

The Delabole Slate Company



sills

SAWN FROM NATURALLY ATTRAC-TIVE DELABOLE SLATE

web:

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Delabole Slate has been used for the production of window sills for hundreds of years, establishing a worldwide reputation for its lasting quality. Sills are manufactured from blue/grey slate extracted deep in the Delabole quarry, which gives rise to the slate's hard-wearing properties.

Delabole sills are sawn to a relatively smooth finish on large frame saws. They are further cut-to-size on circular saws and are available in a range of thicknesses.

Architects, designers and builders alike, are increasingly specifying and using Delabole Slate sills, which they have found offer the following advantageous features:







#### ATTRACTIVE APPEARANCE

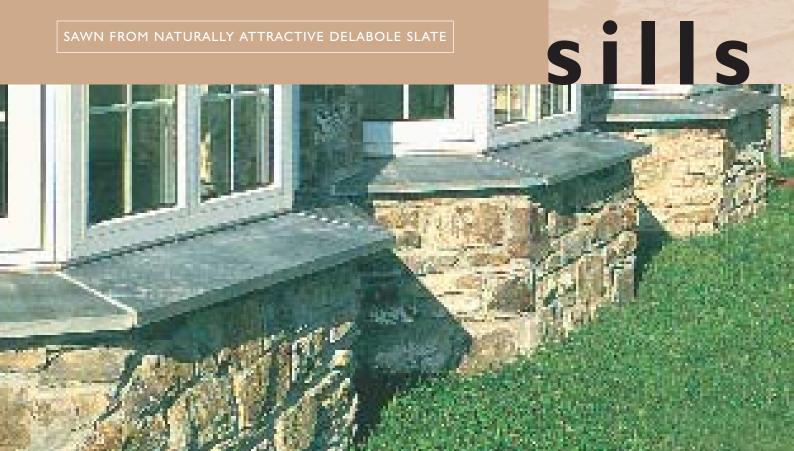
Slate sills from the Delabole Quarry are aesthetically appealing and complement any architectural design. The natural blue/grey colour will enhance red brickwork and clay tile hanging, hung slate, natural hardwood and painted softwood, stone of all kinds, rendering and plaster. Naturally occuring quartz markings are an attractive feature of the slate.

#### **DURABLE**

No more rotting window sills! Delabole Slate sills will last for generations without delamination or detrimental colour change. Examples of sills fitted to buildings centuries ago abound throughout the Westcountry.

## MAINTENANCE FREE

No more painting, coating, treating or cleaning! Delabole Slate sills are virtually maintenance



free. The relatively smooth sawn finish gives no encouragement to the development of unsightly organic growth.

#### **EASILY INSTALLED**

For new buildings slate sills can be easily installed in the blockwork. For existing buildings, plaster can be easily chased-out, and the sills mortared-in. Alternatively slate sills can be cut to fit around blockwork if prefered.





A further advantage is the option slate sills offer the builder for closing the wall cavity. This has become increasingly important with the building regulations regarding closed cavities around windows and prevention of moisture absorption.

The full slab sills can also be fitted far quicker than the old 'sandwich sills' saving valuable labour time, and therefore reducing costs. They will also last much longer.

#### **VERSATILE USE**

Applications include both domestic and commercial use, ranging from Local Government Offices to modern timber frame homes. Sensative conservation projects can be sympathetically restored whilst relatively plain housing estates can be enhanced cost-effectively.



#### **EXTERNAL**

The hard-wearing properties of Delabole Slate make it ideally suited for external features. Recent applications include Wellington Barracks - Buckingham Palace, Ongar Leisure Centre, Ince Castle, Council Offices at Wadebridge and Bodmin, and the new Local Government building at Redruth. Apart from the window sills, Delabole Slate has also been used for wall-capping, steps and door thresholds, e.g for hotels, schools, offices, rest homes etc.



### INTERNAL

Delabole Slate sills also make an attractive internal feature. Fine Rubbed to a matt sheen, they offer the discerning customer the natural choice for the enhancement of any interior design. Sealing products, used primarily to provide additional protection for the slate, can also be used to deepen the colour of the slate for a more 'sophisticated finish'.

Recent applications of internal sills include Coppergate House (Greenpeace H.Q) - London, Buckfast Abbey and Acton Castle.



## performance

#### **GENERAL**

Slate from the Delabole Quarry is universally acknowledged for its outstanding durability. Delabole Slate Sills are hard-wearing, non-combustible, resistant to sulphuric acid, atmospheric pollution, frost, normal heat and temperature changes. Delabole Slate Sills comply with B.S

Delabole Slate is practically impermeable, having an average water absorption value of less than 0.1% by weight. The slate does not delaminate or flake when subjected to soaking and drying cycles.

#### TEST RESULTS

In accordance with ASTM standards, as conducted by Harry Stanger Ltd, Elstree, and Frank Saynor & Associates, Edinburgh.

Compressive Strength 118.0 N/mm<sup>2</sup> Modulus of Rupture 71.0 N/mm<sup>2</sup> <0.1%by weight 0.025 mm Water Absorption
Weather Resistance (depth of softening) **Specific Gravity** 2.819

Tests in accordance with the 'Italian Marble Technical Guide'. (as tested by Harry Stanger Ltd. and Frank Saynor & Associates)

**Compression Breaking Load** 156.0 MPa Compression Breaking Load (after freezing) 144.7 MPa **Imbibition Coefficient** 0.144% 248.75 kg/cm<sup>2</sup> 115 cm **Ultimate Tensile Strength** Impact Test Thermal Linear Expansion 0.0075 mm/m°C 2.69 m<sup>3</sup> x 10<sup>-8</sup> per Nm 2819.0 kg/m<sup>3</sup> **Frictional Wear Test** Weight per unit of volume **Elasticity Modulus** 11.175 x 10<sup>5</sup> kg/cm<sup>2</sup> **Knoop Microhardness** 278 kg/mm<sup>2</sup>

In accordance with BS: 5642 Part 2, BRE Digest 269, 'The Selection of Natural Building stone (as tested by Frank Saynor & Associates).

Acid Immersion Test

(BS 5642) Type A slate (BS 5642) No signs of delamination or splitting along Wetting & Drying Test the edges, or of substantial flaking on the surface.

**Crystallisation Test** (BRE Digest 269) No signs of failure after 15 cycle tests, and negligible weight loss.

## sitework

#### **HANDLING & STORAGE**

Store sills stacked on timber battens. Handle with reasonable care to avoid damage to edges and finish.

#### **FIXING**

Normally, standard rectangular sills for external use are fixed at a sloping angle under the window. Sills can usually be keyed-into the plaster work using cement mortar. It is important that any cement residue is cleaned off the sill at the time of fixing. Alternatively sills can be glued-and-dowelled on

# environment health & safety

**ENVIRONMENT** – Slate is a naturally occurring material that in normal use is both inert and non-polluting.

**WASTE DISPOSAL** – Unwanted items should be disposed of in accordance with the 'Duty of Care – Control of Waste Regulations', and any local Government requirements.

HAZARDS TO HEALTH - Hazards are generally associated with poor handling and incorrect machining of products. Cuts may be sustained from broken or sharp edges; these should receive the appropriate first aid and medical attention. Dust arising from dry-cutting, drilling or machining can be harmful to health.

PRECAUTIONS - Lifting: Wear suitable gloves or other hand protection. Avoid lifting awkward shaped items alone. Get help where needed.

Machining: Use water saturated machinery methods if possible. Use dust masks of suitable standard if dust occurs. Wear eye protection when using machinery and holing tools.

## specification

#### **COMPOSITION & MANUFACTURE**

Quarried from over 200 feet below ground level, the mineral composition and hard-wearing properties of Delabole Slate ensure excellent quality and durability.

The slate is extracted by wire sawing block from the quarry face. Blocks are then sawn to thickness on large frame saws and further cut-to-size on diamond tipped circular saws.

The natural colour of Delabole Slate is predominantly blue/grey, with attractive natural markings. In time, sills may weather to a slightly more mellow shade. Various surface coatings can be applied to darken the slate, and enhance such natural markings. This may be especially suited to internal sills.

#### **FINISHES**

Frame Sawn Finish - This is an unpolished slab, as it is when removed from the Frame Saw. Although there may be some surface saw markings, the finish is relatively smooth, and is usually regarded as eminently suitable for

Fine Rubbed Finish - This is a polished slab, fine rubbed to a smooth finish (like an eggshell to the touch). Polishing will remove saw cuts as well as slightly darkening the slate, providing a more 'sophisticated appearance'. This finish is recommended for internal sills.

#### **SIZE & SHAPE**

Most sills are custom-made to order in accordance with the dimensions required; however, a range of widths and lengths to suit standard windows are available from stock

#### **SPECIAL FEATURES**

Edges can be profiled to various shapes including bevels, chamfers, pencil rounding and bullnosing. Drip grooves and water bars can also be machined where required, whilst notches and drill holes can be added to assist fixing.

## general

MISCELLANEOUS - Delabole Slate supply a range of accessories associated with the fixing, cleaning and protection of slate surfaces. The sealants referred to in this brochure are also available from the company.

SUPPLY - A range of rectangular sills at various widths and lengths to suit standard windows are available from stock.

SHOWROOM - Examples of slate sills are on display in the Delabole Slate showroom which is open to the public, Monday - Friday 8.00am - 4.30pm.

**DELIVERY** – Delabole Slate can arrange delivery to any destination as necessary.

# **DELABOLE**SLATE

Natural Choice The

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Managed Forests