-existing surfaces of metal or concrete, abrasive blast or scarify to remove all laitance and surface contaminants. To ensure better adhesion of typical corrosion resistant mortars, a primer base should be applied before application. The surface should be dust-free and dry and the ambient temperature should be above the dew point of air.

Prepare the substrate with either a silicate primer, PE120 membrane (metal) or AC90 primer (concrete) to ensure an adequate bond with the mortar. For new-build concrete constructions, a damp tolerant primer AC95 is

recommended and can be applied within 48 hours of concrete set, potentially expediting any construction schedule. Mortar can then be applied once priming has been completed.

Standard Packing

All ACCSIL Engineering Bricks/Pavers/Tiles are provided in palletised form. Volume and numbers are specific to brick type.

Storage

Store in a cool, dry, frost-free place. Normal storage conditions in up to 25°C should provide indefinite shelf life.

Safety

Safety data information available on request. Adequate ventilation must be provided whilst work is in progress and is compulsory for closed or indoor applications. The instructions on storage, fire and explosion are to be observed. No releases to the sewers or drains are to be permitted under any circumstances. Always refer to MSDS data sheets for hazard and transport information.

Warranty

We warrant that our products will conform to the description contained in the order and that we have good title in all goods sold. WE PROVIDE NO WARRANTY, WHETHER OF MERCHANTABILITY, FITNESS FOR PURPOSE, OR OTHERWISE, EXPRESS OR IMPLIED, OTHER THAN AS EXPRESSED SET FORTH HEREIN. We are glad to offer suggestions or to refer you to customers using ACCS Ltd cements and compounds for similar applications. Users shall determine the suitability of the product for intended application before using, and users assume all risk and liability whatsoever in connection therewith regardless of any suggestions as to application or construction. In no event shall we be liable hereunder or otherwise for incidental or consequential damages. Our liability and your exclusive remedy hereunder or otherwise, in law or in equity, shall be expressly limited to our replacement of non-conforming goods at our factory or, at our sole option, to repayment of the purchase price of non-conforming goods.



ACCS Ltd

Industrial Protective Linings

Unit 6, Scott Lidgett Industrial Estate,
Scott Lidgett Road, Longport,
Stoke-On-Trent, ST6 4NQ, United Kingdom
Tel: +44 (0) 1782 817 107
Tel: +44 (0) 1782 824 979
Email: info@accsltd.co.uk
Skype: accs.ltd
Registered in England: 6090394
VAT No GB 880-1983-03
www.protectivelinings.co.uk

Technical Data

Nominal Composition	Fire Clay Type Average Figures
SiO ₂	68 -73 %
Al ₂ O ₃	19 – 25 %
TiO ₂	0.5 – 0.7 %
Fe ₂ O ₃	0.7 – 1.4 %
Na ₂ O – K ₂ O	4 – 5 %

Parameter	Test Method	Unit	Fire Clay Type Average Value
Density	BS1902	kg/m ³	2200
Compressive Strength	BS1902	N/mm ²	80
Modulus of Rupture		N/mm ²	13
Thermal Conductivity	BS1902	w/m [°] k	1.2
Coefficient of expansion		10 ⁻⁶ °C	7
Water absorption	BS3921	%	<4
Acid Solubility	BS784 ASTM C279	%wt	<2
Surface Porosity		%	<0.5
Dimensional Tolerances		%	±1.5

Disclaimer

The technical data contained in this document represents the current state of our product knowledge and is for information purposes only. It does not constitute a guarantee or specification.