

# The Heritage Range



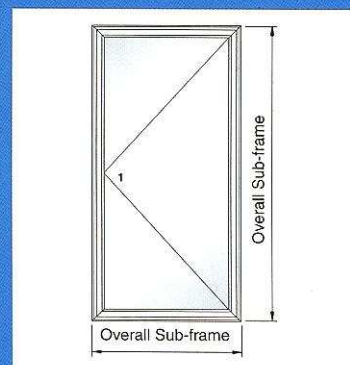
## The Product

Without doubt the most versatile type of secondary glazing. Ideally suited to large glazed areas with minimal sight lines, the system offers a high level security with easy access to the primary glazing.

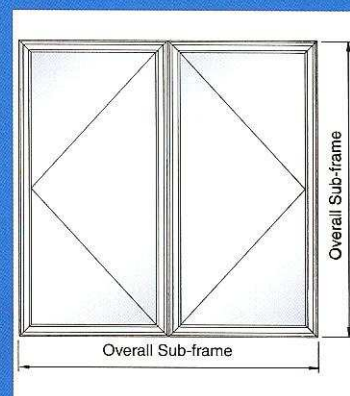
## How it works

A robust system with a broad range of glazing capabilities, the can be hung on either butt hinges or concealed stays and is secured by use of a multi point locking system actuated by a single handle anti-ligature detail and gear box. The ability to utilise Tilt and Turn gearing also increases the flexibility of use, giving high level ventilation and a secure night vent position, whilst retaining easy access to the primary glazing for cleaning and general maintenance.

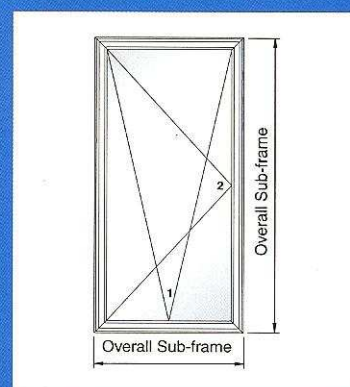
CI/SfB  
(314) Hh4



SINGLE HINGED UNIT



DOUBLE HINGED UNIT



TILT & TURN

All options fitted with a multi point high security locking system

Butt or Concealed Hinges



# Technical Specifications

CI/StB	(314)	Hh4

## Hardwood Sub-Frames Sizes

21mm x 45mm Standard  
21mm x 62mm Reveal Fix  
30mm x 30mm Bay Adaptor

## Hardwood or PVC-u Trims Sizes

6mm x 21mm S.B.N.  
6mm x 27mm S.B.N.  
6mm x 37mm S.B.N.  
6mm x 44mm S.B.N.  
6mm x 55mm S.B.N.  
6mm x 75mm S.B.N.  
6mm x 15mm D.B.N.  
6mm x 35mm D.B.N.  
6mm x 43mm D.B.N.

## Aluminum

Aluminum alloy extruded to exclusive Granada designs from 6063T6 alloy to BS1474.

## Finishes

White Powder Coat, 60 Micron, Interpon SA 098E High Gloss  
Van Dyke Brown, 60 Micron, BS08B29 High Gloss  
Silver anodised, AA5  
RAL colours available on request

## Glazing

In accordance with BS 6206. Choices of 4mm, 6mm, clear float or toughened, all standard and acoustic laminates, double glazed units to 24mm.

## Sash Weight Limit

100kg

## Maximum Sizes

### WIDTH x HEIGHT

1500mm x 2600mm Single Hinged Unit  
3000mm x 2600mm Double Hinged Unit  
1500mm x 2600mm Tilt & Turn Unit

An uprated specification can be obtained upon application to accommodate larger sizes.

## Weather Pile

Polypropylene draught strip and Q Lon to BS 7386.

## Gasket

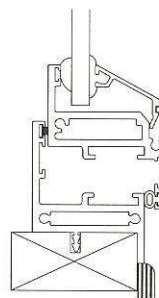
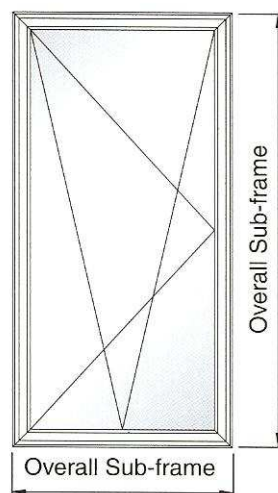
All gaskets extruded to BS 2782, standard colour black, white also available.

## Optional Extras

Complete anti-ligature configuration, including flush fit locking system with detachable handle.

Full range of Arched and Shaped heads.

Integral blind system



Hinged Unit



# Horizontal Sliders

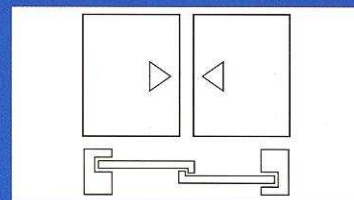


## The Product

The Horizontal Slider is undoubtedly the most frequently used type of secondary glazing. Its uses are therefore widespread, being applied to high rise or low-level commercial properties, historic buildings as well as all kinds of domestic dwellings. The Granada system provides sensitive solutions to the problems created by noise and sound pollution

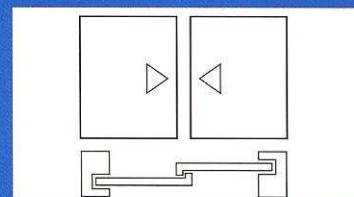
## How it works

Generally available in two, three or four panelled versions, the sashes are fitted with brass rollers, ensuring the smoothest sliding action. Twin brush seals provide excellent high sealing efficiency. This has been scientifically proven to eliminate draughts, increase thermal insulation and give greater improvements to the security of the primary windows. The security issue is further enhanced with the use of the latest locks and handles.



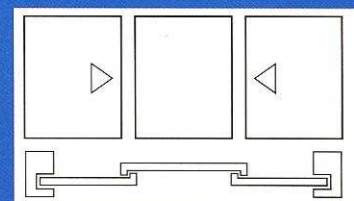
### SS2

RIGHT HAND, TWO PIECE  
HORIZONTAL SLIDER



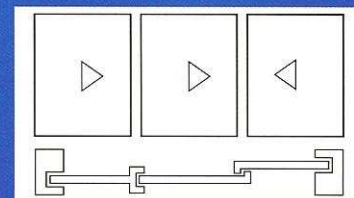
### SS2

LEFT HAND, TWO PIECE  
HORIZONTAL SLIDER



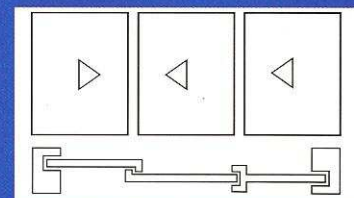
### SS3

THREE PIECE  
HORIZONTAL SLIDER



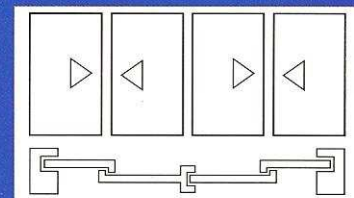
### CO3

LEFT HAND, THREE PIECE  
HORIZONTAL SLIDER



### CO3

RIGHT HAND, THREE PIECE  
HORIZONTAL SLIDER



### SS4

FOUR PIECE  
HORIZONTAL SLIDER



# Technical Specifications

CI/SfB
(314) Hh4

## Hardwood Sub-Frames

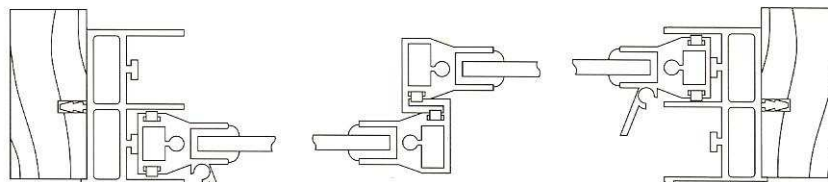
### SIZES

21mm x 45mm Standard  
21mm x 62mm Reveal Fix  
30mm x 30mm Bay Adaptor

## Hardwood or PVCU Trims

### SIZES

6mm x 21mm S.B.N.  
6mm x 27mm S.B.N.  
6mm x 37mm S.B.N.  
6mm x 44mm S.B.N.  
6mm x 55mm S.B.N.  
6mm x 75mm S.B.N.  
6mm x 15mm D.B.N.  
6mm x 33mm D.B.N.  
6mm x 43mm D.B.N.



Plan

## Aluminum

Aluminum alloy extruded to exclusive Granada designs from 6063T6 alloy to BS1474.

## Finishes

Natural anodising to AA5 - BS 3987 Polyester Powder to BS 6496.  
stock finishes in EP white/Van Dyke brown. High gloss finish.  
60 microns. Other RAL colours upon request.

## Glazing

In accordance with BS 6206. Choices of 4mm, 6mm, 8mm and 10mm Clear Float or toughened, 6.4mm, 6.8mm, 7.5mm, 8.8mm and 10.8mm Laminates and 6.4mm, 6.8mm, 7.0mm Acoustic Glass.

## Maximum Sizes

### WIDTH x HEIGHT

2500mm x 2200mm Two Pane Horizontal Slider  
3750mm x 2200mm Three Pane Horizontal Sliders  
5000mm x 2200mm Four Pane Horizontal Sliders

An uprated specification can be obtained upon application to accommodate larger sizes.

## Weather Pile

Polypropylene draught strip to BS 7386.

## Gasket

All gaskets extruded to BS 2782, standard colour black, white 4mm gasket also available.

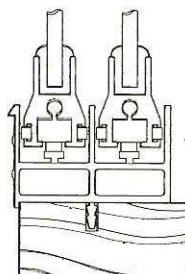
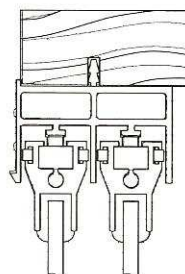
## Acoustics

See separate sheet

## Optional Extras

Chubb Locks  
Budget Locks  
Barrel Locks  
Shoot Bolt Locks  
Restricted Opening Locks  
Arched Heads  
Gothic Heads  
Stacking Units

Can be coupled with other products in the Granada range using Granada's exclusive range of interlocks.



Elevation



# Vertical Sliders



## The Product

Due to the characteristics of the existing primary window, the Balanced Vertical Slider is the most complex type of secondary glazing system. It is applied generally to older properties. It is particularly suited to the refurbishment and upgrade of the nation's architectural heritage.

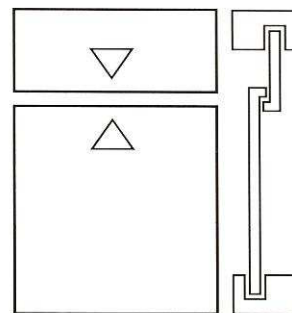
## How it works

The individually pre-tensioned spiral spring balances control the motion of the sash, enabling infinite vertical positioning. This design provides ease of movement and has been specially developed to withstand decades of wear and tear. Tilt in versions can be pivoted through almost 180 degrees. This is especially useful for cleaning but just as importantly can be crucial when considering fire escape requirements.

All variations of Granada's exclusive secondary glazing styles are completely compatible. Each type can be easily used with another no matter what the application may be.

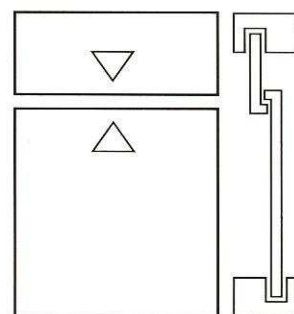
CI/SfB  
(314) Hh4

## Options



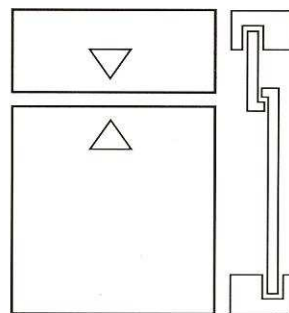
**VS**

VERTICAL SLIDER



**BVS**

VERTICAL SLIDER  
(WITH SPRING BALANCES)



**TILT-IN**

VERTICAL SLIDER  
(WITH SPRING BALANCES,  
TOUGHENED GLASS)



# Technical Specifications

CI/SfB
(314) Hh4

## Hardwood Sub-Frames

### SIZES

21mm x 45mm Standard  
21mm x 62mm Reveal fix  
30mm x 30mm Bay Adaptor

## Hardwood or PVCU Trims

### SIZES

6mm x 21mm S.B.N.  
6mm x 27mm S.B.N.  
6mm x 37mm S.B.N.  
6mm x 44mm S.B.N.  
6mm x 55mm S.B.N.  
6mm x 75mm S.B.N.  
6mm x 15mm D.B.N.  
6mm x 33mm D.B.N.  
6mm x 43mm D.B.N.

## Aluminum

Aluminum alloy extruded to exclusive Granada designs from 6063T6 alloy to BS1474.

## Finishes

Natural anodising to AA5 - BS 3987 Polyester Powder to BS 6496. stock finishes in EP white/Van Dyke brown. High gloss finish. 60 microns. Other RAL colours upon request.

## Glazing

In accordance with BS 6206. Choices of 4mm, 6mm Clear Float or toughened, 6.4mm, 6.8mm, 7.5mm Laminates and 6.4mm, 6.8mm, 7.0mm Acoustic Glass.

## Maximum Sizes

WIDTH x HEIGHT with 4mm glass

1200mm x 3150mm Vertical Sliders

1620mm x 3600mm Balanced Vertical Sliders

1620mm x 3600mm Tilt In Balanced Vertical Sliders

An uprated specification can be obtained upon application to accommodate larger sizes.

## Weather Pile

Polypropylene draught strip to BS 7386.

## Gasket

All gaskets extruded to BS 2782, standard colour black, white 4mm gasket also available.

## Acoustics

See separate sheet

## Optional Extras

Chubb Locks

Flitch Lock

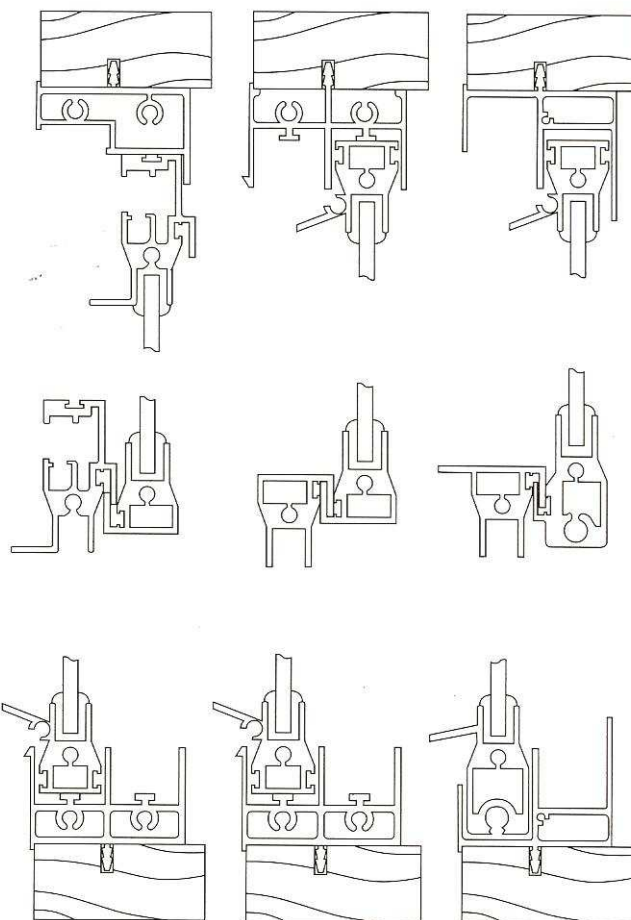
Restricted Opening Locks

Arched Heads

Gothic Heads

Stacking Units

Can be coupled with other products in the Granada range using Granada's exclusive range of interlocks.



Vertical Sliders

Balanced Vertical Sliders

Tilt-in Balanced Vertical Sliders  
Toughened Safety Glass as standard



# Lift Outs



## The Product

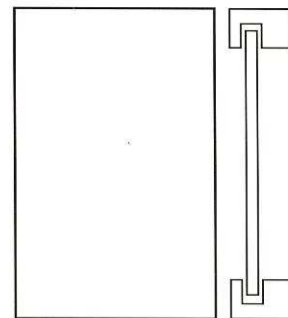
Economically, the Lift Out is the most cost effective type of secondary glazing available. Its most common application is where limited access to the primary window is required, for example a window which has been installed with the sole object of providing light to a room.

## How it works

As well as economical, the Lift Out is also the most basic form of secondary glazing. As its name implies, it simply lifts out of a secured channel. For practical purposes, it is advised that the sash size be considered since the weight of glass must be of manageable proportions. Each sash is manufactured with a double brush pile seal, further increasing the thermal and sound insulation properties.

CI/SfB  
(314) Hh4

## Options



### LO

SINGLE LIFT OUT  
PANEL LIFT UP AND OUT  
FOR REMOVAL



# Technical Specifications

CI/SfB
(314)Hh4

## Hardwood Sub-Frames

### SIZES

21mm x 45mm Standard  
21mm x 62mm Reveal Fix  
30mm x 30mm Bay Adaptor

## Hardwood or PVCU Trims

### SIZES

6mm x 21mm S.B.N.  
6mm x 27mm S.B.N.  
6mm x 37mm S.B.N.  
6mm x 44mm S.B.N.  
6mm x 55mm S.B.N.  
6mm x 75mm S.B.N.  
6mm x 15mm D.B.N.  
6mm x 33mm D.B.N.  
6mm x 43mm D.B.N.

## Aluminum

Aluminum alloy extruded to exclusive Granada designs from 6063T6 alloy to BS1474.

## Finishes

Natural anodising to AA5 - BS 3987 Polyester Powder to BS 6496, stock finishes in EP white/Van Dyke brown. High gloss finish. 60 microns. Other RAL colours upon request.

## Glazing

In accordance with BS 6206. Choices of 4mm, 6mm Clear Float or toughened, 6.4mm, 6.8mm, 7.5mm Laminates and 6.4mm, 6.8mm, 7.0mm Acoustic Glass.

## Maximum Sizes

### WIDTH x HEIGHT

1250mm x 1500mm lift outs

An uprated specification can be obtained upon application to accommodate larger sizes.

## Weather Pile

Polypropylene draught strip to BS 7386.

## Gasket

All gaskets extruded to BS 2782, standard colour black, white 4mm gasket also available.

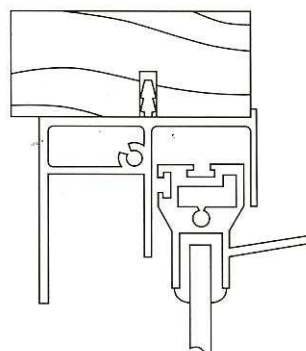
## Acoustics

See separate sheet

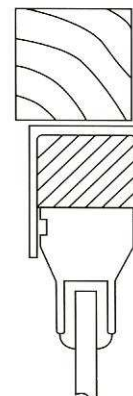
## Optional Extras

Arched Heads  
Gothic Heads  
Stacking Units

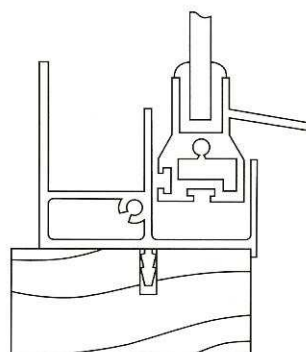
Can be coupled with other products in the Granada range using Granada's exclusive range of interlocks.



Lift-Out Elevation



Slim-line Lift-Out Elevation





# AIRO

## *Test Certificate*

### SOUND REDUCTION INDEX

#### 4/150/6 SECONDARY WINDOW UNIT

#### MEASUREMENTS

Sound Reduction Index (R) measurements were conducted at the AIRO Acoustics Laboratory in accordance with BS 2750: Part3: 1980 and BS 5821: Part 3: 1984, using a purpose built sound transmission suite. AIRO is accredited as NAMAS TESTING Laboratory No. 0483. The test was performed on 19 September 1997.

#### DESCRIPTION

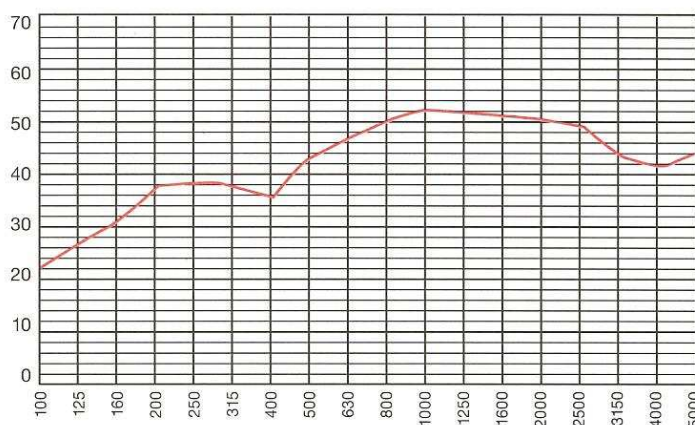
The specimen filled a 1250mm wide x 1500mm high test aperture and comprised a primary and secondary window system. The primary unit consisted of a softwood frame which was glazed with 2 no 4mm fixed panes of area 520 x 1370mm each. The secondary unit consisted of a pair of horizontally sliding sashes with 6mm glazing of area 540 x 1365mm supported in a aluminium framework with an outer frame of English Ash. The cavity between the primary and secondary glazing was 150mm.

Estimated mass of the glazing =  $25\text{kg/m}^2$

Tested for and supplied by Granada Secondary Glazing Limited

#### RESULTS

Frequency Hz	R dB	Frequency Hz	R dB
100	23.2	800	49.8
125	26.9	1000	51.9
160	30.1	1250	51.0
200	36.8	1600	50.5
250	37.8	2000	50.0
315	37.1	2500	48.9
400	34.6	3150	43.3
500	43.1	4000	41.0
630	45.7	5000	44.5



The Weighed Sound Reduction Index,  $R_w = 45\text{ dB}$  (BS 5821: Part 3: 1984) with an unfavourable deviation of 9.4 dB at 400 Hz

This Test Certificate summarises Report No. L/2543 dated 4 November 1997

A J Jones Bsc PhD Cphys MInstP FI0AM  
Managing Director

Sawyer MIOA  
Laboratory Supervisor

Duxons Turn, Marylands Avenue, Hemel Hempstead, Hertfordshire, HP2 4SB. T: 01442 247146







## TEST CERTIFICATE

### SPECTROPHOTOMETRIC DATA

Customer: **Granada Secondary Glazing Ltd** Ref: 10917  
Project: Dublin  
SPD Code: F4 - 85 - 4PKF Fire Code: N/A  
Assembly: Outer: Clear Float Glass - 4mm, putty glazed into softwood frame  
Cavity: 85mm air - filled  
Inner: Pilkington 'K' Float - 4mm, hard coated surface #3,  
gasket glazed into aluminium secondary glazing frame  
mounted in hardwood sub-framed surround

**N.B. Glass arrangement carries no fire rating**

### SPECTROPHOTOMETRIC DATA

Light Factors:	Reflectance Outwards (LR0):	17.0	%
	Reflectance Inwards (LRI):	16.0	%
	Direct transmittance (LDT):	75.0	%
Solar Radiant Heat Factors:	Reflectance Outwards (ERO):	16.0	%
	Absorptance (EAO):	26.0	%
	Direct transmittance (EDT):	59.0	%
	Total transmittance (SF):	0.71	%
Shading Co-efficients:	Short-wave shading (SWS):	0.210	%
	Long-wave shading (LWS):	0.610	%
	Overall shading (SC)	0.82	%
U' (or 'K') Value		1.868	W/m <sup>2</sup> K
Sound attenuation:	General weighted reduction (RW)	37	dB Rw
	Traffic noise reduction (Rt)	31	dB Rt
Nett Weight Kgs /m <sup>2</sup> - inner pane only		10	
Thickness - overall:		93	mm