

STANDARD DUTY PARALLEL STAY







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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.

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

10 year warranty.







CONTENTS

Vent Size and Weight Chart Page 4

Parallel Stays

Fitting Instructions Page 5-8

Position and Clearances Hardware Layout Installation

Performance and Maintenance Page 9

Maintenance and Lubrication Hinge Operating Life

Specification Sheets Page 10-14

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11" Parallel Stay 18" Parallel Stay 36" Parallel Stay Hinge Selection Guide







VENT SIZE AND WEIGHT CHART

PRODUCT	MAX VENT	MAX VENT	MAX VENT	DISTANCE	CAVITY
	WEIGHT	HEIGHT	WIDTH	OPENING	
18" PARALLEL	100 Kg	1000 mm	1200 mm	180 mm	17.0—1.0 mm
36" PARALLEL	200 Kg	2000 mm	2000 mm	180 mm	17.0—1.0 mm

NOTES:

- We recommend 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.
- Opening distance is the movement measured from the closed position to the recommended open position for the type of operation stated.

PRODUCT CODE	DESCRIPTION			
PAR362 18" 17MM	18" PARALLEL 17MM STACK HEIGHT 18.5MM CHANNEL			
PAR362 36" 17MM	36" PARALLEL 17MM STACK HEIGHT 18.5MM CHANNEL			





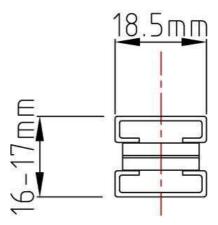




FITTING INSTRUCTIONS

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.









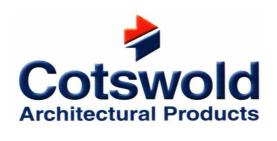


HARDWARE LAYOUT

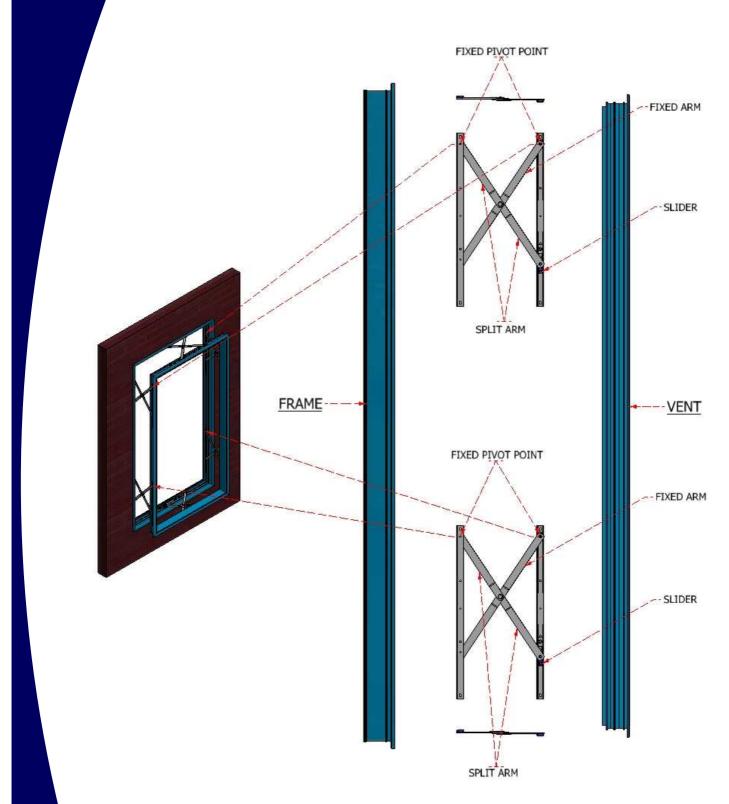
- The side mounted hinges should be fitted with the fixed pivots to the top and the Fixed pivot of the split arm should be to the inside, as shown on the next page.
- Check that the sash and frame profiles used are compatible with Cotswold Parallel Stays, and in particular that the sash/frame clearance is between 17mm—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 if the vent does not exceed 1500mm wide. 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 moto operated this can be provided by either the motors or a synchronized motor operating a separate perimeter lock.

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HARDWARE LAYOUT







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.



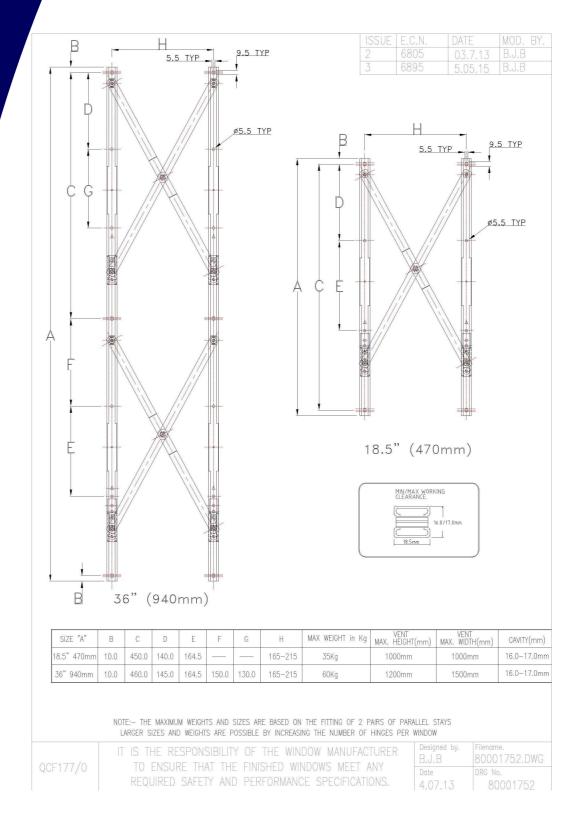


SPECIFICATION SHEETS







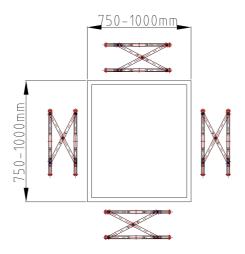




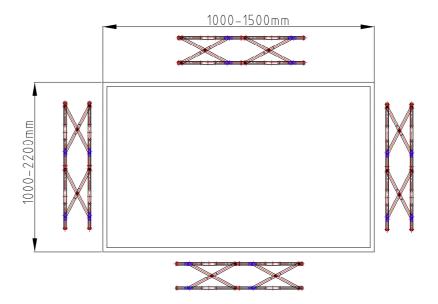




STANDARD PARALLEL MAXIMUM VENT WEIGHT MANUAL OPERATIONS IS 100kG'S FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES



<u>DUAL PARALLEL</u> MAXIMUM VENT WEIGHT MANUAL OPERATIONS IS 100kG'S FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES







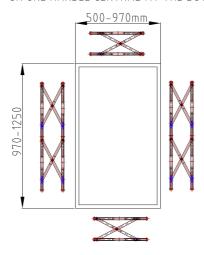


DUAL PARALLEL - HEAVY DUTY

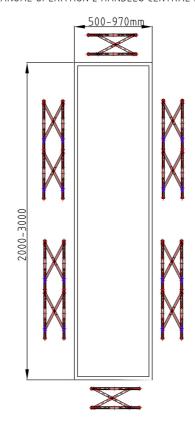
MAXIMUM VENT WEIGHT MANUAL OPERATIONS IS 200kG'S

FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES

OR ONE HANDLE CENTRAL AT THE BOTTOM



<u>DUAL PARALLEL - HEAVY DUTY</u>
MAXIMUM VENT WEIGHT MANUAL OPERATIONS IS 200kG'S
FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES









HEAVY DUTY

MAXIMUM VENT WEIGHT MANUAL OPERATIONS IS 200kG'S FOR MANUAL OPERATION 2 HANDLES CENTRAL AT THE SIDES OR FOR VENTS UP TO 2000mm WIDE MOTORISED OPERATION ONLY

