

HEAVY DUTY PARALLEL
ULTRASTAY REINFORCED
2.5MM LINK ARMS



IT IS THE RESPONSIBILITY OF THE WINDOW MANUFACTURER TO ENSURE THAT THE FINISHED WINDOW MEETS THE REQUIRED SAFETY AND PERFORMANCE SPECIFICATIONS
Cotswold Architectural Products Ltd, Manor Park Industrial Estate, Manor Park Road, Cheltenham, Gloucestershire, GL51 9SQ
Tel +44 (0) 1242 233993, Sales +44 (0) 1242 264426, Email: info@cotswold-windows.co.uk, Web: www.cotswold-windows.co.uk

HEAVY DUTY PARALLEL ULTRASTAY 2.5MM REINFORCED LINK ARMS

A high performance parallel opening hinge range for curtain walled and structurally glazed buildings.



PARALLEL OPENING HINGE FOR BOTH COMMERCIAL **AND DOMESTIC APPLICATIONS**

- Parallel opening windows provide ultimate natural ventilation by allowing air flow around the entire opening.
- Can be used for smoke evacuation vents.
- Can be connected to a building management system as part of an automated solution for climate control.
- Can be operated manually or using electric actuators.
- Hinge mechanism is fully concealed when sash is closed.
- Tested to operate for 25,000 cycles.
- Manufactured from high grade Austenitic stainless steel for maximum performance even in the most corrosive environments.
- Unique linked arm design to provide stability and smooth operation
- 10 year warranty.

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VENT SIZE AND WEIGHT CHART

PRODUCT	MAX VENT WEIGHT	MAX VENT HEIGHT	MAX VENT WIDTH	DISTANCE OPENING	CAVITY
11" PARALLEL	25 Kg	750 mm	350 mm	95 mm	16.9 –1.0 mm or 21.0—1.0 mm
18" PARALLEL	100 Kg	1000 mm	1200 mm	180 mm	16.9 –1.0 mm or 21.0—1.0 mm
36" PARALLEL	200 Kg (motorised)	2000 mm	2000 mm	180 mm	16.9 –1.0 mm or 21.0—1.0 mm

NOTES:

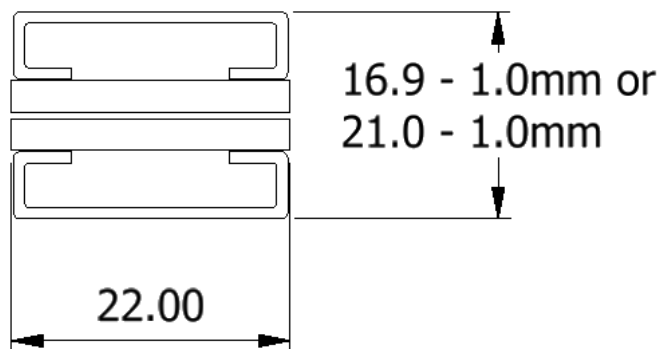
- We recommend a minimum of 4 parallel stays per window.
- Vent height and width is measured form rebate to rebate (not overall size or outer frame size), on conventionally glazed systems, for structurally glazed systems this is the minimum distance required to fit the hinge.
- The above table is for guidance only, please contact Cotswold for advice regarding specific hardware specifications.
- Two operating handles to be positioned centrally, one on each side unless agreed and specified by Cotswold on manually operated windows
- Opening distance is the movement measured from the closed position to the recommended open position for the type of operation stated.

PRODUCT CODE	DESCRIPTION
PARUL11 17MM	11" PARALLEL ULTRA 17MM STACK HEIGHT (RH / LH) PAIR
PARUL11 21MM	11" PARALLEL ULTRA 21MM STACK HEIGHT (RH / LH) PAIR
PARUL18 17MM	18" PARALLEL ULTRA 17MM STACK HEIGHT (RH / LH) PAIR
PARUL18 21MM	18" PARALLEL ULTRA 21MM STACK HEIGHT (RH / LH) PAIR
PARUL36 17MM	36" PARALLEL ULTRA 17MM STACK HEIGHT (RH / LH) PAIR
PARUL36 21MM	36" PARALLEL ULTRA 21MM STACK HEIGHT (RH / LH) PAIR

FITTING INSTRUCTIONS

Position and Clearances

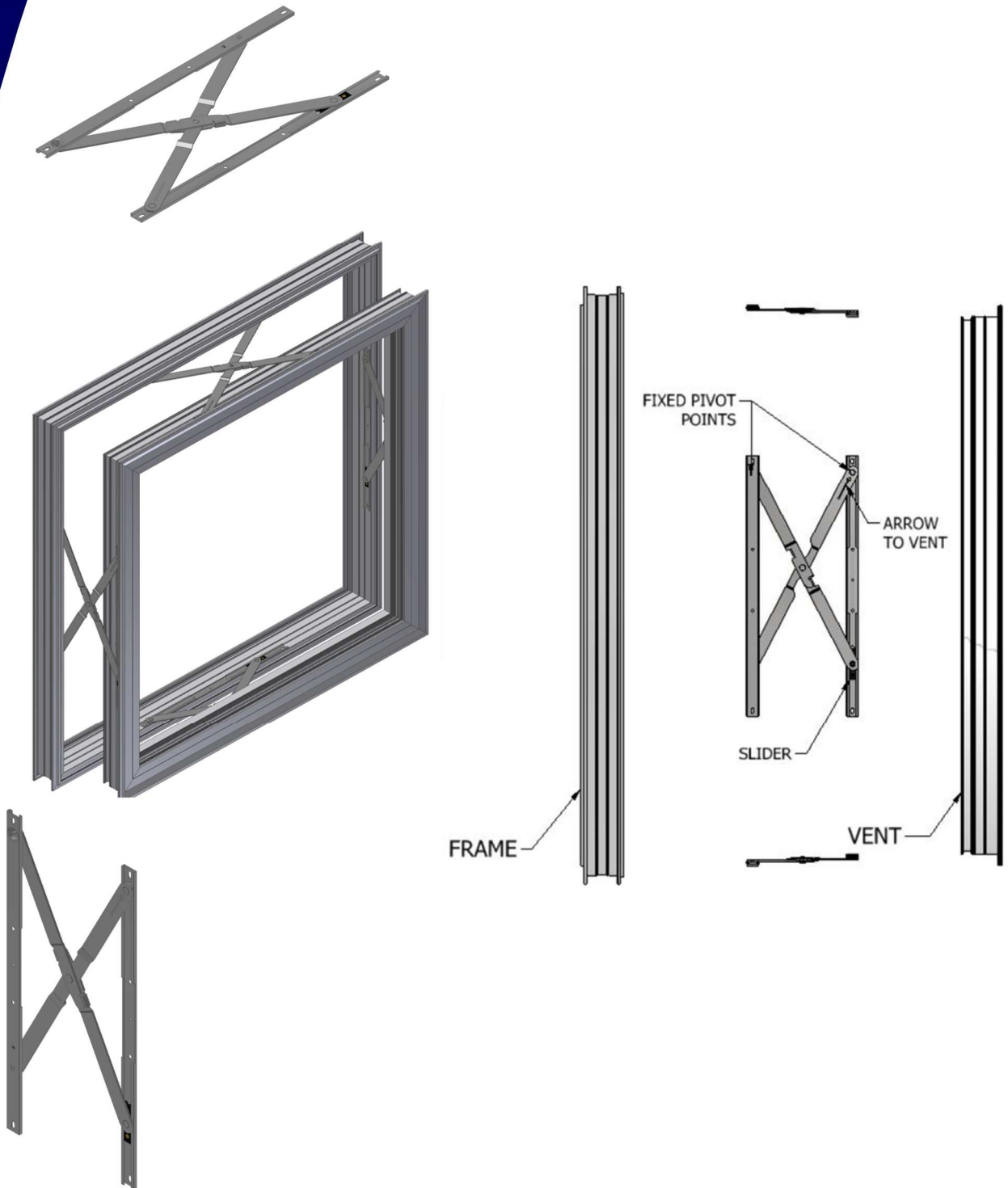
- The parallel stays are designed to be fitted between two flat and parallel rigid faces that conform to the measurements shown below.
- Each stay should be fitted with the vent track parallel to the vent profile and the frame track parallel to the frame profile.
- Any sash and frame up stands must be within the maximum dimensions shown below.



HARDWARE LAYOUT

- The side mounted hinges should be fitted with the fixed pivots to the top and the Fixed pivot of the split arm should be to the inside, as shown on the next page.
- Check that the sash and frame profiles used are compatible with Cotswold Parallel Stays, and in particular that the sash/frame clearance is between 16.9mm—1.0mm or 21.0mm—1.0mm
- Establish the position of the vertical axis along which the parallel stay will be positioned, so as to ensure the correct alignment of the sash when closed. This depends on the type of profile used.
- Based on the dimensions (height and width in mm) and weight (kgs) of the sash, establish the configuration you require from the selection guide found in the Specification Sheets section in this manual.
- In the event of sash dimensions and weights being at the upper limit, select the superior size. Never fit any stays to a sash if dimensions and weights are beyond the recommended maximums.
- On manually operated vents use the two operating handles mounted centrally on the vertical sides of the vent, max width should be determined by practicality and ease of use. Otherwise contact Cotswold.
- Parallel hinges do not provide weather sealing, if the window is manually operated this should be provided by a separate perimeter lock. If the window is motor operated this can be provided by either the motors or a synchronized motor operating a separate perimeter lock.

HARDWARE LAYOUT



IT IS THE RESPONSIBILITY OF THE WINDOW MANUFACTURER TO ENSURE THAT THE FINISHED WINDOW MEETS THE REQUIRED SAFETY AND PERFORMANCE SPECIFICATIONS
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INSTALLATION

Parallel Stays

- All Frame fixing holes should be pre-drilled, referring to the screw hole positions on the specifications sheets. Where adjustment of the vent is required, only the vent fixings corresponding to the slotted screw holes should be re-drilled. Otherwise all vent fixings should be pre-drilled.
- Offer the hinges up to the frame and fit all fixing screws. On the side mounted hinges the fixed pivots must be to the top of the hinge and the sliding pivots to the bottom of the hinge.
- If the vent requires adjustment loosen the fixing screws on the vent and/or frame and reposition the vent as required. When the position of the vent is correct, spot through the final fixing holes and fit the remaining screws, if not previously pre-drilled.

Fixing Screws

- Use 4.8mm diameter pan head screws for fixing vent track and frame track on all Parallel hinges.

When installing hinges the following points should be adhered to:

- All hinge fixings should go through sufficient profile thickness or into screw channels.
- Screw manufacturer's recommendations must be adhered to at all times and if any instructions are supplied by window system manufacturer's/suppliers, it is important they are followed.
- Extreme care must be taken not to strip the thread as deterioration in performance will result.

Note: It is the responsibility of the window manufacturer to ensure that all the fixings screws have adequate strength to support the weight of the sash and the forces exerted upon it over the full life of the window.

PERFORMANCE AND MAINTENANCE

Maintenance and Lubrication

As with most mechanical devices, hinges require periodic maintenance and lubrication. The hinge in general and particularly the pivots, sliding parts and track must be kept free from dirt, debris and any other obstructions at all times.

At the time of installation, lubricate all pivot points with general light engineering oil and wipe away any excess. One drop per pivot is sufficient.

Twice yearly carry out the following checks:

- Clean any dirt or debris from the hinge and clear any obstructions from the pivots, sliding parts and track.
- Apply lubrication as detailed above.
- Check the tightness and security of all fixing screws and rivets.

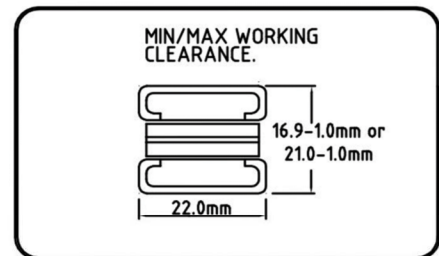
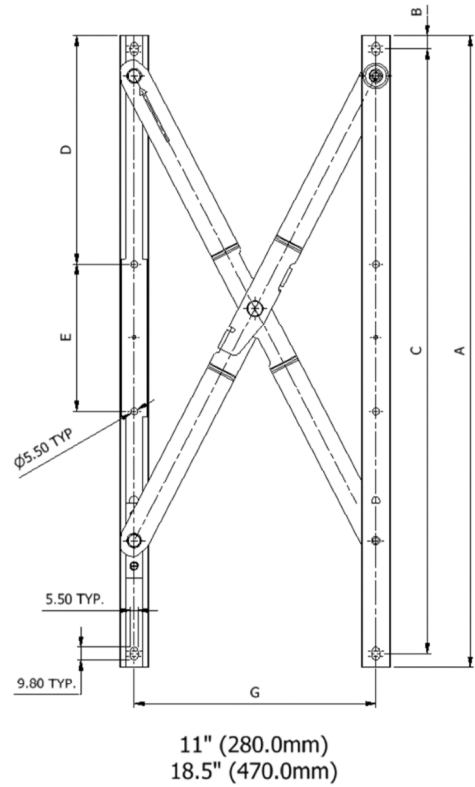
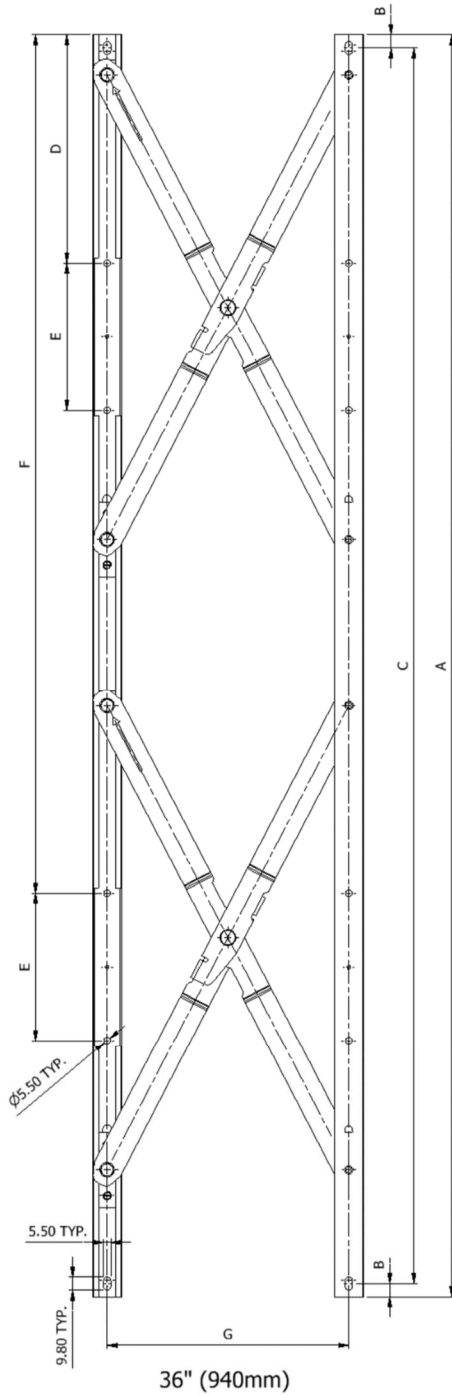
Hinge Operating Life

To attain optimum life all criteria listed above under environmental constraints, vent size weights and maintenance and lubrication must be adhered to.

Parallel hinges will function for at least 25,000 cycles under normal conditions of use. This performance is subject to compliance with Cotswold installation and maintenance instructions.

SPECIFICATION SHEETS

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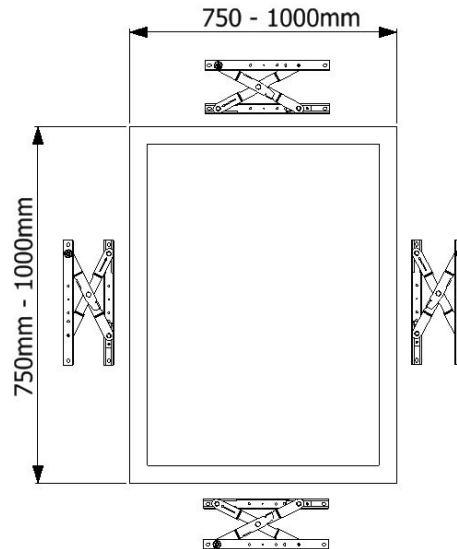


SIZE A	B	C	D	E	F	G	MAX WIGHT IN Kg.	VENT MAX. WIDTH (mm)	VENT MAX. WIDTH (mm)	CAVITY (mm)
11" - 280mm	10.0	260.0	110.0	60.0	-	95.0	25Kg	1450mm	350mm	16.9 - 1.0 or 21 - 1.0
18.5" - 470mm	10.0	450.0	170.0	110.0	-	180.0	100Kg	970mm	970mm	16.9 - 1.0 or 21 - 1.0
36" - 940mm	10.0	-	170.0	110.0	640.0	180.0	200Kg	2000mm	2000mm	16.9 - 1.0 or 21 - 1.0

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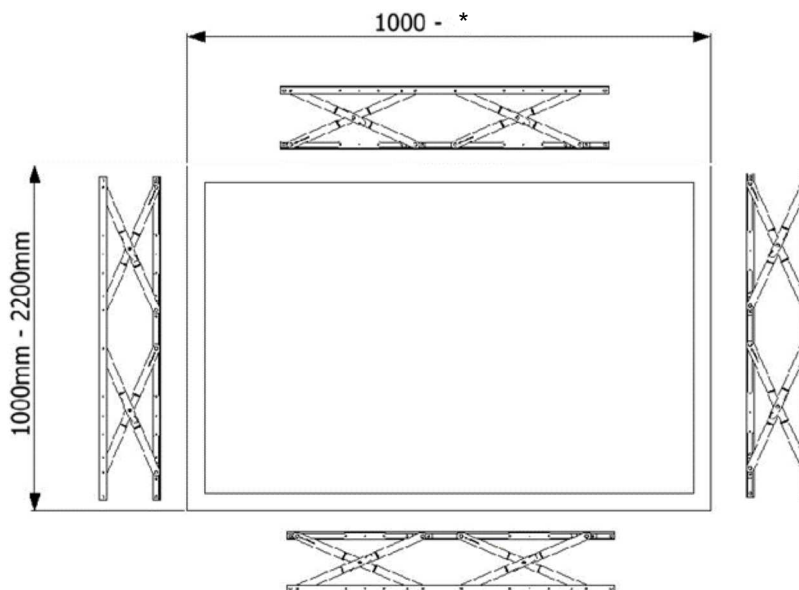
SINGLE ULTRA STAY PARALLEL

MAXIMUM VENT WEIGHT MANUAL OPERATIONS IS 100KGS
FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES—FOR OPTIMUM PERFORMANCE



DUAL ULTRA STAY PARALLEL

MAXIMUM VENT WEIGHT MANUAL OPERATIONS IS 100KGS
FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES—FOR OPTIMUM PERFORMANCE



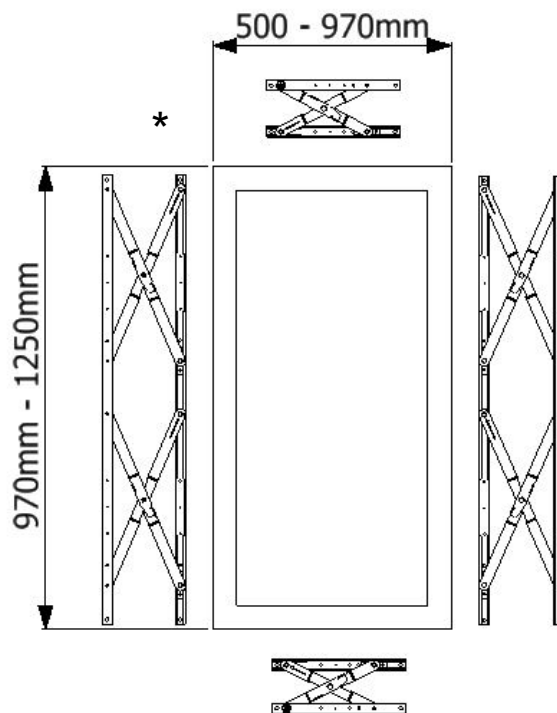
* MAX WIDTH SHOULD BE DETERMINED BY PRACTICALITY AND EASE OF USE

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COMBINATION OF ULTRA STAY PARALLEL

MAXIMUM VENT WEIGHT MANUAL OPERATIONS IS 100KGS, (200KGS IS ACHIEVABLE BUT OPERATED BY MOTORS)

FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES
OR ONE HANDLE CENTRAL AT BOTTOM

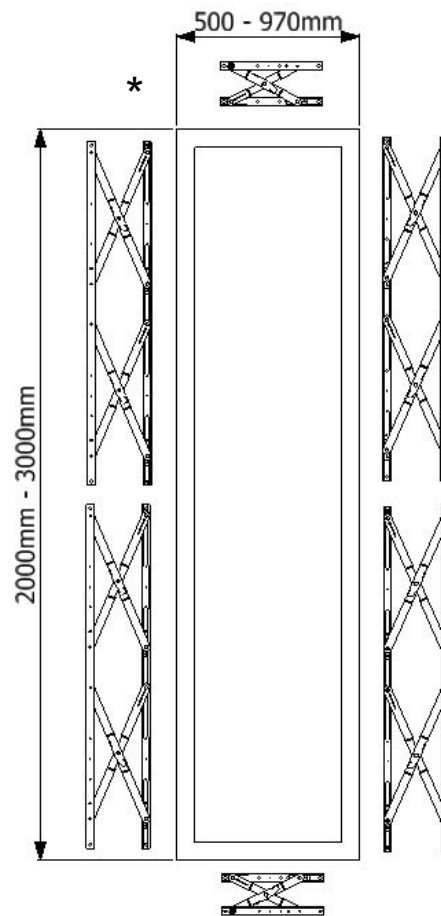


***WHEN USING A COMBINATION OF ULTRA STAY PARALLEL THE WINDOW OPENING WILL BE LIMITED TO THE SMALLEST STAY**

COMBINATION OF ULTRA STAY PARALLEL

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FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES

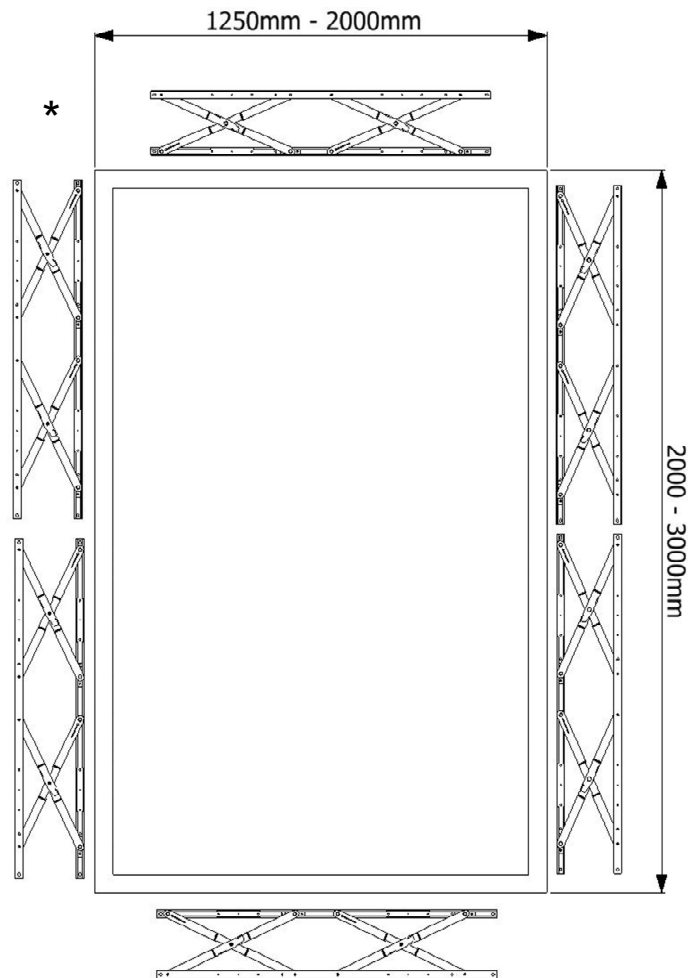


*WHEN USING A COMBINATION OF ULTRA STAY PARALLEL THE WINDOW OPENING WILL BE LIMITED TO THE SMALLEST STAY

HEAVY DUTY

MAXIMUM VENT WEIGHT MANUAL OPERATIONS IS 100KGS, (200KGS IS ACHIEVABLE BUT OPERATED BY MOTORS)

FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES OR FOR VENTS UP TO 2000MM WIDE MOTORISED OPERATION ONLY

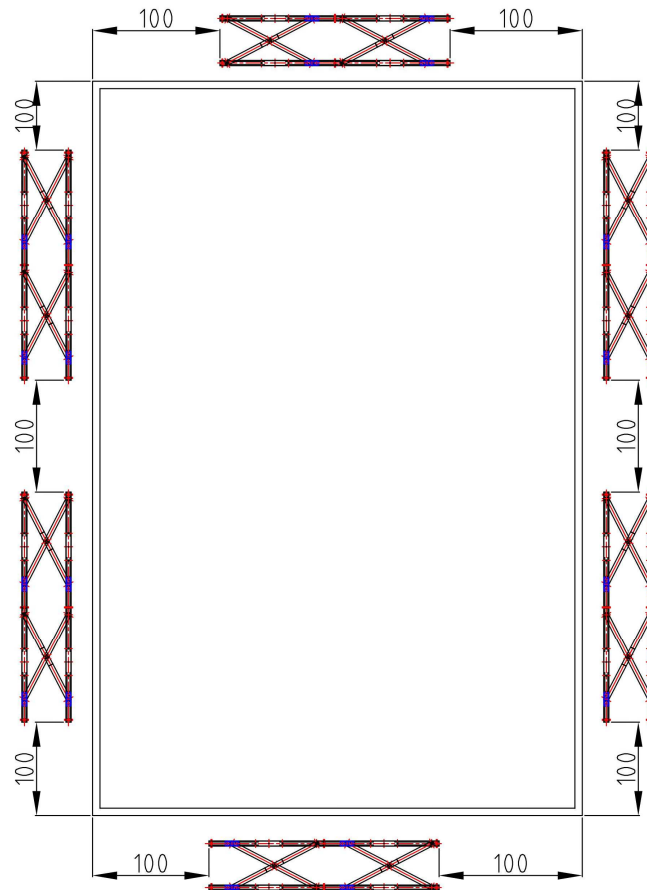


*WHEN USING A COMBINATION OF ULTRA STAY PARALLEL THE WINDOW OPENING WILL BE LIMITED TO THE SMALLEST STAY

To achieve a multi-point locking Espag/Shoot Bolt solution you will need to fit the parallel stays in the alternative position i.e. leaving the euro groove free for the lock mechanism to operate.

This will allow free movement of cams into keeps and provide excellent compression and security around the window.

Note: You may need to refer to your lock provider with regard to minimum spacing's required and also maximum sizes of locks available which will determine the maximum size of window possible.



Warranty

10 YEAR GUARANTEE – FRICTION STAYS

Window Ware

COTSWOLD ARCHITECTURAL PRODUCTS LTD GUARANTEE FOR HEAVY DUTY AND STANDARD FRICTION STAYS

Definitions

In this 10 Year extended Guarantee 'CAP' means COTSWOLD ARCHITECTURAL PRODUCTS LTD and 'the Purchaser' means the person, firm or company to whom the Product is directly sold, by CAP or through authorised agent. The 'Product' means CAP Friction Stays.

Period

This Guarantee will cover the Product for a period of 10 Years of the window to which it is originally fitted.

Scope of the Extended Guarantee

In the event of the failure of the product or any part or component of CAP's manufacture, CAP will repair or replace any such part of the component that in the opinion of CAP is faulty due to defective design, material or workmanship on the part of the CAP. The Guarantee is limited to repair or replacements of the defective parts or components returned to CAP.

This warranty is exclusive. The company makes no other warranty of any kind whatsoever, expressed or implied, with respect to the products manufactured and sold by it. The Products manufactured and sold by it, whether as to merchantability, fitness for a particular purpose, or any other reason, or any other matter. No agent, employee or representative for CAP has any authority to bind CAP in any affirmation, representation or warranty concerning the company Products or parts, except stated herein.

The company shall not in any event be liable to any buyer for consequential, or incidental, or punitive damages of any kind, or for the labour which may be required for the replacement of the said product, whether for breach of warranty, negligence, on the basis of strict liability, or for any other reason.

Warranty (continued)

Invalidation of Extended Guarantee

The terms of this Extended Guarantee will be invalidated if in the opinion of CAP the failure of the Product is attributed to any one or more of the following factors: -

The Product or any part thereof has been modified in anyway.

The Product has been subjected to unfair wear and tear.

The Product has been subject to aggressive, toxic or any other environmental influences from either the fabric of the window or the air quality.

Inspection

CAP reserves the right to inspect the premises and the window in which the alleged defect Product has been fitted. If inspection reveals evidence of neglect, misuse or any other factor, which would invalidate the Purchase for the inspection visit, and any other work carried out by CAP in connection therewith.

Consequential Loss

The liability of CAP will be confirmed to the terms of the Lifetime Guarantee
And specifically excludes any consequential losses.

Force Majeure

CAP will not be liable for any claim arising under this Extended Guarantee as a result of a Force Majeure.

Evidence of Claim

The onus of proof of liability under this Extended Guarantee lies with the Purchaser.

English Law

The terms and legality of the Extended Guarantee will be governed and
Interpreted in accordance with English Law.