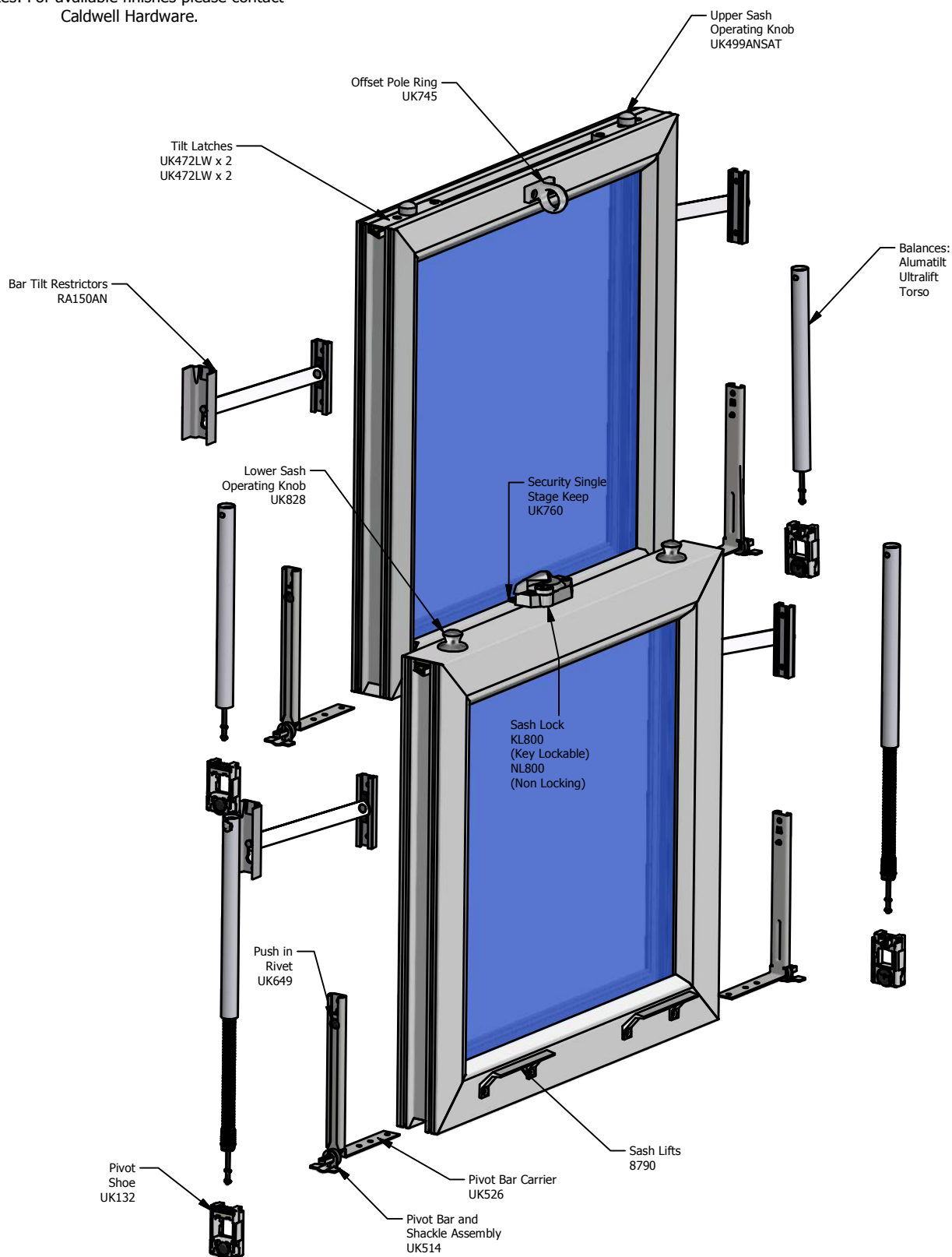


STAYFIX PRIMARY ALUMINIUM Vertical Sliding Window

Notes: For available finishes please contact
Caldwell Hardware.



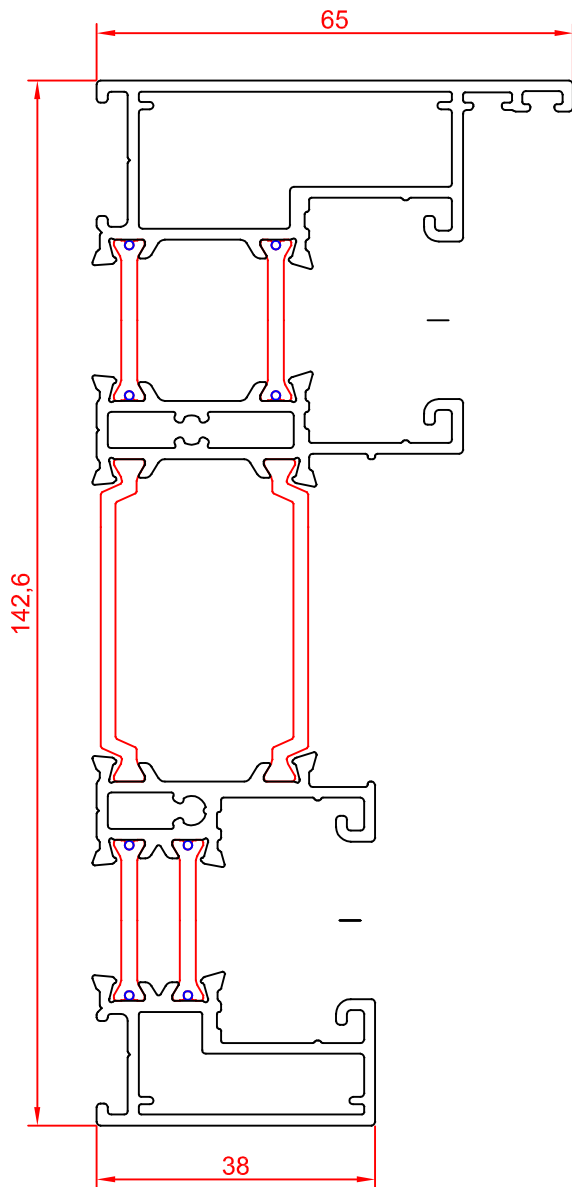
MINIMUM GAP BETWEEN SASH & FRAME MUST BE $3.5\text{mm} \pm \begin{smallmatrix} 0.0 \\ 0.5 \end{smallmatrix}$

All of the information shown on this data sheet was correct at the time of issue.
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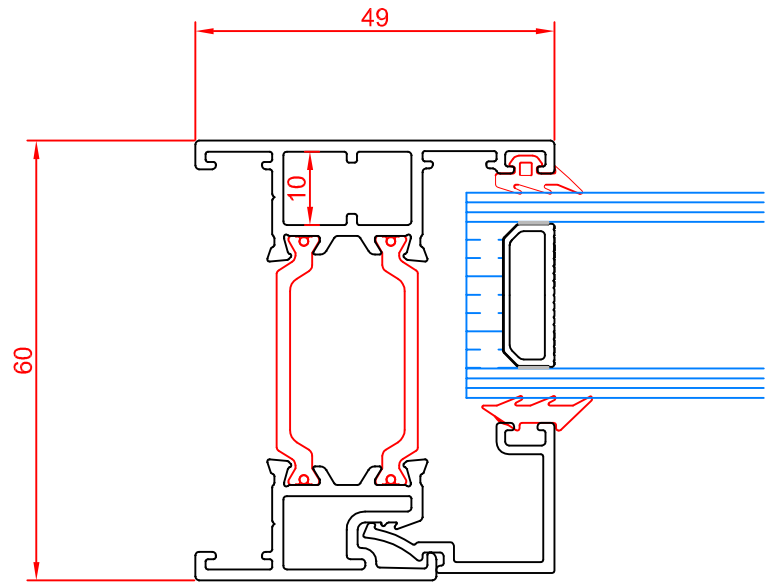


STAYFIX

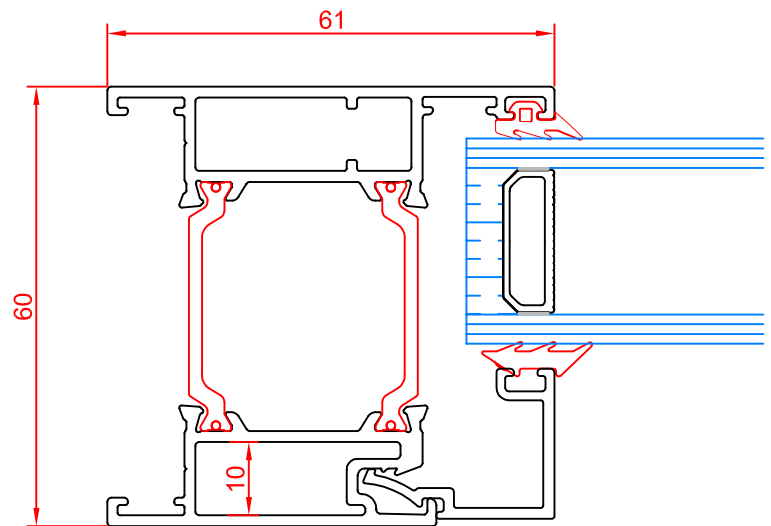
VS section



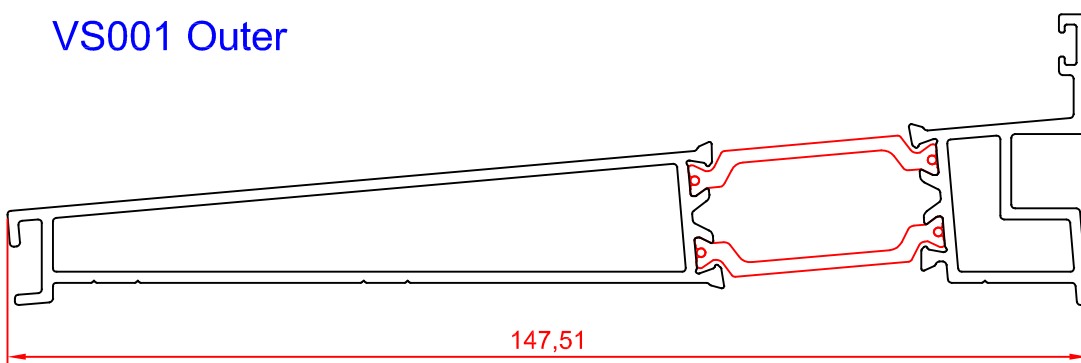
VS001 Outer



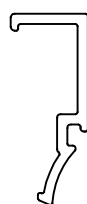
VS002 Top sash



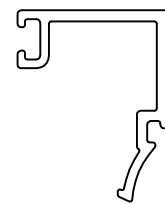
VS003 Bottom sash



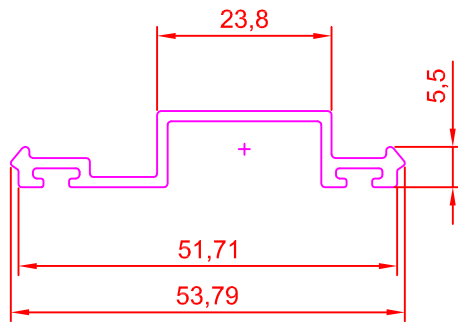
VS004 147 Sash cill



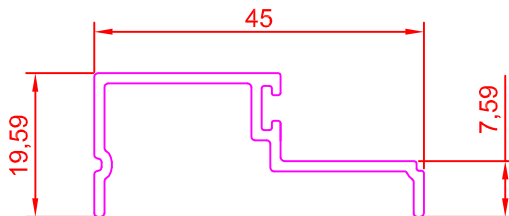
B9838
28mm Sq
Bead



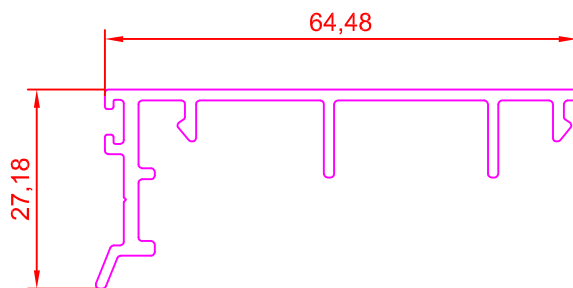
VS005 28mm
Bead



VA001 Cover cap



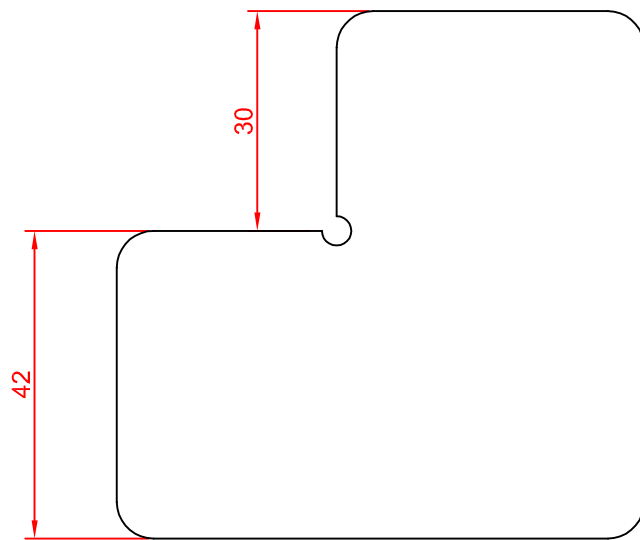
VA002 Party Bead



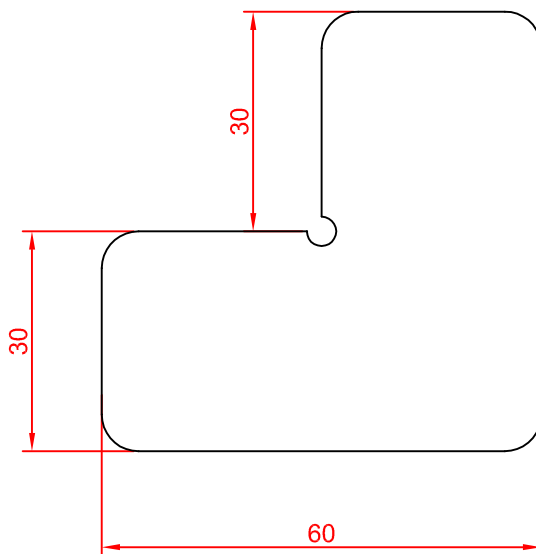
VA003 Rail Interlock



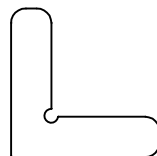
VA006 Qlon



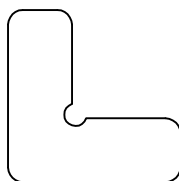
CHE42_1.2 x 42mm cheveron



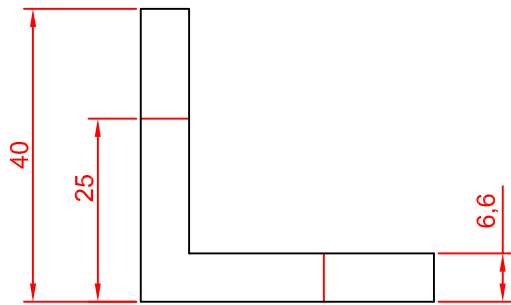
CHE30_1.2 x 30mm cheveron



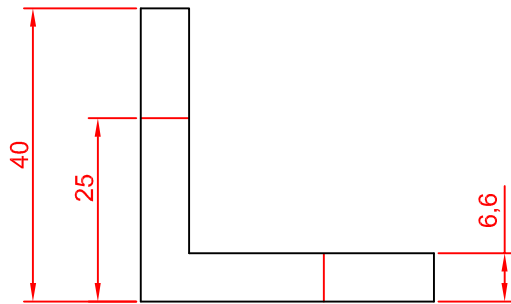
Che_1.2 x 5mm cheveron



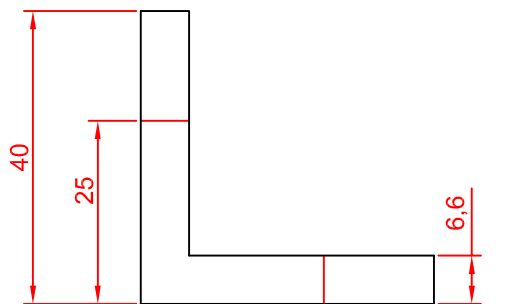
Che8.7_1.2 x 8.7 cheveron



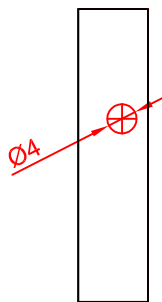
VA007 16mm cleat M4



VA008 11mm cleat M4



VA009 9.5mm cleat M4

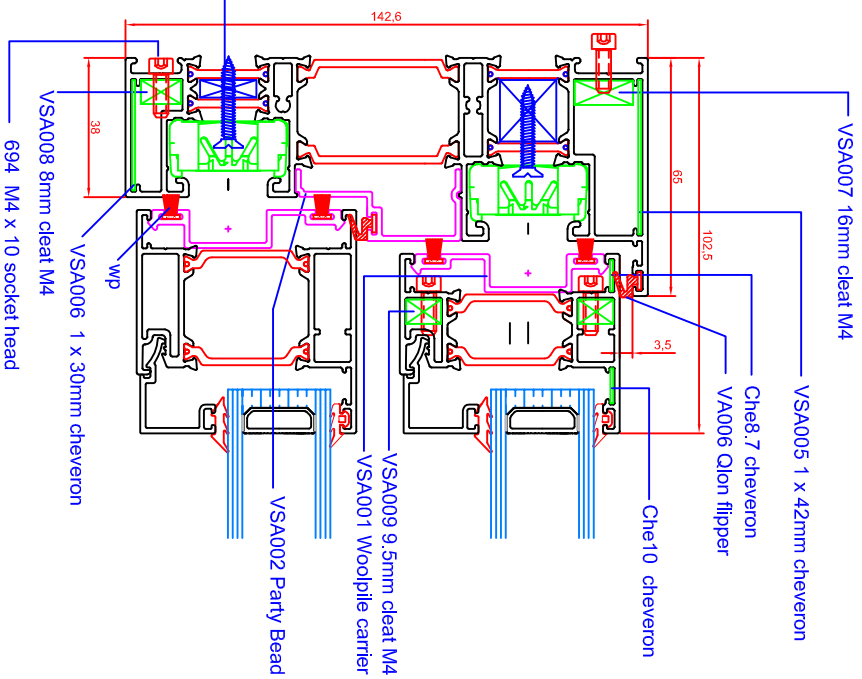


Off centre hole 3.55 and 5.95



STAYFIX

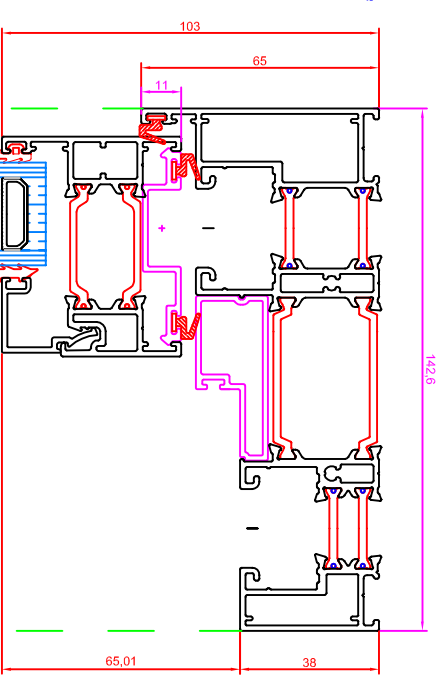
Outside



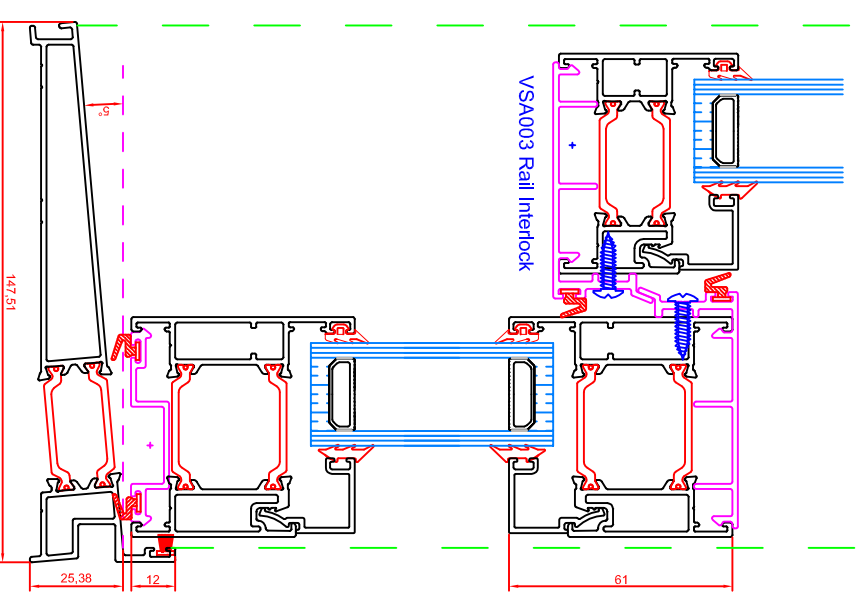
Profile List

VS001 Outer
VS002 Top Vent
VS003 Bottom Vent
VS004 Cill
VS005 28mm Bead

Outside



Vertical Slider - General arrangement



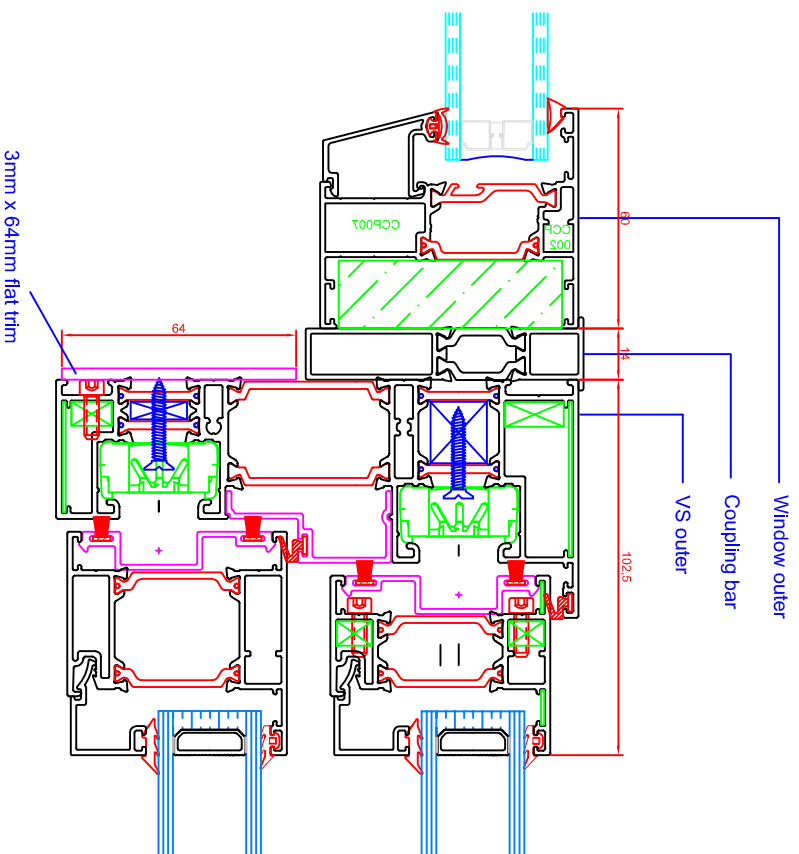
- Outer Top - Mitre cut,
- Outer Height - Top mitre and bottom 5 deg (see drawing)
- Outer joining - Top by cleat + M4 cocket screw and bottom by screw into height
- Sash - Mitre cut and joined with cleat and M4 socket screw
- For balance fixing - Use rivot or slide timber block into cavity.
- Apply dots of silicon before sliding woolpile to stop coming out.



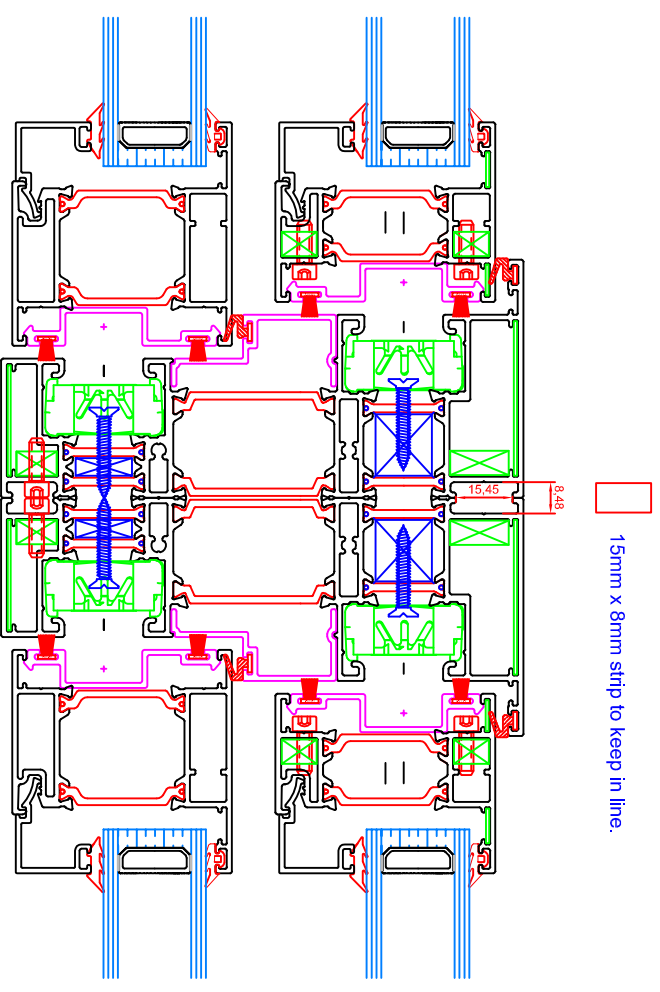
STAYFIX

Vertical Slider - General arrangement

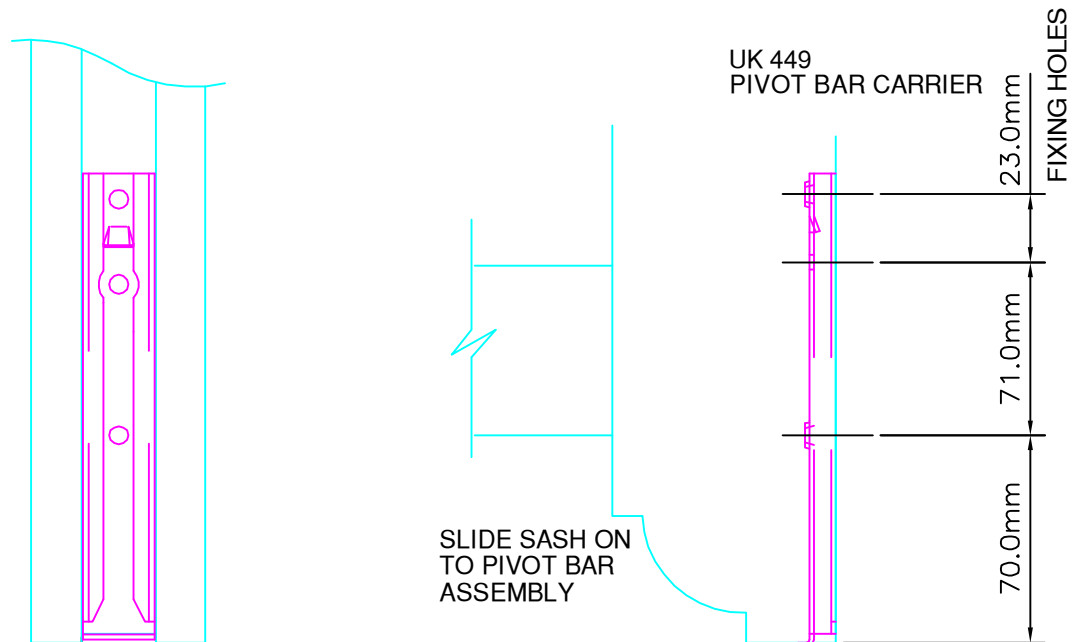
VS to side fix window



VS to VS



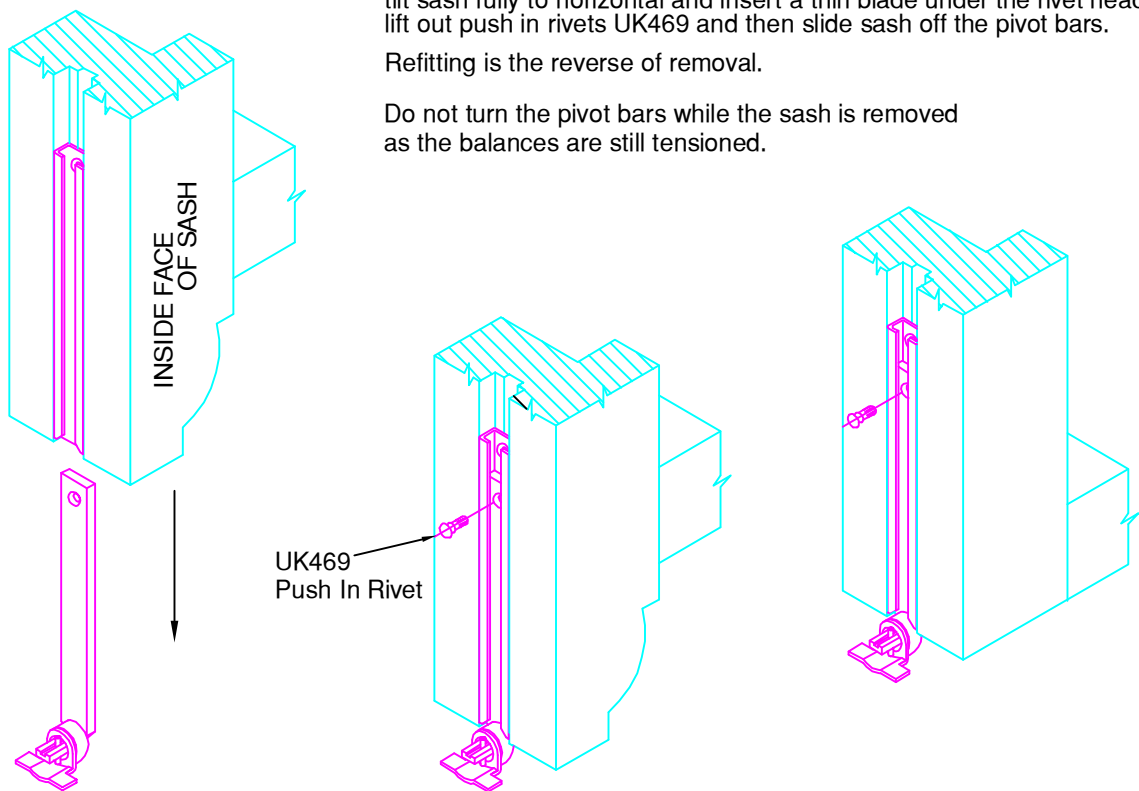
SASH FITTING - SLIDE OFF PIVOT BARS



To remove top sash from the window frame, tilt sash fully to horizontal and insert a thin blade under the rivet head, lift out push in rivets UK469 and then slide sash off the pivot bars.

Refitting is the reverse of removal.

Do not turn the pivot bars while the sash is removed as the balances are still tensioned.



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Test Report

Sponsor:

Stayfix Ltd
53 Park Royal Road
Park Royal
London
NW10 7LQ

CONFIDENTIAL

Report: BMT/MTP/F14292/Rev1

Report on testing of a vertical sliding window to PAS 24

Issue date: February 2015



1762

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Page 1 of 6



Results of Test: BMT/MTP/F14292/Rev1

Stayfix Ltd

53 Park Royal Road
Park Royal
London
NW10 7LQ

This document confirms that performance testing was conducted from 15 October 2014 to 23 January 2015. Testing was conducted to the following standard:

- PAS 24: 2012 Enhanced security performance requirements for doorsets and windows in the UK

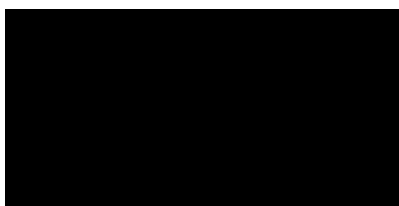
The following results were achieved:

Product tested	Stayfix PA Vertical Sliding Window	
Summary of testing procedure		Result
PAS 24: 2012 Clauses C.4.3, C.4.4.2, C.4.4.3, C.4.5, C.4.6 and C.4.7		Pass

Passed PAS 24: 2012 for the requirements of both key removable and non key removable locks

The results relate only to the specimens tested, as detailed in the technical specification

Revision 1 – Reference number changed for hardware on page 5 of 6



Kyle Morris – Senior Technical Officer

Vincent Kerrigan - Technical Manager
Issue date: 17th February 2015

BM TRADA

Chiltern House, Stocking Lane, Hughenden Valley, High Wycombe, HP14 4ND, UK

Tel: 01494 569800 Fax: 01494 564895

Web: www.bmtradagroup.com Email: testing@bmtrada.com

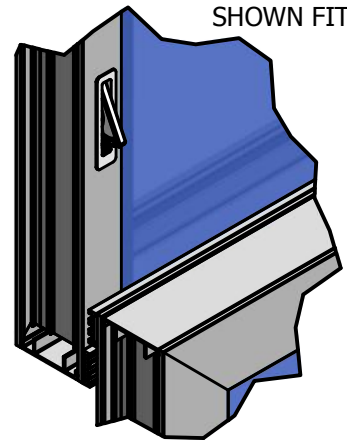
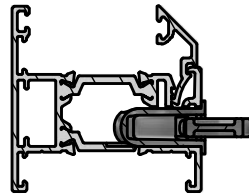
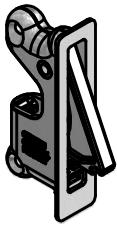
This document is confidential and remains the property of Chiltern International Fire Ltd, trading as BM TRADA



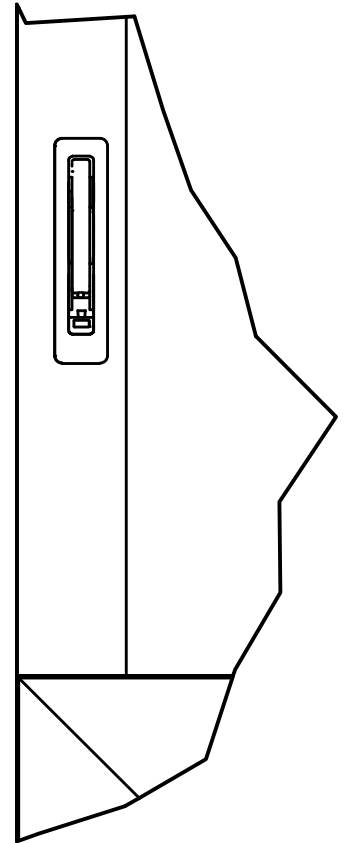
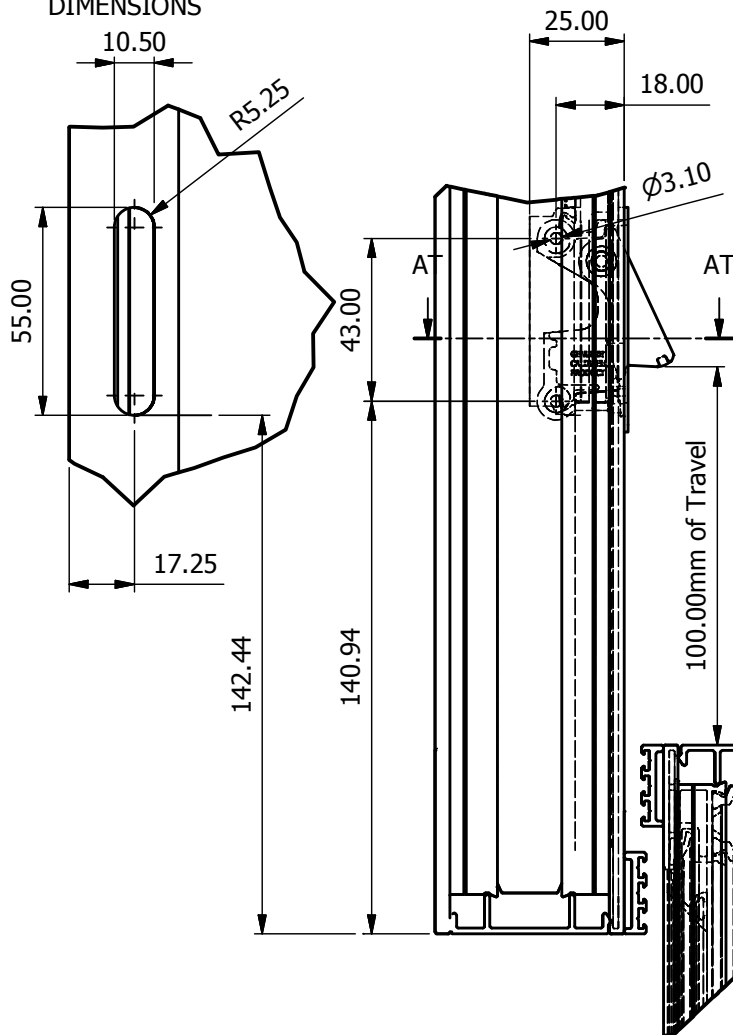
1762

PE401N Travel Restrictor (Stayfix Primary Aluminium)

PE401NCH (CHROME)
SHOWN FITTED



CLEARANCE SLOT
DIMENSIONS



Take care when using PE401N travel restrictors with slide in pivot bar carriers. A possible clash could affect fitting.

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Stayfix Primary Aluminum Bar Restrictor Details

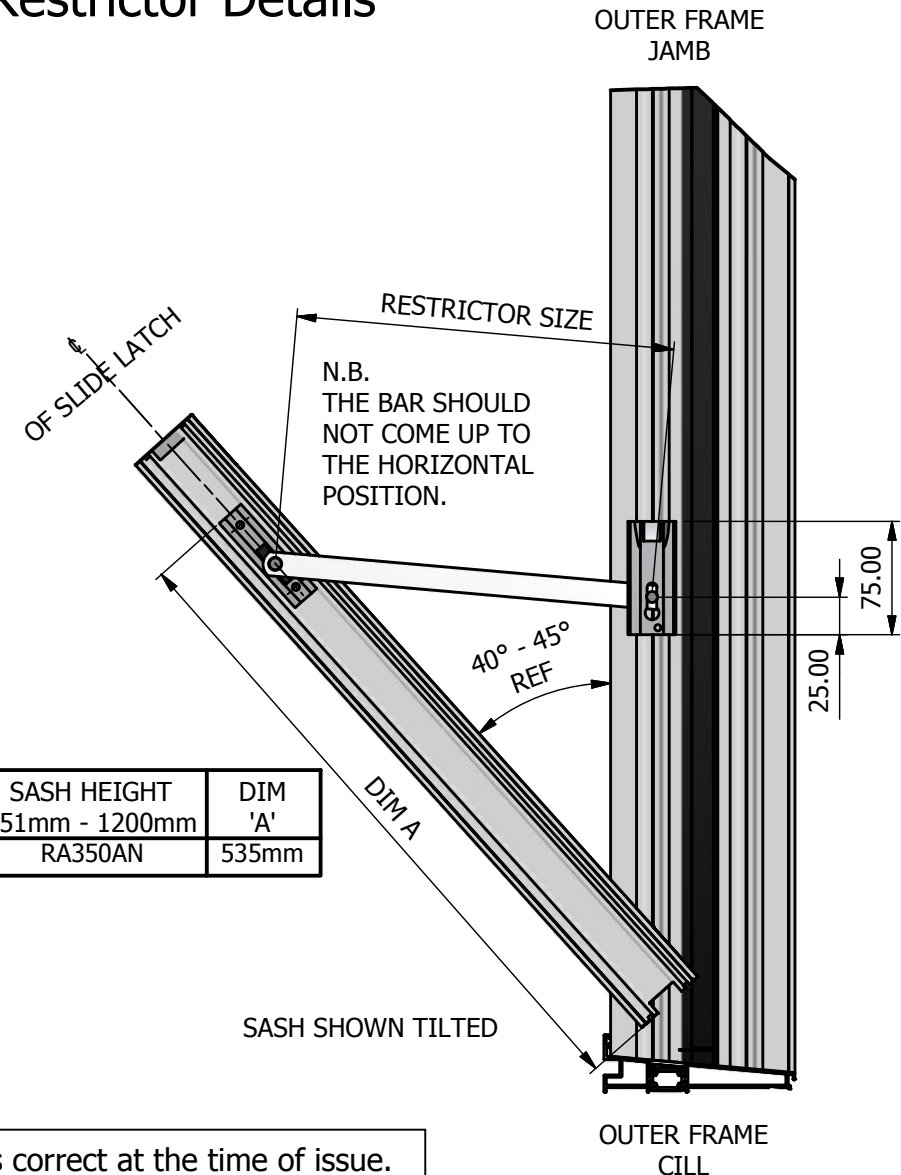
POSITION CHANNEL ON CENTRE LINE OF SASH PROFILE & DIM'A' FROM BOTTOM OF SASH, PAN HEAD FIXING SCREWS MUST BE USED TO FIX THE CHANNEL INTO THE SASH PROFILE.

NOTE: THE GAP BETWEEN SASH AND OUTER FRAME SHOULD BE INCREASED TO $3.5 \pm \frac{0.5}{0.5}$ WHEN FITTING THESE RESTRICTORS.
ENSURE THAT BAR RESTRICTORS ARE NOT FITTED ON SASHES ABOVE 35kg IN WEIGHT.

WINDOW SYSTEM	SASH HEIGHT 250mm - 286mm	SASH HEIGHT 287mm - 450mm	DIM 'A'	SASH HEIGHT 451mm - 650mm	DIM 'A'	SASH HEIGHT 651mm - 1200mm	DIM 'A'
STAYFIX SYSTEM	SEE NOTE	RA150AN	278mm	RA250AN	435mm	RA350AN	535mm

NOTE!
WHEN FITTING A BAR RESTRICTOR ON THIS SIZE OF SASH. THE 40° - 45° ANGLE WILL NOT BE MAINTAINED.

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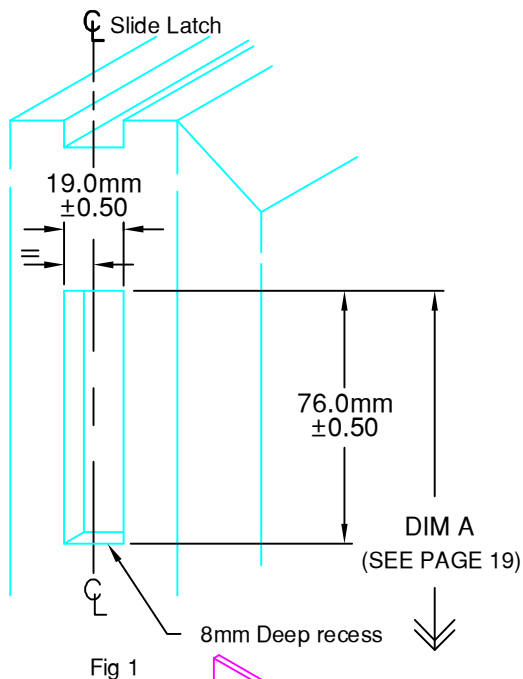


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FITTING RESTRICTOR

BAR TYPE



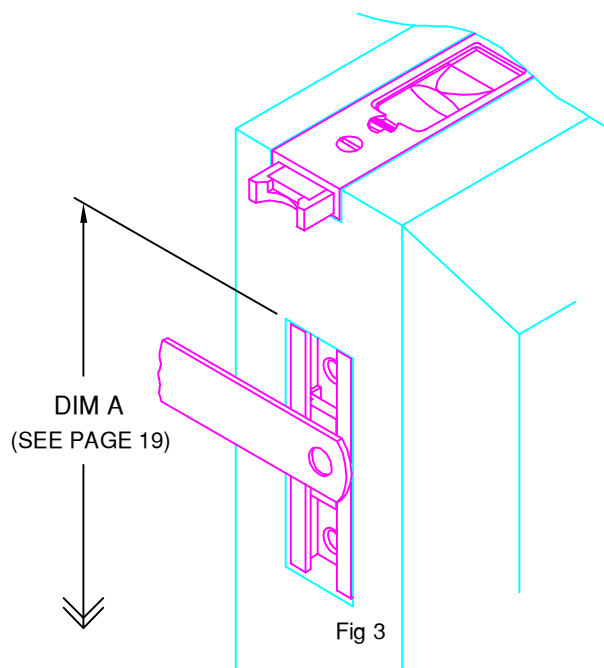
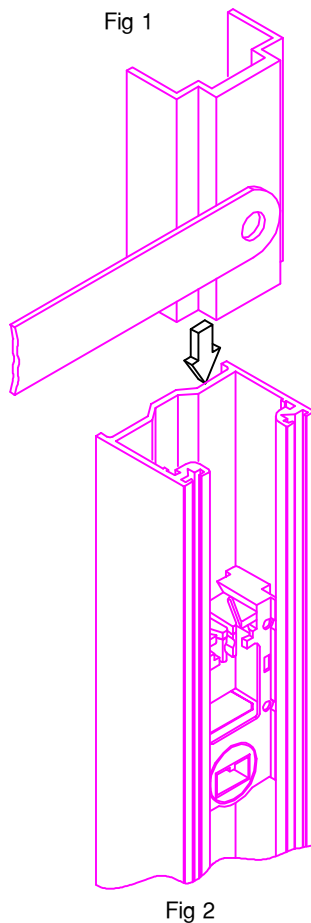
Recess both sash stiles as shown in fig 1 to a depth of 8mm at the position shown on page 19.
(Alternatively continue the 19mm groove along the entire length)

Load the restrictor assembly into the jamb channel ensure that it is above the pivot shoe see fig 2.
Fix channels and balances as shown.

Gently tilt the sash & fit the sash slide plate & slide into the recess see fig 3.

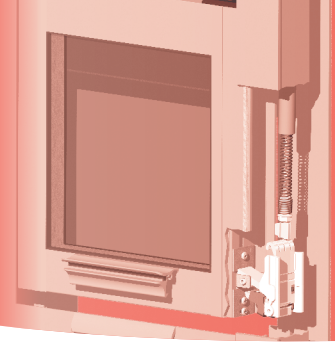
Screw the sash plate securely into position using pan head screws & check operation.

Side view of sash profile



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ULTRA-LIFT[®]nt



A HYBRID BALANCE SYSTEM FOR HEAVY SASH 80 - 100 LBS



HIGH LIFT ASSISTANCE
MAKES HEAVY SASH EASY TO OPERATE

.670 TUBE DIAMETER
FITS MANY COMMON BALANCE POCKETS

BOOSTED FORCE CURVE
HELPS INITIATE OPENING OF SASH

CLASS 5 RATING
BALANCE LIFTS 70% OF SASH WEIGHT

LOW CARBON COATED STEEL ROD
RUST RESISTANT WITH LOW FRICTION PROPERTIES

WHITE OR GRAY PVC TUBE COVER
*PROVIDES CONTAMINANT PROTECTION
TUBE BLENDS INTO WINDOW COLOR*

STANDARD ROD END CONFIGURATION
COMPATIBLE WITH A WIDE RANGE OF WINDOW DESIGNS

CUSTOM BUILT AND IDENTIFIED
MAXIMUM PERFORMANCE WITH EASY INSTALLATION

**WEIGHT RANGES: 80 - 100 LBS
LENGTHS: 30 - 60 INCHES
AAMA 902-07 CLASS 5
VERIFIED COMPONENT**

Solutions That Set New Standards

CALDWELL

SOLUTIONS THAT SET NEW STANDARDS

Telephone 024 7643 7900

Guide To Travel Stops

Travel stops are essential whenever spring balances are in use. Travel stops ensure that the spring balances do not become damaged or prematurely worn. Travel stops are required at both the top of the window & at the bottom.

Travel stops are available from most of the major window system companies & these are usually profile specific. Caldwell also offer a range of travel stops.

The principal failure mode on spring balances where travel stops are not fitted are over extension & under extension. Both of these failure modes result in the balances being damaged beyond repair & will almost certainly mean that the balances will have to be replaced.

Over extension occurs when the upper sash is pulled downwards beyond the working range of the balance, this can result in internal damage within the spring balance. Travel stops prevent this from happening by limiting the travel of the sash.

Under extension occurs if the lower sash is lifted up until it hits the bottom of the balances, this can result in internal damage within the spring balance. Travel stops prevent this by limiting the travel of the sash.

DO NOT OPERATE THE WINDOW UNTIL THE UPPER AND LOWER TRAVEL STOPS ARE FITTED.

Travel stop lengths

Caldwell recommend the minimum size of travel stops to be fitted to an equally split vertical slider are:

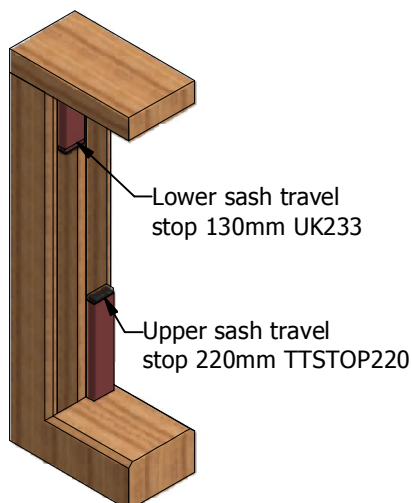
Upper sash travel stop = 220mm
Lower sash travel stop = 130mm

The above sizes should always be used with Caldwell spring balances, however longer stops can be used if required.

For every 25mm that the upper sash is smaller than equally split, 50mm must be added to the upper sash travel stop length.

If horns are used, reduce the calculated length of the travel stop by the length of the horn.

For further information, please contact Caldwell Technical Department.

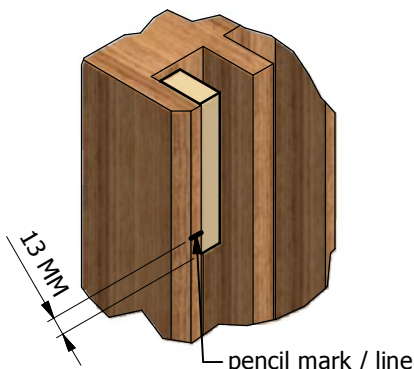


CONVENTIONAL TIMBER SYSTEM TRAVEL STOPS

On a conventional timber system a UK190 - Upper Sash Travel Stop and a UK191- lower Sash Travel Stop can be used (see datasheet 00333). Alternatively, a block of timber cut to length can be used. All stops should be fitted as described below.

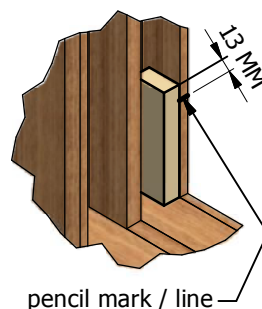
Carefully lift the lower sash until resistance is felt i.e. the balance is fully retracted. Pencil mark one jamb in line with the top of the sash.

Fix a limit stop with its bottom edge 13mm below the mark. Raise the sash to the limit block and fix a second block to the opposite jamb.



Carefully lower the upper sash until resistance is felt i.e. the balance is fully extended. Pencil mark one jamb in line with the bottom of the meeting rail.

Fix a limit stop with its bottom edge 13mm above the mark. Lower the sash to the limit block and fix a second block to the opposite jamb.



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Telephone 024 7643 7900

Tilting Sash Balance fitting & Adjustment Using The EZ Tensioning Tool

1. Mount the balances into the outer frame, do not over-tighten the screws as this will distort the balance.
2. Attach the tensioning tool to the bottom pin of the balance rod.
Make sure that the end hooks of the tensioning tool are fully engaged on the lower pin of the balance rod.
Contact between the tensioning tool & the balance rod lower pin must be maintained at all times.
A firm grip of the tensioning tool is required at all times when in use.
Do not let the balance rod rotate as this will result in loss of tension.
Connect the top pin into the centre slot on the pivot shoe & allow the balance to retract fully before releasing the tensioning tool.

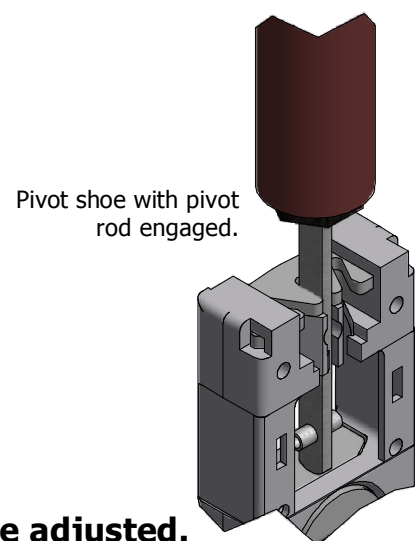
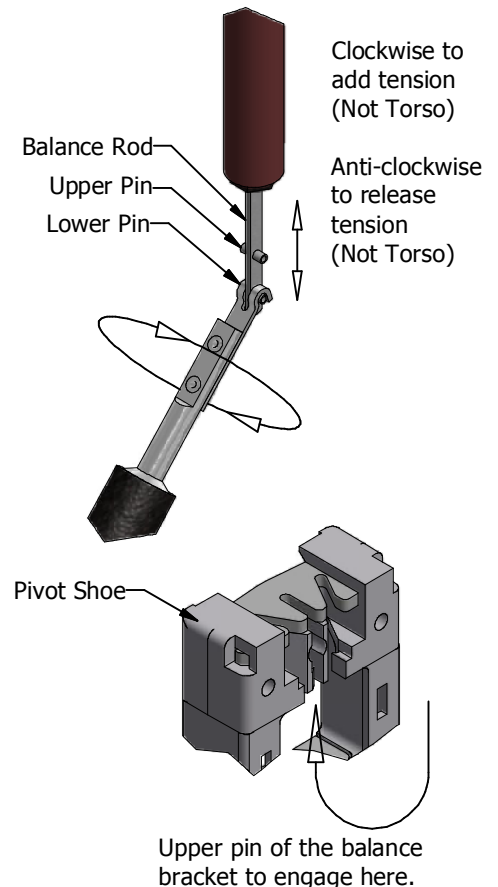
Note: to avoid damaging the balance, it is essential that it is not distorted whenever fitting, connecting or tensioning balances. No side loading should be applied as this will permanently affect the balance.

3. To engage the balance rod in the pivot shoe, the balance should be extended down by means of the tensioning tool until the upper pin of the bracket can be fully engaged in the central slot of the pivot shoe. The tensioning tool can now be disengaged.
If fitting regular or heavy duty Alumitilt see below for tensioning details.
4. Tensioning for REGULAR or HEAVY DUTY ALUMATILT balances.
To tension the balance it is necessary to apply the appropriate number of turns, in a clockwise direction, shown on the job sheet or tensioning chart, DATASHT-00086.
Always tension both balances identically.
During tensioning, position the end of the rod approx. 50mm down from the bottom of the aluminium tube, once tensioned insert the upper pin into the central slot in the pivot shoe.
5. Tensioning ULTRALIFT balances.
Ultralift balances are pre-tensioned when manufactured & therefore should not normally require tensioning on the window.
As a feature of their design the tension can be increased or decreased by a maximum which equals 1kg sash weight.
This adjustment is a maximum & any further adjustment may damage the balance.

If adjustment of the Ultralift balance is required, attach the tensioning tool to the bottom pin & remove the rod from the pivot shoe. Allow the bracket to retract to within approx. 50mm of the end of the tube. To release tension, rotate one turn anti-clockwise, & no further. To add tension, rotate the balance one turn clockwise, & no further. Reconnect the balance rod to the pivot shoe & check the operation of the sash. Always tension both balances identically.

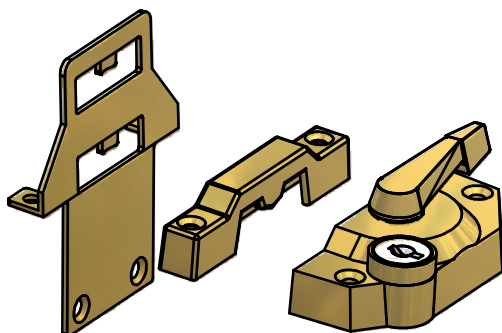
Torso balances are PRE-TENSIONED & can not be adjusted.

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KL800 SASH LOCK



KL800 SASH LOCK

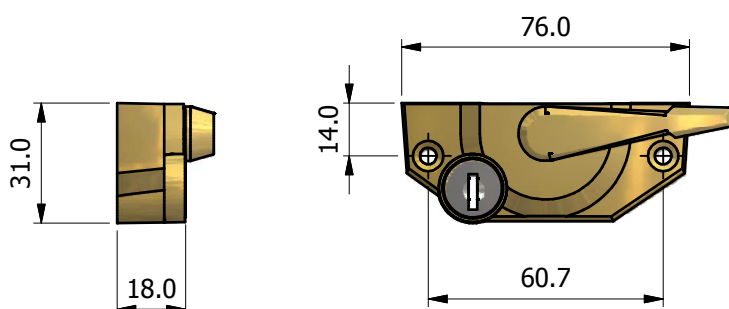
KEY CYLINDER LOCKING FOR ADDED SECURITY.
2 KEYS SUPPLIED WITH LOCK.
CAM ACTION LEVER.

NL800 SASH LOCK

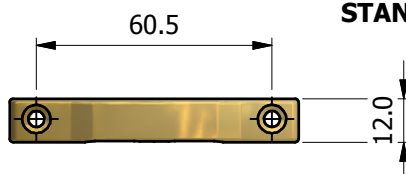
NON LOCKABLE VARIANT.
CAM ACTION LEVER.

MATERIAL:-

LOCK: ZINC PRESSURE DIE-CASTING

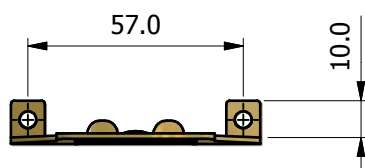
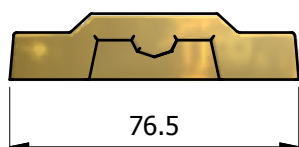


STANDARD KEEPS - SUPPLIED SEPARATELY



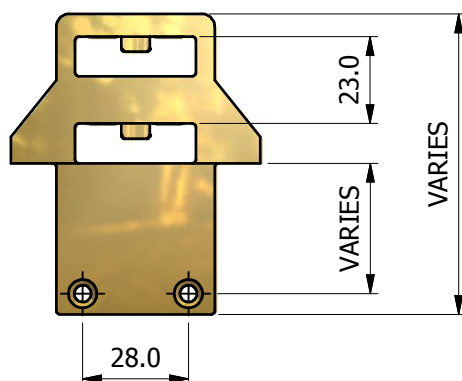
PART No. 30459

MATERIAL:-
ZINC PRESSURE
DIE-CASTING



PART No. VARIOUS

MATERIAL:-
STEEL



SINGLE STAGE
KEEPERS.
DOUBLE STAGE
KEEPERS WHICH
ALLOW TRICKLE
VENTILATION TO
BUILDING
REGULATIONS
PART L.

ORDER CODE	FINISH
KL800W	WHITE
KL800RIBCO	POLISHED GOLD
KL800CH	CHROME
KL800DG	DAWN GOLD
NL800W	WHITE
NL800RIBCO	POLISHED GOLD
NL800CH	CHROME
NL800DG	DAWN GOLD

OTHER FINISHES
AVAILABLE ON REQUEST
SUBJECT TO QUANTITY

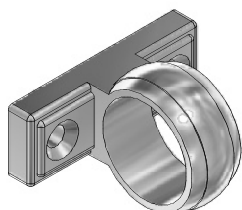
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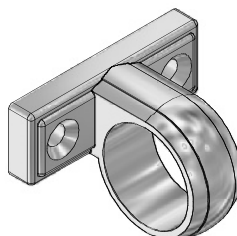
Telephone 024 7643 7900

SASH RING & SASH HOOK



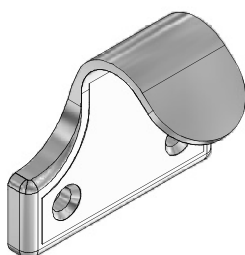
UK624 SASH RING

Traditional style
Pressure die cast for greater accuracy and consistency (superior to brass)
Consistent hole centres
Similar decorative features to UK616.



UK745 OFFSET SASH RING

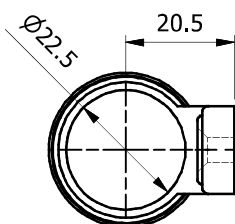
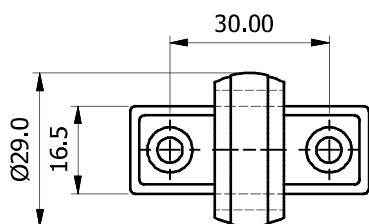
This has all the benefits of the UK624 but due to the offset offers more clearance for thinner sash profiles.



UK616 SASH HOOK

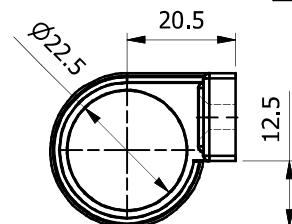
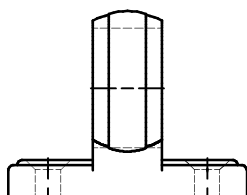
Traditional style
Pressed steel for strength (superior to brass)
Consistent hole centres (superior to brass)
Similar decorative features to UK624.

Other finishes are available on request subject to quantity



ORDER CODE	ORDER CODE	FINISH
UK624HIPCAWHITE	UK745HIPCAWHITE	WHITE P.C.
UK624CH	UK745CH	CHROME
UK624RN	UK745RN	LEGRAND GOLD
UK624DG	UK745	DAWN GOLD
UK624SC	-	SATIN CHROME
UK624BS	UK745	BRUSHED STAINLESS

Material: Zinc pressure die cast



The UK745 is dimensionally the same apart from the offset

Other finishes are available on request subject to quantity

ORDER CODE	FINISH
UK616HIPCAWHITE	WHITE P.C.
UK616CH	CHROME
UK616RN	LEGRAND GOLD
UK616DG	DAWN GOLD
UK616SC	SATIN CHROME
UK616BS	BRUSHED STAINLESS

Material: Pressed steel

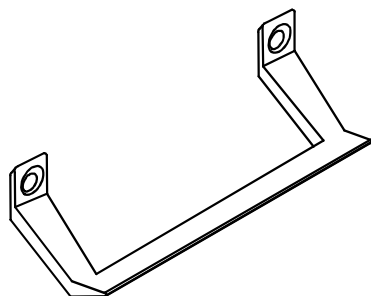
SASH LOCKS ARE AVAILABLE IN FINISHES TO MATCH THE ABOVE PRODUCTS

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CALDWELL SPECIALIST HARDWARE

8790 SASH LIFT

SLIDING SASH

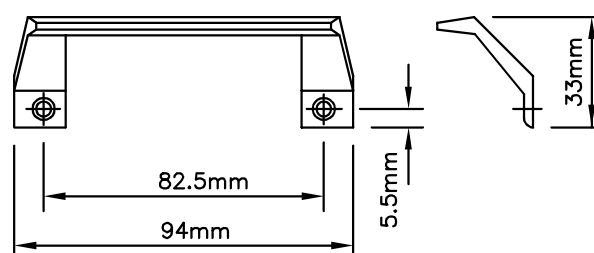
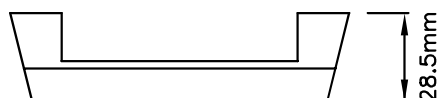


SASH LIFT

Caldwell sash lifts provide easy opening and closing of sliding sash windows. While having a low profile appearance. They provide a positive grip to the sash for ease of operation.

MATERIAL

High Pressure Zinc Die casting



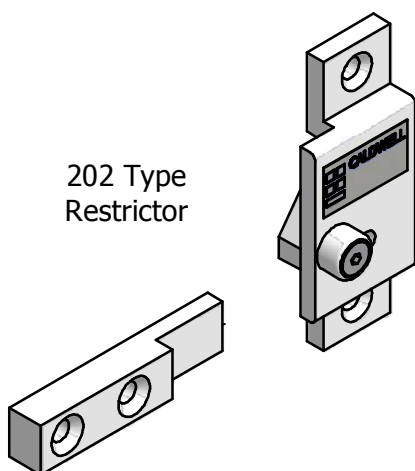
Other finishes are available on request subject to quantity.

Order code	Finish
8790W	WHITE P.C.
8790RIBCO	POLISHED GOLD
8790B	BLACK P.C.
8790BZ	BRONZE

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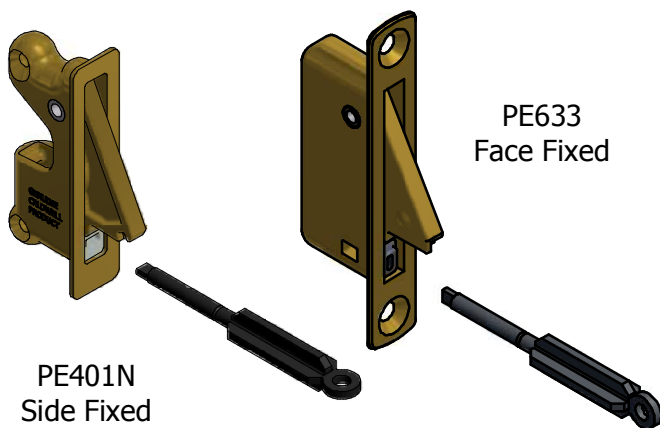
Travel Restrictors

202 Type
Restrictor



The Caldwell range of vertical sliding window restrictors limit the travel of the sashes. The result of restricting sash travel is a reduced amount of clear opening on the window. Restriction may be required to enhance safety, to enhance security, or where a combination of both is required.

PE633
Face Fixed



PE401N
Side Fixed

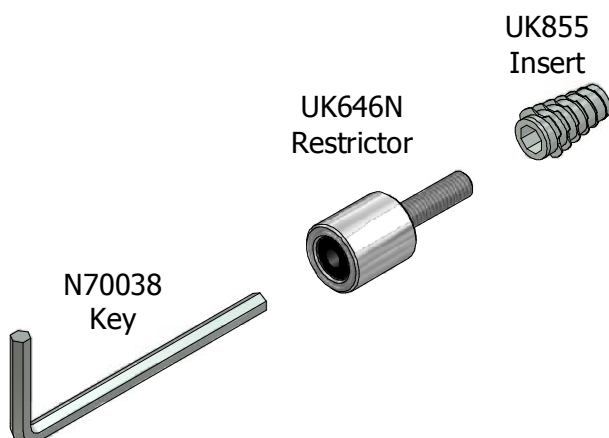
All Caldwell vertical sliding window restrictors are releasable as well as self engaging. The releasable feature allows sashes to still be opened fully when required i.e. for cleaning or maintenance. The self engaging feature ensures that all of the restrictors re-engage on their own when the sashes are returned to their closed position. They also have a locking feature allowing the sash to be locked in either the restricted or unrestricted position.

All Caldwell vertical slider restrictors are suitable for use on PVCu, Timber, Aluminium, Steel and Composite vertical sliding windows.

UK646N
Restrictor

UK855
Insert

N70038
Key



Also available is a UK646N Roller restrictor that has various benefits of restriction and ease of fitting. The UK855 threaded insert and the N70038 key are also required for this option.

Note: there is also a double stage version of this restrictor, see manual: MAN-0014, for more details).

For fitting instructions for any of our restrictors please see our Vertical Sliders Restrictor Manual (available to be sent by Caldwell - MAN-0014)

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