Streatlam Buff Sandstone

Technical Data Sheet
Streatlam Buff Sandstone

Streatlam Buff Quarry
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Compiled May 2000

This data sheet was compiled by the Building Research Establishment (BRE). It is based on data from current tests at BRE (2000). The data sheet was compiled in May 2000. The work was carried out by BRE as part of a Partners in Technology Programme funded by the Department of the Environment, Transport and the Regions and Dunhouse Quarry Co. Ltd. and does not represent an endorsement of the stone by BRE.

General

The quarry is situated at Moresby, Whitehaven.

Petrography

Pale yellow fine to medium grained, non-calcareous sandstone with brown staining liesegang rings.

Expected Durability and Performance

It is important that the results from the individual tests are not viewed in isolation. They should be considered together and compared to the performance of the stone in existing buildings and other uses. Sandstone is traditionally acknowledged as generally being a very durable building and paving stone and has been used extensively in many towns and cities in the UK. Streatlam Buff sandstone appears to be a durable stone that will have good resistance to acid rain or air pollution. In addition, the moderate weight loss in the sodium sulphate crystallisation test indicates moderate resistance to salt damage (for example in coastal locations or from de-icing salts). From the frost test the stone should also have high frost resistance. The compressive and flexural strength of the stone is in the lower third for a sandstone and is comparable with many sandstones. The compressive strength indicates that the stone should be suitable for use in heavy to medium trafficked areas.

Overall, Streatlam Buff should be suitable for use in many aspects of construction including flooring, paving, load bearing masonry and cladding. Special consideration may be require where a long service life in very exposed conditions is required.

Test Results – Streatlam Buff

Safety in Use		
Slip Resistance (Note 1)	82	Wet Values > 40 are considered safe.
Abrasion Resistance (Note 1)	Not determined	Values <23.0 are considered suitable for use in heavily trafficked areas
Strength under load		
1) Compression(Note 2)	78.6 MPa	Loaded perpendicular to the bedding plane ambient humidity
2) Bending (Note 1)	9.7 MPa	Loaded perpendicular to the bedding plane ambient humidity

	Not Determined	Loaded perpendicular to the bedding plane ambient humidity
Porosity and Water Absorption		
1) Porosity (Note 3)	14.8%	
2) Saturation Coefficient (Note 3)	0.72	
3) Water Absorption	4.7 % (by wt)	
4) Bulk specific gravity	2277kg/m^3	
Resistance to Frost		
Flexural strength after Freeze/Thaw Test (Note 1)	10.4 MPa	Loaded perpendicular to the bedding plane ambient humidity
Resistance to Salt		

Sodium Sulphate Crystallisation Test (Note 3)	1.08% Mean wt loss	
Resistance to Acidity		
Acid Immersion Test(Note 4)	Pass	

(Test methods Note 1 = prEn1341, Note 2 = prEn 1342, Note 3 = prEn 1341 /BRE 141, Note 4 = BRE 141)

Tests were carried out at BRE in 2000