

QUIET, WARMTH & STYLE

GRANADA
secondary glazing

Product Guarantee

Here at Granada we aim to supply a product that – with regular maintenance – will give many years of trouble-free operation.

We have invested heavily into our machinery, premises and people, to ensure that the quality of the finished product is consistently delivered to the best of our ability.

Through these commitments to quality, we are confident in surpassing other window manufacturers with the comprehensive warranty that we offer on our products and installation.

The warranty period begins from the date of supply, and guarantees that the goods supplied will be free from inherent defects for a period of:

Five years for Aluminium frames and glazing
Two years for moving parts (including, but not limited to springs, locks, handles, rollers, hinges etc.)

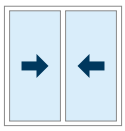
Product Index - Based on 4mm Glass

Key : (T) = Traditional range (H) = Heritage range

Glass Range : (T) = 4mm to 6.8mm (H) = 4mm to 8.8mm

Horizontal Sliding

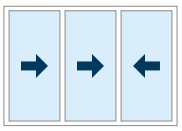
SS2 or HSS2



2 panel

	Max width	or	max height
(T)	2,400mm		1,800mm
(H)	3,200mm		2,700mm

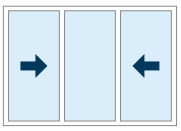
CO3 or HCO3



3 panel

	Max width	or	max height
(T)	3,600mm		1,800mm
(H)	4,900mm		2,700mm

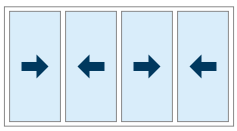
SS3 or HSS3



3 panel (fixed centre panel)

	Max width	or	max height
(T)	3,600mm		1,800mm
(H)	4,900mm		2,700mm

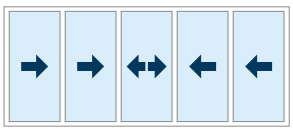
SS4 or HSS4



4 panel

	Max width	or	max height
(T)	4,900mm		1,800mm
(H)	4,900mm		2,700mm

SS5 or HSS5

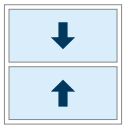


5 panel

	Max width	or	max height
(T)	4,900mm		1,800mm
(H)	4,900mm		2,700mm

Vertical Sliding

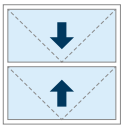
BVS or HBVS



Balanced vertical slider

	Max width	or	max height
(T)	1,500mm		3,000mm
(H)	1,500mm		3,000mm

TBVS or HTBVS



Tilt-in balanced vertical slider

	Max width	or	max height
(T)	1,500mm		3,000mm
(H)	1,500mm		3,000mm

Insert Panel

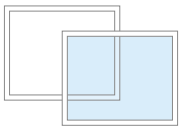
INS



	Max width	or	max height
(T)	1,200mm		2,000mm

Lift Out

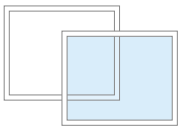
LO or HLO



Lift out unit

	Max width	or	max height
(T)	2,000mm		2,000mm
(H)	On Application		

SLLO

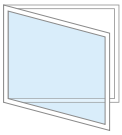


Slimline Lift out unit

	Max width	or	max height
(T)	2,000mm		2,000mm

Hinged Casement

HU



Traditional hinged casement

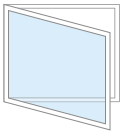
	Max width	or	max height
(T)	950mm		2,100mm

Optional extras:

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

Hinged Casement - (Heritage hinged unit will house up to 28mm sealed unit)

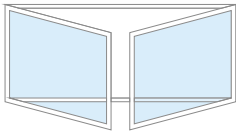
HHU or HHU-TT



Heritage hinged casement

	Max width	or	max height
(H)	1,400mm		2,400mm

DHHU



Double heritage hinged casement

	Max width	or	max height
(H)	2,800mm		2,800mm

All windows are supplied fully assembled and ready to install. Units comprise of an aluminium outer frame joined to a seasoned hardwood timber surround.

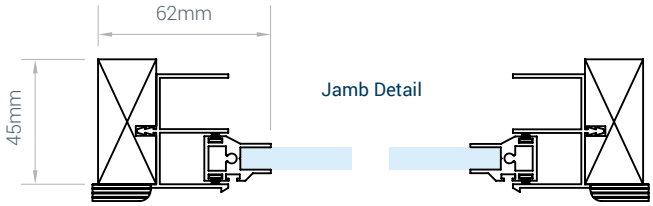
Traditional Product Range

Balanced Vertical Slider (BVS)

Vertical sliding secondary glazing designed especially for secondary glazing sash windows. These discreet units house self-supporting panes that remain in place at any chosen position.

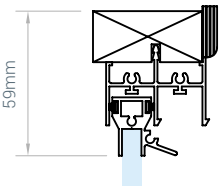




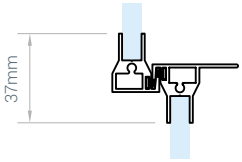




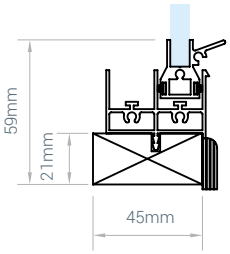
Head Detail



Interlock



Cill Detail



Features

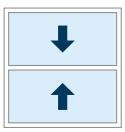
- Slim, unobtrusive aluminium profile
- Smooth sliding action utilising spring balances to ensure ease of use and to support the weight of panel
- Improved noise and thermal installation
- Enhanced Security
- Suitable for arched applications
- Suitable to have bevelled timber subframe to fix in to bays / splayed reveals
- Can be coupled or stacked with other units in the range to treat large areas of glazing or long runs of windows

Variations of Basic Unit

- Tilt In Version of the unit available
- Goal Post subframe and aluminium available
- Locking Fitch Catch available
- Standard and acoustic trickle vents are available
- Can be coupled and stacked using a heavy duty frame coupling section or timber to timber
- Larger trims and timber trims available at additional costs
- Variety of stock colours available, including all RAL options
- Can accept flyscreen mesh
- Curved in plan option available

Specification

- Glazing options: 4mm - 6.8mm
- Choice of timber subframes
- Pre-drilled and countersunk to suit either face fix or reveal fix
- Woolpile inserted in to panel section groove to create outer frame seal
- Gasket colour option of black or white
- PVCu trims supplied for the face of the units to create a neat, clean finish
- Standard colour white high gloss - RAL 9910
- Fitch catch located centrally on mid rail

Traditional Configurations	BVS	
		Based on 4mm Glass
Max width:	1,500mm	
or Max height:	3,000mm	

Optimum Noise Reduction: 53dB (Rw)

Using 6.4mm acoustic laminate glazing, with 200mm glass-to-glass

Optimum U Value: 1.868 W/m2K

Using 4mm toughened Low E glazing, with 80mm glass-to-glass

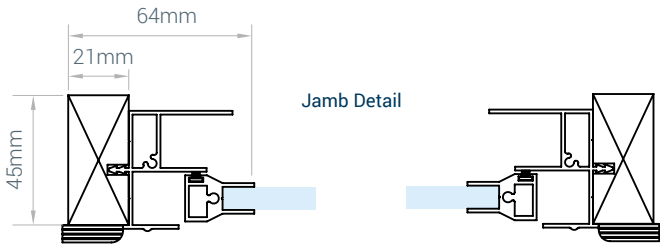
Traditional Product Range

Tilt-In Balanced Vertical Slider (TBVS)

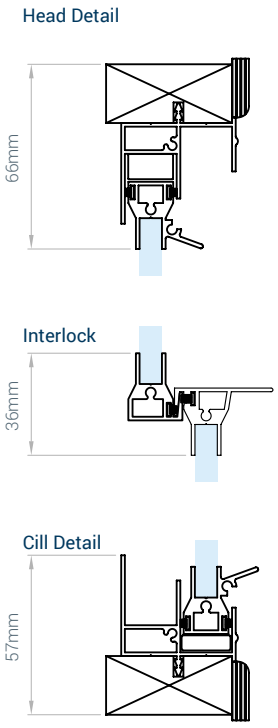
Discreet units with self-supporting panes. Tilt-in facility enables each secondary sash (panel) to be independently released from the outer frame and pivoted inwards through almost 180°.











Features

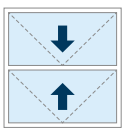
- Slim, unobtrusive aluminium profile
- Smooth sliding action utilising spring balances to ensure ease of use and to support the weight of panel
- Both panels tilt-in to allow easy access for cleaning and maintenance
- Improved noise and thermal installation
- Suitable for arched applications (please note: top panel won't tilt)
- Suitable to have bevelled timber subframe to fix in to bays / splayed reveals
- Can be coupled or stacked with other units in the range to treat large areas of glazing or long runs of windows

Variations of Basic Unit

- Goal post subframe and aluminium available
- Locking Fitch Catch available
- Standard and acoustic trickle vents are available
- Tilt-in balanced vertical slider can be coupled and stacked using a heavy duty frame coupling section or timber to timber
- Larger trims and timber trims available at additional costs
- Variety of stock colours available, including all RAL options
- Can accept flyscreen mesh

Specification

- Glazing options: 4mm - 6.8mm
- Choice of timber subframes
- Pre-drilled and countersunk to suit either face fix or reveal fix
- Woolpile inserted in to panel section groove to create outer frame seal
- Gasket colour option of black or white
- PVCu trims supplied for the face of the units to create a neat, clean finish
- Standard colour white high gloss - RAL 9910
- Fitch catch located centrally on mid rail

Traditional	TBVS
Configurations	 Based on 4mm Glass
Max width:	1,500mm
or Max height:	3,000mm

Optimum Noise Reduction: 48dB (Rw)

Using 6.4mm acoustic laminate glazing, with 200mm glass-to-glass

Optimum U Value: 1.868 W/m2K

Using 4mm toughened Low E glazing, with 80mm glass-to-glass

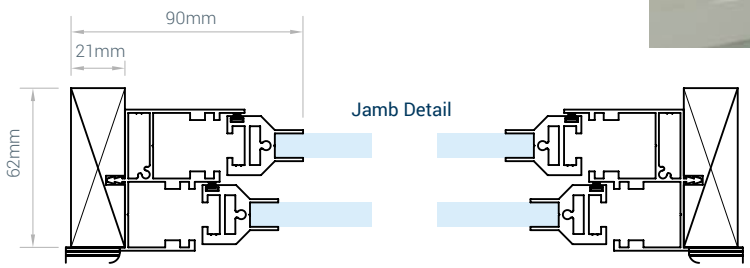
Heritage Product Range

Balanced Vertical Slider (HBVS)

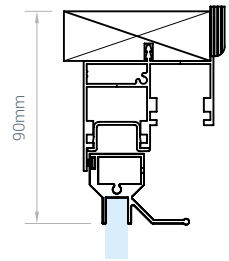
A removable panel within its own outer frame, fixed to the face or reveal of the existing window. These units use an aluminium twin track profile, to provide a secure fixing for larger panes of glass.



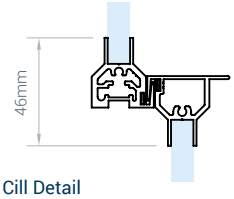




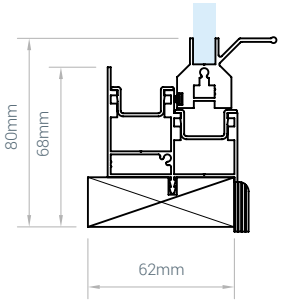
Head Detail



Interlock



Cill Detail



Features

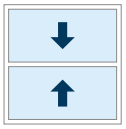
- Slim, unobtrusive aluminium profile
- Smooth sliding action utilising spring balances to ensure ease of use and to support the weight of panel
- Improved noise and thermal installation
- Enhanced security
- Suitable for arched applications
- Suitable to have bevelled timber subframe to fix into bays /splayed reveals
- Can be coupled or stacked with other units in the range to treat large areas of glazing or long runs of windows

Variations of Basic Unit

- Tilt In Version of the unit available
- Goal Post subframe and aluminium available
- Locking Fitch Catch available
- Standard and acoustic trickle vents are available
- Balanced vertical slider can be coupled and stacked using a heavy duty frame coupling section or timber to timber
- Larger trims and timber trims available at additional costs
- Variety of stock colours available, including all RAL options
- Can accept flyscreen mesh

Specification

- Glazing options: 4mm - 8.8mm
- Choice of timber subframes
- Pre-drilled and countersunk to suit either face fix or reveal fix
- Woolpile inserted in to panel section groove to create outer frame seal
- Gasket colour option of black or white
- PVCu trims supplied for the face of the units to create a neat, clean finish
- Standard colour white high gloss - RAL 9910
- Fitch catch located centrally on mid rail

Heritage Configurations	HBVS  Based on 4mm Glass
Max width:	1,500mm
or Max height:	3,000mm

Optimum Noise Reduction: 49dB (Rw)

Using 6.4mm acoustic laminate glazing, with 200mm glass-to-glass

Optimum U Value: 1.868 W/m2K

Using 4mm toughened Low E glazing, with 80mm glass-to-glass

Heritage Product Range

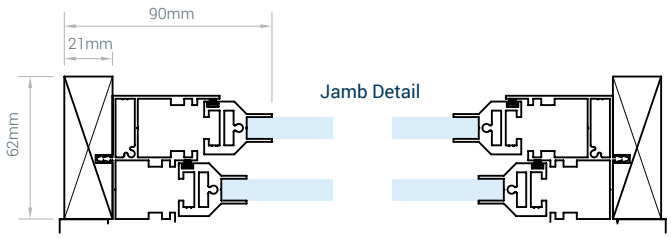
Tilt-In Balanced Vertical Slider (HTBVS)

Heavy duty units with self-supporting panes. Tilt-in facility enables each secondary sash (panel) to be independently released from the outer frame and pivoted inwards through almost 180°.

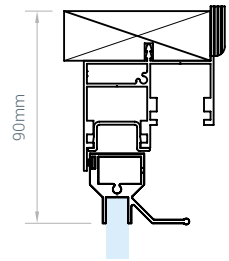




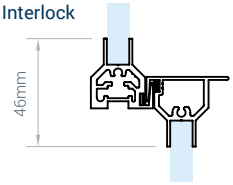




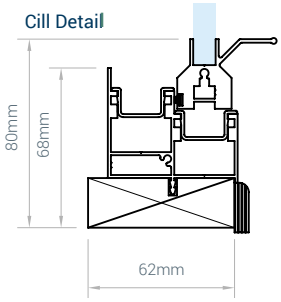
Head Detail



Interlock



Cill Detail



Features

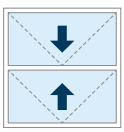
- Slim, unobtrusive aluminium profile
- Smooth sliding action utilising spring balances to ensure ease of use and to support the weight of panel
- Both panels tilt-in to allow easy access for cleaning and maintenance
- Improved noise and thermal installation
- Suitable for arched applications
- Suitable to have bevelled timber subframe to fix in to bays / splayed reveals
- Can be coupled or stacked with other units in the range to treat large areas of glazing or long runs of windows

Variations of Basic Unit

- Goal post subframe and aluminium available
- Locking Fitch Catch available
- Standard and acoustic trickle vents are available
- Tilt-in balanced vertical slider can be coupled and stacked using a heavy duty frame coupling section or timber to timber
- Larger trims and timber trims available at additional costs
- Variety of stock colours available, including all RAL options
- Can accept flyscreen mesh

Specification

- Glazing options: 4mm - 8.8mm
- Choice of timber subframes
- Pre-drilled and countersunk to suit either face fix or reveal fix
- Woolpile inserted in to panel section groove to create outer frame seal
- Gasket colour option of black or white
- PVCu trims supplied for the face of the units to create a neat, clean finish
- Standard colour white high gloss - RAL 9910
- Fitch catch located centrally on mid rail

Heritage	HTBVS
Configurations	 Based on 4mm Glass
Max width:	1,500mm
or Max height:	3,000mm

Optimum Noise Reduction: 49dB (Rw)

Using 6.4mm acoustic laminate glazing, with 200mm glass-to-glass

Optimum U Value: 1.868 W/m2K

Using 4mm toughened Low E glazing, with 80mm glass-to-glass

Minimum & Maximum Size Guide

On Application

Windows in this area are beyond our maximum size limit. However, we may be able to make the windows but we will not offer any guarantee of performance and will accept your order solely on this basis. Alternatively, please redesign the window to comply with the recommended sizes to benefit from the full product warranty.

1. Maximum Glass Size 2050 x 3250
2. Maximum Window size for delivery: 1800mm x 4000mm - Over sized windows will be packaged as kit form
3. MAXIMUM AREA FOR 4mm Annealed / Float GLASS IS 1.6m² - Allow for 4mm TOUGHENED GLASS IF PANEL SIZE EXCEEDS THIS
4. MAXIMUM AREA FOR 4mm Toughened GLASS IS 2.5m²
5. MAXIMUM AREA FOR 6mm Annealed / Float GLASS IS 3.0m² - Allow for 6mm TOUGHENED GLASS IF PANEL SIZE EXCEEDS THIS
6. Flyscreen Maximum size 1200mm in one direction (comes on a roll 1200 wide!)
7. HORIZONTAL SLIDERS OVER 1800mm HIGH WILL HAVE 21243 MEDIUM STRENGTHENING INTERLOCK ADDED AT NO EXTRA COST
8. HORIZONTAL SLIDERS OVER 2000mm HIGH WILL BE HERITAGE
9. Our Standard White = Interpon SA 098E high gloss. RAL equivalent = 9910 high gloss
10. Stacked units Standard or Heritage Reveal Fix - If the bottom unit is a Horizontal Slider Support Bars must be used which means deeper timbers. Standard 62mm becomes 70mm. Heritage 70mm becomes 80mm.
11. + / - frame tolerance = 3mm
12. To estimate the weight of a panel or window use the glass weight for the overall panel or window size.

    Multiply width x height x glass weight

    4mm glass = 10kg/m² 6mm glass = 15kg/m² 6.4mm glass = 16kg/m²

    8mm glass = 20kg/m² 8.4mm glass = 21kg/m²

    For double glazed units add the two panes together
13. Points to note for any Large Frame
    - Can you get it in the building, up the stairs etc.?
    - Can it be operated safely i.e. Is there room to open a large Hinged Unit?
    - Should it be fixed and only operable by maintenance?
14. Insert on plastic hinges must not exceed 10kg
15. Minimum Width for Arched Head windows

    Insert 400mm (200mm radius)

Lift Out	400mm (200mm radius)
BVS	500mm (250mm radius)
TBVS	500mm (250mm radius)
HTBVS	800mm (400mm radius)
HHU	800mm (400mm radius)
16. Horizontal Sliders Panel - Maximum Aspect Ratio Width to Height 1:5
17. Vertical Sliders Panel - Maximum Aspect Ratio Width to Height 5:1
18. Heritage Hinged Casement Panel - Maximum Aspect Ratio Width to Height 1.5:1

Secondary Glazing		Max Panel Weight KG'S	Minimum overall size (equal split) (mm)		Minimum panel size (mm)		Maximum size (mm) 4mm Glass		Maximum size (mm) 6mm Glass or 6.4mm Laminate		On Application (mm) 6mm Glass or 6.4mm Laminate		Maximum Glass Thickness
			Width	Height	Width	Height	Width	Height	Width	Height	Width	Height	
Standard	SS2	40kg	400	250	1/2 of min overall width		2400	1800	2400	2000	4900	2000	6.8mm
	SS3 / CO3	40kg	550	250	1/3 of min overall width		3600	1800	3600	2000	4900	2000	6.8mm
	SS4	40kg	700	250	1/4 of min overall width		4900	1800	4900	2000	4900	2000	6.8mm
	SS5	40kg	850	250	1/5 of min overall width		4900	1800	4900	2000	4900	2000	6.8mm
	INS	40kg	200	200	NA		1200	2000	2000	2000	2000	2500	6.8mm
	BVS	25kg	300	600	1/2 of min overall height		1500	3000	1500	3000	1600	3600	6.8mm
	TBVS	25kg	300	700	1/2 of min overall height		1500	3000	1400	2700	1400	3000	6.8mm
	LO	on application	250	300	NA		2000	2000	on application	on application	on application	on application	6.8mm
	SLLO	on application	250	300	NA		2000	2000	on application	on application	on application	on application	6.8mm
	HU	35kg	347	385	NA		950	2,100	950	2100	950	2,100	6.8mm
Heritage	HSS2	60kg	1000	500	1/2 of min overall width		3200	2700	4900	2700	NA	NA	8.8mm
	HSS3 / HCO3	60kg	1500	500	1/3 of min overall width		4900	2700	4900	2700	NA	NA	8.8mm
	HSS4	60kg	2000	500	1/4 of min overall width		4900	2700	4900	2700	NA	NA	8.8mm
	HSS5	60kg	2500	500	1/5 of min overall width		4900	2700	4900	2700	NA	NA	8.8mm
	HBVS	48kg	400	900	1/2 of min overall height		1500	3000	1400	3000	1800	3800	8.8mm
	HTBVS	48kg	400	900	1/2 of min overall height		1500	3000	1400	3000	1800	3800	8.8mm
	HHU	130kg	350	500	NA		1400	2400	1500	3000	1600	3200	28mm
	HHU-TT	130kg	600	500	NA		1400	2400	1400	2400	1400	2400	28mm
	DHHU	130kg	700	500	1/2 of min overall width		2800	2800	3000	3000	3200	3200	28mm
	HSLO	on application	500	500	NA		2000	2000	on application	on application	on application	on application	8.8mm

Important Note! Maximum sizes are for width OR height, not combined i.e. Do not exceed the maximum panel weight.

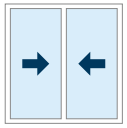
A LOW-RISK LIFT for a person of average strength and build is considered to be a maximum of 25kg. If you are in any doubt, look to reduce the risk by asking someone to share the lift with you or your client, particularly if you or the client are in a higher risk group e.g. Elderly, Disabled, Pregnant or Young. Refer to http://www.hse.gov.uk/msd/mad/index.htm for further help.

Acoustic Performance Results

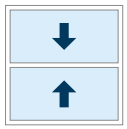
	Primary Window 4mm Float Glass				Primary Window 6mm Float Glass				Primary Window 4mm Float Glass				Primary Window 6mm Float Glass			
	200mm Glass to Glass				200mm Glass to Glass				150mm Glass to Glass				150mm Glass to Glass			
Secondary Glazing	**SS2**	**HHU**	**BVS**	**HTBVS**	**SS2**	**HHU**	**BVS**	**HTBVS**	**SS2**	**HHU**	**BVS**	**HTBVS**	**SS2**	**HHU**	**BVS**	**HTBVS**
4mm Toughened	49	50	49	47	51*	51	51	48	48*	48*	47*	46*	51*	50*	50*	47*
6mm Toughened	50*	51*	51*	47*	51*	52*	52*	48*	49*	49*	48*	46*	51*	50*	50*	47*
6.4mm Acoustic Laminate	51	52	53	48	52*	53*	54*	50	50*	50*	49*	47*	52	51*	52*	48*
8.8mm Acoustic Laminate	NA	52*	NA	48*	NA	53*	NA	49	NA	50*	NA	47*	NA	51*	NA	48*
10.8mm Acoustic Laminate	NA	53*	NA	NA	NA	54	NA	NA	NA	51*	NA	NA	NA	52*	NA	NA
4/12/6.4mm Sealed Unit	NA	53*	NA	NA	NA	53	NA	NA	NA	51*	NA	NA	NA	52*	NA	NA

Key :

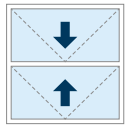
SS2



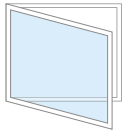
BVS



TBVS

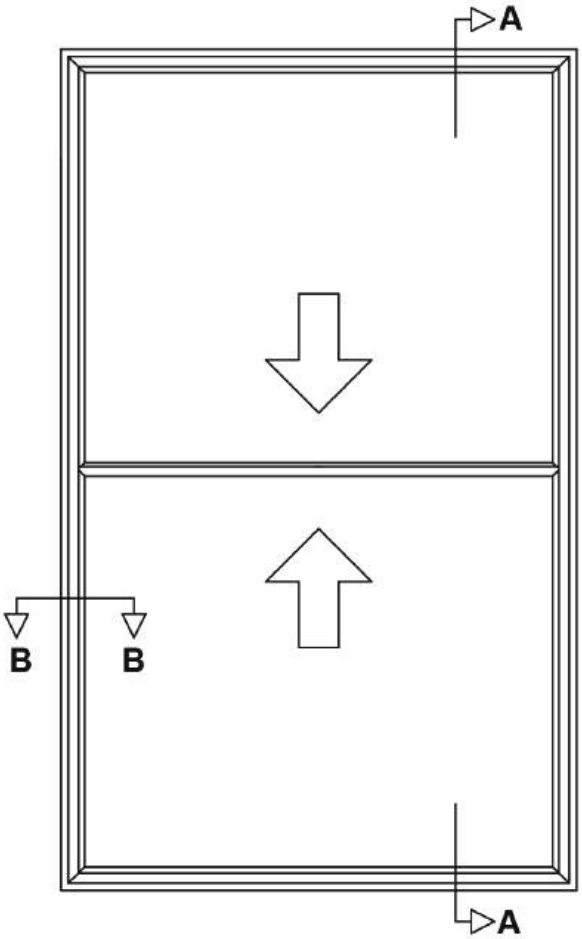


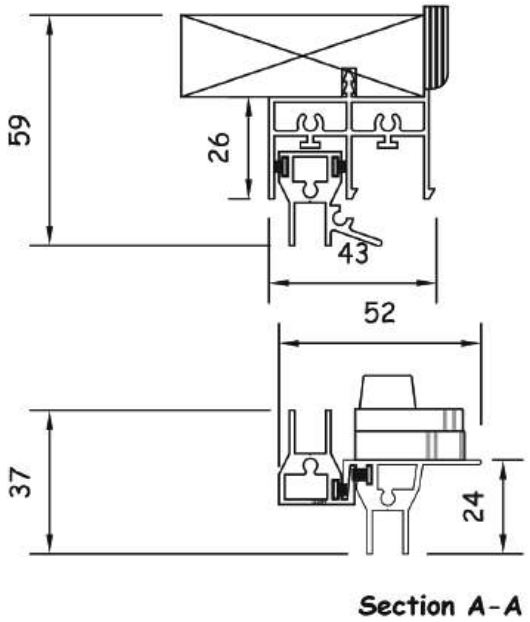
HHU



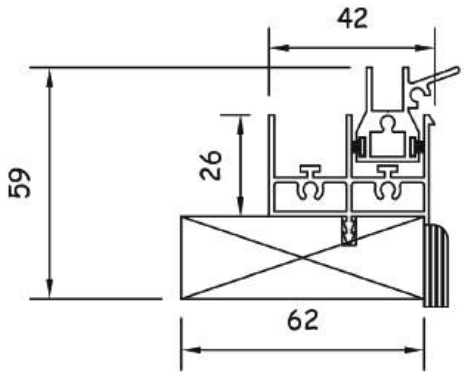
Granada Secondary Glazed windows have been tested at Chiltern Dynamics in accordance with BS EN ISO 10140-2: 'Laboratory measurement of airborne sound insulation of building elements'. The table shows results for secondary windows set at a 200mm and 150mm cavity with 4mm or 6mm float glass in the primary window. Chiltern's Dynamics lab is UKAS Accredited No.1762

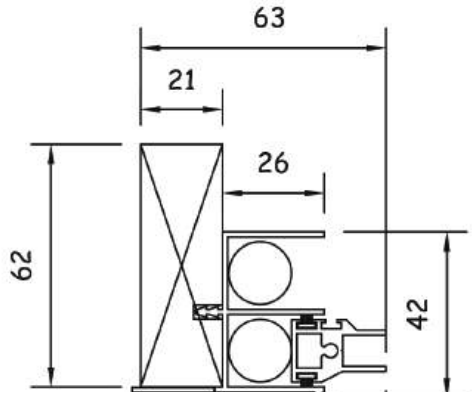
* Sound reduction figures predicted by Chiltern Dynamics using the basis of actual laboratory test results. Sound Reduction (Rw) measured in dB.





Section A-A





Specification:

Aluminium 6063T6 alloy to BS EN 755 standard, powder coated to BS 6496 to 60 micron finish.

Stock finishes: White - Interpon SA 098E high gloss, brown - van dyke and silver anodised. The sub-frame is manufactured from primed high quality, environmentally certified (MTCS) engineered timber. Standard sizes 45mm x 21mm & 62mm x 21mm.

All frames are factory glazed.
Standard gasket colour is black.
All frames include pvc-u trim as standard - Painted MDF or PEFC timber available upon request.

In line with our company policy of continuous product development and improvement, Granada reserves the right to make minor alterations to specification without notice.

Optional Extras

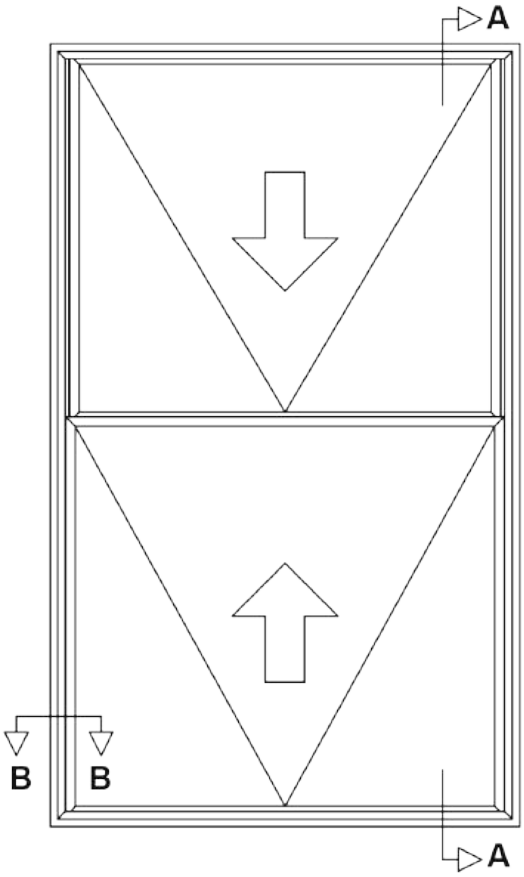
Locking fitch catch
White gasket
White aluminium coupling / stacking interlock
Trickle vents / acoustic trickle vents
RAL colour
Flyscreen
Timber sizes other than standard

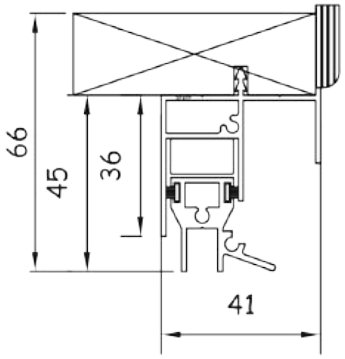
Type: Balanced Verticle Slider Reveal Fix - Profile Dims Shown		
Drg. No. GS/03-001a	Rev:	Scale: 1:20 & 1:2 (at A4)

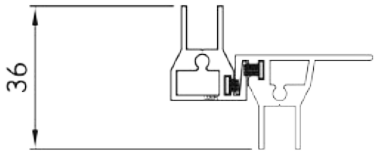
GRANADA
secondary glazing

Campbell Way
Dinnington
Sheffield
S25 3QD

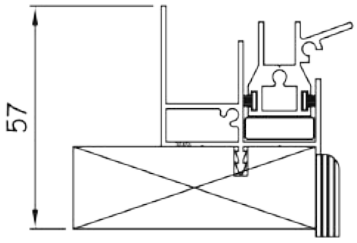
Tel: 01909 499 899
W: www.granadaglazing.com

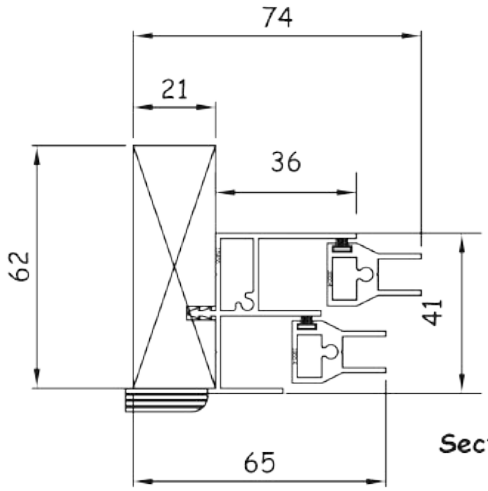






Section A-A





Section B-B

Specification:

Aluminium 6063T6 alloy to BS EN 755 standard, powder coated to BS 6496 to 60 micron finish.

Stock finishes: White - Interpon SA 098E high gloss, brown - van dyke and silver anodised. The sub-frame is manufactured from primed high quality, environmentally certified (MTCS) engineered timber. Standard sizes 45mm x 21mm & 62mm x 21mm.

All frames are factory glazed.
Standard gasket colour is black.
All frames include pvc-u trim as standard - Painted MDF or PEFC timber available upon request.

In line with our company policy of continuous product development and improvement, Granada reserves the right to make minor alterations to specification without notice.

Optional Extras

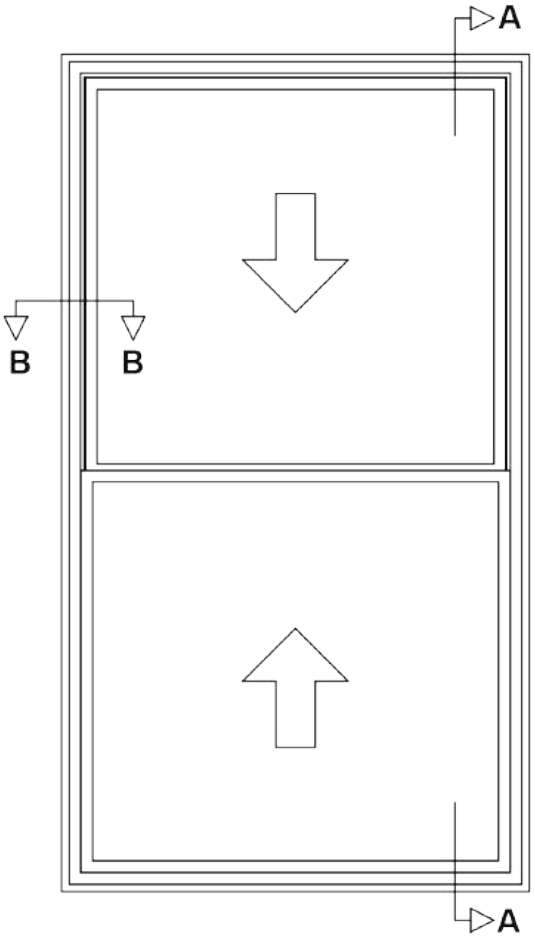
Locking fitch catch
White gasket
White aluminium coupling / stacking interlock
Trickle vents / acoustic trickle vents
RAL colour
Flyscreen
Timber sizes other than standard

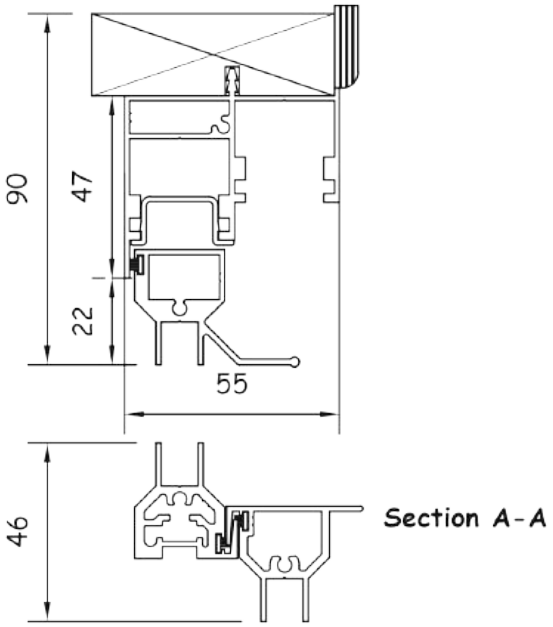
Type: Tilting Balanced Verticle Slider Reveal Fix		
Drg. No. GS/03-010	Rev:	Scale: 1:20 & 1:2 (at A4)

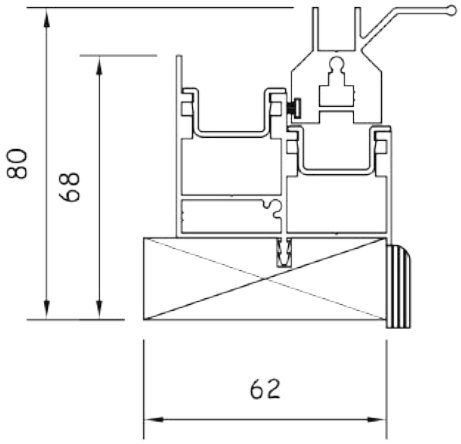
GRANADA
secondary glazing

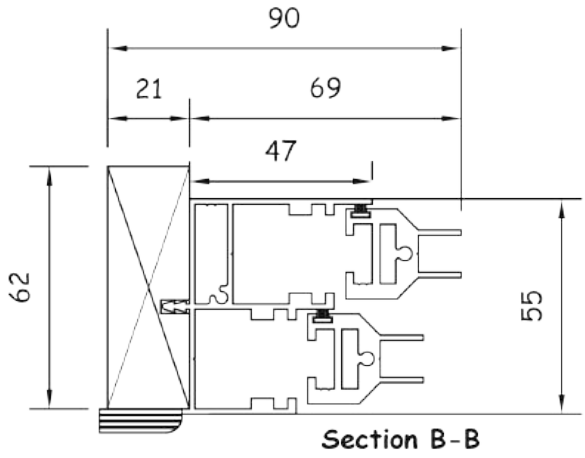
Campbell Way
Dinnington
Sheffield
S25 3QD

Tel: 01909 499 899
W: www.granadaglazing.com









Optional Extras

Locking fitch catch
White gasket
white aluminium coupling / stacking interlock Trickle vents / acoustic trickle vents
RAL colour
Flyscreen
Timber sizes other than standard

Specification:

Aluminium 6063T6 alloy to BS EN 755 standard, powder coated to BS 6496 to 60 micron finish.

Stock finishes: White - Interpon SA 098E high gloss, brown - van dyke and silver a nodised.The sub-frame is manufactured from primed high quality, environmentally certified (MTCS) engineered timber. Standard sizes 62mm x 21mm & 70mm x 21mm.

All frames are factory glazed.
Standard gasket colour is black.
All frames include pvc-u trim as standard - Painted MDF or PEFC timber available upon request.

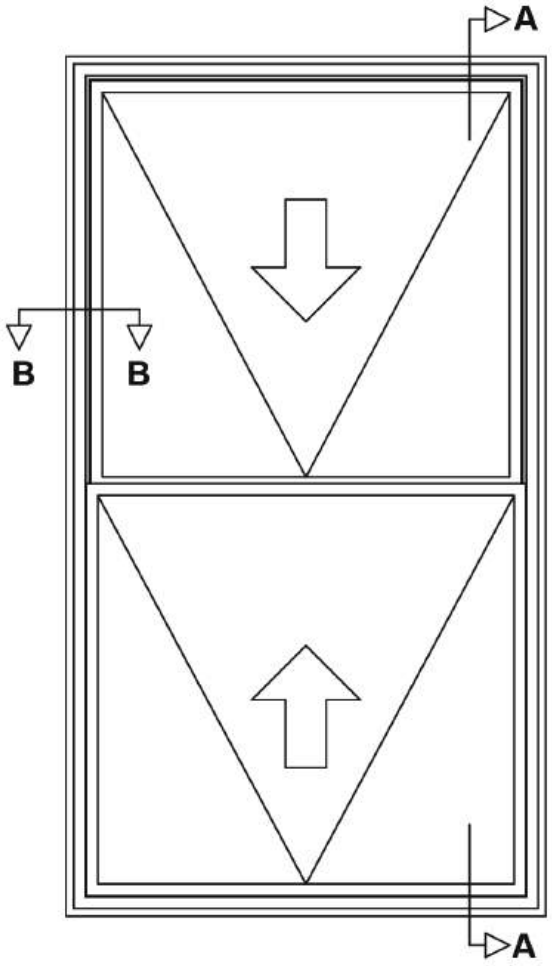
In line with our company policy of continuous product development and improvement, Granada reserves the right to make minor alterations to specification without notice.

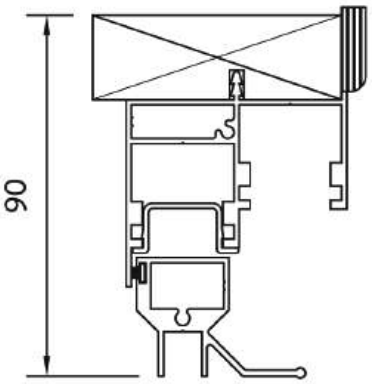
Type: Heritage Balanced Vertical Slider Face Fix		
Drg. No. GS/04-002	Rev:	Scale: 1:20 & 1:2 (at A4)

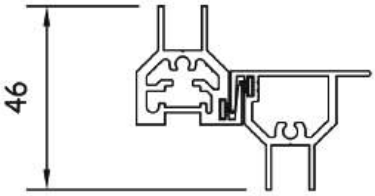
GRANADA
secondary glazing

Campbell Way
Dinnington
Sheffield
S25 3QD

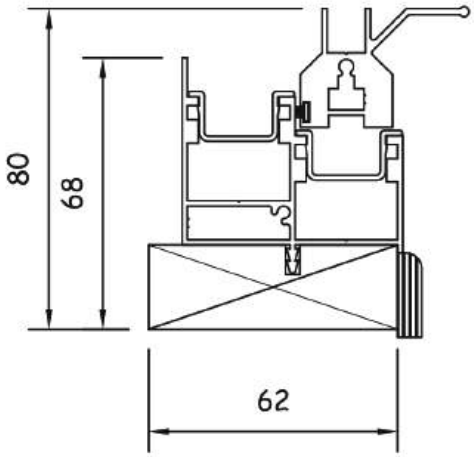
Tel: 01909 499 899
W: www.granadaglazing.com

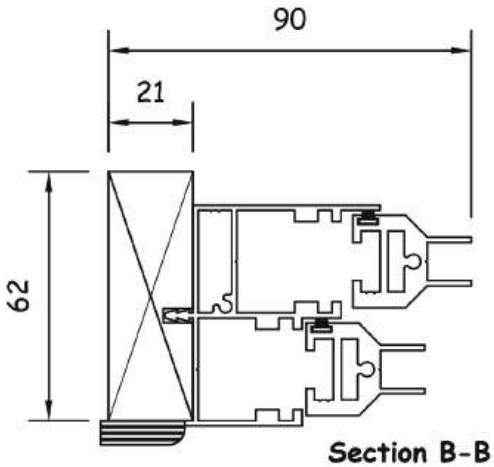






Section A-A





Section B-B

Specification:

Aluminium 6063T6 alloy to BS EN 755 standard, powder coated to BS 6496 to 60 micron finish.

Stock finishes: White - Interpon SA 098E high gloss, brown - van dyke and silver a nodised.The sub-frame is manufactured from primed high quality, environmentally certified (MTCS) engineered timber. Standard sizes 55mm x 21mm & 70mm x 21mm.

All frames are factory glazed.
Standard gasket colour is black.
All frames include pvc-u trim as standard - Painted MDF or PEFC timber available upon request.

In line with our company policy of continuous product development and improvement, Granada reserves the right to make minor alterations to specification without notice.

Optional Extras

Locking fitch catch
White gasket
white aluminium coupling / stacking interlock
Trickle vents / acoustic trickle vents
RAL colour
Flyscreen
Timber sizes other than standard

Type: Heritage Balanced Vertical Slider Face Fix		
Drg. No. HTBVS FF	Rev:	Scale: 1:20 & 1:2 (at A4)

GRANADA
secondary glazing

Campbell Way
Dinnington
Sheffield
S25 3QD

Tel: 01909 499 899
W: www.granadaglazing.com