



Secondary Glazing
solutions that conserve
your windows' beauty



CUT OUT
NOISE



REDUCE
ENERGY BILLS



INCREASE
SECURITY

Why Secondary Glazing?

Secondary glazing is a more cost-effective solution than replacing your existing windows altogether and offers so many additional benefits:

- Bespoke design solutions to preserve your windows' integrity and appearance
- Strong, reliable, long-lasting and low maintenance
- Discreet and unobtrusive
- Suitable for conservation areas, listed and historic buildings
- Substantially improves the thermal insulation of existing single-glazed windows
- Reduces fuel bills by cutting out draughts and improving energy performance
- Enhanced levels of noise insulation
- No external access required – ideal for multi-storey buildings
- Reduces insurance premiums by adding an additional barrier against unauthorised entry



Call 01909 499 899

Fax 01909 499 900

Email enquiries@gsecg.com

www.gsecg.com



The perfect solution

We are now the UK's largest manufacturer and supplier of secondary glazing units, making anywhere between 700 and 1200 units a week.

We are renowned for the excellent service we offer and have built our reputation on providing top quality products that offer great value for money.

Our secondary glazing is suitable for all types of premises, including grade one and two listed buildings, schools, colleges, hospitals, universities, hotels, churches and commercial buildings.

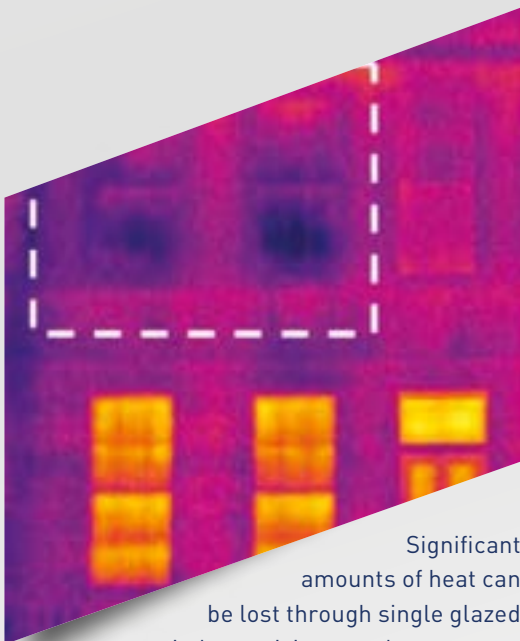
With a comprehensive range of designs, finishes, accessories and glass to choose from, we can provide a perfect solution for any type of property – go on, try us!

- ✓ No hassle, quick turnaround quotes
- ✓ Suitable for virtually all applications, including sash windows, arched windows, steel framed windows and doors
- ✓ Quick, clean and non-disruptive installation with no need to redecorate or clean up afterwards
- ✓ Fully accredited and backed up by test results and certification





Reducing noise pollution can have an enormously positive effect on productivity and quality of life



Significant amounts of heat can be lost through single glazed windows, giving your home a poor energy rating and creating large energy bills



Cut out noise

In today's modern world, the volume of intrusive, disturbing noise entering our homes and places of work from outside is reaching intolerable levels – which can be extremely damaging to our health and wellbeing.

Secondary glazing specified for sound insulation is the most effective method of achieving significant levels of noise reduction and sound proofing. Specialist laminated acoustic glass is used to maximise the noise reduction from all types of obtrusive noise, such as:

- **general street noise**
- **traffic noise**
- **aeroplane and airport noise**
- **railway, station and train noise.**

So, now you can concentrate on your work or enjoy a good night's sleep, in a newly peaceful environment.





Reduce energy bills

Our standard secondary glazing substantially reduces the heat lost through single glazed windows and can be made even more energy efficient by specifying low "E" heat reflective glass and "A" rated sealed units.

We also offer three premium solutions, from Standard to Outstanding, for optimal thermal insulation – enabling you to achieve energy neutrality.

Whichever option you choose, the units will:

- **save energy**
- **reduce heating bills**
- **improve the energy rating of your home**
- **add to your comfort.**

Official tests show that secondary glazing with energy efficient glass offered 11% more heat insulation than standard double glazing.



Secure, modern locks are included on our sash units to increase security



Increase security

Our secondary glazing improves home security, and helps cut your insurance premiums, by adding an additional barrier against unauthorized entry as they cannot be opened from the outside.

For higher risk and more vulnerable doors and windows, such as those on the ground floor rear of a property, we can upgrade the specifications to include:

- **deadlocks**
- **multi-point locking**
- **toughened glass**
- **laminated security glass.**

However, windows and doors that are used as fire exits are still easy to access and open from the inside, ensuring the safety of everyone in the building. We also offer limited opening restrictors for use where small children are around.



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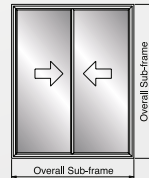
The range

All of our secondary glazing is supplied fully assembled and ready to install.

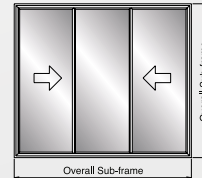
Our units comprise of an aluminium outer frame joined to a seasoned FSC timber surround which allows for a neat, unobtrusive installation even in the most difficult situations.

Most of the units, glazing and fittings are available in the Heritage (H) range too, with some items specifically designed for that range.

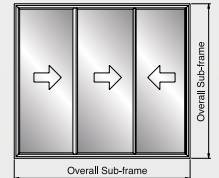
SS2/HSS2
2 panel
horizontal slider



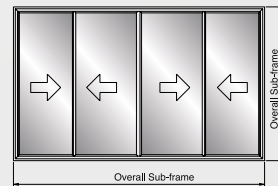
SS3/HSS3
3 panel horizontal slider
(fixed centre panel)



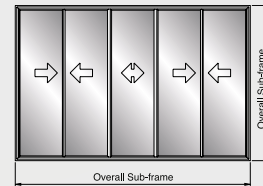
CO3/HC03
3 panel
horizontal slider



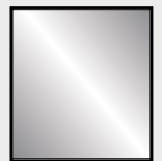
SS4/HSS4
4 panel
horizontal slider



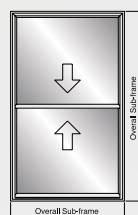
SS5/HSS5
5 panel horizontal slider
(fixed centre panel)



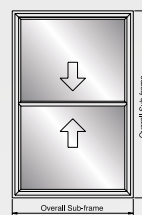
INS/HINS
Insert panel



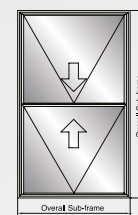
VS
Vertical slider



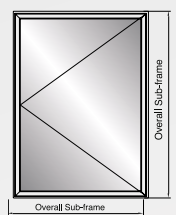
BVS/HBVS
Balanced
vertical slider



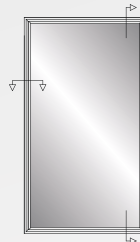
TBVS/HTBVS
Tilt-in balanced
vertical slider



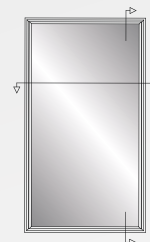
HU/HHU
Hinged unit



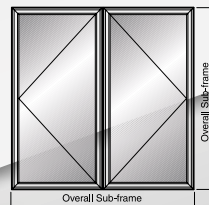
LO/HLO
Lift out



SLLO/HSLO
Slimline lift out



DHU/HDHU
Double hinged unit



Also available:

Curved head window
Gothic head window
Trickle vent
Acoustic trickle vent
Acoustic tile board
Shaped corners

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Standard specifications highlighted in **bold**.

Main unit types*	S	H	Max.width x height (mm)
SS2/HSS2 2 panel horizontal slider	✓		2400x2000
		✓	3200x2700
SS3/HSS3 3 panel horizontal slider	✓		3600x2000
		✓	4900x2700
C03/HC03 3 panel horizontal slider (fixed centre panel)	✓		3600x2000
		✓	4900x2700
SS4/HSS4 4 panel horizontal slider	✓		4900x2000
		✓	4900x2700
SS5/HSS5 5 panel horizontal slider	✓		4900x2000
		✓	4900x2700
VS Manually operated Standard vertical slider	✓		1200x1800
BVS/HBVS Balanced vertical slider	✓		1500x3000
		✓	1800x3800
TBVS/HTBVS Tilt-in balanced vertical slider	✓		1500x3000
		✓	1800x3800
HU/HHU Hinged unit	✓		1200x1800
		✓	1600x3800
LO Lift out	✓		2000x2700
SLLO/HSLO Slimline lift out	✓		2000x2200
		✓	2000x2700
Insert panel	✓		2000x2200
		✓	2000x2700
DHU/HDHU Double hinged unit	✓		2400x1800
		✓	3200x3800

NB: All unit types are subject to maximum size recommendations as specified in the Granada Maximum & Minimum Size Chart (supplied separately)

Glazing options	S	H	Sizes available
Clear float	✓	✓	4/6mm
Clear toughened	✓	✓	4/6mm
Clear laminate	✓	✓	6.4/6.8mm
Clear stapid silence (Acoustic Glass)	✓	✓	6.4/6.8mm
		✓	8.8mm
Pilkington K float	✓	✓	4/6mm
Pilkington K toughened	✓	✓	4/6mm
Obscure glass	✓	✓	4/6mm
Obscure toughened	✓	✓	4/6mm
Fly screen mesh	✓	✓	
Hole cut out	✓	✓	

Glass can be specified for thermal insulation, noise insulation or both. Other/thicker glass available on selected products.

Granada manufacture **Standard (S)** Secondary Glazing windows to suit most designs of primary window in the home. There is also the **Heritage range (H)** which can accommodate the larger windows and the more commercial applications.

Timber sub-frame options	S	H	Sizes available (mm)
Face fix	✓	✓	45x21 / 45x30 / 55x21
Reveal fix	✓	✓	62x21 / 62x30 / 70x21
Square corner post (bays)	✓	✓	45x45 / 62x62
Bevelled bay meeting stiles	✓	✓	
White metal bar PPC	✓	✓	38 (Astragal)
Box support bar	✓	✓	25x25
Interlocker (coupling section)	✓	✓	
SBN PVC or SBN painted timber	✓	✓	27x6 / 21x6 / 40x6 / 60x6 / 90x6

Hardware and locking options	S	H
Heavy duty interlocker (horizontal sliders)	✓	
Chubb lock (horizontal sliders)	✓	
Chubb lock (lift outs)	✓	
Lockable fitch catch	✓	✓
Secure by Design option on hinged units		✓
Budget lock (only on H/D interlocker)	✓	
Travel limit stop	✓	✓
Hinged unit spring restrictor catch	✓	
Hinged unit restrictor		✓
Hinged unit locking handle		✓
Double hinged unit	✓	✓
Hinged unit invisi-hinges		✓
Hinged unit tilt and turn (max. size 1400x2400mm)		✓
Snake eye actuator		✓

Colours

***Standard finish = white polyester powder coated (high gloss)**

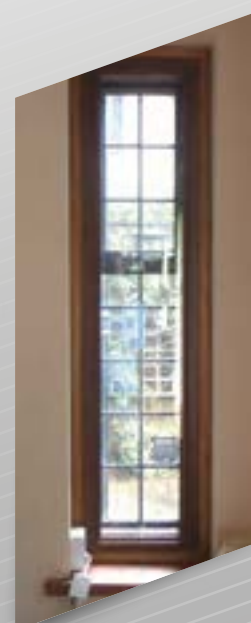
Other finishes available:

- Silver Anodised
- Van Dyke Dark Brown (High gloss)
- Light Oak Woodgrain effect

Other woodgrain finishes are available upon request

- Ivory Satin Finish RAL1015
- Magnolia Satin Finish BS08B15
- Pure White Satin Finish RAL9010
- Slate Grey Satin Finish RAL7015
- Cream Satin Finish RAL9001
- Jet Black Satin Finish RAL9005

Other RAL colours can be made to order



The results



Noise reduction

Tests were carried out by Chiltern Dynamics in October and November 2012 under laboratory conditions in accordance with BS EN ISO 1014-2 'Laboratory measurement of airborne sound insulation of Building Elements'.

Noise reduction is always stated as the combined noise reduction of the primary window plus any secondary glazing.

Tests show that, in a typical situation, the noise that you hear without secondary glazing is 400% greater.

In other words, from a starting point of 50dB, the level of noise that you hear decreases by 20dB, so it is halved (10dB) and then halved again (another 10dB).

By fitting secondary glazing with 6.4mm laminated acoustic glass and a 75mm cavity, the level of noise experienced decreased by: **75%**

For more information and to view the test certificates, please visit: <http://www.gsecg.com/sound-proofing-and-noise-insulation-table-and-test-results-residential-secondary-glazing>

Thermal insulation

The following secondary glazing thermal insulation test was carried out in Switzerland by the Interver Glass Technology specialist glass testing facility for an installation in Eire:

- the existing primary window was traditional timber framed with putty glazed 4mm float glass
- the cavity was a typical unsealed 85mm
- the secondary window was our standard white finished aluminium secondary glazing unit with hardwood fixing sub frame and channel, glazed with 4mm Pilkington 'K' hard coat low 'E' glass

Thermal window insulation is always stated as the combined thermal insulation of the primary window plus any secondary glazing:

- ✓ the combined window thermal insulation U value for this configuration was 1.868 W/m²K
- ✓ this will be equivalent to a WER rating scale of B or C.

By fitting the secondary glazing with double glazed low E "K" glass we can achieve a WER Rating Scale of: **A Rated**

For more information and to view the test certificates, please visit <http://www.gsecg.com/residential-secondary-glazing-thermal-insulation-test-results>

“We have slept a complete night through for the first time since we moved into our flat! Not only does the secondary glazing look like it is part of the existing window frame and therefore maintains the original character of the building, but also, it has reduced the draught and noise levels from outside beyond our expectations. We were highly impressed with the efficiency and professionalism of all those we have dealt with and the speed with which the windows were manufactured and installed from the date of the quote. Many thanks.”

M Wilkinson, Manchester

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Approved and accredited by:

