Myddle Red Sandstone

Technical Data Sheet
Myddle Red Sandstone
Myddle Quarry
Clive, Near Shrewsbury, Shropshire, SY4 3LF
Contact : Grinshill Quarries
Tel: 01939 220522 Fax: 01939 220285
Grid reference : —- —-
Compiled October 1997, updated June 2000

This data sheet was compiled by the Building Research Establishment (BRE)., The data sheet was compiled in October 1997and updated in June 2000 using data collected in earlier surveys. 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 Grinshill Stone Quarries and does not represent an endorsement of the stone by BRE.

General

The quarry is on Lower Road, Myddle in Shropshire. Stone has been quarried in the area since Roman times. The stone from this quarry is processed at the Grinshill Quarry site.

Petrography

Myddle Red Sandstone is from the New Red Sandstone of Triassic age. It is reddish brown in colour. The quarry face is 30m in height, with individual beds around 3m deep. Blocks are usually supplied at depths of 1.2m on bed.

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. Sandstones from the New Red Sandstone series are traditionally acknowledged as generally being a very durable building and paving stone and have been used extensively in many towns and cities in the UK. Myddle Red sandstone appears to be a durable stone that is not effected by acid rain or air pollution. The failure in the harsh saturated sodium sulphate crystallisation test indicates susceptibility to salt damage (for example in coastal locations or from de-icing salts). The compressive strength of the stone is towards the lower end of the range but is comparable with limestone.

Overall, Myddle Red should be suitable for use in most aspects of load bearing masonry and cladding but should not be used in areas where a long service life is needed in locations with a high salt concentrations.

Test Results – Myddle Red

Safety in Use		
Slip Resistance (Note 1)	Not determined	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)	21 MPa	Test conditions not given
2) Bending (Note 1)	Not determined	
Porosity and Water Absorption		
1) Porosity (Note 3)	23.5 – 25.1%	

2) Saturation Coefficient (Note 3)	0.69 – 0.71	
3) Water Absorption	Not determined	
4) Bulk specific gravity	2000kg/m^3	
Resistance to Frost		
Freeze/Thaw Test (Note 1)	Not detemined	
Resistance to Salt		
Sodium Sulphate Crystallisation Test (Note 3)	Mean wt loss	All cubes failed before the end of the test
Resistance to Acidity		
Acid Immersion Test(Note 4)	Pass	All samples passed the test with no splitting or delamination

(Test methods Note 1 = prEN1341, Note 2 = prEN 1342, Note 3 = prEN 1341 /BRE 141, Note 4 = BRE 141.

All based on BRE 1986 data and data supplied by the producer)