

ref: PA/2008/1119.

First floor on picture below shows how our windows would look. Windows incorporate a tilt facility as well as traditional opening.

SLIDING SASH
HOWARTH WINDOWS & DOORS
43

A comprehensive range of side and top hung sliding sash windows meeting the most exacting specifications

PLANT-ON BARS
All factory-glazed frames with glazing bars are priced using the tape bar system.

The clip-on bar system is available at a reduced cost. In order to reduce the risk of movement, all external bars are made from straight grain, quarter cut hemlock. On translucent finishes, this may result in minor colour variation.

LOW-E GLAZING AND DOCUMENT I
All prices quoted for glazed windows incorporate 24mm low-E glazing as a minimum.

For full details on all other glazing options please contact the Sales Office. Tel: 01469 535302.

NIGHT VENTS
Windows up to 635 wide have no ventilators fitted. From 635 wide to 1084 will have 4000 mm² and 1085 and over will have 8000 mm² ventilation.

WINDOW FURNITURE RANGE
Ironmongery options are available from Howarth.



Photograph courtesy Brydon Estates (UK) Ltd, main contractor Frudd Construction Ltd.

CALCULATED BENCHMARK U-VALUES (W/m²K)
Sliding Sash U-values with 24mm (4mm-16mm-4mm) low-E

<p>Benchmark A</p>  <p>1.86 W/m²K 1.70 W/m²K</p>	<p>1230mm wide x 1480mm high</p> <p>Benchmark 1.92 W/m²K</p> <p>Argon filled low-E Benchmark 1.73 W/m²K</p>	<p>Benchmark B</p>  <p>1.98 W/m²K 1.76 W/m²K</p>
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PRODUCT RANGE

Sliding Sash Non Bar	44
Sliding Sash Vertical Bar	44
Sliding Sash All Bar	45
Sliding Sash Marginal Bar	45
Sliding Sash Metric Non Bar	46
Sliding Sash Metric Vertical Bar	46
Sliding Sash Metric All Bar	46
Sliding Sash Metric Marginal Bar	47
Sliding Sash Window Options	47
Sliding Sash Bay Windows	48

Standard Sliding Sash Ironmongery
White and Brass effect fittings are Standard with Chrome effect fittings available at extra cost.



our proposed windows.

DEVELOPMENT CONTROL SECTION

05 AUG 2008

referred To



Specifications:

Visually coordinating with the doorframe and casement window ranges, Howarth's sliding sash window is a popular choice where Public Planning Guidelines call for new windows to match local architectural style. Tests independently witnessed by the British Woodworking Federation assess the window as achieving compliance with the British and European Standards below.

Hi Spec sliding sash windows are manufactured to meet the following British and European Standards:

MATERIALS, CONSTRUCTION & WORKMANSHIP REQUIREMENTS

- BS644 Part 1: 2003 Specification for Factory Assembled Windows.
- BS1186 Part 2: 2003 Specification for Workmanship in Joinery.

PERFORMANCE

High Performance Part 'B' rating under BS5368 Parts 1,2 and 3. It should be noted that this is higher than the Part 'A' rating to which many windows are routinely tested.

- BS6375 Part 1: 1989 Certification of Weather Tightness.
Air Permeability: Class B - 600Pa
Limit of Water Tightness: 300Pa
Limit of Wind Resistance: 2000Pa

TIMBER

- BS EN 942: 1996 Timber in Joinery; General Classification of Timber Quality. All timber used is Redwood Nordic Pine from well managed yield sources.



IRONMONGERY OPTIONS

Handles and catches are available as standard in brass or white. A chrome option can be specified at an additional cost.

PRESERVATION OF TIMBER

- BS5589: 1989 Table 5 Performance Level B for 30 year service life.
Preservative: Organic Solvent Type to BS5707.
Test Results: BS6375 Part 1 & Part 2.

PRIMER (WATER BASED)

- Paint: BS5082: 1993.
Basecoat Stain: BS7779: 1994.

ADHESIVES

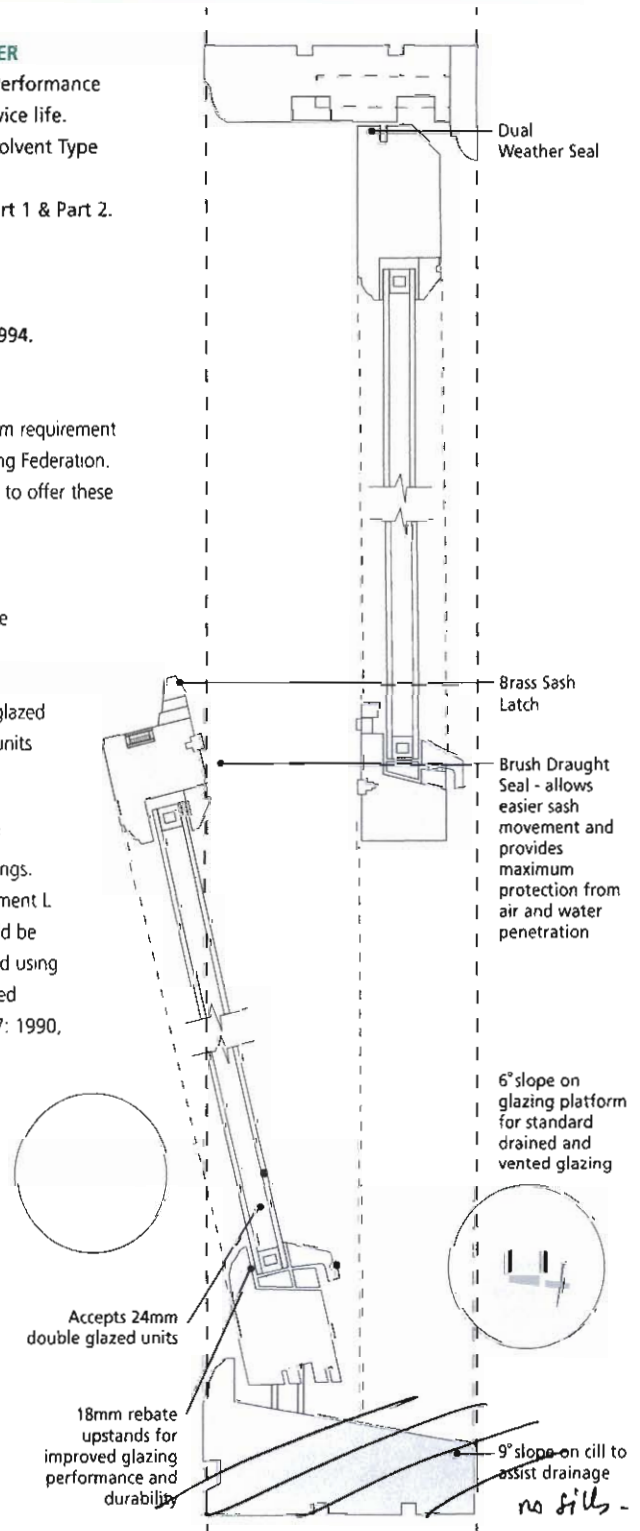
- BS EN 204 D4.
D3 adhesive is the minimum requirement for the British Woodworking Federation. Howarth uses D4 adhesive to offer these extra benefits :
- improved durability
- greater strength
- improved water resistance

GLAZING

Sliding sash windows are glazed using 24mm, dual sealed units (4-16-4) tested to BS5713: 1994 as standard. This will give high levels of thermal insulation SAP ratings. However, to achieve Document L 24mm low-E glazing should be used. The units are installed using superior, drained and vented methods, to BS8000 Part 7: 1990, which prolongs the life of the sealed unit, enabling Howarth to offer a guarantee period of 10 years.

GLAZING BAR OPTIONS

Glazing bars are available in 28mm or 19mm options.



we would obviously choose the 19mm option.