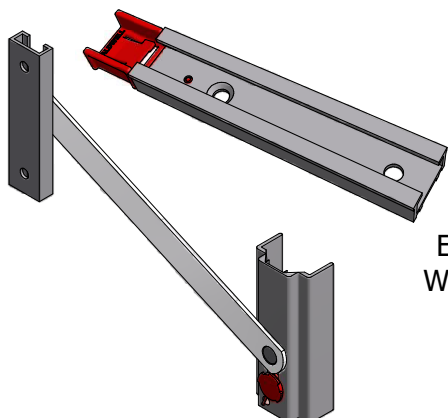


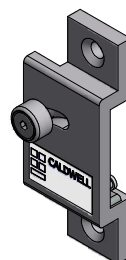
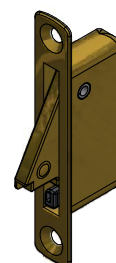
# VERTICAL SLIDING WINDOW RESTRICTORS *FABRICATOR MANUAL* 1st Edition



## Cavendish Hardware Ltd,

Unit 8, Tithe Street,  
Leicester,  
LE5 4BN

Email: [Sales@cavendish-hardware.co.uk](mailto:Sales@cavendish-hardware.co.uk)  
Web Site: [www.cavendish-hardware.co.uk](http://www.cavendish-hardware.co.uk)



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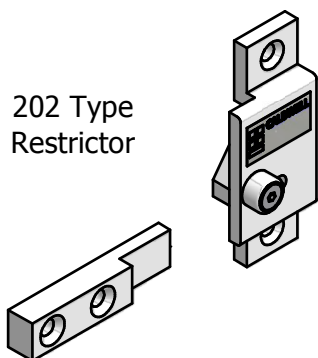
### KEY FEATURES

- ENHANCED SAFETY & SECURITY OF WINDOW.
- ADJUSTABLE TRAVEL RESTRICTION.
- SUITABLE FOR CONVENTIONAL VS & TILT VS WINDOWS.
- AVAILABLE IN VARIOUS FINISHES TO MATCH OTHER HARDWARE.
- SUITABLE FOR MOST TIMBER, ALUMINIUM, PVCu, STEEL & COMPOSITE VERTICAL SLIDERS.
- LOCKING & NON LOCKING OPTIONS.
- PROVIDES SUPPORT WHEN TILTING IN VS WINDOWS FOR CLEANING.



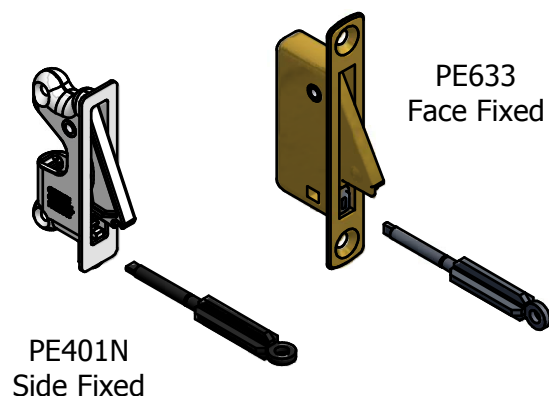
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## Introduction to Vertical Slider Restrictors



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.



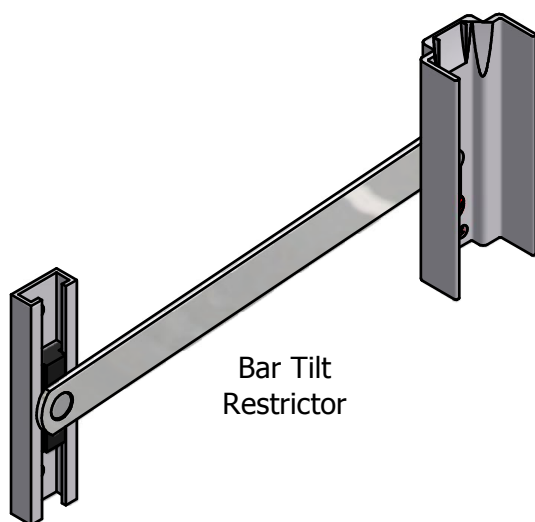
PE401N  
Side Fixed

PE633  
Face 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 ie 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.



Bar Tilt  
Restrictor

The Caldwell range of vertical sliding bar tilt restrictors allow the retention of sash weights up to 35kg whilst tilted in for cleaning purposes.

They have a robust stainless steel arm construction which is retained within the jamb for maximum load retention. The in-built bi-axial anti-jam device enables smooth sash re-engagement.

All of the information shown on this data sheet was correct at the time of issue. All information however is subject to change and therefore it is advisable to check with Caldwell Hardware to ensure that you have the latest issue level.

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## PE633 VS Travel Restrictor

Caldwell's new design of travel restrictor provides a convenient, simple and cost effective option to restrict the amount of opening on sash windows.

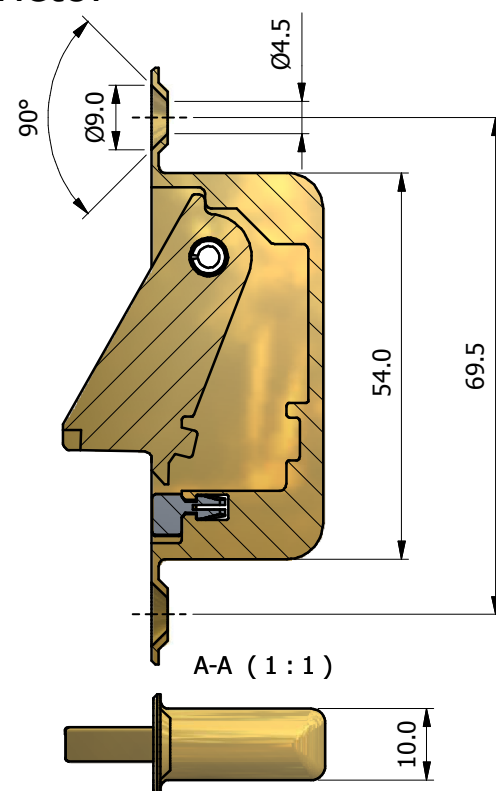
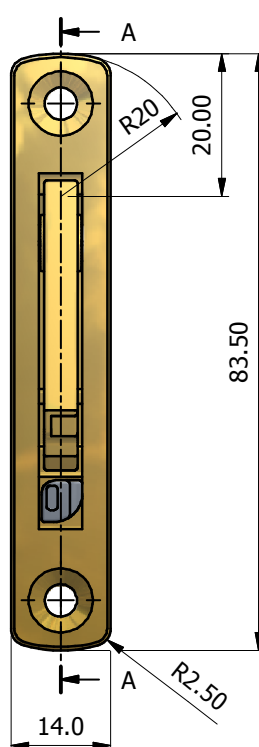
They are discreet in appearance and location and offer enhanced safety and security for a wide range of PVC, timber and aluminium profiles.

The spring loaded tongue is lockable in both the flush and projecting position.

The face fixed feature offers simple installation, as well as ease of replacement and retro-fitting if ever required. Also fixing from the face allows the flange of the restrictor to be screwed to the window frame and sit as flush as possible.

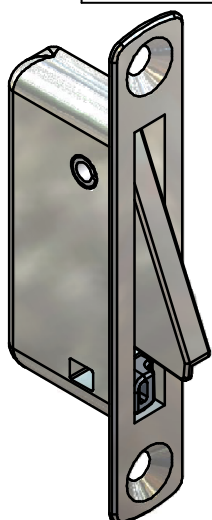
### MATERIALS

Body: Zinc pressure die-casting  
Tongue: Zinc pressure die-casting  
Spring: Spring steel  
Locking cam: Black acetal  
Cam Key: Black acetal  
Spirol Pin: Stainless steel

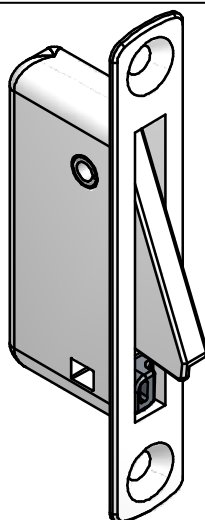


IT IS RECOMMENDED THAT A RESTRICTOR IS FITTED TO BOTH SIDES OF THE SASH

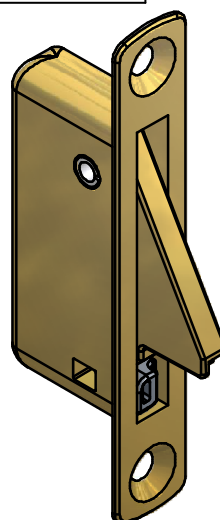
**IMPORTANT NOTE:** WHEN FITTING THE PE633 RESTRICTOR IT IS RECOMMENDED TO USE A LOW TORQUE DRIVER OR SIMILAR TO PREVENT ANY DEFORMATION OF THE RESTRICTOR BODY.



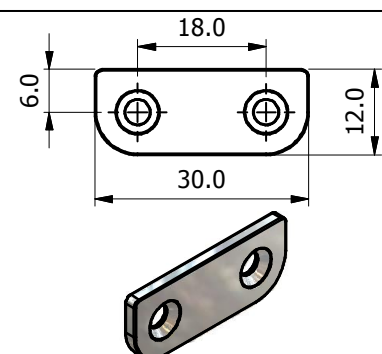
POLISHED CHROME  
FINISH  
ORDER CODE - PE633CH  
(KP1018 with strike plate)



WHITE POWDER COATED  
FINISH  
ORDER CODE - PE633HIPCAWHITE  
(KP1016 with strike plate)



POLISHED GOLD  
FINISH  
ORDER CODE - PE633DG  
(KP1017 with strike plate)



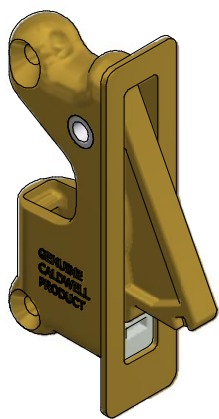
Also available for timber windows are strike plates to stop damage to the strike point on the meeting rails. These are also available in the same finishes as the travel restrictors.

### ORDER CODES

POLISHED CHROME  
UK737CH (KP1018 with restrictor)  
WHITE POWDER COAT  
UK737HIPCAWHITE (KP1016 with restrictor)  
POLISHED GOLD  
UK737DG (KP1017 with restrictor)

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## PE401N Travel Restrictor



The PE401N travel restrictor restricts the amount of opening on the lower sash to a typical set distance of 100mm dependant on the customers requirements. This is adjusted by the position in which the restrictor is fitted on the stile of the sash. The travel restrictor is fixed in place using two fixings which are screwed through either side of the sash. This gives the restrictor a secure fixing and hides the screw fixings from sight.

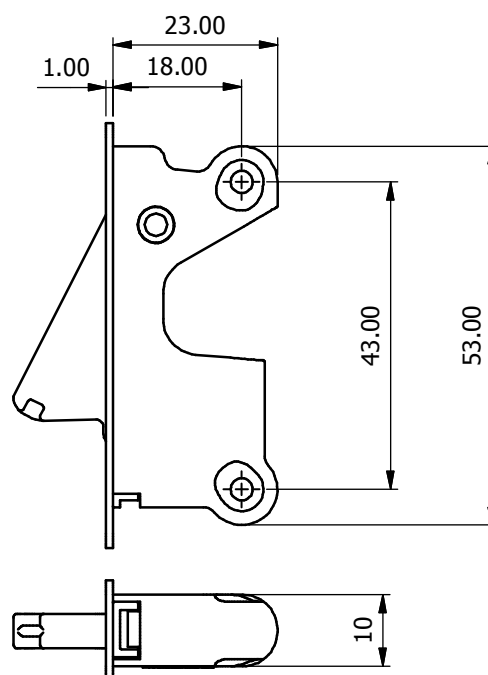
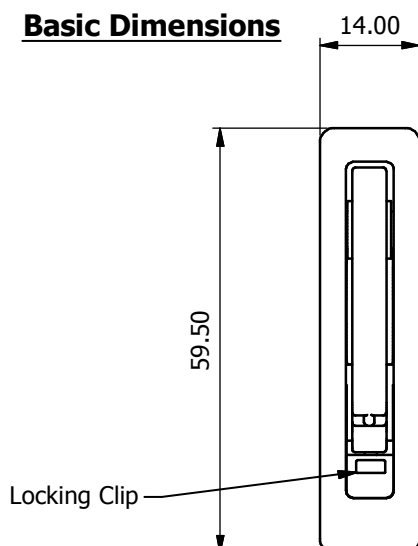
It is advisable that when used on PVCu windows the fixing screws should also pass through reinforcement. The spring loaded tongue is lockable in both restricted and unrestricted positions.

The PE401N is a die cast product which is available in white, gold and chrome finishes. Other finishes are available on request.

The Caldwell travel restrictor comes with a key to operate the locking mechanism.

The key has been designed to break as a fail safe, before the latch, in the event of excessive force being used when operating. This ensures replacement of the restrictor is not necessary in the event of misuse. Replacement keys are available at the customers request.

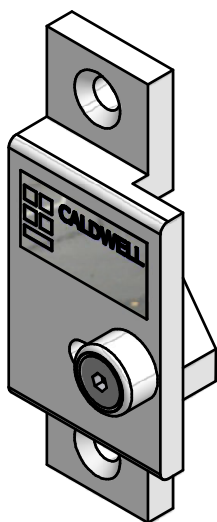
### Basic Dimensions



**IT IS RECOMMENDED THAT A RESTRICTOR IS FITTED TO BOTH SIDES OF THE SASH.**

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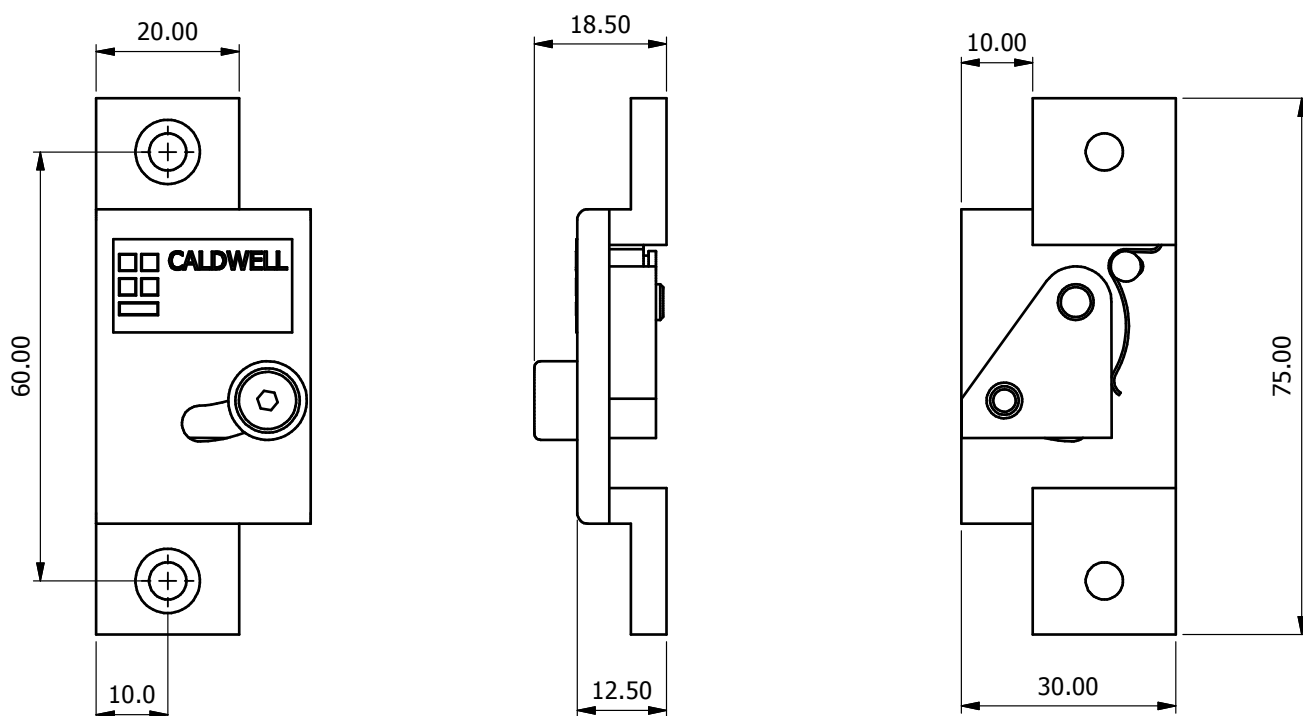
## 202 Travel Restrictor



The 202 travel restrictor restricts the amount of opening to a set distance (typically 100mm dependant on the customers requirements). This is adjusted by the position in which the restrictor is fitted on the jamb of the outer frame or the stile of the sash. The travel restrictor is fixed in place using two fixings, and the keep is also fixed with two fixings. It is advised that when using PVCu windows the fixings should also screw through reinforcement. This travel restrictor can be locked in the restricted or unrestricted position by tightening the allen key screw on the front. This can be supplied on request. The 202 travel restrictor can also be supplied with a security screw to stop unauthorised operation.

The 202 travel restrictor is manufactured from aluminium and is available in white or silver anodised. Other finishes are available on request.

### Basic Dimensions



**IT IS RECOMMENDED THAT A RESTRICTOR IS FITTED TO BOTH SIDES OF THE SASH.**

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## 202 Travel Restrictor Keeps

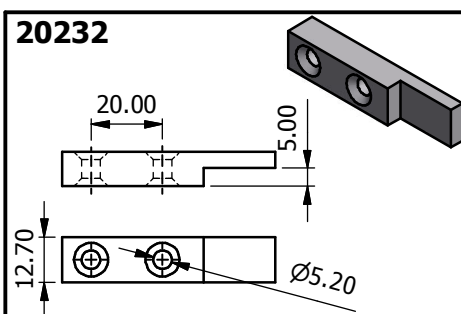
### 202 KEEP MATRIX

KEEP	DECEUNINCK	SPECTUS	PLASTMO	PLUS PLAN	REHAU HERITAGE MK1 & 2	VARIOUS TIMBER WINDOWS
20232	✓	✓	✓	✓	✓	✓
20247						✓
20252						✓
20257						✓
20262						✓
20272						✓
20275						✓

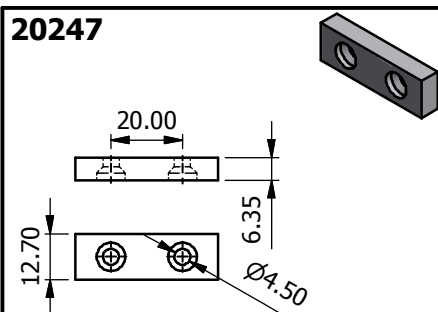
Please contact Caldwell Technical Department if your application is not shown on the above matrix.

All of our keeps are manufactured from aluminium and are available in silver anodised and white finishes. Other finishes available on request.

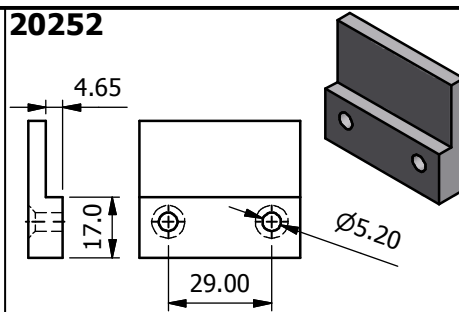
#### 20232



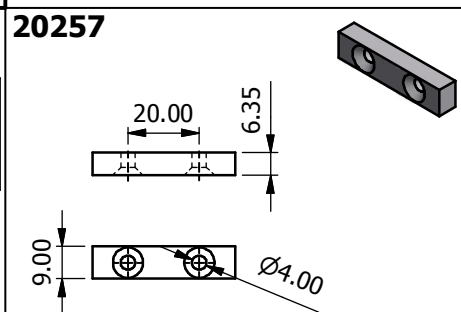
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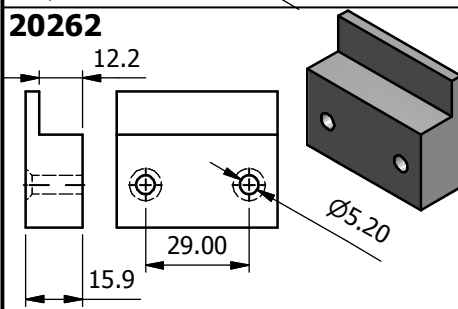
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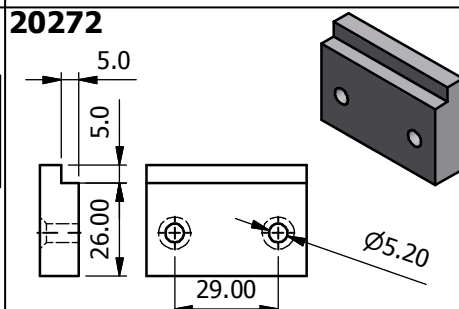
#### 20257



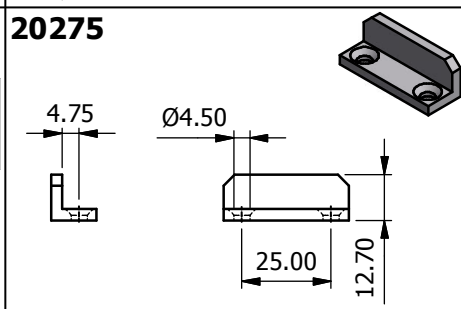
#### 20262



#### 20272



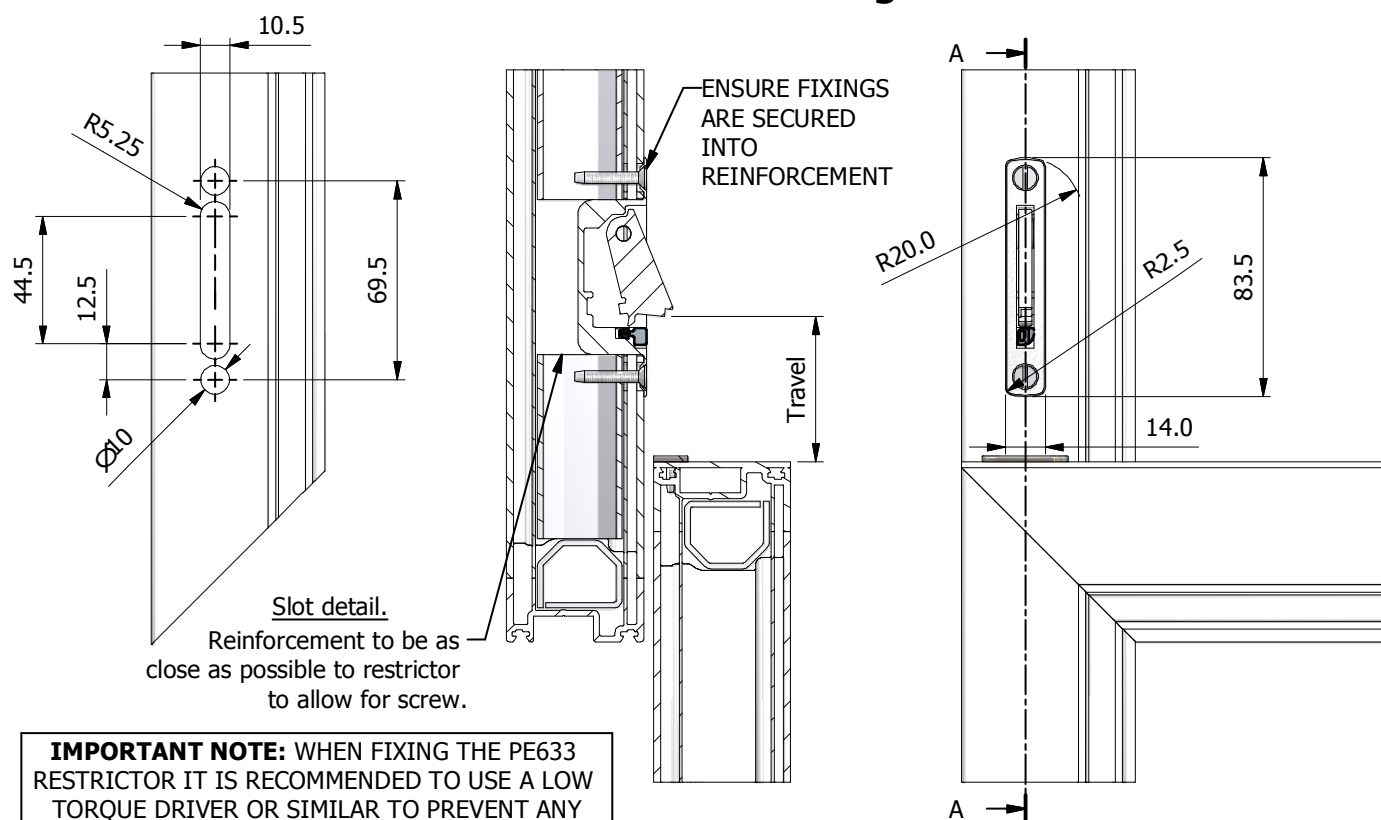
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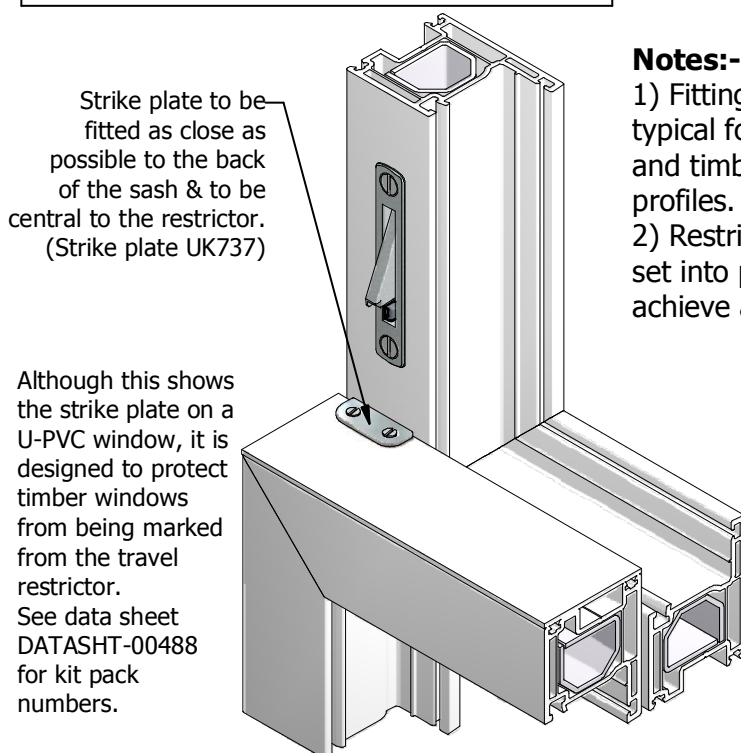
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## Travel Restrictor PE633 Fitting Instructions

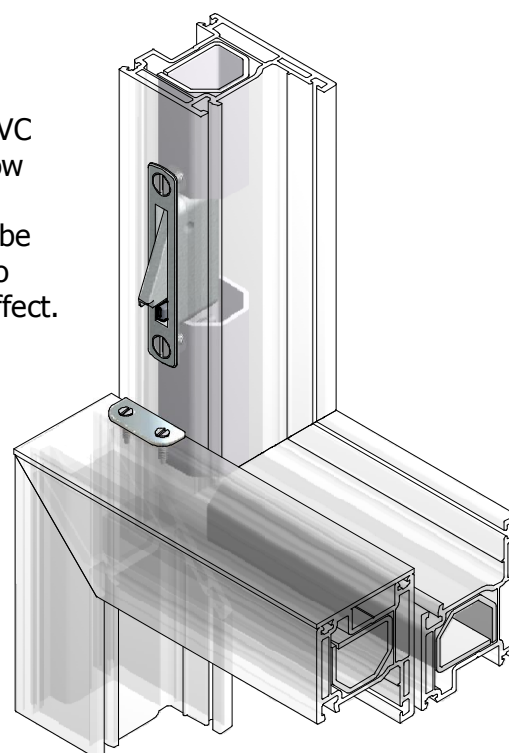


**IMPORTANT NOTE:** WHEN FIXING THE PE633 RESTRICTOR IT IS RECOMMENDED TO USE A LOW TORQUE DRIVER OR SIMILAR TO PREVENT ANY DEFORMATION OF THE RESTRICTOR BODY.



### Notes:-

- 1) Fitting details typical for both PVC and timber window profiles.
- 2) Restrictor can be set into profiles to achieve a flush effect.

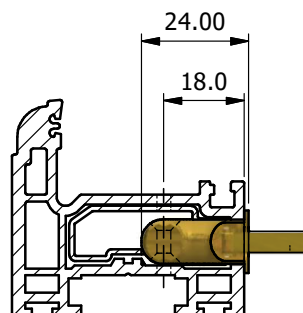
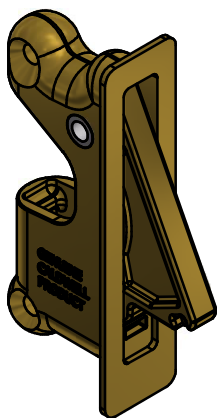


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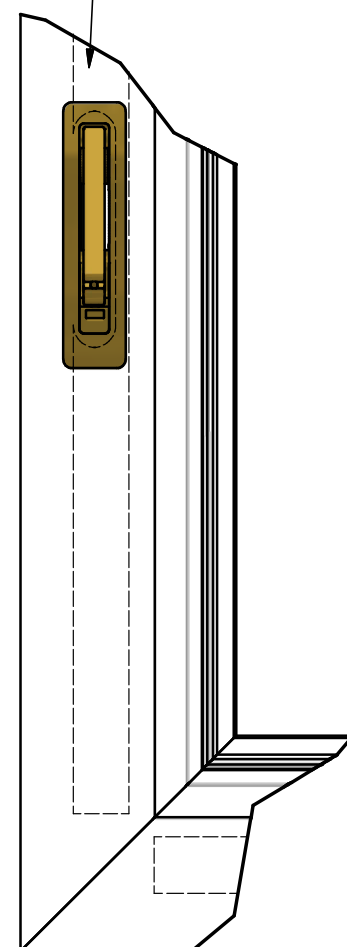
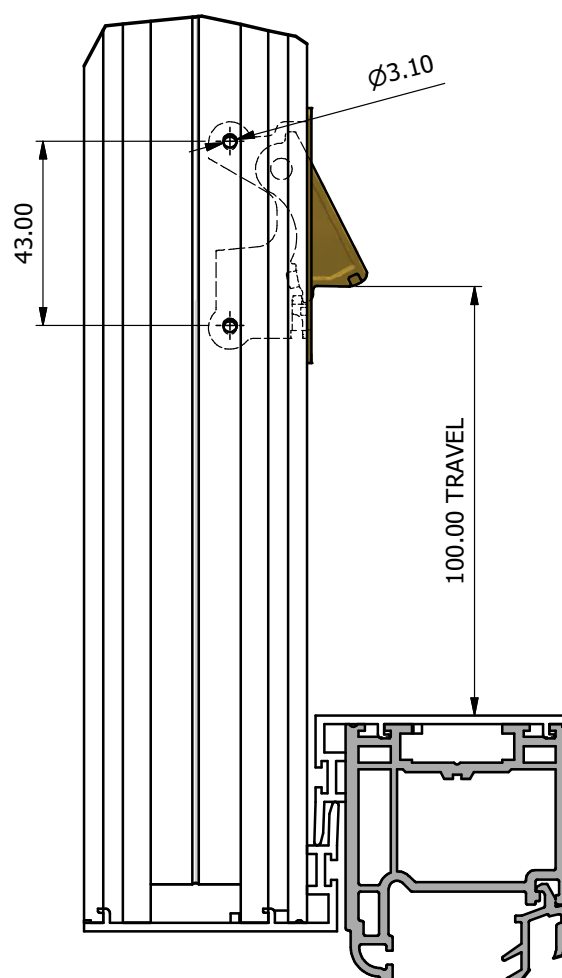
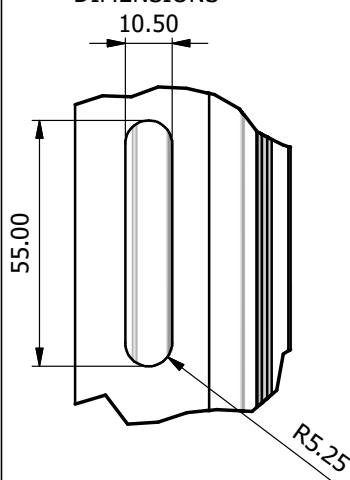
## Typical PE401N Fitting Detail



ENSURE RESTRICTOR IS PUSHED TO THE TOP OF THE SLOT PRIOR TO FIXING IN PLACE. THIS WILL ENSURE THAT THE LATCH CAN OPERATE FREELY.

Reinforcement to be cut short or machined with clearance slot.

CLEARANCE SLOT DIMENSIONS



PE401NDG (DAWN GOLD)  
SHOWN FITTED

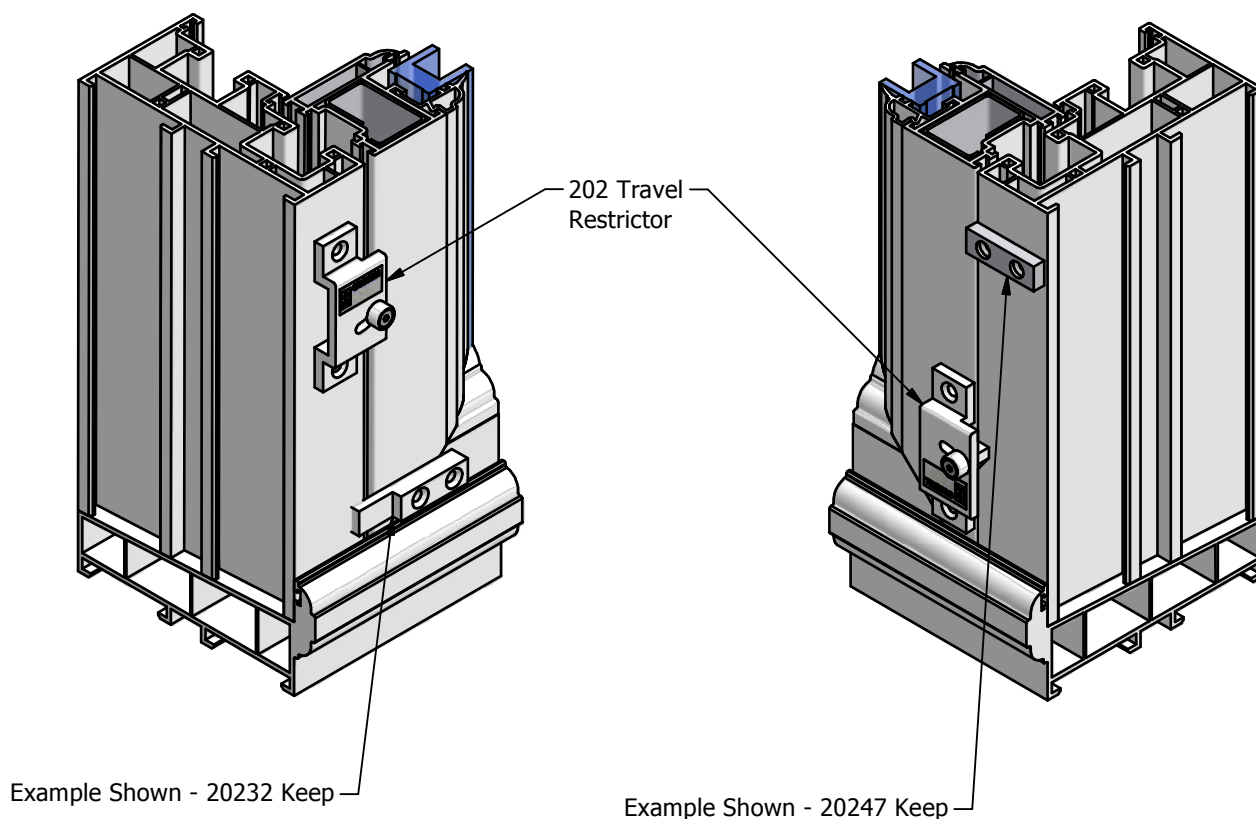
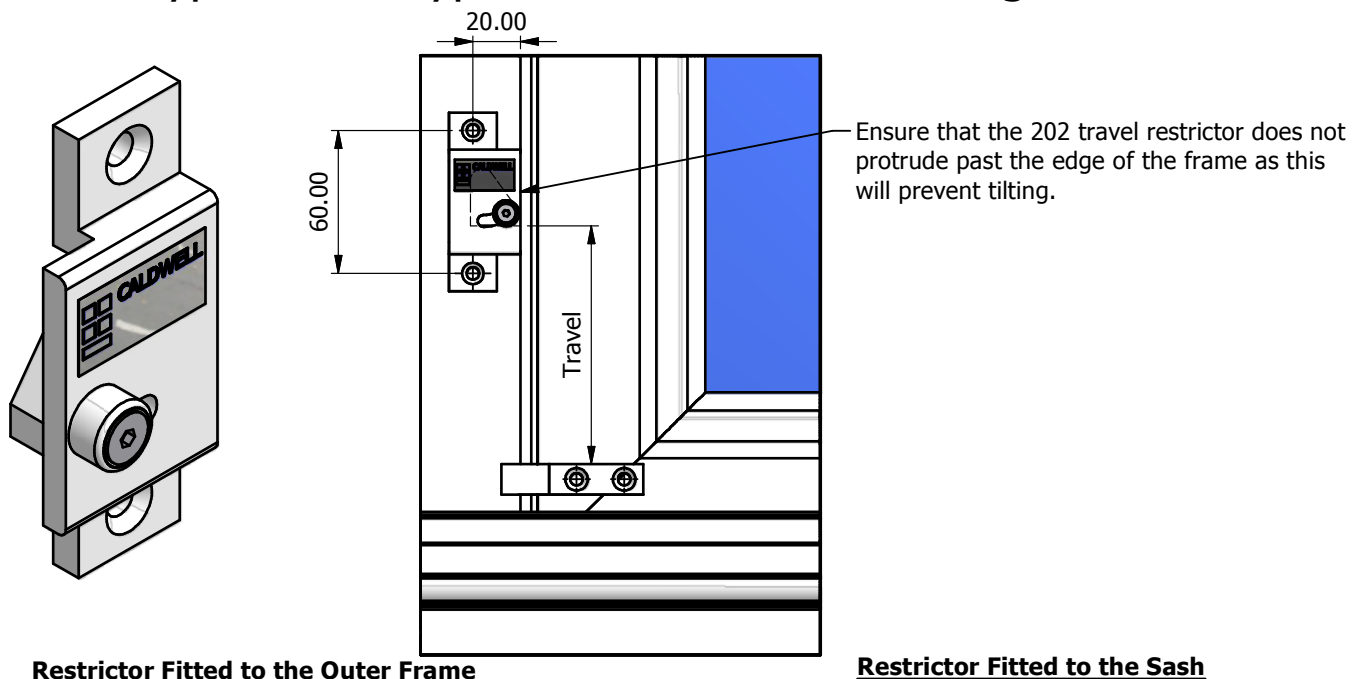


Take care when using PE401N travel restrictors with slide in pivot bar carriers. A possible clash could affect fitting.

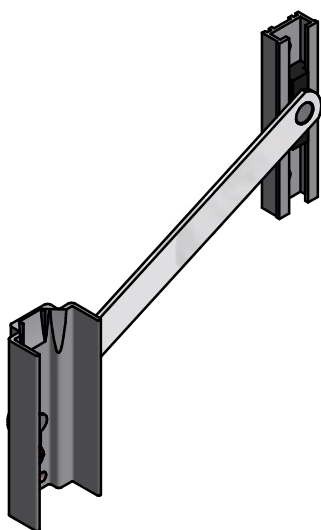
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## Typical 202 Type Travel Restrictor Fitting Detail



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## Standard Bar Tilt Restrictors

Bar tilt restrictors are used to restrict the sash on a vertical sliding window when being tilted in for cleaning or maintenance. They are available in three different lengths dependant on the height of the sash. They are as follows:

Sash heights 350mm - 450mm = 150mm Bar Restrictor

Sash heights 451mm - 650mm = 250mm Bar Restrictor

Sash heights 651mm - 1200mm\* = 350mm Bar Restrictor

When fitted in pairs to both sashes, they will support a maximum sash weight of 35kg\*.

The outer frame slide and sash slide channel are manufactured from aluminium and are normally supplied in a silver anodised finish. Other finishes are available on request. The arm of the restrictor is manufactured from stainless steel.

### BASIC DIMENSIONS

ALUMINIUM SASH CHANNEL	OUTER FRAME SLIDE	RESTRICTOR CODE REFERENCE
19.0	20.5	RA150AN
		RA250AN
		RA350AN
19.0	19.75	RA150GP
		RA250GP
		RA350GP
18.0	20.5	RA150JC / RA150RJ
		RA250JC / RA250RJ
		RA350JC / RA250RJ
18.0	20.5	RA150LB
		RA250LB
		RA350LB
25.6	31.2	RA150PP
		RA250PP
		RA350PP
19.0	31.2	RA150RU
		RA250RU
		RA350RU
18.0	20.5	RA150TT
		RA250TT
		RA350TT
25.75	18.75	RA150VK
		RA250VK
		RA350VK
25.6	24.5	RA150WH
		RA250WH
		RA350WH
19.0	24.5	RA150VS
		RA250VS
		RA350VS
19.0	24.0	RA150SP
		RA250SP
		RA350SP

All bar restrictors are also available in a quick release version. See page 14 for more information.

The outer channels are supplied to suit specific window systems. See page 12 for more details.

It is recommended that bar restrictors are fitted to both sashes, but in some smaller windows it is acceptable if bar restrictors are only fitted to the lower sash as long as the combined weight of both sashes do not exceed 35kg.

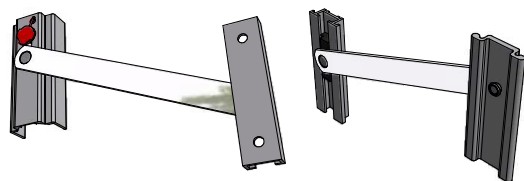
It is critical that the sash slide is fitted in the correct position as shown on page 12.

\*Note: for sash weights 35.5kg or above, and sash heights over 1201mm, the Heavy Duty Bar Restrictor can be used (up to 50kg). See DATASHEET-00673 for more information.

**BAR RESTRICTORS MUST BE FITTED IN PAIRS ON EACH SIDE OF THE SASH.**

It is recommended that the sash slide channel is fitted into reinforcement on PVCu windows.

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## Bar Restrictor Details

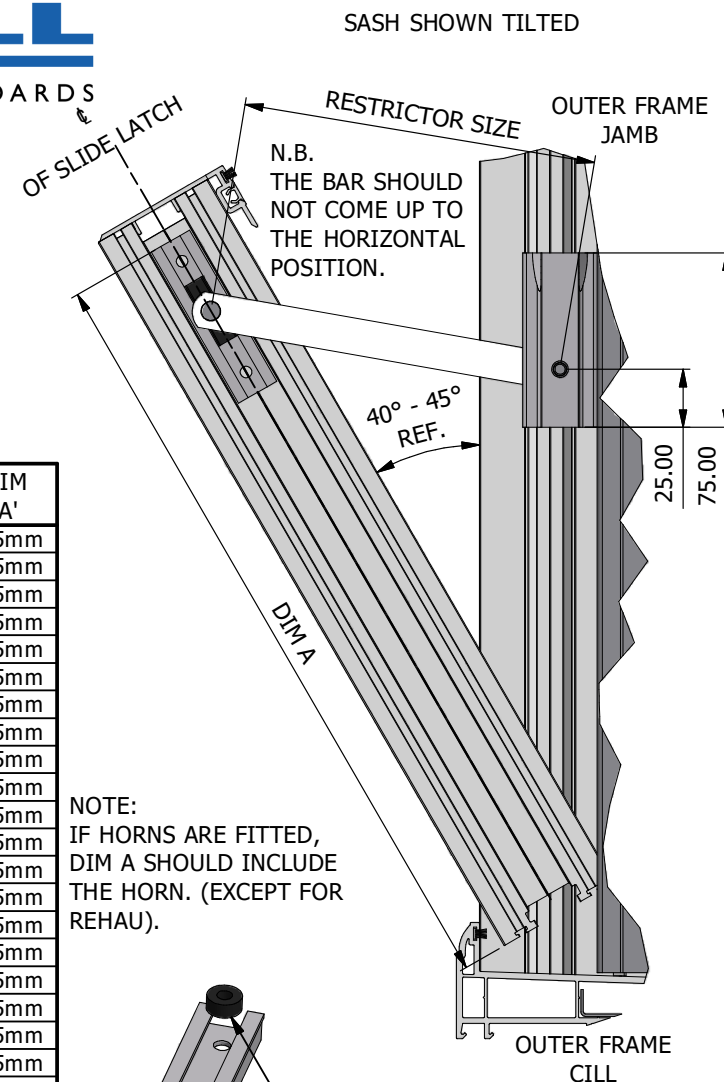
POSITION CHANNEL ON CENTRE LINE OF SASH PROFILE & DIM 'A' FROM BOTTOM OF SASH, PAN HEAD FIXING SCREWS MUST BE USED TO FIX THE CHANNEL INTO THE SASH PROFILE. (WHEN USING UPVC WINDOWS SCREWS ARE TO BE FITTED INTO REINFORCEMENT).

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

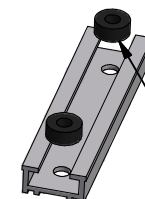
WINDOW SYSTEM	SASH HEIGHT 250mm - 450mm	DIM 'A'	SASH HEIGHT 451mm - 650mm	DIM 'A'	SASH HEIGHT 651mm - 1200mm	DIM 'A'
ANODIL	RA150AN	335mm	RA250AN	435mm	RA350AN	535mm
ALCOA SYSTEM 80	RA150TT	335mm	RA250TT	435mm	RA350TT	535mm
CLEARVIEW	RA150RU	335mm	RA250RU	435mm	RA350RU	535mm
DECEUNINCK	RA150JC	335mm	RA250JC	435mm	RA350JC	535mm
SPECTUS*	RA150RU	335mm	RA250RU	435mm	RA350RU	535mm
SPECTUS (DEEP JAMB SLIDE)*	RA150SP	335mm	RA250SP	435mm	RA350SP	535mm
JELD WEN	RA150RJ	335mm	RA250RJ	435mm	RA350RJ	535mm
ARDEN KINWARD	RA150AR	335mm	RA250AR	435mm	RA350AR	535mm
LB PLASTICS SHEERFRAME	RA150LB	335mm	RA250LB	435mm	RA350LB	535mm
MITRE-MASTER	RA150TT	335mm	RA250TT	435mm	RA350TT	535mm
PLASTMO/EUROCELL*	RA150RU	335mm	RA250RU	435mm	RA350RU	535mm
PLUS PLAN	RA150PP	335mm	RA250PP	435mm	RA350PP	535mm
REHAU 719	RA150RU	335mm	RA250RU	435mm	RA350RU	535mm
REHAU HERITAGE MK1	RA150RU	335mm	RA250RU	435mm	RA350RU	535mm
REHAU HERITAGE MK2	RA150PP	335mm	RA250PP	435mm	RA350PP	535mm
SAPA	RA150GP	335mm	RA250GP	435mm	RA350GP	535mm
SAPA DUALSLIDE	RA150AN	335mm	RA250AN	435mm	RA350AN	535mm
SMARTS SYSTEM	RA150RU	335mm	RA250RU	435mm	RA350RU	535mm
SWISH	RA150PP	335mm	RA250PP	435mm	RA350PP	535mm
TIMB-A-TILT (with mk3 jamb)	RA150TT	335mm	RA250TT	435mm	RA350TT	535mm
TIMB-A-TILT (with mk4 jamb)	RA150AN	335mm	RA250AN	435mm	RA350AN	535mm
VEKA MATRIX	RA150VK	335mm	RA250VK	435mm	RA350VK	535mm
VEKA MATRIX 2007	RA150VS	335mm	RA250VS	435mm	RA350VS	535mm
WHSMITH SYSTEM 10	RA150WH	335mm	RA250WH	435mm	RA350WH	535mm

\* The RA150SP, RA250SP & RA350SP should be used for Spectus and Plastmo/Eurocell when security jamb packers are used.

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NOTE: IF HORNS ARE FITTED, DIM A SHOULD INCLUDE THE HORN. (EXCEPT FOR REHAU).



**UK241 NYLON RING**  
SOLD SEPARATELY. THE UK241 SHOULD BE USED WHEN LOW HEAD SCREWS ARE USED. IT ALSO OFFERS AN IMPROVED BUFFER OVER USING SCREWS ALONE.

DATASHT REF. 00141

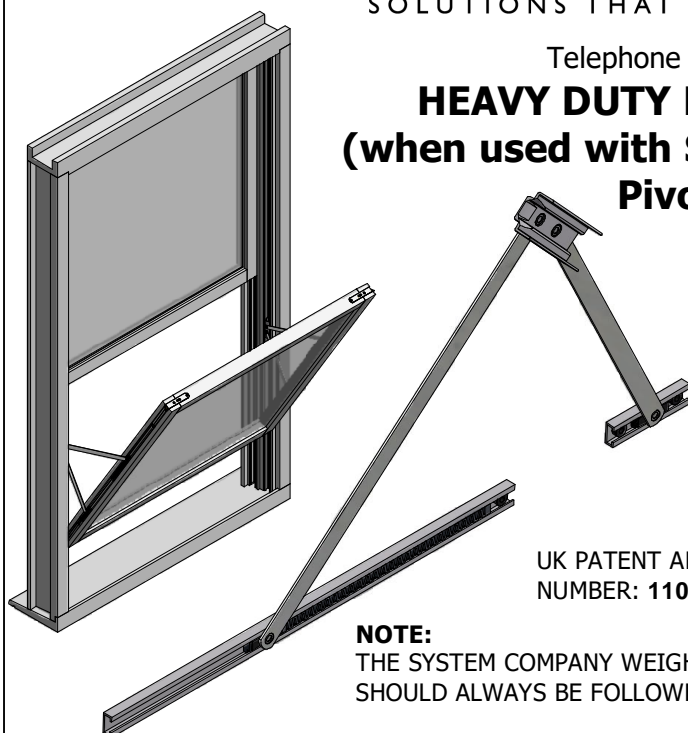
ISSUE LEVEL 12

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## HEAVY DUTY BAR RESTRICTOR (when used with Standard and Slide-in Pivot Bars)

UK PATENT APPLICATION  
NUMBER: 1107417.6

**NOTE:**  
THE SYSTEM COMPANY WEIGHT GUIDELINES  
SHOULD ALWAYS BE FOLLOWED

The Caldwell Heavy Duty Restrictor allows sashes on vertical sliding windows that weigh **35.5kg to 50kg** to be tilted inwards safely for cleaning purposes.

Unlike our standard restrictors, the heavy duty version does not come in different lengths, instead, it covers all sash heights from **900mm to 1550mm**.

The double armed restrictor supports the sash when accidentally dropped, by distributing the load across the frame and the sash. The restrictor also contains a specially designed buffer to cushion the load, and ultimately increase safety levels for the user.

PART NUMBER	WINDOW SYSTEM	DIM 'A'	DIM 'B'
RA350RUHD	SMART SYSTEMS	875mm	255mm
RA350TTHD	TIMB-A-TILT	875mm	255mm
RA350SPHD	SPECTUS	875mm	255mm
RA350WHHD	WHS HALO*	875mm	255mm
RA350VSHD	VEKA MATRIX 2007	875mm	255mm
RA350SPHD	PLASTMO	875mm	255mm
RA350SPHD	EUROCELL	875mm	255mm
RA350PPHD	REHAU HERITAGE MK 2	875mm	255mm
RA350ANHD	SAPA DUALSLIDE	875mm	255mm
CONTACT CALDWELL	COMAR	TBC	TBC
CONTACT CALDWELL	DECEUNINCK	TBC	TBC
CONTACT CALDWELL	LB PLASTICS	TBC	TBC

\*: Maximum sash weight limited to 40kg at the system companies request

### NOTE:

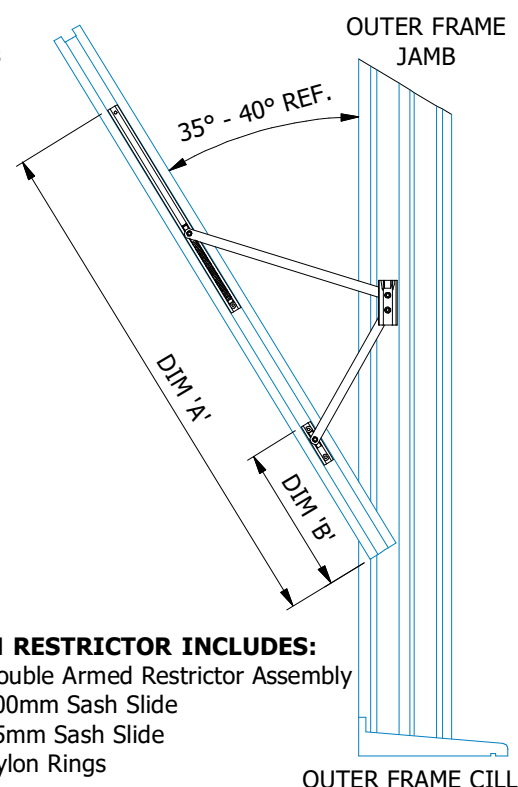
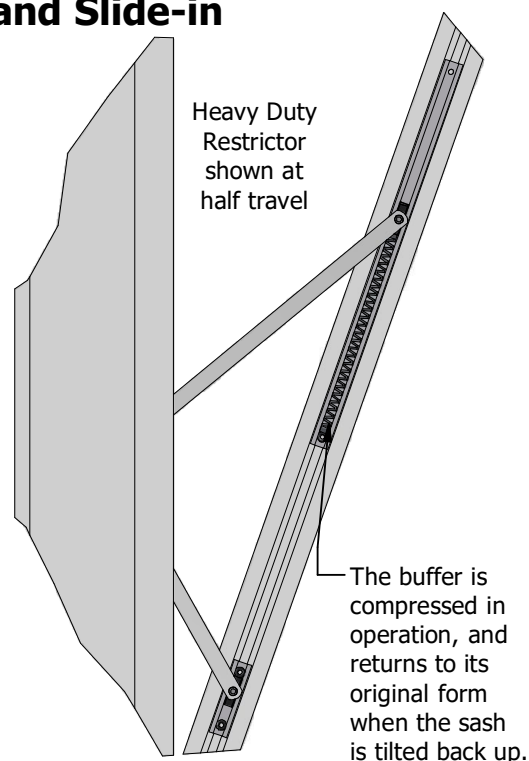
IF HORNS ARE FITTED, DIM 'A' & 'B' SHOULD INCLUDE THE HORN LENGTH. (EXCEPT FOR THE REHAU SPRING LOADED HORN OPTION).

THE ABOVE SIZES ONLY APPLY WHEN USING STANDARD OR SLIDE IN PIVOT BARS. FOR FITTING SIZES WHEN USING LIFT-OUT PIVOT BARS, SEE DATASHEET-00690.

All of the information shown on this data sheet was correct at the time of issue.  
All information however is subject to change and therefore it is advisable to check  
with Caldwell Hardware to ensure that you have the latest issue level.

DATASHT-00673

ISSUE LEVEL 08



### EACH RESTRICTOR INCLUDES:

- 1 x Double Armed Restrictor Assembly
- 1 x 400mm Sash Slide
- 1 x 75mm Sash Slide
- 3 x Nylon Rings

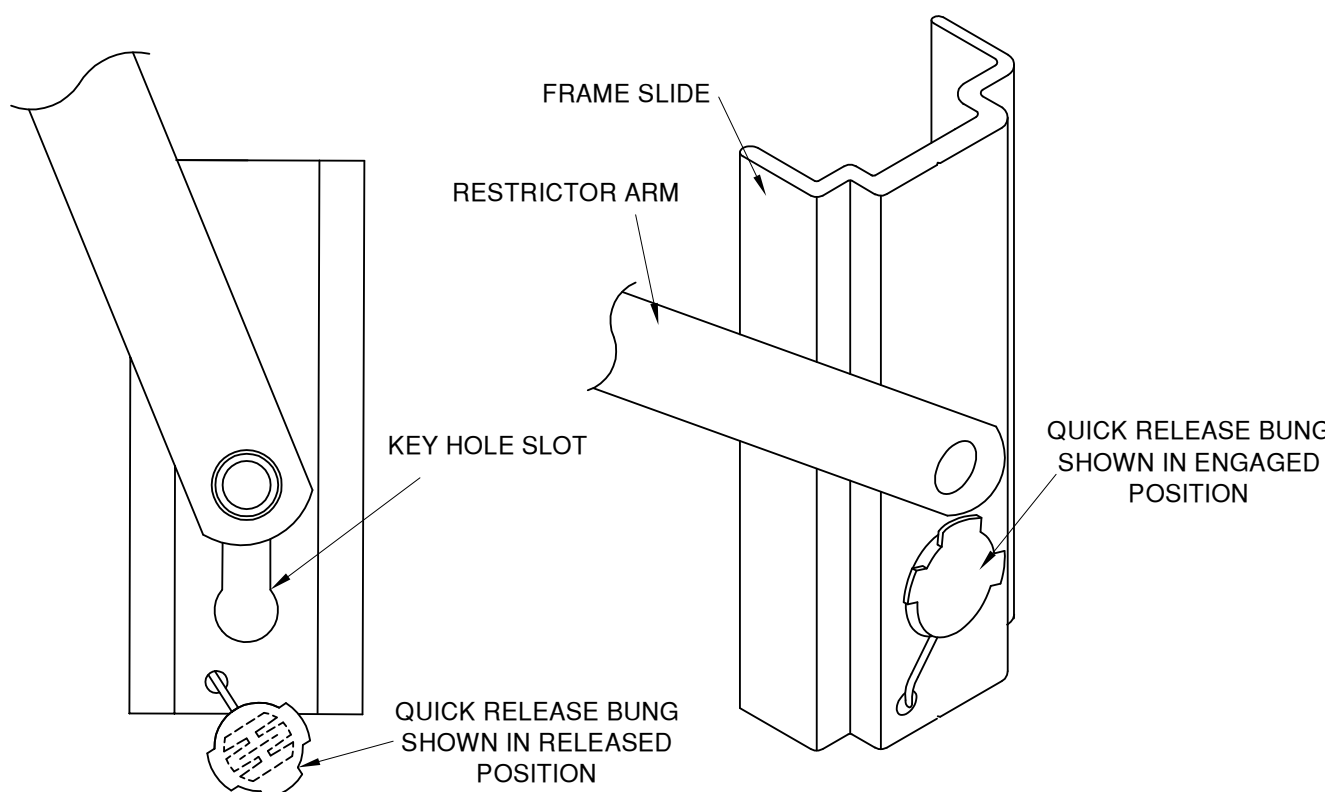
Telephone 024 76437900

## Operation & Installation Of Quick Release Bar Restrictor

### Installation Notes

1. When installing the bar restrictor the bung end of the frame slide must locate towards the cill.

2. Depending on the manufacturing method in use, the frame slide may need to be inserted before the frame is fabricated.



### Operating Notes

#### Releasing the Restrictor Arm

1. Ensure the weight of the sash is fully supported.
2. Release the red quick release bung from the frame slide. Lever under the tabs with a flat head screwdriver if required. Once released the bung should be retained by the tab.
3. Push the restrictor arm downwards towards the large end of the key hole slot.
4. Pull the restrictor arm free of the frame slide.
5. Repeat the procedure on the other side of the sash.

#### Re-engagement of the Restrictor Arm

1. Ensure the weight of the sash is fully supported.
2. Locate the restrictor arm into the key hole slot.
3. Push restrictor arm up towards the top of the slot.
4. Press the bung into the large end of the key hole slot.
5. Ensure the bung is fully pressed home and that it is firmly retained, failure to push fully home could result in the bung breaking off. If required the bung should be replaced with a new one, if in doubt consult Caldwell.
6. Repeat the procedure on the other side of the sash.

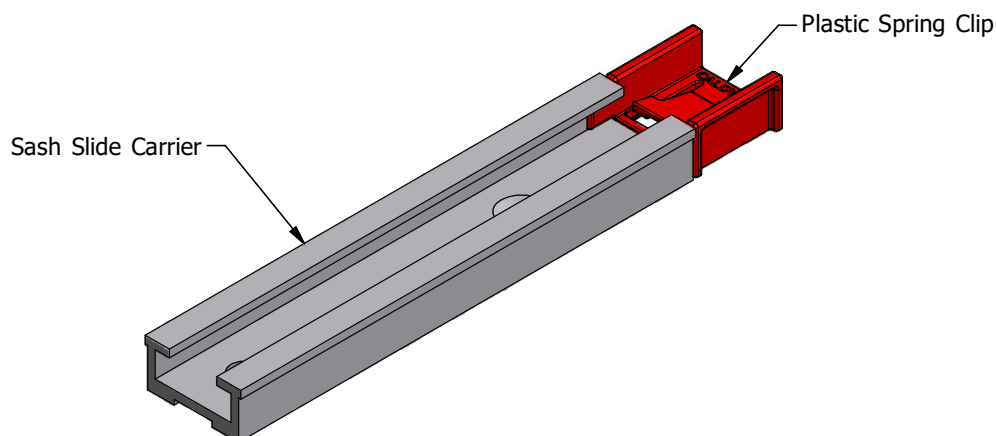
All of the information shown on this data sheet was correct at the time of issue. All information however is subject to change and therefore it is advisable to check with Caldwell Hardware to ensure that you have the latest issue level.

# CALDWELL

SOLUTIONS THAT SET NEW STANDARDS

## QUICK RELEASE SASH SLIDES

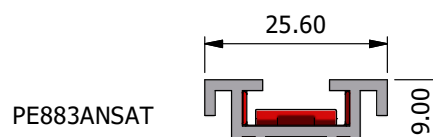
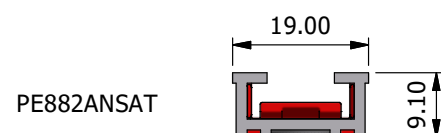
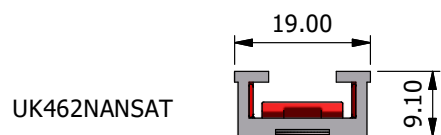
The Caldwell Quick Release Sash Slides are designed for quick and easy release of bar restrictors from the sash for cleaning or maintenance purposes. The plastic spring clip provides easy and secure fitting of the bar restrictor into the sash slide and removal is achieved by pressing the clip fully down and sliding the bar restrictor from the slide carrier.



The Caldwell Quick Release Sash Slides come in a choice of three different sash slide profiles. The matrix below shows required sash slides for common window systems.

WINDOW SYSTEM	QUICK RELEASE SASH SLIDE
ANODIL	PE882ANSAT
CLEARVIEW	PE882ANSAT
SPECTUS	PE882ANSAT
JELD WEN	UK462NANSAT
ARDEN KINWARD	PE882ANSAT
PLASTMO	PE882ANSAT
PLUS PLAN	PE883ANSAT
REHAU 719	PE882ANSAT
REHAU HERITAGE MK1	PE882ANSAT
REHAU HERITAGE MK2	PE883ANSAT
SAPA	PE882ANSAT
SAPA DUALSLIDE	PE882ANSAT
SMARTS SYSTEM	PE882ANSAT
SWISH	PE883ANSAT
TIMB-A-TILT (MK3 JAMB)	PE882ANSAT
TIMB-A-TILT (MK4 JAMB)	PE882ANSAT
VEKA MATRIX 2007	PE882ANSAT
WHSMITH	PE883ANSAT

### Quick Release Sash Slide Identification



It is recommended that bar restrictors are always fitted in pairs and that the maximum sash weight is no more than 35Kg with two bar restrictors fitted. For sash weights of 35.5Kg -50.0Kg, and sash heights over 1201mm, please see DATASHEET-00673 for information on the Caldwell Heavy Duty Bar Restrictors.

**EXTRA CARE SHOULD BE TAKEN WITH BAR RESTRICTORS REMOVED TO PREVENT INJURY OR DAMAGE CAUSED BY THE SASH FALLING INWARDS.**

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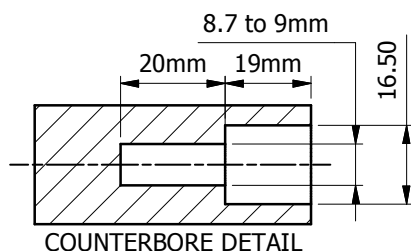


# CALDWELL

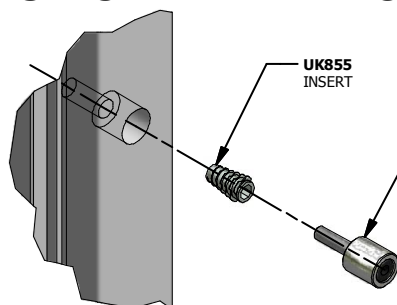
SOLUTIONS THAT SET NEW STANDARDS

Telephone 024 7643 7900

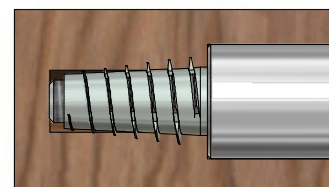
## UK646N SINGLE STAGE CALDWELL ROLLER RESTRICTOR



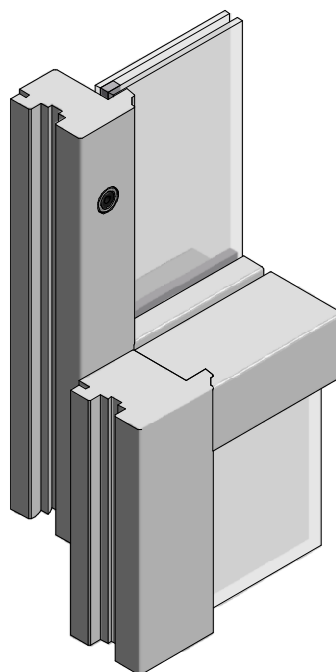
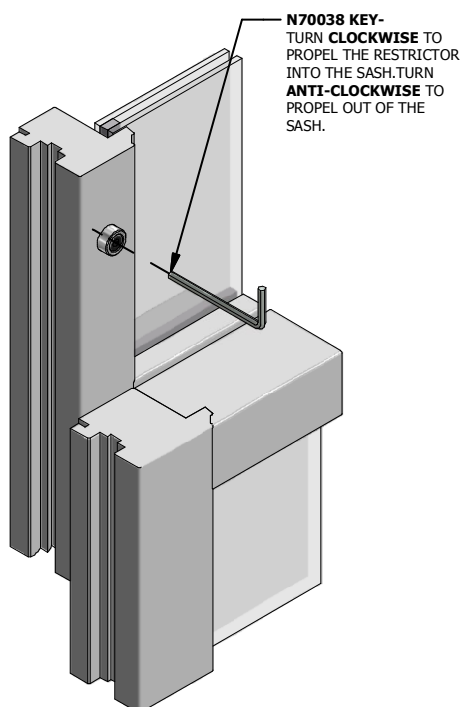
**STEP 1: DRILL THE COUNTERBORE TO THE DIMENSIONS ABOVE**



**STEP 2: SCREW IN THE UK855 INTO THE COUNTERBORE CLOCKWISE USING AN ALLEN KEY**



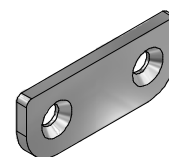
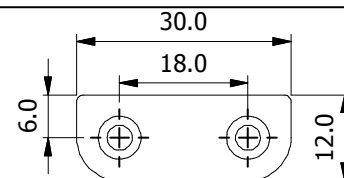
**STEP 3: SCREW IN THE UK646N USING THE 4MM A/F ALLEN KEY**



**NOTE:** IF FITTING TO PVC OR ALUMINIUM PROFILES, USE RIVET-NUTS (NOT SUPPLIED BY CALDWELL) INTO THE REINFORCEMENT, INSTEAD OF THE WOOD INSERT. IF IN ANY DOUBT, PLEASE CONTACT CALDWELL TECHNICAL DEPARTMENT.

FINISH	INDIVIDUAL RESTRICTOR	SINGLE STAGE KIT
HIPCA WHITE	UK646NHIPCAWHITE	KP1069
DAWN GOLD	UK646NDG	KP1070
CHROME	UK646NCH	KP1071
BRUSHED STAINLESS	UK646NBS	KP1072
STAINLESS STEEL	UK646NSTST	KP1073
BRASS	UK646NPB	KP1078

**EACH SINGLE STAGE KIT CONTAINS:**  
 2x UK646N Restrictors  
 2x UK855 Wood inserts  
 1x N70038 4mm A/F Allen Key



Also available for timber windows are strike plates to stop damage to the strike point on the meeting rails.

**ORDER CODES**  
POLISHED CHROME  
 UK737CH  
WHITE POWDER COAT  
 UK737HIPCAWHITE  
POLISHED GOLD  
 UK737DG

Other finishes may be available. Please contact Caldwell if you have a specific requirement.

There is also a double stage version of this restrictor available. See Datasheet-00750 for more details.

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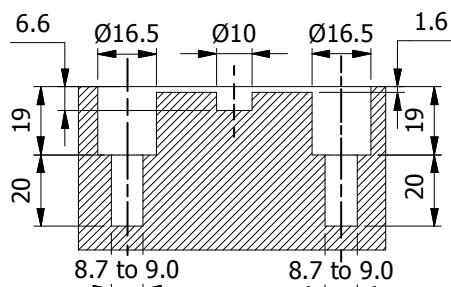
# CALDWELL

SOLUTIONS THAT SET NEW STANDARDS

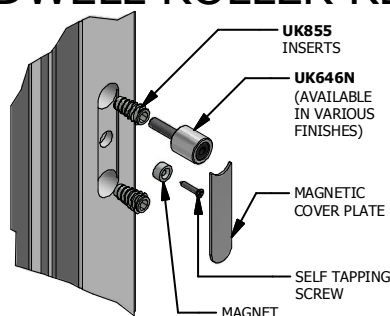
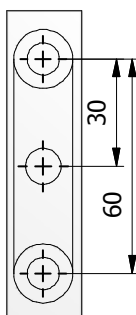
Telephone 024 7643 7900

## UK646N DOUBLE STAGE CALDWELL ROLLER RESTRICTOR

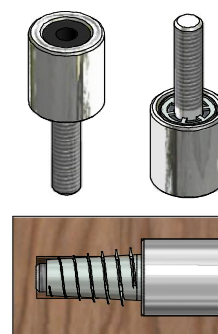
### RECOMMENDED MACHINING DETAIL



**STEP 1:** DRILL THE COUNTERBORE TO THE DIMENSIONS SHOWN



**STEP 2:** SCREW IN THE UK855 INTO THE COUNTERBORE CLOCKWISE USING THE ALLEN KEY



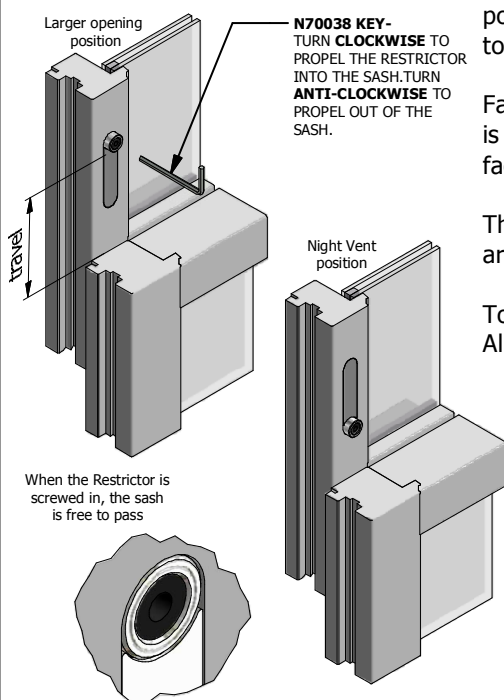
**STEP 3:** SCREW IN THE UK646N USING THE 4MM A/F ALLEN KEY

This Double Stage Restrictor allows the customer to set the position of the Stainless Steel Roller Restrictor to a 100mm sash opening (recommended). It also offers the possibility of being screwed into a night vent position, while having the cover plate to avoid unsightly fixings being on display.

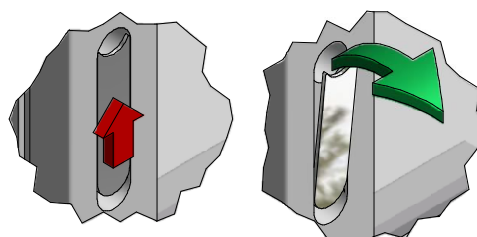
Fabricators are advised to follow the recommended routing detail shown in step 1 (it is important to add the 1.6mm recess to allow the cover plate to fit flush with the face of the sash profile).

The Stainless Steel Cover Plate is held in position by a magnet, this can be switched around, as and when required.

To rotate the position of the cover plate, remove the Roller Travel Stop using the Allen Key, slide the cover plate and pull off and place in the alternative position.



**N70038 KEY-** TURN **CLOCKWISE** TO PROPEL THE RESTRICTOR INTO THE SASH. TURN **ANTI-CLOCKWISE** TO PROPEL OUT OF THE SASH.

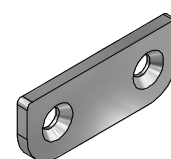
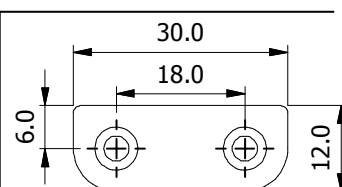


**EACH DOUBLE STAGE KIT CONTAINS:**  
 2x UK646N Restrictors  
 4x UK855 Inserts for Timber  
 2x UK854 Cover Plates  
 2x Magnets  
 2x Screws for the Magnet  
 1x N70038 4mm A/F Allen Key

FINISH	INDIVIDUAL RESTRICTOR	DOUBLE STAGE KIT
HIPCA WHITE	UK646NHIPCAWHITE	KP1074
DAWN GOLD	UK646NDG	KP1075
CHROME	UK646NCH	KP1076
BRUSHED STAINLESS	UK646NBS	KP1077
BRASS	UK646NPB	KP1079

**NOTE:** When used in a double stage setup, this restrictor is only suitable for timber profiles. If in doubt, please contact the Caldwell Technical Department. There is also a single stage version of this restrictor available. See Datasheet-00750 for more details.

Other finishes may be available. Please contact Caldwell if there is a specific requirement.



Also available for timber windows are strike plates to stop damage to the strike point on the meeting rails.

**ORDER CODES**  
POLISHED CHROME  
 UK737CH  
WHITE POWDER COAT  
 UK737HIPCAWHITE  
POLISHED GOLD  
 UK737DG

All of the information shown on this data sheet was correct at the time of issue. All information however is subject to change and therefore it is advisable to check with Caldwell Hardware to ensure that you have the latest issue level.



Telephone 024 76437900

## Cleaning Instructions for Decorative Anodised, Powder Coated & Plated finishes



The decorative finishes on Caldwell Hardware products are of a high quality. Please take care when installing, using tools and sealants etc. To keep finishes in good condition clean with a soft damp cloth only.

ON NO ACCOUNT should any household bleaches, detergents or abrasive polish etc. be used on Caldwell Hardware products.

If in doubt please contact Caldwell Hardware Technical Services department on 02476 437900.



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### **AVAILABILITY**

202 restrictor products in clear anodised finish are available on a lead-time of 10 working days.

PE633 & PE401 Restrictors in all finishes are available on a lead time of 5 working days.

For paint finishes, add a further 6 working days to the lead times given above.

### **APPLICABLE STANDARDS**

Caldwell Manufacturing operates a BSI ISO 9001:2000 accredited quality assurance system and all products supplied are controlled through the manufacturing processes by this system.

The aluminium extrusions used for the key components are produced in accordance with BS1474:1987.

The anodic coatings on the components are all carried out in accordance with BS1615:1987 and will meet the requirements of BS7412:1991 for corrosion protection levels.

### **WARRANTY DETAILS**

All vertical sliding window restrictors are supplied with a warranty of 12 months. This covers repair or replacement of products defective due to poor materials or workmanship, subject to the products being used and maintained in accordance with our guidelines.

### **MAINTENANCE**

Caldwell vertical sliding window restrictors are free from routine maintenance and when installed in accordance with our guidelines should continue to perform for many years without problems. Fixings to be tightened as required.

See page 12 for cleaning instructions for plated products.

# CALDWELL

SOLUTIONS THAT SET NEW STANDARDS

## TROUBLESHOOTING PE633 & PE401 RESTRICTOR

PROBLEM	CAUSE	SOLUTION
Sash is not restricted but restriction is required.	Restrictor not in operating position.	Release spring operated tongue using nylon key provided.
Sash is restricted but not required.	Restrictor not in closed position.	Push spring operated tongue back into restrictor and lock using nylon key.
Restrictor key breaks	Too much pressure applied to key.	New key can be ordered part ref: PE40162 (for PE401) & PE63362 (for PE633)

## TROUBLESHOOTING 202 RESTRICTOR

Restrictor cam is on the wrong side of restrictor body.	Incorrect handing of restrictor.	Fit correct hand to correct side of window. Refer to Page 9 of manual.
Keeper does not engage correctly with restrictor.	Incorrect keeper fitted.	Fit correct type of keeper. Refer to Page 7.
Logo upside down.	Restrictor fitted the wrong way round.	Check handing.
Tilting sash fouls restrictor when tilted.	Restrictor fitted incorrectly.	Fit to correct dimension. Refer to Page 9.
Restrictor fixing not secure enough.	Restrictor not fixed into reinforcement.	Ensure fixings go into reinforcement.

## TROUBLESHOOTING BAR TILT RESTRICTORS

Sash won't close after tilting once installed.	The incorrect length of bar is being used or a gap smaller than 3.5mm has been left between the sash and frame.	Order the correct length bar tilt restrictor and ensure the 3.5mm gap is maintained between the sash and frame.
The outer frame slide won't fit into the profile.	Incorrect part bar restrictor.	Order the correct bar restrictor.
Sash slide carrier stands proud of the sash stile.	Incorrect sash channel.	Order the correct sash channel.
Sash slide carrier is lower than the sash stile.	Incorrect sash channel.	Order the correct sash channel.



## VERTICAL SLIDER RESTRICTOR ORDER FORM

<b>Customer:</b>	<b>Delivery Address:</b>	<b>Date:</b>	<b>Order No.</b>
		<b>Required Delivery Date:</b>	
		<b>Contact:</b>	
		<b>Tel:</b>	<b>Fax:</b>

**Please enter the quantity required in blank boxes**

### PE633 Face Fixed Travel Restrictor

Part Ref.	Chrome	Dawn Gold	White	Brushed Stainless
PE633				

### PE633 Replacement Key

Part Ref.	Description	Qty
PE63362	Replacement Key	

### PE401 Travel Restrictor

Part Ref.	Chrome	Dawn Gold	White	Brushed Stainless
PE401 (Locking)				
PE402 (Non-Locking)				

Part Ref.	Description	Qty
PE420	Replacement Key Kit	

### 202 Travel Restrictor

Part Ref.	Silver Anodised	White
202L (Left Hand)		
202R (Right Hand)		

### 202 Travel Restrictor Keeps

Part Ref.	Silver Anodised	White
20232		
20247		
20248		
20249		
20252		
20257		
20262		
20272		
20275		

### UK646N Restrictor

UK646N single stage kit	White: KP1069	Dawn Gold: KP1070	Chrome: KP1071	Brushed Stainless: KP1072	Stainless Steel: KP1073	Polished Brass: KP1078
UK646N double stage kit	White: KP1074	Dawn Gold: KP1075	Chrome: KP1076	Brushed Stainless: KP1077	N/A	Polished Brass: KP1079
Individual UK646N	UK646NHIPCAWHITE	UK646NDG	UK646NCH	UK646NBS	UK646NSTST	UK646NPB

# CALDWELL

SOLUTIONS THAT SET NEW STANDARDS

## Standard Bar Tilt Restrictors

Part Ref.	Window System	Qty
RA150TT	Alcoa System 80, Mitre-Master & Timb-A-Tilt	
RA150RU	Clearview, Spectus, Plastmo, Rehau 719 & Rehau Heritage MK1	
RA150PP	Rehau Heritage MK2	
RA150VK	Veka Matrix	
RA150VS	Veka Martix 2007	

RA250AN	Anodil, Sapa Dualslide	
RA250TT	Alcoa System 80, Mitre-Master & Timb-A-Tilt	
RA250RU	Clearview, Spectus, Plastmo, Rehau 719 & Rehau Heritage MK1	
RA250JC	Deceuninck	
RA250RJ	Jeld Wen	
RA250AR	Arden Kinward	
RA250LB	LB Plastics Sheerframe	
RA250PP	Plus Plan, Swish & Rehau Heritage MK2	
RA250GP	Sapa	
RA250VK	Veka Matrix	
RA250WH	WHSmiths System 10	
RA250VS	Veka Matrix 2007	

RA350AN	Anodil, Sapa Dualslide	
RA350TT	Alcoa System 80, Mitre-Master & Timb-A-Tilt	
RA350RU	Clearview, Spectus, Plastmo, Rehau 719 & Rehau Heritage MK1	
RA350JC	Deceuninck	
RA350RJ	Jeld Wen	
RA350AR	Arden Kinward	
RA350LB	LB Plastics Sheerframe	
RA350PP	Plus Plan, Swish & Rehau Heritage MK2	
RA350GP	Sapa	
RA350VK	Veka Matrix	
RA350WH	WHSmiths System 10	
RA350VS	Veka Matrix 2007	

## Heavy Duty Bar Tilt Restrictors

Part Ref.	Window System	Qty
RA350TTHD	Timb-A-Tilt	
RA350ANHD	Timb-A-Tilt, Sapa Dualslide	
RA350VSHD	Veka Matrix 2007	
RA350SPHD	Spectus, Plastmo	
RA350WHHD	WHSmiths System 10	
RA350PPHD	Rehau Heritage Mk2	

Please fax your order to Caldwell Hardware - 02476 437969

**THIS ORDER IS ACCEPTED ONLY UNDER OUR CURRENT 'TERMS & CONDITIONS OF SALE' COPIES AVAILABLE UPON REQUEST.**

# AUTHORITIES



**All Caldwell products are manufactured according to BS EN ISO 9001:2008 certified Quality Management Systems.**

**Where product standards do not exist Caldwell have set in house procedures.**

**Further information on specific testing is often available from our technical department.**



**Caldwell are also members of The Council for Aluminium in Building (CAB) which brings together three existing trade associations, the Architectural Aluminium Association, The Patent Glazing Contractors Association and the Aluminium Window Association, into a unified voice.**

