CONVENTIONAL TIMBER VERTICAL SLIDING WINDOWS FABRICATORS MANUAL

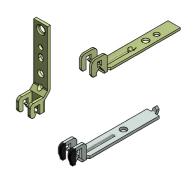
1st Edition



Cavendish Hardware Ltd.

Unit 8, Tithe Street, Leicester, LE5 4BN

Email: <u>Sales@cavendish-hardware.co.uk</u>
Web Site: <u>www.cavendish-hardware.co.uk</u>



INDEX

Key Features	1
Introduction	2
General Details	3
Balance Brackets	4
Accessories	5 6
Weatherseal Accessories	6
Brass Accessories	7
Vertical Window Travel Stops	8
Guide to Travel Stops	9
Spirex and Spiralift Balances	10
Frame and Sash Preparation	11
& Installation Instructions	
Tensioning Chart	12
Ultralift Balances Frame and	13
Sash Preparation & Installation	14
Instructions	
Torso Balances Installation	
Instructions Without Horns	15
Installation Instructions With	16
Horns	
Frame & Sash preperation when	17
using E-Balances	
202 Travel Restrictor	18
Rola VS Travel Restrictor	19
Hardware Isometric	20
Balance Order Form	21
Accessories Order Form	22
Authorities	23

KEY FEATURES

- MODERN OPERATING SYSTEM.
- PROFILE DESIGNS CAN BE DIRECTLY COPIED OR ADAPTED AS REQUIRED.
- LOWER OPERATING FORCES THAN TRADITIONAL BOX SASH.
- SPIRAL CONSTANT FORCE BALANCES.
- LOWER MANUFACTURING COSTS.
- LOWER MATERIAL COSTS.
- TRADITIONAL & MODERN HARDWARE OPTIONS AVAILABLE.
- LOW MAINTENANCE WINDOW.
- SASH RESTRICTION AVAILABLE.
- SECURITY OPTIONS AVAILABLE.

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INTRODUCTION

CONVENTIONAL TIMBER MANUAL

Conventional Timber Manual is the complete manual to give you the widest choice of hardware to enable user to produce a high performance timber vertical sliding window.

This manual is intended to give recommendations on how to prepare and assemble traditional sash windows in timber using components provided by Caldwell Hardware (UK) Ltd.

No attempt is made to design the timber mouldings for the sashes or outer frame of the window but guidance is given where dimensions are critical to the assembly or operation of the window.

Where cutting sizes or deductions are given, these should be checked for applicability to specific window designs.

In addition to providing this manual, we are pleased to advise window manufacturers on the use of components within their own window designs.

FOR FURTHER INFORMATION PLEASE CONTACT:-

CALDWELL HARDWARE (U.K.) LTD REGISTERED OFFICE & WORKS: HERALD WAY BINLEY INDUSTRIAL ESTATE COVENTRY CV3 2RQ ENGLAND Telephone: 024 7643 7900 Fax: 024 7643 7969

Web Site: www.caldwell.co.uk E-mail: sales@caldwell.co.uk

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ISSUE LEVEL 02

Page 2 of 23

GENERAL DETAILS

SPIREX - For sashes up to 13.5kg SPIRALIFT - For sashes between 13.5kg and 18kg

All of the above have a tube diameter of 13.5mm. The minimum groove size should be 18mm x 18mm. Finish: Natural aluminium as standard.

Also available in white or brown PVC-U sleeve, please mark accordingly if required.

ULTRALIFT FACTORY TENSIONED BALANCES

For sashes between 5.5kg and 27kg. With ± 1 kg on site adjustment. They have a tube diameter of 17mm. The minimum groove size should be 21mm x 21mm.

Available in white, brown or grey PVC-U sleeve, please specify colour when ordering.

TORSO FACTORY TENSIONED BALANCES

For sashes up to 50kg. Tube diameter of 19mm.
The groove size should be 21mm x 21mm.
(Specials available up to 65kg data on request. Tube diameter 25mm.
The groove size should be 27mm x 27mm)

Available in white, brown or grey PVC-U sleeve, please specify colour when ordering.

NOTE: Torso and Ultralift are factory tensioned balances pre-set to the pre-determined sash weights. Due to the nature of the product, cancellation charges will apply should the order be changed or cancelled after we have received the official order.

SASH WEIGHT CALCULATIONS

It is preferable that accurate glazed sash weights are provided when ordering, if this is not possible then we are prepared to calculate the approximate sash weights based on the information provided. We cannot accept any responsibility for goods supplied incorrectly if accurate sash weighs have not been provided.

NOTE: Balance lengths are calculated on the assumption that the fixed position of the balance is directly underneath the head. If other please state.

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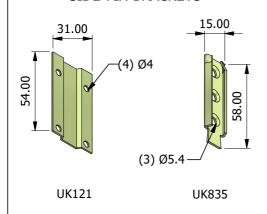


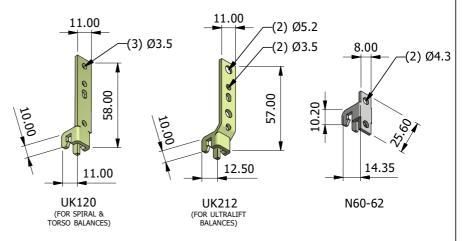
SOLUTIONS THAT SET NEW STANDARDS

Telephone 024 7643 7900

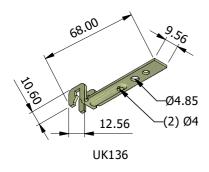
Balance Brackets CONVENTIONAL WINDOW ACCESSORIES

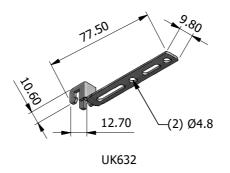
SIDE FIX BRACKETS

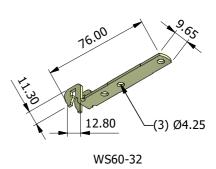




BOTTOM FIX BRACKETS

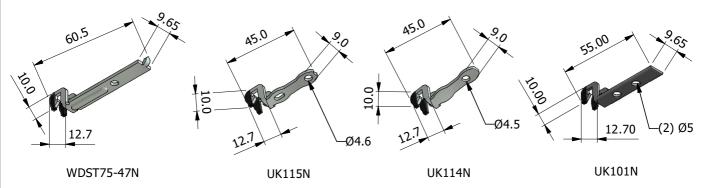






NYCLAD BRACKETS

(THESE HAVE A BLACK NYLON COATING ON THE TIP OF THE HOOK END - TO RUB ON INSIDE FACE OF JAMB TO GUIDE THE SASH)



DIMENSIONS SHOWN ARE FOR GUIDANCE PURPOSES ONLY.
PLEASE CONTACT CALDWELL IF FULL DETAIL DRAWINGS ARE REQUIRED.

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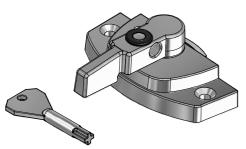
Data Sheets\DATASHT-00104



SOLUTIONS THAT SET NEW STANDARDS

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Conventional Timber VS Accessories



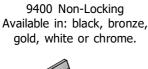
9600 Locking (9114 Key) Key supplied separately



UK230 Keeper Available in: bronze, gold, white or chrome.



With Night Vent
Available in: bronze,
gold, white or chrome.





7761 Sash Lift Available in: white, black, bronze, gold, ribco gold or chrome.



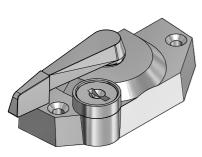
8790 Sash Lift Available in: white, black, bronze, ribco gold or chrome.



UK624 Sash Ring Available in: white, chrome or gold



UK745 Offset Sash Ring Available in: white, chrome or gold

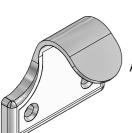


KL800 Sash Lock Key supplied with lock Available in: gold, white or chrome.

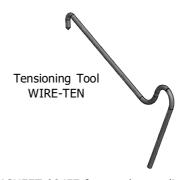




UK466 (for KL800 / NL800) UK465 (for 9600 / 9400) Sash Lock Plate Available in white



UK616 Sash Hook Available in: white, chrome or gold



BB Tensioning Tool (One per order)

Please see DATASHEET 00457 for weather sealing accessories

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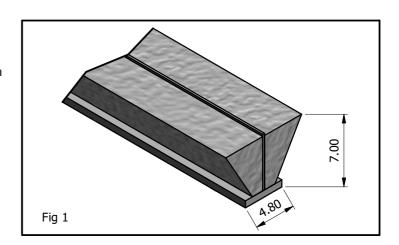
WEATHERSEAL ACCESSORIES

Brush Pile

A high quality brush pile with a central weather fin manufactured from polypropylene giving low friction properties and offering additional weather performance and sealing characteristics. The pile can either be used in the following three ways:-

- 1) Fitted directly to grooves in pvc or aluminum profiles,
- 2) fitted to the timb-a-tilt jamb liner (timb-a-tilt only) or
- 3) fitted to the brush pile holder as detailed below (for both conventional or timb-a-tilt windows).

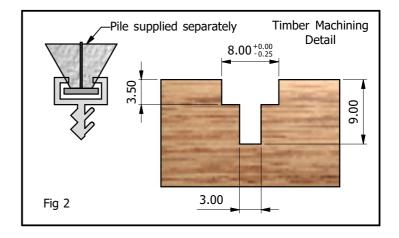
Pile base width: 4.8mm
Pile height: 7mm
Caldwell Part No: UK687



Brush Pile Holder

A brush pile holder suitable for brush piles with a 4.8mm base width. The holder is manufactured from rigid pvc and is available in both white or brown and simply pushes into a 'T' slot when machined in timber profiles (see fig 2).

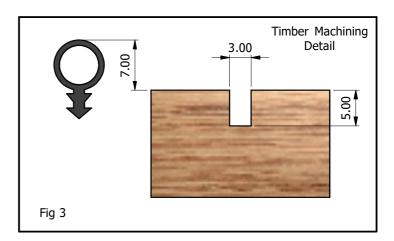
Caldwell Part No. UK688



Bubble Seal

A 7mm diameter rubber bubble seal for horizontal sealing of top & bottom sashes on vertical sliding windows. Seal simply pushes into a 3mm x 5mm groove when machined in timber profiles (see fig 3).

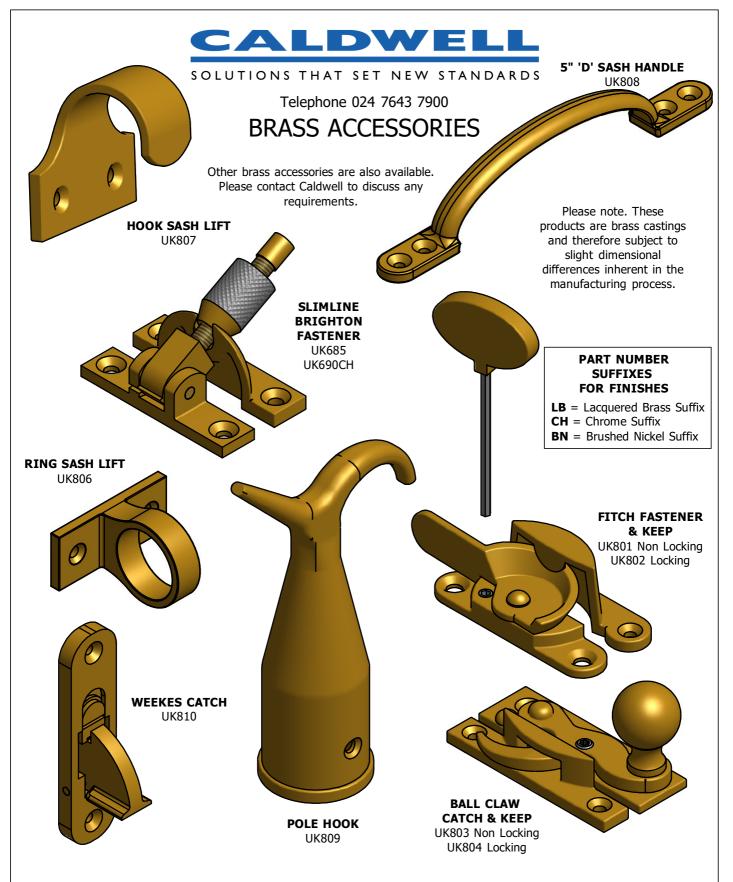
Caldwell Part No. UK689



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Published on 01/08/2016 at 10:49:26 Page 6 of 23



Caldwell's range of brass hardware is supplied in a lacquered finish. If this is to be used externally then it should be waxed weekly to protect the lacquered finish. Over time, and subject to the environment it operates within plus the type of use it undergoes, the lacquer coating will be eroded. When the lacquer coating is no longer present then the brass surface will need to be maintained with a propriety brass cleaner on a regular basis to maintain appearance and prevent visible corrosion.

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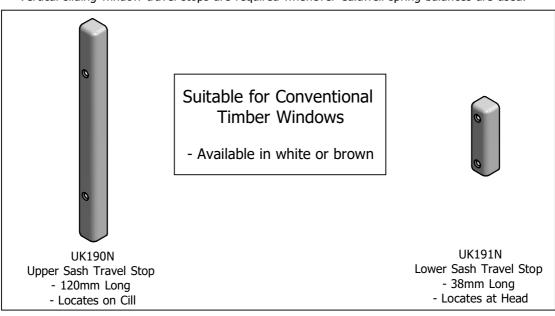
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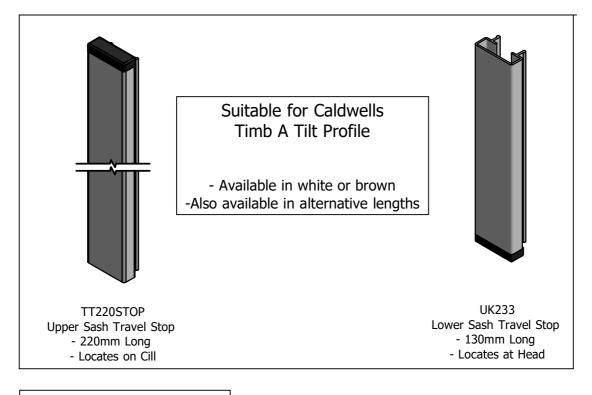


Telephone 024 7643 7900

Caldwell Vertical Sliding Window Travel Stops

Vertical sliding window travel stops are required whenever Caldwell spring balances are used.





DO NOT OPERATE THE WINDOW UNTIL THE UPPER AND LOWER TRAVEL STOPS ARE FITTED For further information on travel stops, please request a copy of DATASHT-00332 guide to travel stops

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Guide To Travel Stops

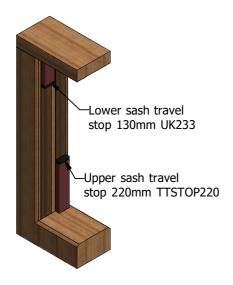
Travel stops are essential whenever spring balances are in use. Travel stops ensure that the spring balances do not become damaged or prematurely worn. Travel stops are required at both the top of the window & at the bottom.

Travel stops are available from most of the major window system companies and these are usually profile specifiic. 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 and 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, again 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.

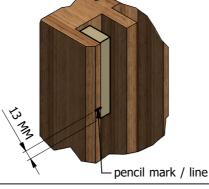
For further information, please contact Caldwell Technical Department.

CONVENTIONAL TIMBER SYSTEM TRAVEL STOPS

On a conventional timber system, a UK190N-Upper Sash Travel Stop and a UK191N-lower Sash Travel Stop can be used (see datasheet 00333). NOTE: If the UK190N & UK191N are used, they need to be positioned correctly to limit travel adequately (method shown below). Alternatively, a block of timber cut to length can be used. All stops should be fitted as described below.

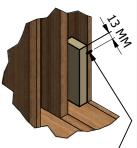
Carefully lift the lower sash until resistance is felt i.e. the balance is fully retracted. Pencil mark one jamb in line with the top of the sash.

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.



pencil mark / line -

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FRAME AND SASH PREPARATION FOR TIMBER WINDOWS

SPIREX & SPIRALIFT BALANCES

(i) MACHINED SASH METHOD

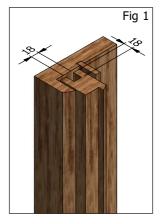


Fig 1: Sash groove dimensions

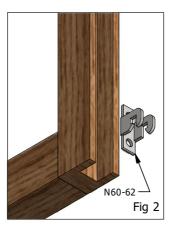


Fig 2: Side fix options

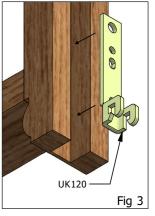


Fig 3: Side fix to horn.

When fixing ALWAYS

put screws through

at least the top

and bottom holes.

(ii) MACHINED FRAME METHOD

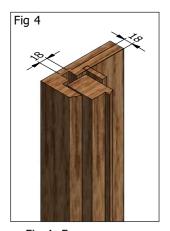


Fig 4: Frame groove dimensions

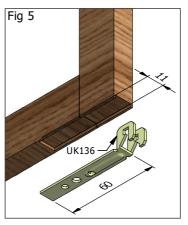


Fig 5: Bottom fix.

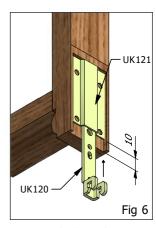


Fig 6: Side fix to horn with sliding bracket facility sink UK121 in unitl it is flush.

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INSTALLATION PROCEDURE

SPIREX & SPIRALIFT BALANCES

IMPORTANT PLEASE REFER TO PAGES 8 & 9 OF THIS MANUAL FOR TRAVEL STOP INFORMATION. PLEASE READ BEFORE INSTALLING BALANCES.



Fig 1: Load balances into outer frame before installing sashes, then load the sash into the frame. If window is already installed see Fig 1A.

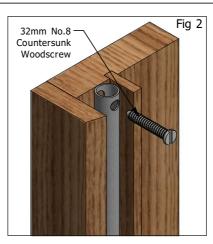


Fig 2: Do not over tighten the top screw as this will distort the balance tube and reduce it's efficiency.



Fig 1A: If window is already installed. Fully lower the sash before attempting to insert the balance into the machined groove in the sash or frame.

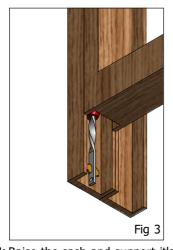


Fig 3: Raise the sash and support it's weight on a suitable strut.

Unhook and clear the spiral rod of its fixing bracket. Lower the rod by up to a maximum of 50mm.

Should the rod extend out of the

Should the rod extend out of the balance by more than 50mm, gently push the rod back into the balance, allowing it to rotate freely.



Fig 4: Apply tension clockwise, using a hook tensioning tool. Check the Balance Tensioning Chart on page 9 for the correct number of turns.

WARNING: do not move the sashes fully up or down until limit stops have been fitted as below.

Limit stops must be fitted for both upper and lower sashes. They should be of adequate length to prevent over extending of the balance spiral rod

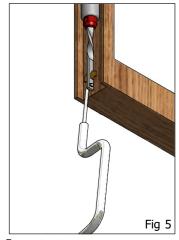


Fig 5: Latch the cross pin into the bracket seat and remove the tension tool.

Finally check for a smooth operation of the sash.

THE SPIRAL ROD OR BALANCE TUBE SHOULD NOT BE DISTORTED IN ANY WAY DURING INSTALLATION.

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Tensioning Chart for Spiral Balances

REGULAR ALUMATILT & SPIREX

BALA LENG	STH	203	228	254	279	305	330	326	381	406	432	457	483	208	3	529		610	635	099	989	711	737	762	787	813	838	864	688	914	940		166	1010	tί	106/		1110	11,60				
INC		8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38 3	9 4	10 4	41	42	43	44	45 4	46	47	48	
3 6 9 12 15 18 21 24 27 30	1 2 3 4 5 6 7 8 9 10 11 12 13 13.5	3 2 3 2 2½ 3½ 4 4½ 5½ 6	4 / ₂ 4½ 5 6	3 3 3½ 4½ 5 5½	3 4 3 3½ 4½ 5 6	2½ 3½ 4½ 3½ 4½ 3 4 4½ 5 6	1½ 2½ 4 5 4 5 3½ 4½ 5 5 5 5½ 6 6 6½ 7	5 4 5 3½	3 4½ 5½ 4½ 5 3½ 4½ 5	2 3 4½ 5½ 4½ 5 3½ 4½ 5 5 5½	3½ 5 6 4 5½ 4 5 5 6 6½ 7 7½	2½ 4 5 6 4½ 5½ 4½ 5½ 6 6½ 7½ 8	3 4½ 5½ 6½ 4½ 5 5 5½ 6½ 7 8½	3 5 6 7 5 6 5 6 6½ 7 7 7 9½ 10	3 5 6½ 7½ 5½ 6 5½ 7 8 8½ 9½	3 5½ 6½ 7½ 5½ 6 7 8½ 9½ 11 11½	2½ 3½ 4½ 5½ 6½ 7½ 9 10 6½ 7½	2½ 3½ 4½ 5½ 6½ 5 6½ 7½ 9 10 6½ 7½	2½ 3½ 4½ 5½ 7 5½ 7 8 9	2½ 3½ 5 6 7 5½ 7 8 9 ±10½ 7	2½ 3½ 5 6 7 6 7½ 8½ 9½ 11 7½ 8	3 4 5 6 7½ 6 7½ 8½ 9½ 11 7½ 8½	3 4 5½ 6½ 7½ 6½ 8	3 4 6 7 8 8 9 9 9 1 1/2 8 9	3 4 6½ 7½ 8½ 7 8½ 9 10 11½ 8½ 9½	3 4 6½ 7½ 8½ 7 8½ 9 10 11½ 8½ 9½	2 3 3½ 4½ 5½ 6 8 9 8 8½ 8½ 9	2 3 4 5 6 7 8½ 9½ 8 8½ 9	2 3½ 4½ 6 7 8 9 10½ 8 8½ 9	3½ 4½ 6 7 8 9 10½ 8 8½ 9	5 6½ 7½ 8½ 9½ 11 8½ 9 9½	5 6½ 8 8 9 9½ 1 11 1	5 7 7 8 8 9 0 11 1 9 0 12 9 0 14 9	7 3½ { 3½ { 10 1 1½1 9 1½ : 1½1 1½1	0½ 1½ 9 10 1½ 12 3½	10½ 11½ 9½ 10½	10½ 9½ 10½ 12 12½ 14	6 7½ 9 10 11 12 9½ 11 12	6 8 9½ 9 110 1 111 1 111 1 112 1 113 1	6 (8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	6½ 8½ 9½ 0½ 1½ 2½ 1½ 1½ 13	7 9 10 11 12 13 11 12 13 13 13 13 13 12	WHITE COUPLING
SASH WEIGHT Ibs	WEIGH kg											<u>UL</u>	<u> </u>	<u> </u>	1110												<u> </u>						11.	, 	, , , , , , , , , , , , , , , , , , , 		<u> </u>						

HEAVY DUTY ALUMATILT & SPIRALIFT

	ANCE GTH m	432	457	483	208	533	559	584	610	635	099	989	711	737	762	787	813	838	864	688	914	940	965	991	1016	1041	1067	1092	1118	1143	1169	1194	1220
INC	HES	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
30	14	2	21/2	3	31/2	4	41/2	5	51/2	51/2	6	6	61/2	7	71/2	8	8	81/2	81/2	9	9	91/2	91/2	10	10	10½	11	11	12	121/2	13	131/2	14
33	15	2	21/2	3	31/2	41/2	5	51/2	6	6	7	71/2	71/2	8	81/2	9	9	91/2	10	10	101/2	11	111/2	111/2	12	12	12½	13	131/2	14	141/2	141/2	15
36	16	3	31/2	4	41/2	5	51/2	6	6	61/2	7	8	81/2	9	91/2	10	10½	11	11	11	111/2	12	121/2	121/2	13	13	13	131/2	131/2	14	141/2	15	151/2
	17	4	41/2	5	51/2	6	61/2	7	7	71/2	8	81/2	9	91/2	10	11	111/2	12	12	121/2	121/2	13	13	131/2	131/2	14	14	141/2	15	15	15½	16	16
40	18	5	51/2	6	61/2	7	71/2	8	8	81/2	9	9	91/2	10	101/2	11	111/2	12	121/2	13	131/2	14	141/2	15	15	15	151/2	151/2	16	16	161/2	17	17
SASH WEIGHT	GHT														BLA	CK (COUF	PLIN	G														
\s\ \(\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	WEIGH kg																																

To establish spring colour and tension turns required:

Find appropriate balance length and read down until it coincides with required sash weight. That figure is the number of tension turns and the colour is that of the coupling required.

For sashes over 40lbs (18kg) refer to Ultralift or Torso information sheets.

Note: Tensioning chart is for guidance purposes only.

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FRAME AND SASH PREPARATION FOR TIMBER WINDOWS

ULTRALIFT BALANCES

(i) MACHINED SASH METHOD

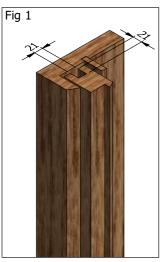


Fig 1: Sash groove dimensions.

LOWER SASH

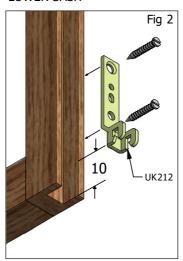


Fig 2: The bottom edge of the UK212 bracket must be 10mm up from the bottom of the sash.

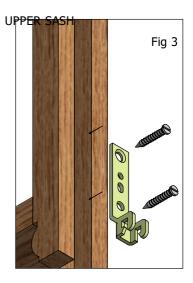


Fig 3: The bottom edge of the UK212 bracket must be level with the bottom of the sash or horn depending on which is applicable.

(ii) MACHINED FRAME METHOD

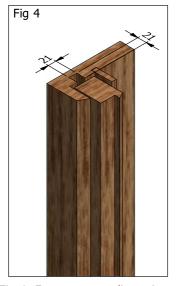


Fig 4: Frame groove dimensions.

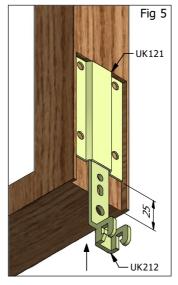


Fig 5: The bottom edge of the UK121 bracket must ne 25mm up from the bottom of the sash.

Always fix through all four fixing holes.

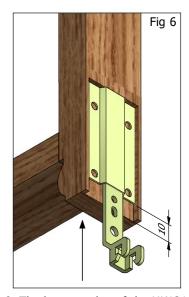


Fig 6: The bottom edge of the UK121 bracket must be 10mm up from the sash or horn depending on which is applicable.

NOTE: If using the UK835 bracket instead of the UK121, the same guidelines apply apart from the routing width, which can be reduced (to 16mm).

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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INSTALLATION PROCEDURE

ULTRALIFT BALANCES

IMPORTANT PLEASE REFER TO PAGES 8 & 9 OF THIS MANUAL FOR TRAVEL STOP INFORMATION. PLEASE READ BEFORE INSTALLING BALANCES.



Fig 1: Load balances into outer frame before installing sashes, then load the sash into the frame. If window is already installed, see Fig 1A.



Fig 1A: Fully lower the sash before inserting the balance into the machined groove in the sash or frame.

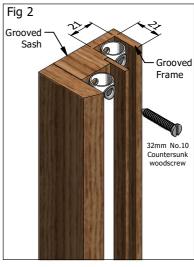


Fig 2: The balance should be fixed directly under the head.

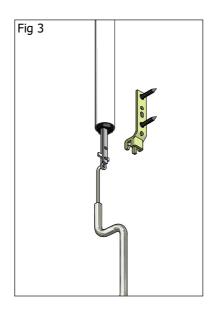
Do not overtighten the fixing

Fig 3: ATTACHING TO SASH When both the upper and lower balances are installed the UK201 can be located within the UK212 bracket as follows:-

UPPER SASH

With the sash in the closed position, supported on a suitable strut. Locate the tensioning tool into the eye at the bottom of the balance. Pul down and locate into the UK212 bracket.

Do not allow the rod to rotate as this will result in loss of tension.



LOWER SASH

Raise the sash into the open position without the upper stops fitted and support on a suitable strut.

The UK201 should now be below the sash.

Attach the tensioning tool, locate the UK201 into the UK212 bracket.

Do not allow the rod to rotate as this will result in loss of tension.

THE SPIRAL ROD OR BALANCE TUBE SHOULD NOT BE DISTORTED IN ANYWAY DURING INSTALLATION.

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U:\APPROVED MANUALS\MAN-0003\MAN-0003-11

INSTALLATION PROCEDURE TIMBER WINDOWS WITHOUT HORNS

TORSO BALANCES

NOTE PLEASE REFER TO PAGES 8 & 9 OF THIS MANUAL FOR TRAVEL STOP INFORMATION. PLEASE READ BEFORE INSTALLING BALANCES.



Fig 1: Load balances into outer frame before installing sashes, then load the sash into the frame. If window is already installed, see Fig 1A.



Fig 1A: Fully lower the sash before inserting the balance into the machined groove in the sash or frame.

During this opmation the balance must not be distorted in any way

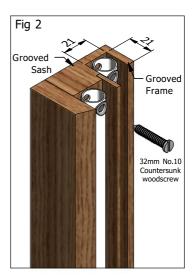


Fig 2: The balance should be fixed directly under the head.

Do not overtighten the fixing screw.

FIXING METHOD FOR THE UNDERSIDE OF SASHES

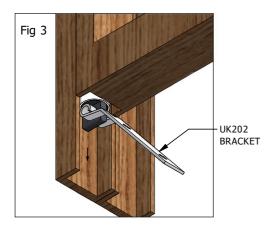


Fig 3: Fully raise the sash and support on a suitable strut. The pull down the sash bracket and lay on the underside of the sash.

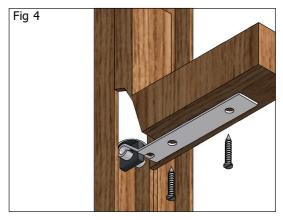


Fig 4: Fix the sash using two woodscrews (18mm minimum penetration) through the holes in the bracket.

(SEE PAGE 13 FOR FIXING TO THE HORN)

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INSTALLATION PROCEDURE TIMBER WINDOWS WITH HORNS

TORSO BALANCES

FITTING UPPER SASH BALANCES TO SASHES WITH HORNS

MACHINED SASH METHOD

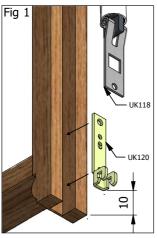


Fig 1: The UK120 bracket should be fitted so that the bottom edge is 10mm above the bottom of the horn. The top and bottom holes in the UK120 bracket must be used to prevent the bracket bending. (Penetration of screws to be 10mm minimum)

Groove sizes 21mm x 21mm



Fig 2: The UK118 bracket is then pulled down and the square hole located over the jaws on the UK120 bracket. The tension on the balance spring will hold the balance bracket in place. No screws should be fixed through the UK118 bracket.

MACHINED FRAME METHOD

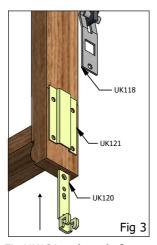


Fig 3: Fix UK121 to horn before sash is in place (Penetration of screws shoould be 10mm minimum). When sash is fitted, UK120 is slid into UK121 as shown, and it's bottom edge should be 10mm above the bottom of the horn.

Groove sizes 21mm x 21mm

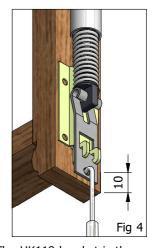


Fig 4: The UK118 bracket is then pulled down and the square hole located over the jaws on the UK120 bracket. The tension on the balance spring will hold the balance bracket in place. No screws should be fixed through the UK118 bracket.

DO NOT OPERATE THE WINDOW UNTIL THE TRAVEL STOPS ARE FITTED INTO POSITION. (SEE PAGES 8 & 9)

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LOTIONS THAT SET NEW STANDAR

Telephone 024 7643 7900

FRAME AND SASH PREPARATION OF TIMBER WINDOWS TORSO E-BALANCES

Applications

Torso E-Balances are suitable to be used in Non-tilting VS Windows. These balances have a tube diameter of 25mm, which require a larger rebate detail to accept them. Torso E-Balances have a higher weight band, ranging from 50.5KG - 65.0KG. Caldwell Hardware recommend sashes to be a **MAXIMUM OF 35.0kg** when tilting, Anything above that weight is at the customers discretion.

(i) Machined Frame Method- Groove sizes 30mm x 30mm

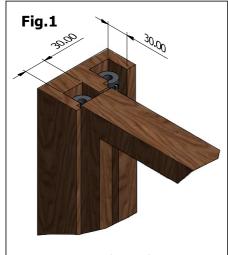


Fig.1 Frame rebate dimensions

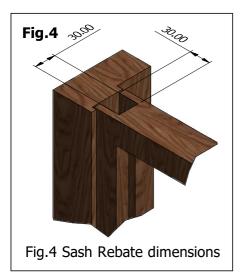


Fully raise the sash and support with suitable blocks. Pull down the fixing bracket flush to the underside as shown



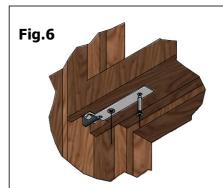
Method for fixing E-Balance to sashes without Horns

(ii) Machined Sash Method- Groove sizes 30mm x 30mm





Raise the sash fully to the head and support with suitable blocks.
Align the UK202 bracket with the underside of the sash and ensure it is sitting flush.



Fix the sash using two woodscrews (18mm Minimum penetration) through the holes in the bracket as shown.

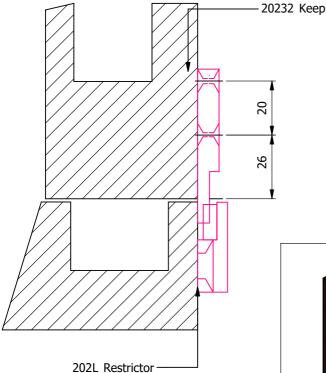
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DATASHT-00553 ISSUE LEVEL 01

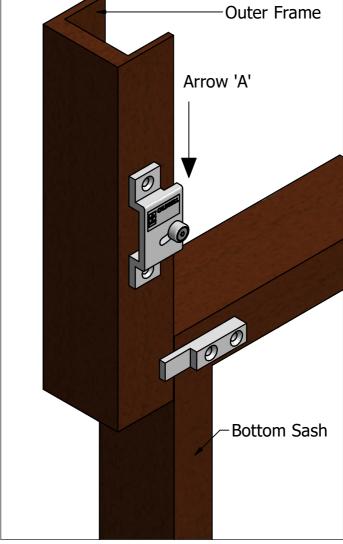
Published on 01/08/2016 at 10:49:28 Page 17 of 23

202 TRAVEL RESTRICTOR

PLAN VIEW on Arrow 'A'



ISOMETRIC VIEW



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.

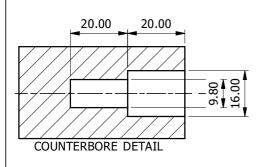
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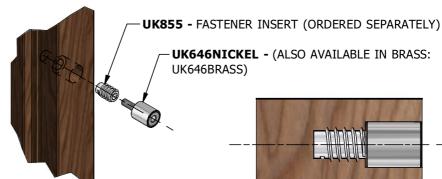


SOLUTIONS THAT SET NEW STANDARDS

Telephone 024 7643 7900

UK646 ROLA VS TRAVEL RESTRICTOR FITTING DETAILS





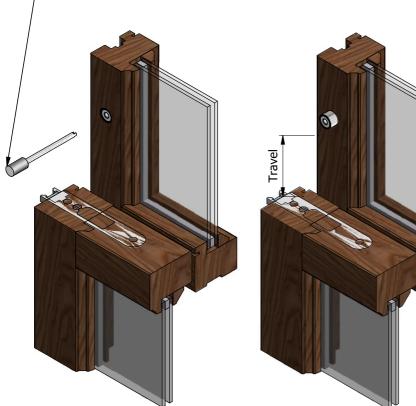
STEP 1: DRILL THE COUNTERBORE TO THE DIMENSIONS ABOVE

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

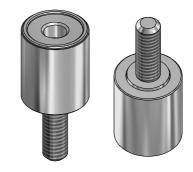
STEP 3: SCREW IN THE UK646 BY HAND

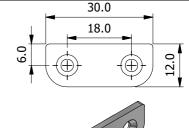


TURN CLOCKWISE TO PROPEL THE RESTRICTOR INTO THE SASH. TURN ANTI-CLOCKWISE TO PROPEL OUT OF THE SASH.











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 WHITE POWDER COAT UK737HIPCAWHITE POLISHED GOLD UK737DG

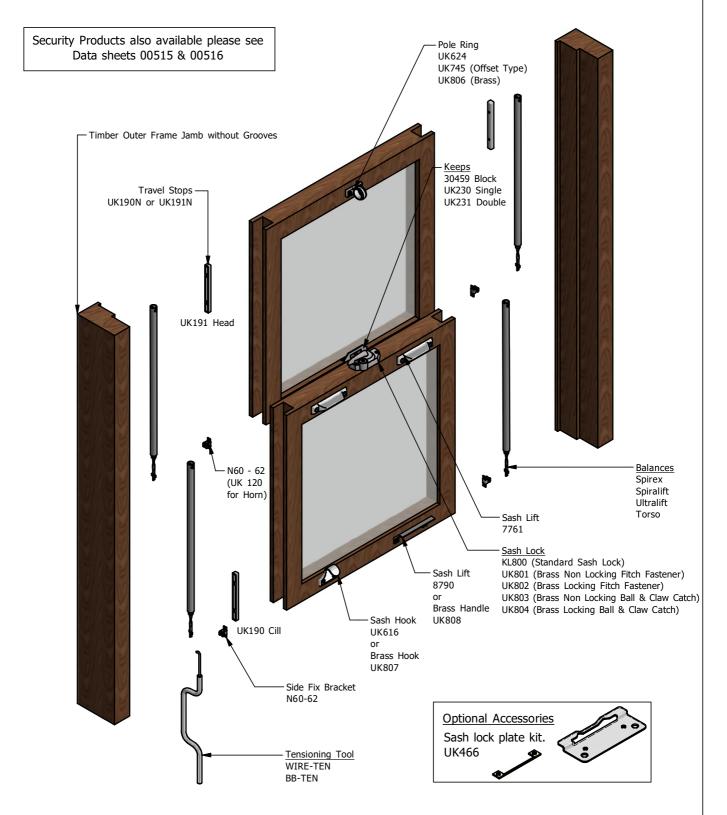
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DATASHT REF. 00654 **ISSUE LEVEL 02**

Published on 01/08/2016 at 10:49:28



Conventional Timber Vertical Sliders



NB Other balance fixing brackets are available as per DATASHT-00104 (Page 4)

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CAD REF\ACAD\DATA-SHEETS\DATASHT-00892



CONVENTIONAL TIMBER VS BALANCE ORDER FORM

PLEASE SEND TO CALDWELL HARDWARE VIA EMAIL: SALES@CALDWELL.CO.UK OR FAX: 024 7643 7969

CUSTOMER	DETAILS	
COSTOMER	DETAILS	

Order No.

Contact:

Delivery Date:

Tel. No.

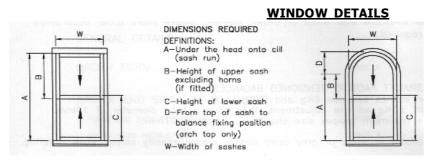
Fax No.

Georgian Bars ((Plant on type)	YES	NO	UPPER sash	VERT.		HORIZ.						
(If yes, specify no. horize	ontal & no. vertical Bars)			LOWER sash	VERT.		HORIZ.						
Pre-tensioned	balances only	YES	S		NO								
Torso bala	nces only	YES	S		NO								
Type of	f wood	Softwo	ood		Hardwood								
Arched Top Sash	Arched Top Sash Balances housed in Outer Frame OR Balances housed in Sash												
THIS ORDER FORM MUST ONLY BE USED WHEN ORDERING SASH BALANCES													
FOR US	E WITH CONVENTIONAL T	IMBER	VER	TICAL SLIDING	WINDOWS	S							

Ref.	QUANTITY OF WINDOWS	DIM "W" (mm)	DIM "A" (mm)	DIM "B" (mm)	DIM "C" (mm)	DIM "D" (mm)	SIZE OF HORN	GEORGIAN BARS (Tick)	GLAZING CONFIG. eg. 6-12-6	D SASH HT (kg)
										UPPER
										LOWER
										UPPER
										LOWER
										UPPER
										LOWER
										UPPER
										LOWER
										UPPER
										LOWER

White Tubes White travel Stops Brown Tubes Brown Travel Stops	
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		Qty		Qty		Qty		Qty
Side Fix Brackets	UK121		UK120		UK212		UK835	
Bottom Fix Brackets	UK136		UK632		WS60-32			
Nyclad Brackets	WDST75-47		UK115N		UK114N		UK101N	



NOTE: Sash weights are based on 50mm square profile in softwood unless otherwise stated.

For accuracy it is preferable that you provide a fully glazed sash weight.

We cannot accept responsibility for goods supplied incorrectly if accurate sash weights have not been provided.

PLEASE REQUEST DATA SHEET 00363 FOR WINDOW DIMENSION TERMINOLOGY

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

K:\Technical Services\Order Forms\Systems\Conventional Timber\OF071 Conventional Timber VS Balance

ISSUE 9



CONVENTIONAL TIMBER ACCESSORIES ORDER FORM TO: CALDWELL HARDWARE FAX: 024 7643 7969

CUSTOMER: ORDER No:

Please enter quantity required in boxes:

BALANCE TENSIONING TOOLS

Wire-Ten Tensioning Tool	BB Tensioning Tool	

SASH LOCKS

9600	White	Chrome	Dawn Gold	Legrand Gold	Brushed Stainless	Black	Bronze	
Key for 9 9114	9600 -							
9400	White	Chrome	Dawn Gold	Legrand Gold	Brushed Stainless	Black	Bronze	
KL800	White	Chrome	Dawn Gold	Legrand Gold	Brushed Stainless			
NL800	White	Chrome	Dawn Gold	Legrand Gold	Brushed Stainless			

KEEPERS

UK230	Bronze	Chrome	Dawn Gold	White	Brushed Stainless	
UK231	Bronze	Chrome	Dawn Gold	White	Brushed Stainless	
30459	Chrome	Dawn Gold	Legrand Gold	White	Brushed Stainless	

SASH LOCK PLATE

UK465	White		UK466	White	
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SASH LIFTS & POLE RINGS

7761	White		Chr	rome		Dawn Gold		Legrand Gold		Brus Stair	hed nless	Black		Bronze	
8970	White		Chr	rome		Dawn Gold		Legrand Gold		Brus Stair	hed nless	Black		Bronze	
UK184 Black				Whit	е										
UK616	UK616 Chrome			Dawn Gold			Legrand Gold			White	Brus	hed Sta	inless		
UK624	UK624 Chrome			Dawi	vn Gold		Legrand	Gold		White	Brus	hed Sta	inless		
UK745 Chrome			Dawn Gold			Legrand Gold			White	Brus	hed Sta	inless			

BRASS HARDWARE

	UK807	UK685	UK806	UK810	UK809	UK808	UK801	UK802	UK803	UK804
Lacquered Brass (LB)										
Chrome (CH)										
Brushed Nickel (BN)										

RESTRICTORS

PE401	Chrome	Dawn Gold	White	Brushed Stainless	
PE633	Chrome	Dawn Gold	White	Brushed Stainless	
202R	White	Silver Anodised			
202L	White	Silver Anodised			
20232	White	Silver Anodised			

BRUSH PILE – UK687

10 METRES	100 METRES	550 METRES	

BRUSH PILE HOLDER – UK688

10 x 1 METRE STRIPS (WHITE)	100 x 2.9 METRE STRIPS (WHITE)	
10 x 1 METRE STRIPS (BROWN)	100 x 2.9 METRE STRIPS (BROWN)	

BUBBLE SEAL – UK689

10 METRES		100 METERS		l
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Issue 11

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.

