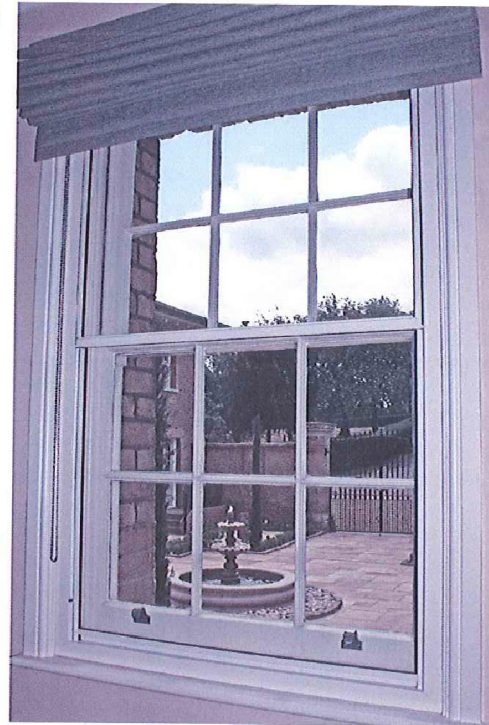
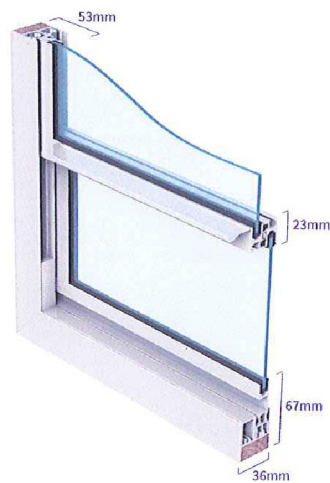




SERIES 20 SLIMLINE

VERTICAL SLIDING

A slim section vertical sliding unit suitable for treating traditional sash windows. Spring balances fully support the sliding sashes in all positions.



FEATURES

- Recessed finger pull on lower sash allows contra-sliding to assist with cleaning
- 23mm interlock stile with projecting finger pull
- Twin brush seals ensure high sealing efficiency
- Fixings concealed within the frame - trims not required
- Frames may be linked with a colour matched aluminium transom/mullion section

DIMENSIONS

Recommended maximum frame

Format	Height (mm)	Width (mm)
2 PANES	3000	1400

Maximum sash (h)1500mm x (w)1400mm, minimum sash (h)300mm x (w)350mm

Overall dimensions are subject to a maximum sash weight of 20kg

Sash height to width ratio should not normally exceed 1:3

A minimum frame to frame gap of 75mm is recommended for access to the outer window

FRAME COLOUR

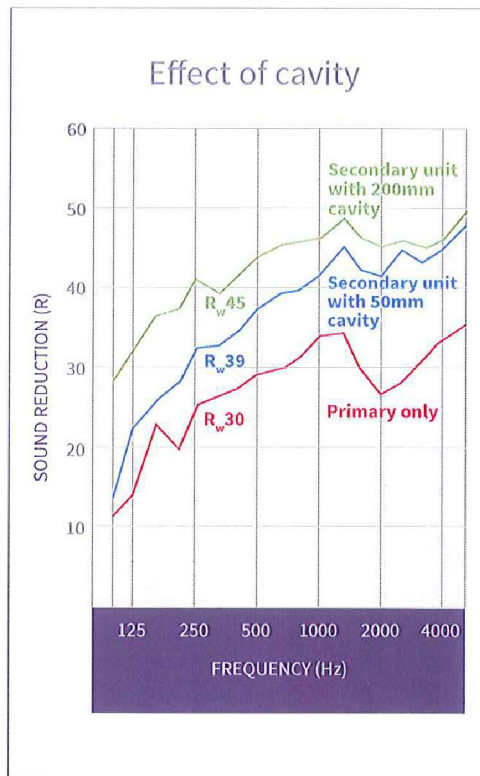
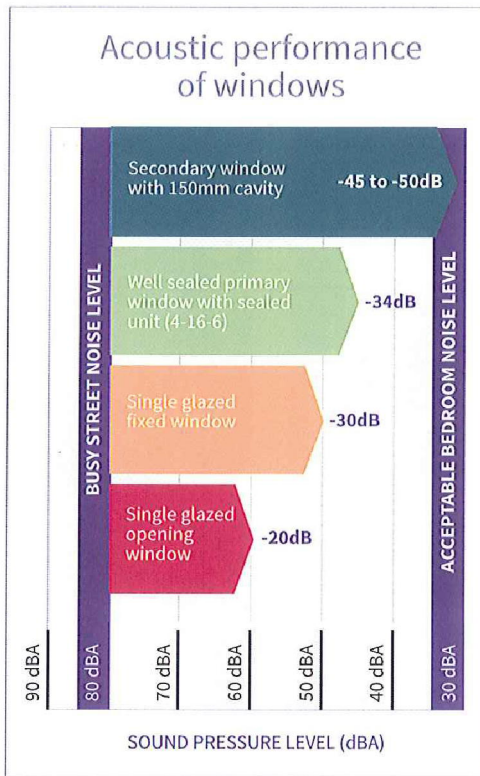
Stock finish is white HIPCA 9910 semi-gloss

Any standard powder paint, wood grain finish or anodised finish to order

OPTIONS

Glazing	4mm to 6.8mm
Frames	Heavy duty box interlock stile Curved heads - minimum radius 450mm
Ironmongery	H3 Recessed finger pull to upper sash (see page 44/45) H17 Cranked 'D' handle to upper sash L2 Lockable fitch catch L4 Plunge lock L13 Sliding latch

Optimising performance



Notes

Sound is measured as a pressure and expressed in dB (decibels) which is a logarithmic scale. 0dB represents the threshold of hearing and 120 dB the onset of pain. To the human ear a change of 3dB is just about noticeable whereas an increase of 10dB approximates to a doubling of loudness.

Cavity is the space between the existing primary windows and the secondary glazing. Performance improves as the cavity increases with an optimum of about 200mm.

Glass type and thickness have a direct impact on performance. Thicker glass has greater mass, so will provide better acoustic results. Ideally the secondary glass should be of different thickness to the primary window glass to avoid sympathetic resonance which will increase noise transmission. Acoustic laminate glass helps improve performance at higher frequencies.

Reveal linings are acoustic absorbent lining materials which can be fitted to the reveals, normally at the head and jambs. These raise insulation levels by 1 to 2dB and are used when external sound levels are very high.

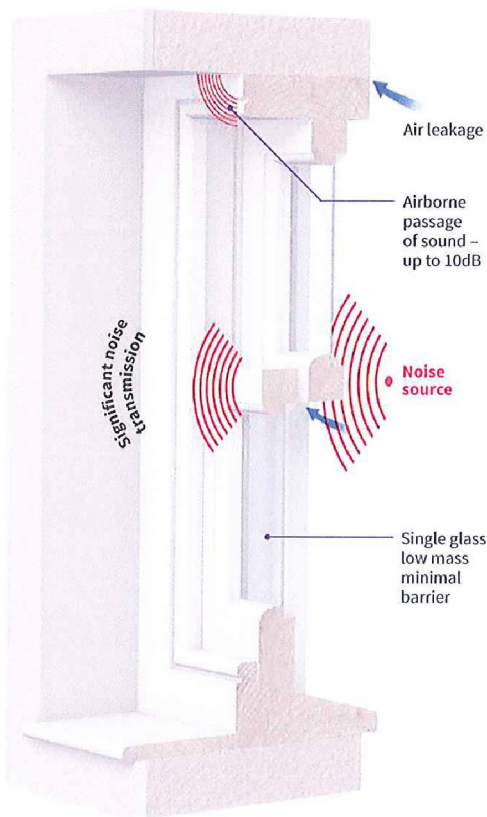
Testing and certification

The product range has been tested against single glazed primary windows with 50mm, 100mm, 150mm and 200mm cavities. Testing was carried out by Taylor Woodrow Technology in accordance with Standard BS EN ISO 140-3: 1995 'Laboratory measurement of air-borne sound insulation of building elements'. Results were reviewed and interpolated by Hann Tucker Associates.

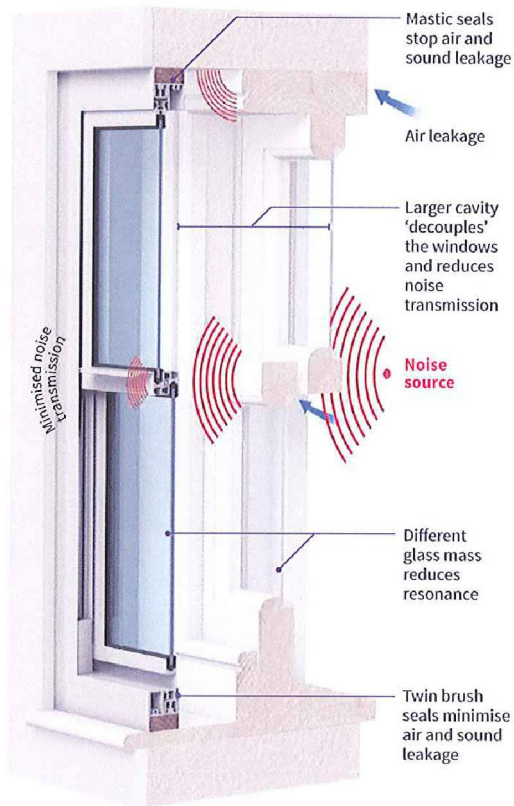
Please visit our website for performance figures. Summary tables are on page 50.

How secondary glazing improves acoustic performance

Original window...



...with secondary glazing



Sound is transmitted through a window by direct vibration of the glass. The larger air space created by secondary glazing decouples the movement of the inner and outer glass, which means they act as separate barriers, thereby reducing resonance.

By contrast, a typical sealed glass unit, where the two panes of glass are rigidly connected and have a minimal cavity, performs little better than a single pane.

Airborne sound is also a major problem with ill-fitting windows – a 1% gap in the total window area can reduce sound insulation by as much as 10dB. A purpose-made secondary window seals the whole of the external window with frames bedded on an acrylic sealant and opening panels fitted with high performance seals.



Selectaglaze Ltd., Alban Park, Hatfield Road, St. Albans AL4 0JJ

www.selectaglaze.co.uk

Ref: DH/E59813
Please quote the above ref.
In all correspondence

5th June 2017

Clem Dobson Associates
17 The Courtyard
Buntsford Gate Business Park
Bromsgrove
Worcs
B60 3DJ

For the attention of Ms Sharon McDonald

Dear Sharon,

Re: Secondary Glazing at Flat A, 112 Whitfield Street

Following our visit to the above property, we now take pleasure in confirming our proposals and estimate for consideration.

We understand that there is a requirement for noise insulation and take pleasure in providing the following proposals which will improve the acoustic insulation of the windows in accordance with our guidance notes attached.

Our Proposals

For all windows, we propose our Series 20 vertical sliding sash window to mimic the primary window in style and operation. This unit will also give you access for cleaning and ventilation if required.

Specification

Units will be manufactured from exclusive Selectaglaze 6063 T6 aluminium alloy profiles to BS 1474, finished in our stock HIPCA white semi-gloss polyester powder paint to Qualicoat standards with white gasket.

Glazing included is 6.8mm Stadip silence acoustic glass, which complies with BS 6262 Codes of Practice.

The secondary glazing will be installed upon bespoke timber frames onto which the secondary glazing will be sealed and secured. These in the most part, will be covered by our odd leg main frame sections, making further decorations unnecessary and all fixings will be concealed within the main frames.

Estimate

To survey, manufacture, supply and install 5 no. Selectaglaze aluminium secondary glazing units into 5 no. window openings as detailed above.

All for the sum of.....£4,765.62 ex VAT

The estimate is exclusive of VAT, which will be levied at the rate prevailing at the time of supply, currently 20%.

Our price is based on all the listed items being ordered. Should items be added or omitted, Selectaglaze reserve the right to re-cost this project.

Warmer Quieter Safer

Directors: M.M. Childerstone BA (Oxon) (CHAIRMAN), R.M. Childerstone, K.A. Heron BSc (MANAGING), D.J. Lamborn BA, ACA (FINANCIAL), C.M. Biggill (SALES)

Registered in England and Wales at the above address: No. 679979

Terms

The estimate is based on Selectaglaze's 'Terms and Conditions of Sale', together with a 'Site and Attendance schedule', both of which are attached.

The estimate as detailed will remain open for an acceptance period of 60 days, after which time we reserve the right to apply any fluctuations in material and labour rates.

Please note that if the property is a Listed Building, we will require a copy of the local authority approval for the secondary glazing installation. It is a legal requirement on both our parts that this is in place before the works can take place.

Payment

With regard to payment, you currently do not have an account facility and we will require a 25% deposit inclusive of VAT, with order and the balance paid in full prior to installation.

Programme / Delivery

As a guide, our surveyor can normally visit your property to take accurate manufacturing sizes within 7 to 10 working days from receipt of order. Manufacture will take a further 3 to 4 weeks, with installation being completed during normal working hours, within 1 day. These lead times are for guidance only and should be confirmed at the time of order as they may be subject to fluctuation due to existing contractual commitments.

Attendance

For both survey and installation, we will require clear and safe access of at least 1-1½ metres in front of each window, with furniture etc. being moved away in advance.

This cost includes for Selectaglaze to remove and refit the blinds on all windows.

The mirror which is located inside the bathroom reveal will need to be removed by others prior to installation.


The windows on the front elevation which are located in the kitchen/ lounge area have a radiator located under the windows. The secondary glazing will partially cover the top of each radiator and may possibly restrict these from being removed off the wall once fitted.

No allowance has been made for any construction drawings, however if required these can be provided at an additional cost.

We trust we have interpreted your requirements correctly, however should you wish to discuss any elements of the estimate, please do not hesitate to contact the undersigned.

Assuring you of our close attention and interest at all times.

Yours sincerely


Denis Hussein
Technical Advisor
For and on behalf of Selectaglaze Limited

Warmer Quieter Safer

Case study: Ham Yard Hotel, London

Located in one of the most vibrant and bustling districts in Central London, lies the stunning Ham Yard Hotel.

Built on a plot that has been vacant for a number of years, the site has a creative past. During the 1920s Ham Yard was home to the Hambone Club for writers and musicians. During the 1940s it became a regular paid jazz club for London musicians called Club Eleven. During WWII the site saw serious damage through bombings and the area was never redeveloped.

Many plans were put forward over the years to develop the site, but all were rejected until, finally permission was granted for Firdale Hotels to redevelop the area. They created 91 individually designed hotel bedrooms and 24 apartments, along with a 1950's style bowling alley, theatre and restaurant. However, building a hotel in the centre of an area with such vibrant night life does come with its drawbacks.

Although new double glazed windows were installed throughout, the hotel still suffered from high external noise levels. Firdale Hotels approached Selectaglaze to help deliver a solution with their bespoke secondary glazing systems.

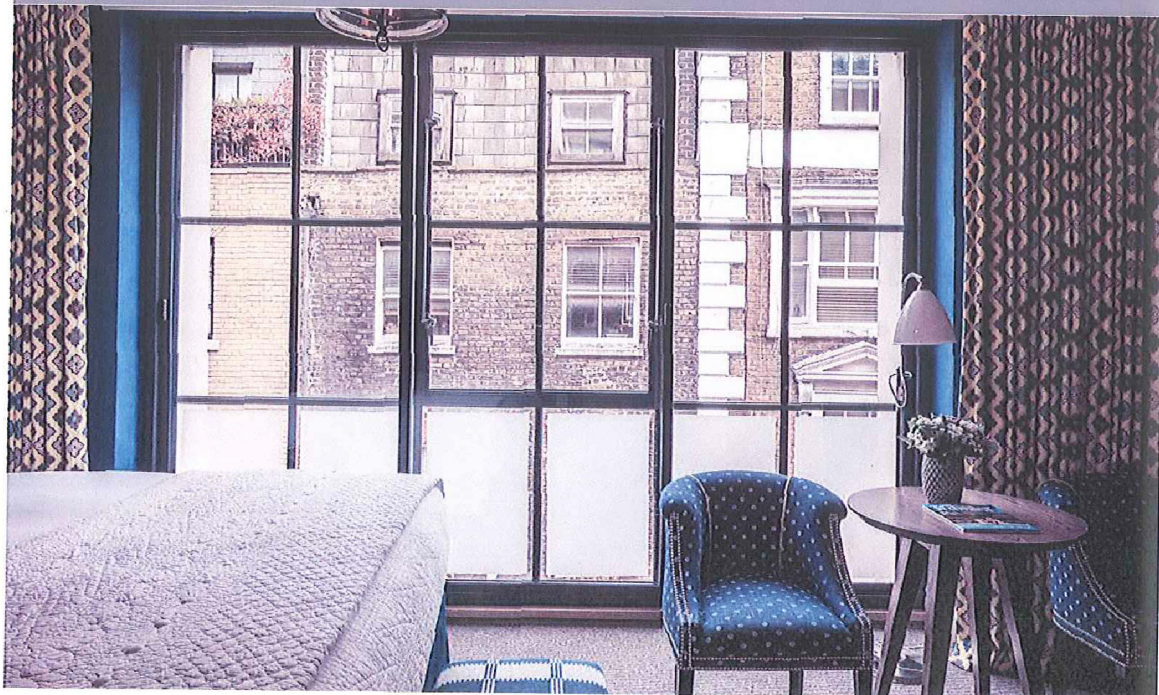
Three different unit styles were used, one of which was the Series 80 horizontal slider, typically used for larger windows as it can hold up to 12mm thick glass. Acoustic laminated glass was used, which absorbed sound from outside, to



assist in creating a more peaceful and relaxing environment – as well as a good night's sleep.

A total of 37 openings were treated with the secondary glazing being finished in a dark grey colour to match the existing primary windows, making them as inconspicuous as possible.

As testament to the detailed planning throughout the design and build phases, the hotel also gained a BREEM 'Excellent' rating.



Acoustic performance

A well-sealed secondary window, with a cavity of at least 100mm can provide noise reduction in excess of 45dB. Combined with double glazed windows, up to 56dB is achievable. The result is a more peaceful living or working environment.

Why improve?

Most traditional single glazed windows with poorly sealed frames offer little defence against unwelcome noise and even modern double glazed windows fare little better against high sound levels.

Noise is unwanted sound and a form of pollution that can be detrimental to health.

A significant reduction in noise level will:

- create a quieter less stressful environment
- reduce sleep disturbance
- help improve concentration and productivity
- protect hearing

World Health Organisation 'Guidelines for Community Noise' and **BS 8233** set out guidelines for acceptable sound levels in a range of environments. An acceptable sound pressure level (SPL) is 30 to 35dBA for a bedroom, 35 to 50dBA for a classroom or meeting room and 45 to 50dBA for a typical open office. Traffic noise close to the façade of a building on fairly busy roads will be 70 to 80dBA and hence sound reductions in the range 30 to 50dBA are required.

National Planning Policy Framework: 2012 assesses the impact of noise in new developments. Brownfield sites will often be located in areas with very challenging noise levels and window designs involving an additional secondary window to produce acoustic triple glazing can be pivotal in meeting acoustic requirements.

Building Bulletin 93, Acoustic Design of Schools Feb 2015 sets out minimum standards for ambient noise levels in school rooms.

