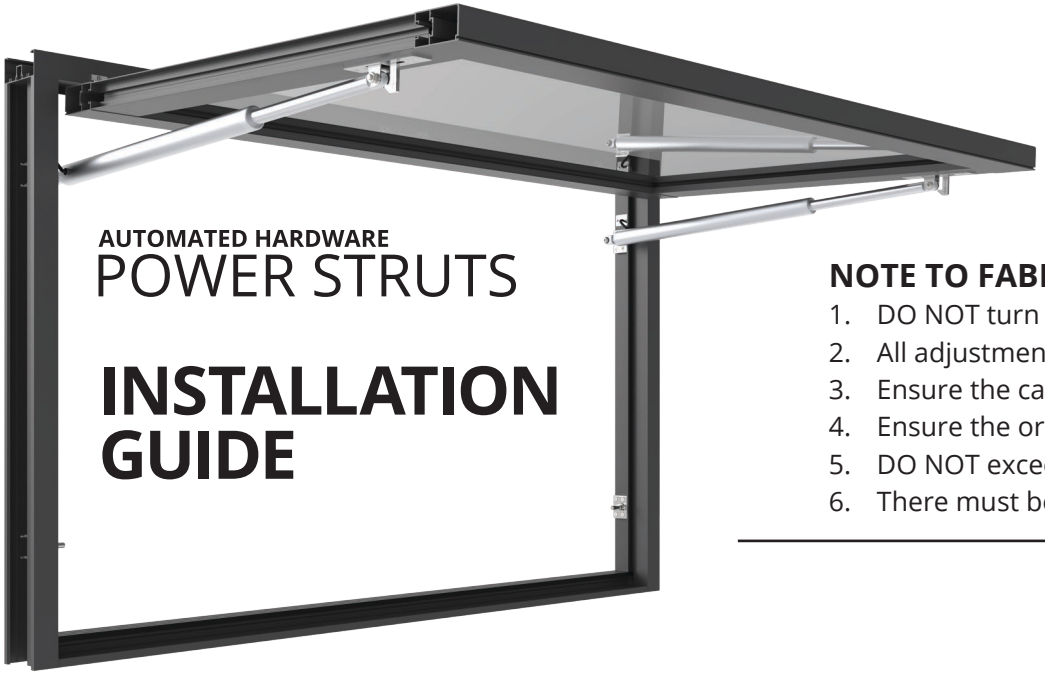

AUTOMATED HARDWARE
POWER STRUTS

INSTALLATION GUIDE

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3. Ensure the cable enters the frame above the top mount
4. Ensure the orientation of the Top mount and Latch post are correct
5. DO NOT exceed 2 full turns of the top eye during adjustment.
6. There must be a 10mm gap at the base of the Sash to allow for the Sash to freely open and close.

1.

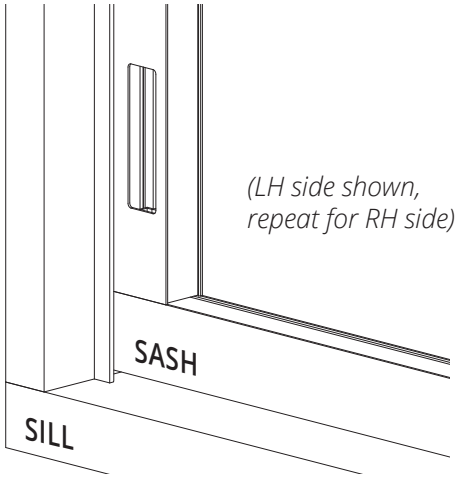
WINDOW SASH CUTOUT DETAIL

Machine the Latch Box Cut-Outs on the inside face of the LH and RH Sash Stiles to the dimensions shown.

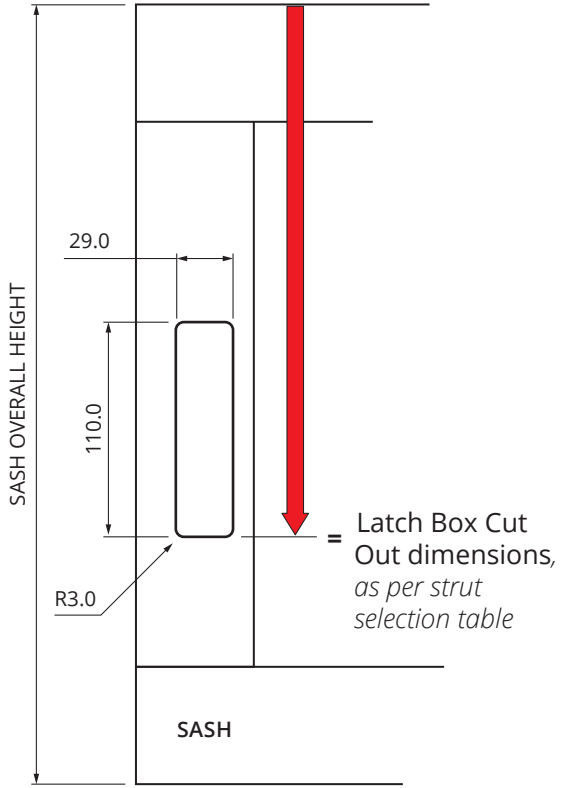
Ensure the machine Cut-Out is 110mm x 29mm at least 33mm deep.

**** CRITICAL STEP ****

Measure the Latch Box Cut-Out using the strut selection table. The measurement of the Latch Box Cut-Out is from the top of the sash to the bottom of the Cut-Out. The Cut-Out will dictate that the sash opens to 90 Degrees.



(LH side shown, repeat for RH side)



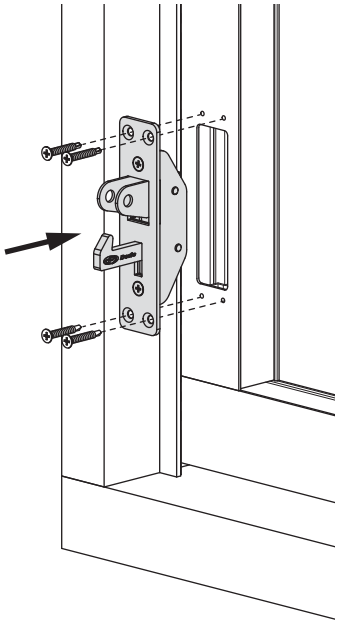
= Latch Box Cut Out dimensions, *as per strut selection table*

2.

Install the Latch Boxes into the Left-Hand Sash and Right-Hand Sash Cut-Outs using four 10Gx25mm screws.

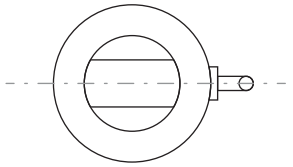
(Left-Hand side shown, repeat for Right-Hand side).

Push the Latch box all the way down to the bottom of the Cut-Out.

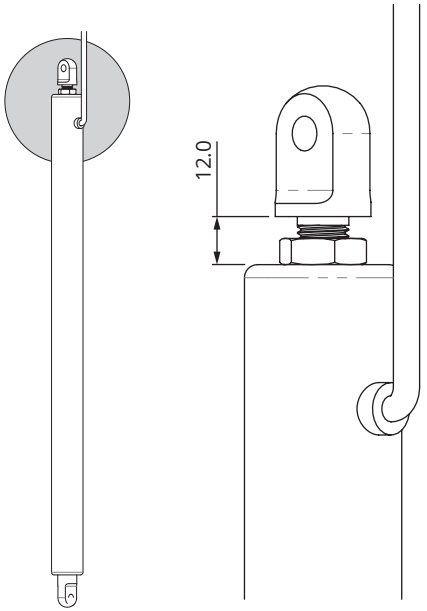


3.

On each Power Strut Actuator: Adjust the gap between the Eyelet and the Main Body to 12mm, then lock off with Locking Nut.



Try and line up the Eyelet end with the Actuator cable exit as shown.



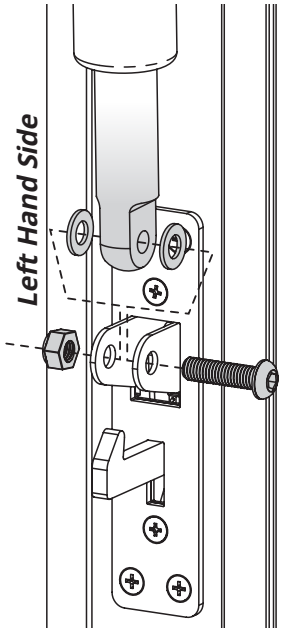
4.

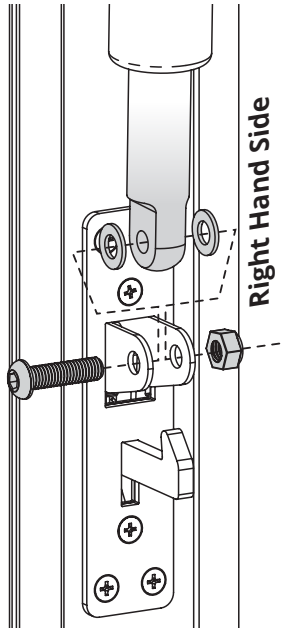
Mount the bottom of the Actuator onto the Latch Box using the M8x30mm Bolt, Nyloc Nut and Washers.

Ensure the Washers are placed on either side of the Actuator Eyelet.

**** CRITICAL STEP ****
When you have the bolt fitted into the latch box, only hand tighten the nut, further adjustment may be needed.

DO NOT TURN THE LOWER LEG OF THE STRUT AT ANY TIME DURING THIS STEP. ADJUSTMENT TO BE MADE AT THE TOP EYE ONLY.





AUTOMATED HARDWARE
POWER STRUTS

INSTALLATION GUIDE

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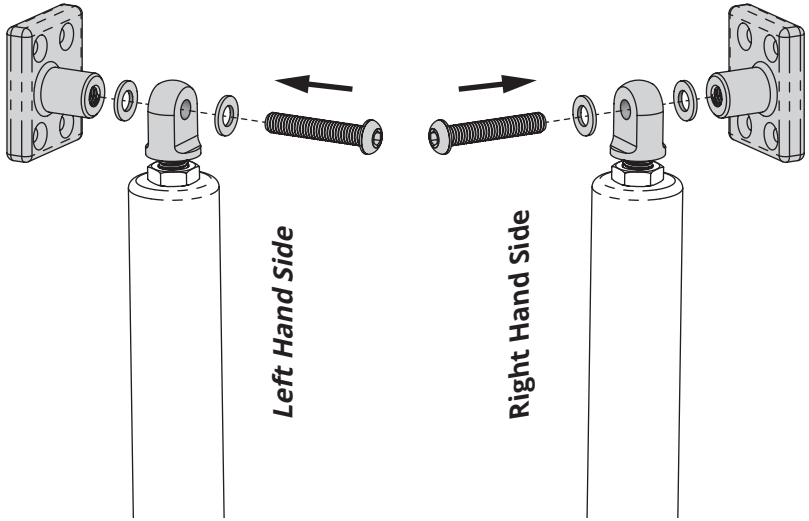
5.

Mount the top of the Actuator to the Top Bracket with the supplied M8x45mm Bolt and Washers.

Ensure the Washers are placed on either side of the Actuator Eyelet.

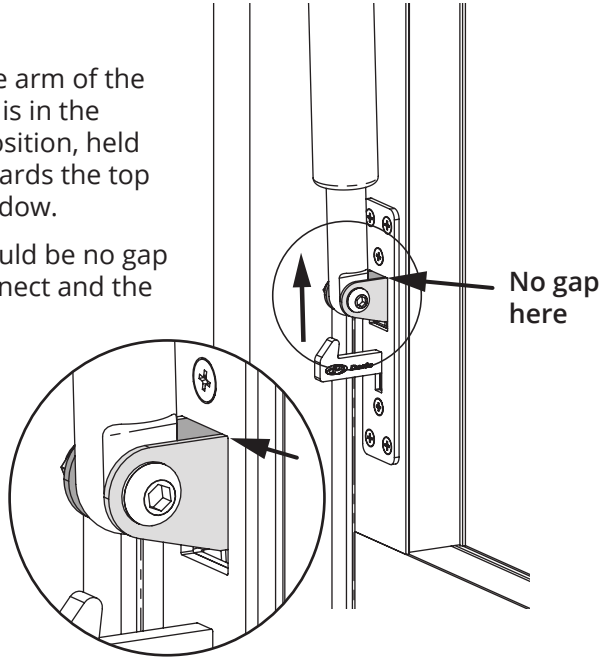
Wind in all the way but don't tighten yet, more adjustments are required.



6.

Ensure the arm of the Latch Box is in the upright position, held firmly towards the top of the window.

There should be no gap in the connect and the face plate.



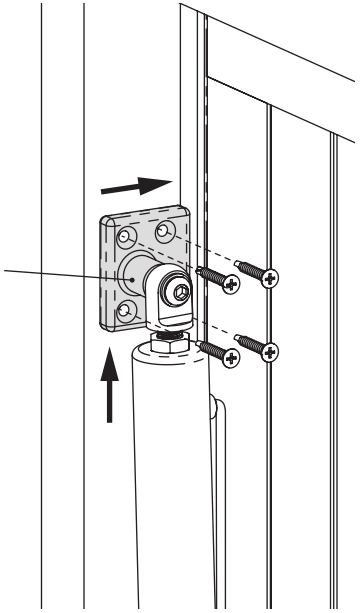
7.

At the top of the sash, hold the Top Bracket firmly against the frame while applying pressure towards the top of the window and the glass.

Ensure the Bracket is rotated so the threaded post sits **furthest away** from the glass.

Install the LH and RH side Top Brackets using four 10Gx25mm screws each.

If required, remove the Actuator to install any remaining inaccessible screw mounts.



8.

Position the Latch Post so that the flat side is firmly seated against the Latch Tongue.

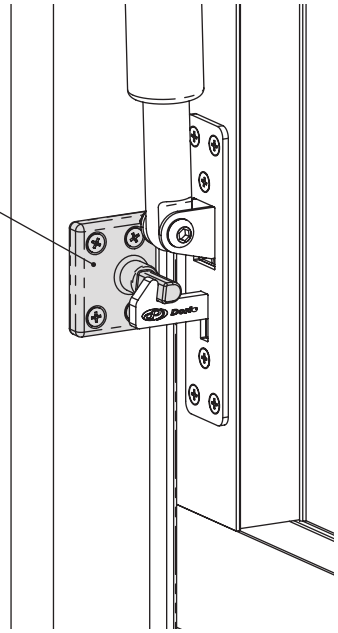
Ensure that the Latch Post is rotated so it is in the position closest to the glass.

Install the LH and RH Latch Posts in position with four 10Gx25mm screws each.

**** CRITICAL STEP ****
When the latch post is installed the Shape of the hook should nest neatly onto the post.

It is important that you do not push the hook down while positioning the latch post. There should be very little pressure on the latch post and hook.

**** Too Much Pressure on the hook is caused by the incorrect seal being fitted to the sash. ****



AUTOMATED HARDWARE
POWER STRUTS

INSTALLATION GUIDE

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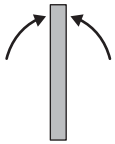
9.

**** CRITICAL STEP ****
Stand the Frame up right.

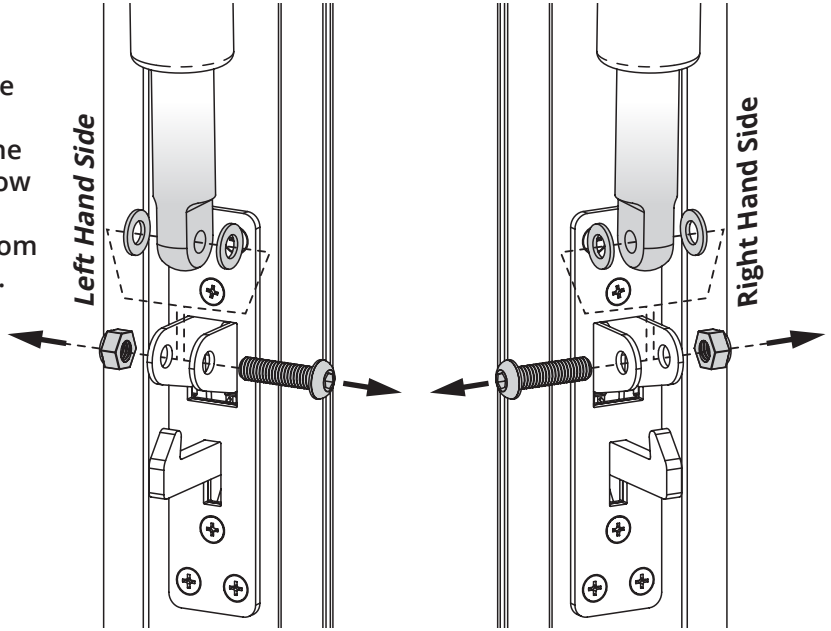
All further tests are conducted with the frame in the upright position from here on in.

Ensure that the frame is vertically level and the base is secured in place ready to operate the sash.



10.

Disconnect the bolts in the lower leg of the Struts and allow the struts to move away from the Latch Box.

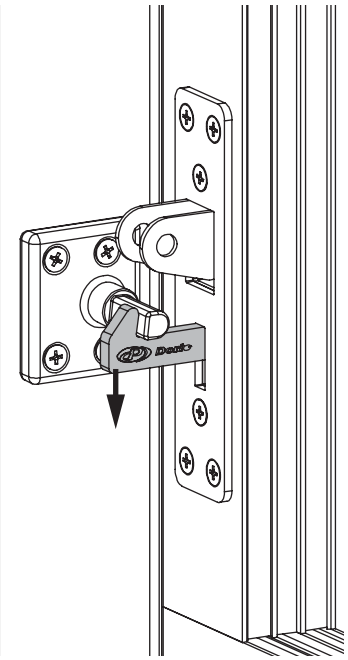


11.

With the help of an additional person, unlatch the hook frame the latch post.

This will allow the Sash to swing open about 100mm.

This is the natural resting spot of the sash due to the hinge connection.



12.

**** CRITICAL STEP ****

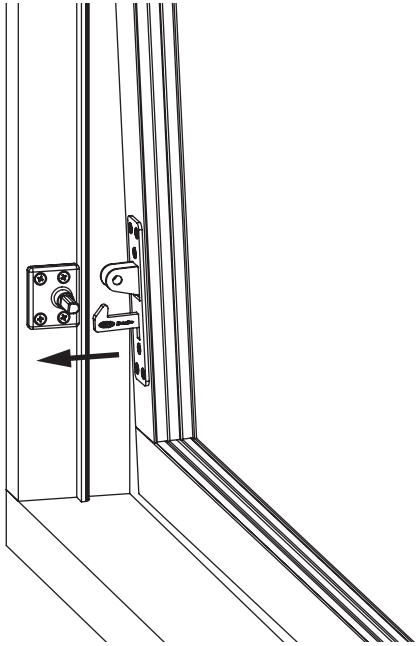
This step now checks the correct latching function.

Carefully pull the window into the closed position. Minimal force is required to correctly latch the sash.

The Latch Hooks should easily hook over the latch post.

**** Too Much Pressure on the hook is caused by the incorrect seal being fitted to the sash. ****

**** if you are experiencing latching issues at this stage, Stop, assess, rectify. ****



13.

At this point its time to connect the electricals. Please refer to the wiring schematics for correct connection.

Check List

1. Connect the 2 by Female leads from the Motors to the S102HL sync.
2. Connect the S102HL sync to the Controller.
3. Connect the Power to the controller.
4. Pair the remote if required.

Before operating the struts. Ensure there is no obstruction and the end is clear of the latch box.

Open the Actuators about 50mm by pressing **Open** of the Remote or Controller.

Once the Actuators reach 50mm press **STOP** on the Remote or Controller.

14.

Mount the bottom of the Actuator onto the Latch Box using the M8x30mm Bolt, Nylock Nut and Washers.

Ensure the Washers are placed on either side of the Actuator Eyelet.

**** CRITICAL STEP ****

When you have the bolt fitted into the latch box, only hand tighten the nut, further adjustment may be needed.

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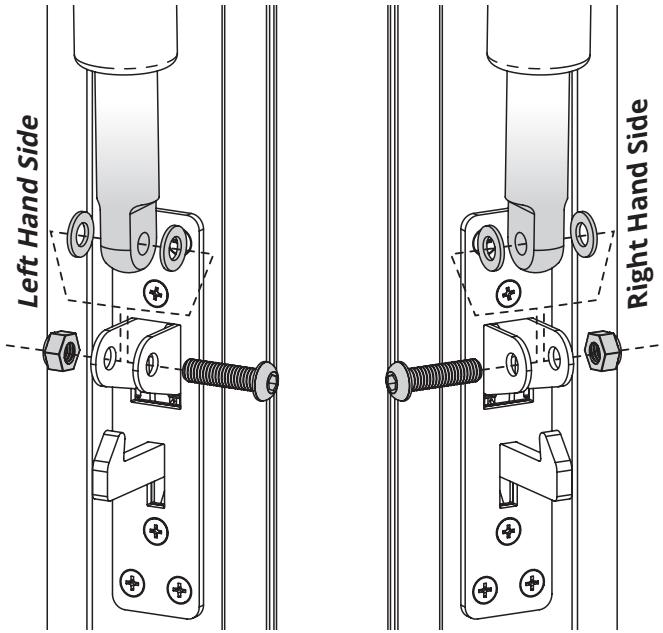


15.

Now that both actuators are re fitted, Press Close on the Remote / Controller. The Sash will now close.

**** Latched Correctly **** - No need for further adjustment, continue to Step 18

**** Left Hand did not latch fully **** - Further adjustment is required to LH only. Please follow from steps 16.

**** Right Hand did not latch fully **** - Further adjustment is required to RH only. Please follow from steps 16.

**** Both did not latch fully **** - Further adjustment is required to LH and RH. Please follow from steps 16.

16.

Open the window again to roughly 50mm of strut extension by selecting OPEN on the remote. Stop at 50mm extension.

The following adjustments are only carried out at the top of the Struts:

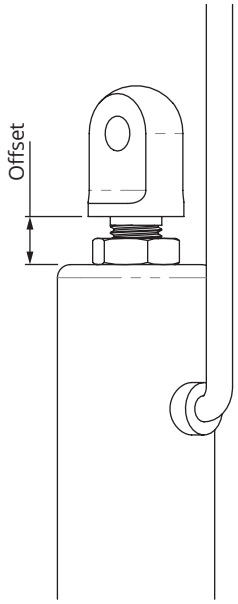
- Loosen the Lock nut a few turns
- Rotate the eye end clockwise to shorten ½ a turn only (Max 2 turns)
- Re-insert the bolt and nip up the lock nut

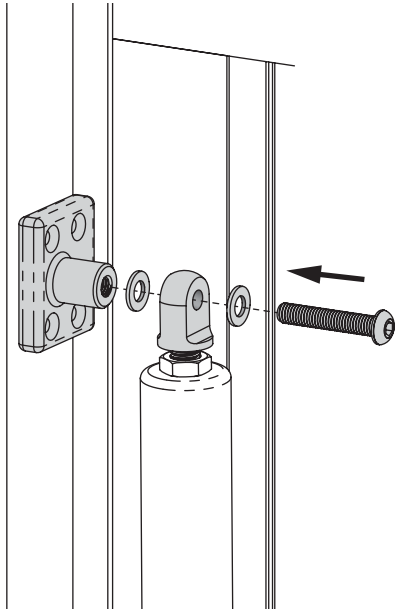
**** CRITICAL STEP ****

When adjusting the eye end of the strut, do not adjust more than 2 full turns of the eye end.

This will create additional force on the latch and hinges beyond the system design.

Continued adjust will cause damage to you frame, sash and VOID the warranty of the product.





17.

Now that both actuators are re connected, Press Close on the Remote / Controller. The Sash will now close.

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18.

With the sash latching correctly, Open the frame 1 more time to around 50mm of strut extension.

Loosen the Lock nut at the eye end. Carefully turn the Main body of the Strut to position the Cable facing the Sash.

LH Strut Rotate Anti Clock Wise - RH Strut Rotate Clock Wise.

Grasp the Main body of the Strut and use a 19mm spanner to now tighten the Lock Nut.

Back out the M8x45mm Bolt and apply a few drops of thread lock and re-insert.

Do not over tighten.

Close the Sash and disconnect the electricals.

19. OPTIONAL CABLE COVER:

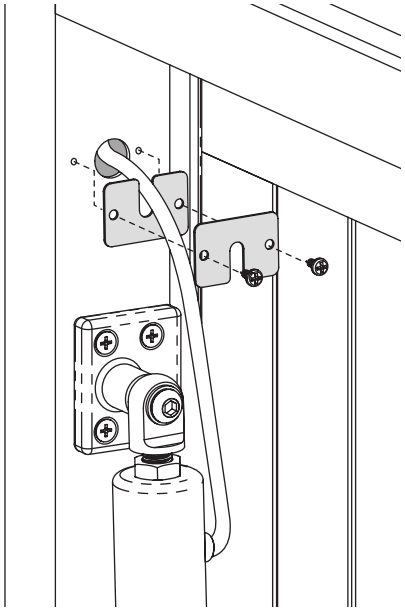
Drill a 22mm hole into each side of the frame above the Actuator and plug the Power Strut in.

Mount the two Stainless steel Faceplates with two 6G Pan Head screws to cover the 22mm hole.

**** CRITICAL STEP ******

Ensure sure cable exiting actuator is positioned closet to the glass

The Cable will need to have a bit of slack left in the cable to allow for movement when the sash opens and closes.

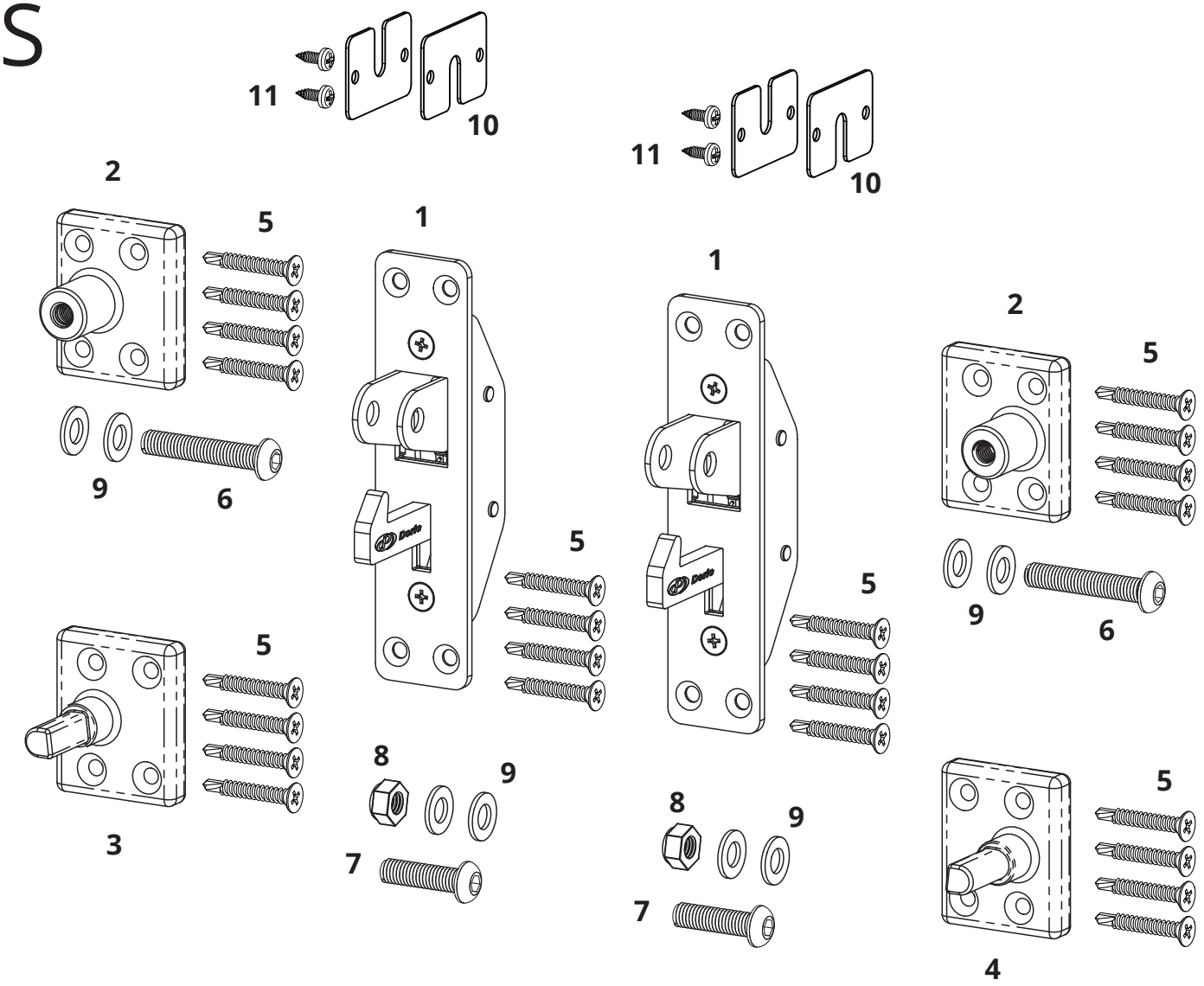


AUTOMATED HARDWARE

POWER STRUTS

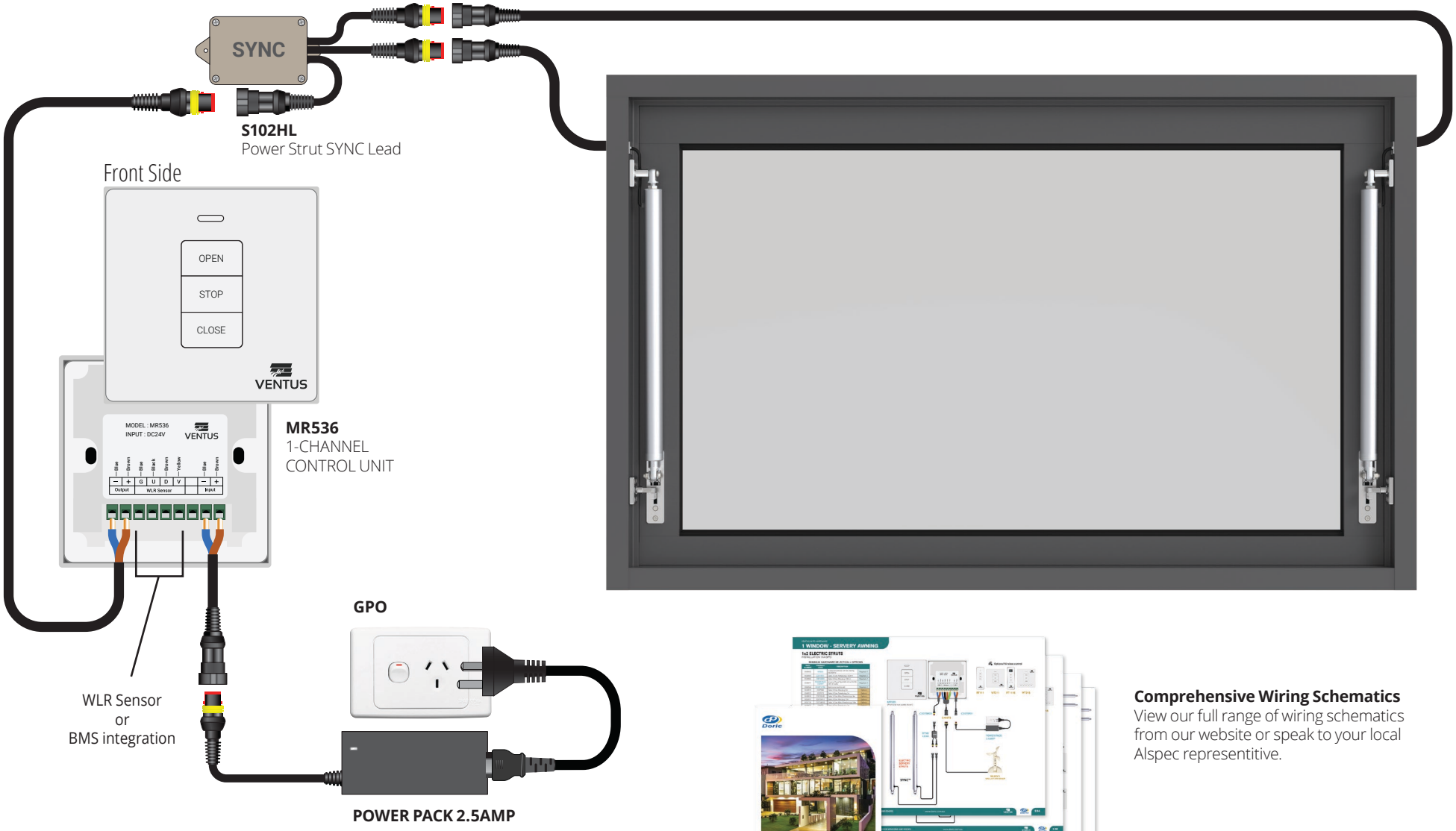
BILL OF MATERIALS

Item No.	Name	Qty
1	Latch Box	2
2	Top Bracket	2
3	LH Latch Post	1
4	RH Latch Post	1
5	10G x 25mm Screw	24
6	M8 x 45mm Bolt	2
7	M8 x 30mm Bolt	2
8	M8 Nyloc Nut	2
9	M8 Washer	8
10	Cable Cover Plate	4
11	6G x 10mm Screw	4

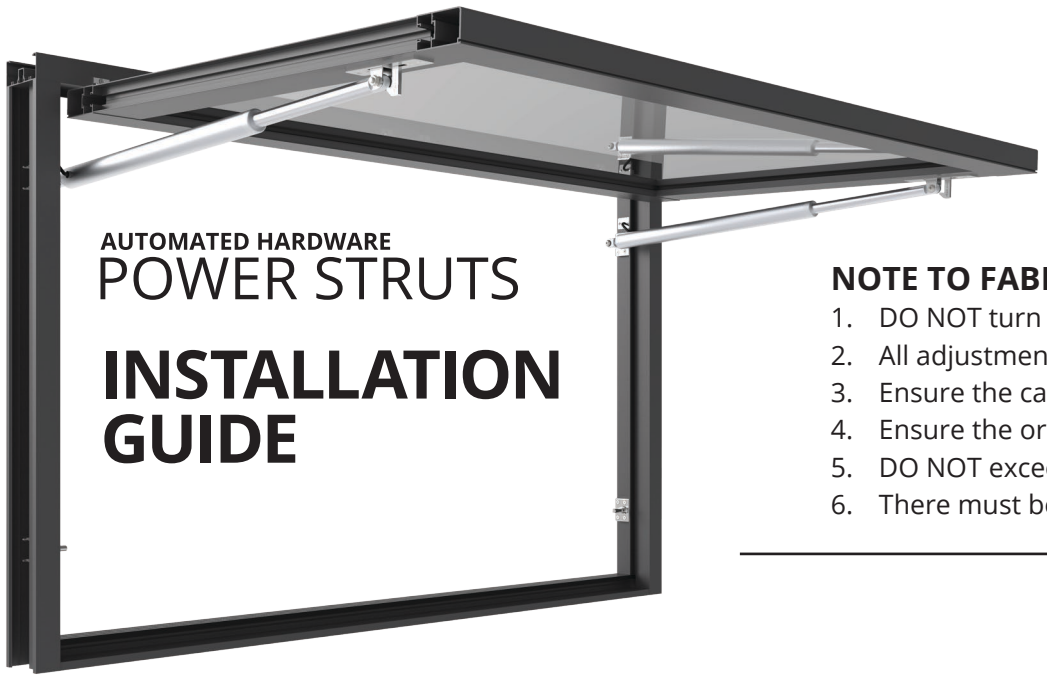


WIRING EXAMPLE

Illustrative Purposes Only. Not to scale



Comprehensive Wiring Schematics
View our full range of wiring schematics from our website or speak to your local Alspec representitive.



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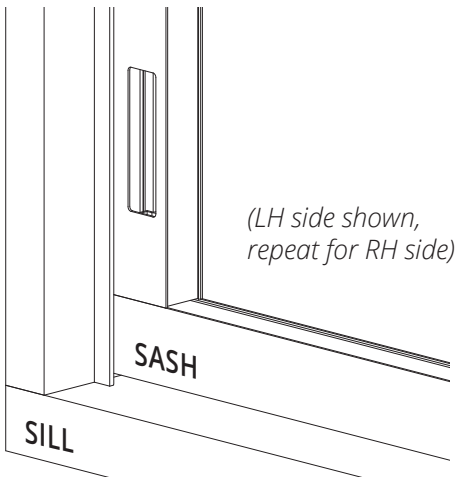

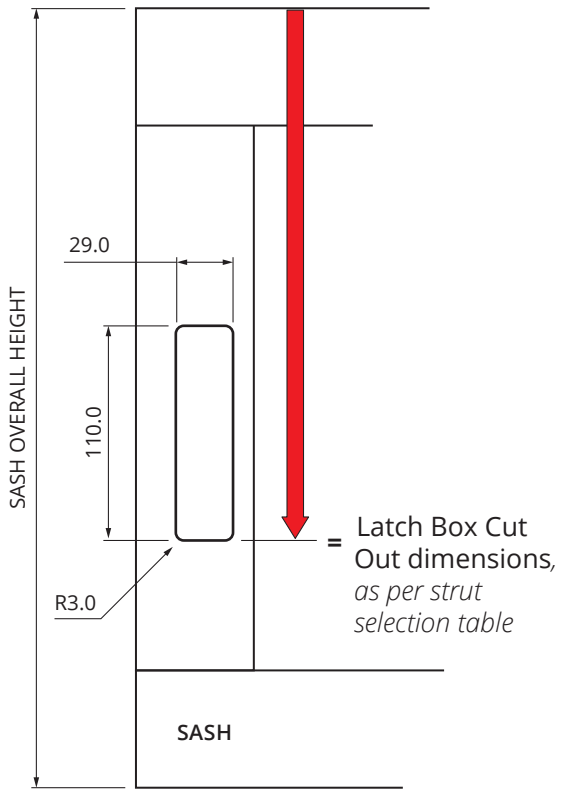

2.

Install the Latch Boxes into the Left-Hand Sash and Right-Hand Sash Cut-Outs using four 10Gx25mm screws.

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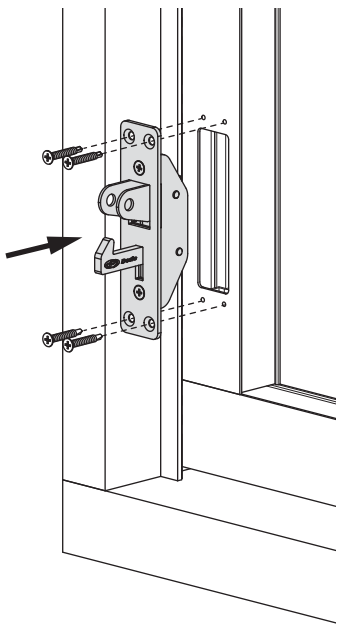
Push the Latch box all the way down to the bottom of the Cut-Out.



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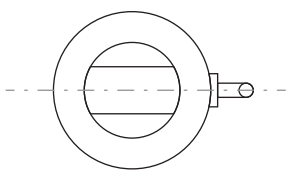

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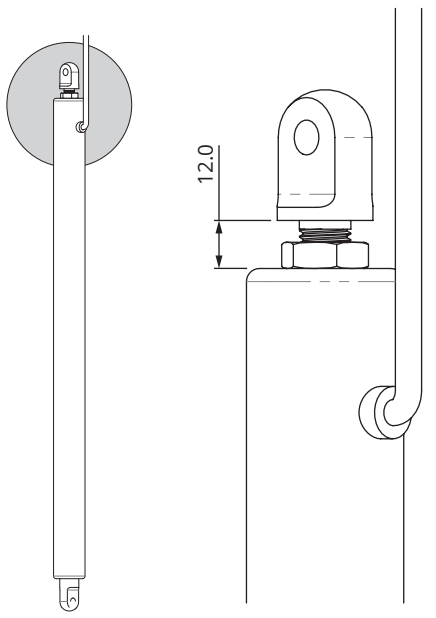

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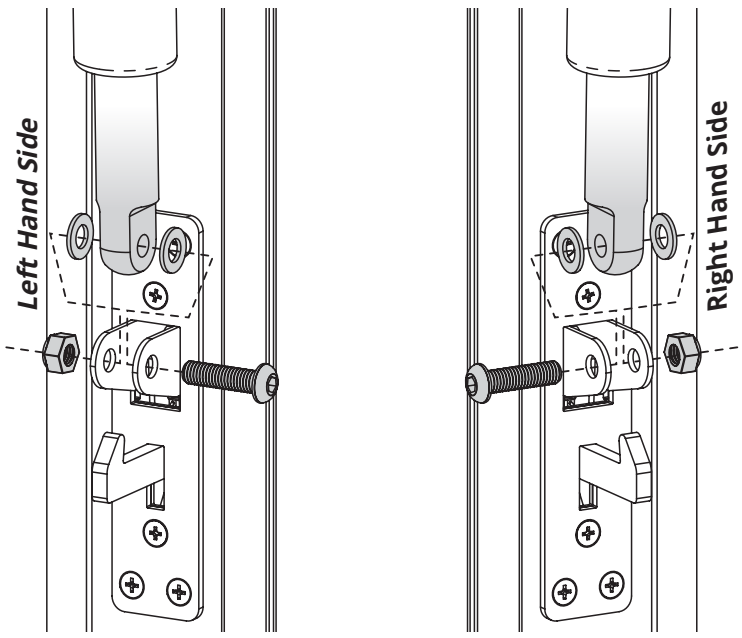

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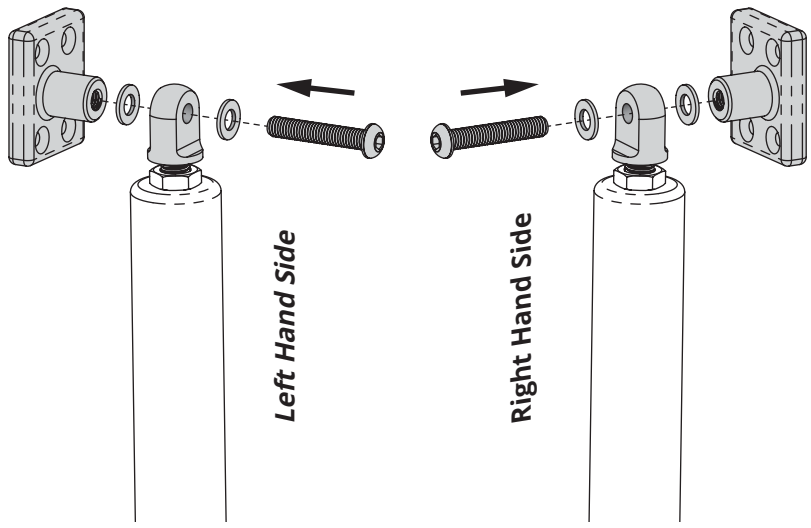

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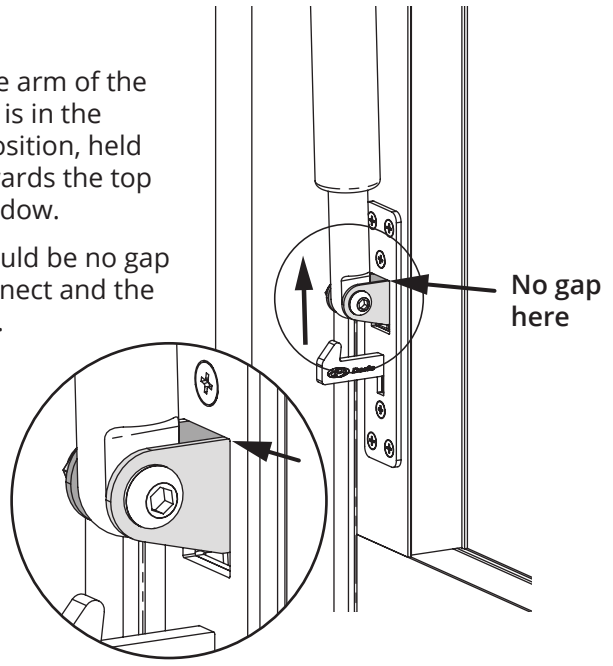

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At the top of the sash, hold the Top Bracket firmly against the frame while applying pressure towards the top of the window and the glass.

Ensure the Bracket is rotated so the threaded post sits **furthest away** from the glass.

Install the LH and RH side Top Brackets using four 10Gx25mm screws each.

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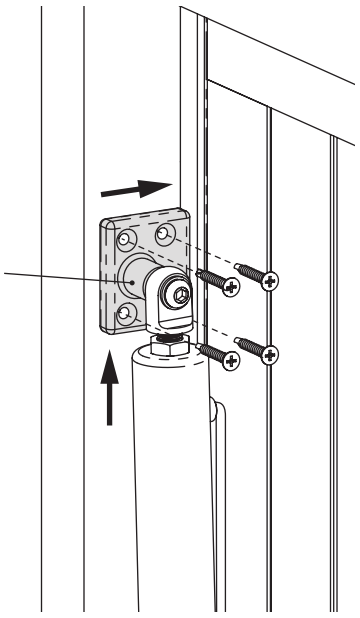

8.

Position the Latch Post so that the flat side is firmly seated against the Latch Tongue.

Ensure that the Latch Post is rotated so it is in the position closest to the glass.

Install the LH and RH Latch Posts in position with four 10Gx25mm screws each.

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When the latch post is installed the Shape of the hook should nest neatly onto the post.

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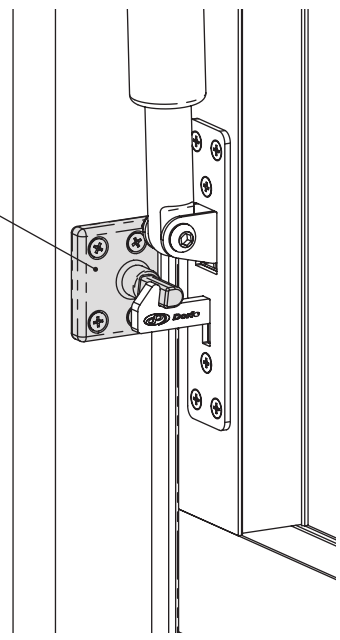

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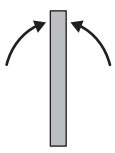
Ensure that the frame is vertically level and the base is secured in place ready to operate the sash.



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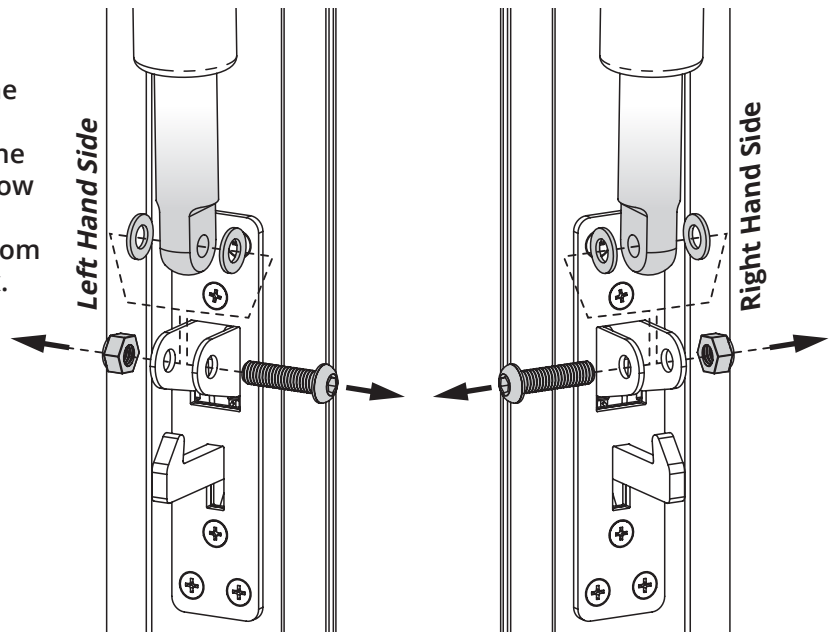
Disconnect the bolts in the lower leg of the Struts and allow the struts to move away from the Latch Box.

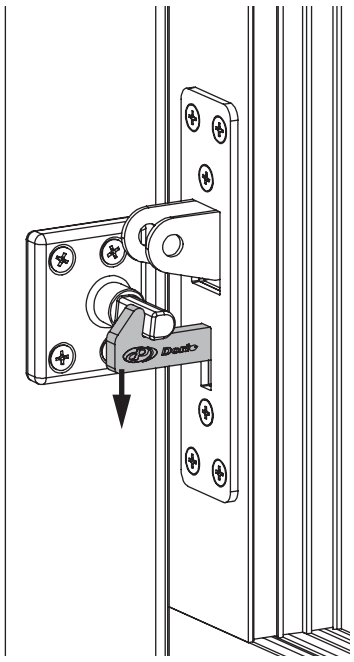


11.

With the help of an additional person, unlatch the hook frame the latch post.

This will allow the Sash to swing open about 100mm.

This is the natural resting spot of the sash due to the hinge connection.



12.

**** CRITICAL STEP ****

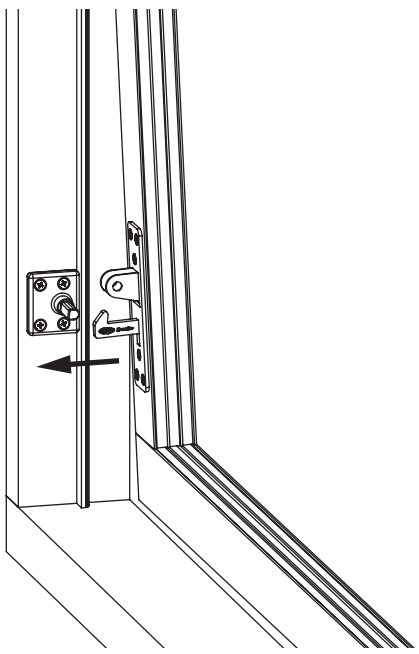
This step now checks the correct latching function.

Carefully pull the window into the closed position. Minimal force is required to correctly latch the sash.

The Latch Hooks should easily hook over the latch post.

**** Too Much Pressure on the hook is caused by the incorrect seal being fitted to the sash. ****

**** if you are experiencing latching issues at this stage, Stop, assess, rectify. ****



13.

At this point its time to connect the electricals. Please refer to the wiring schematics for correct connection.

Check List

1. Connect the 2 by Female leads from the Motors to the S102HL sync.
2. Connect the S102HL sync to the Controller.
3. Connect the Power to the controller.
4. Pair the remote if required.

Before operating the struts. Ensure there is no obstruction and the end is clear of the latch box.

Open the Actuators about 50mm by pressing **Open** of the Remote or Controller.

Once the Actuators reach 50mm press **STOP** on the Remote or Controller.

14.

Mount the bottom of the Actuator onto the Latch Box using the M8x30mm Bolt, Nylock Nut and Washers.

Ensure the Washers are placed on either side of the Actuator Eyelet.

**** CRITICAL STEP ****

When you have the bolt fitted into the latch box, only hand tighten the nut, further adjustment may be needed.

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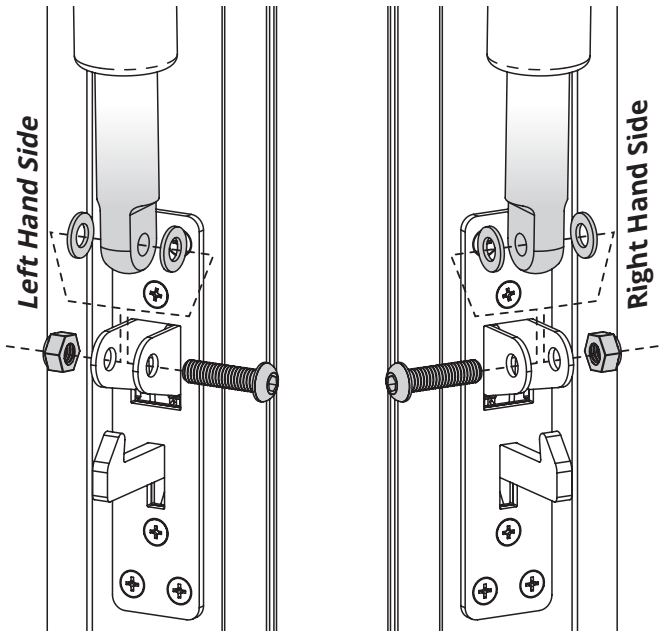


15.

Now that both actuators are re fitted, Press Close on the Remote / Controller. The Sash will now close.

**** Latched Correctly **** - No need for further adjustment, continue to Step 18

**** Left Hand did not latch fully **** - Further adjustment is required to LH only. Please follow from steps 16.

**** Right Hand did not latch fully **** - Further adjustment is required to RH only. Please follow from steps 16.

**** Both did not latch fully **** - Further adjustment is required to LH and RH. Please follow from steps 16.

16.

Open the window again to roughly 50mm of strut extension by selecting OPEN on the remote. Stop at 50mm extension.

The following adjustments are only carried out at the top of the Struts:

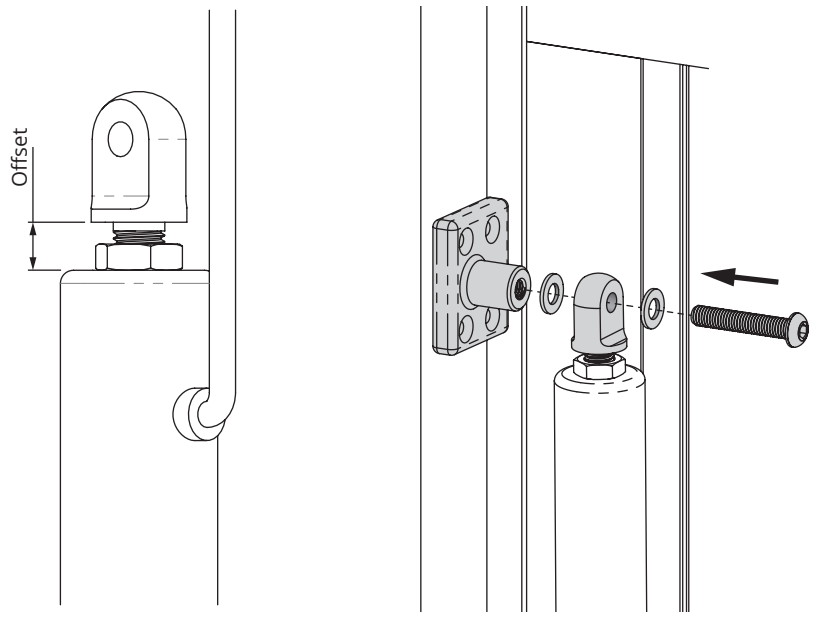
- Loosen the Lock nut a few turns
- Rotate the eye end clockwise to shorten ½ a turn only (Max 2 turns)
- Re-insert the bolt and nip up the lock nut

**** CRITICAL STEP ****

When adjusting the eye end of the strut, do not adjust more than 2 full turns of the eye end.

This will create additional force on the latch and hinges beyond the system design.

Continued adjust will cause damage to you frame, sash and VOID the warranty of the product.



17.

Now that both actuators are re connected, Press Close on the Remote / Controller. The Sash will now close.

**** Latched Correctly **** - No need for further adjustment, continue to Step 18

**** Left Hand did not latch fully **** - Further adjustment is required to LH only. Please follow from steps 16.

**** Right Hand did not latch fully **** - Further adjustment is required to RH only. Please follow from steps 16.

**** Both did not latch fully **** - Further adjustment is required to LH and RH. Please follow from steps 16.

18.

With the sash latching correctly, Open the frame 1 more time to around 50mm of strut extension.

Loosen the Lock nut at the eye end. Carefully turn the Main body of the Strut to position the Cable facing the Sash.

LH Strut Rotate Anti Clock Wise - RH Strut Rotate Clock Wise.

Grasp the Main body of the Strut and use a 19mm spanner to now tighten the Lock Nut.

Back out the M8x45mm Bolt and apply a few drops of thread lock and re-insert.

Do not over tighten.

Close the Sash and disconnect the electricals.

19. OPTIONAL CABLE COVER:

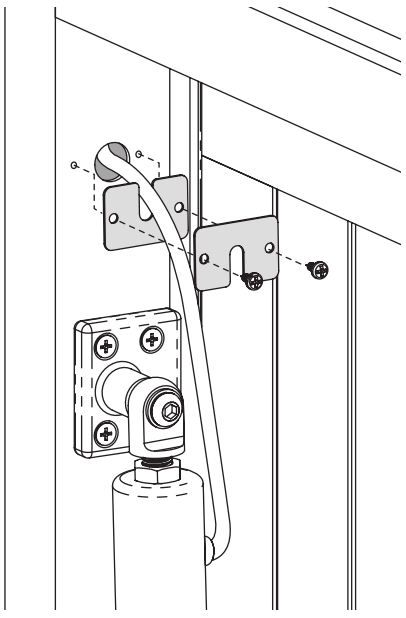
Drill a 22mm hole into each side of the frame above the Actuator and plug the Power Strut in.

Mount the two Stainless steel Faceplates with two 6G Pan Head screws to cover the 22mm hole.

**** CRITICAL STEP ****

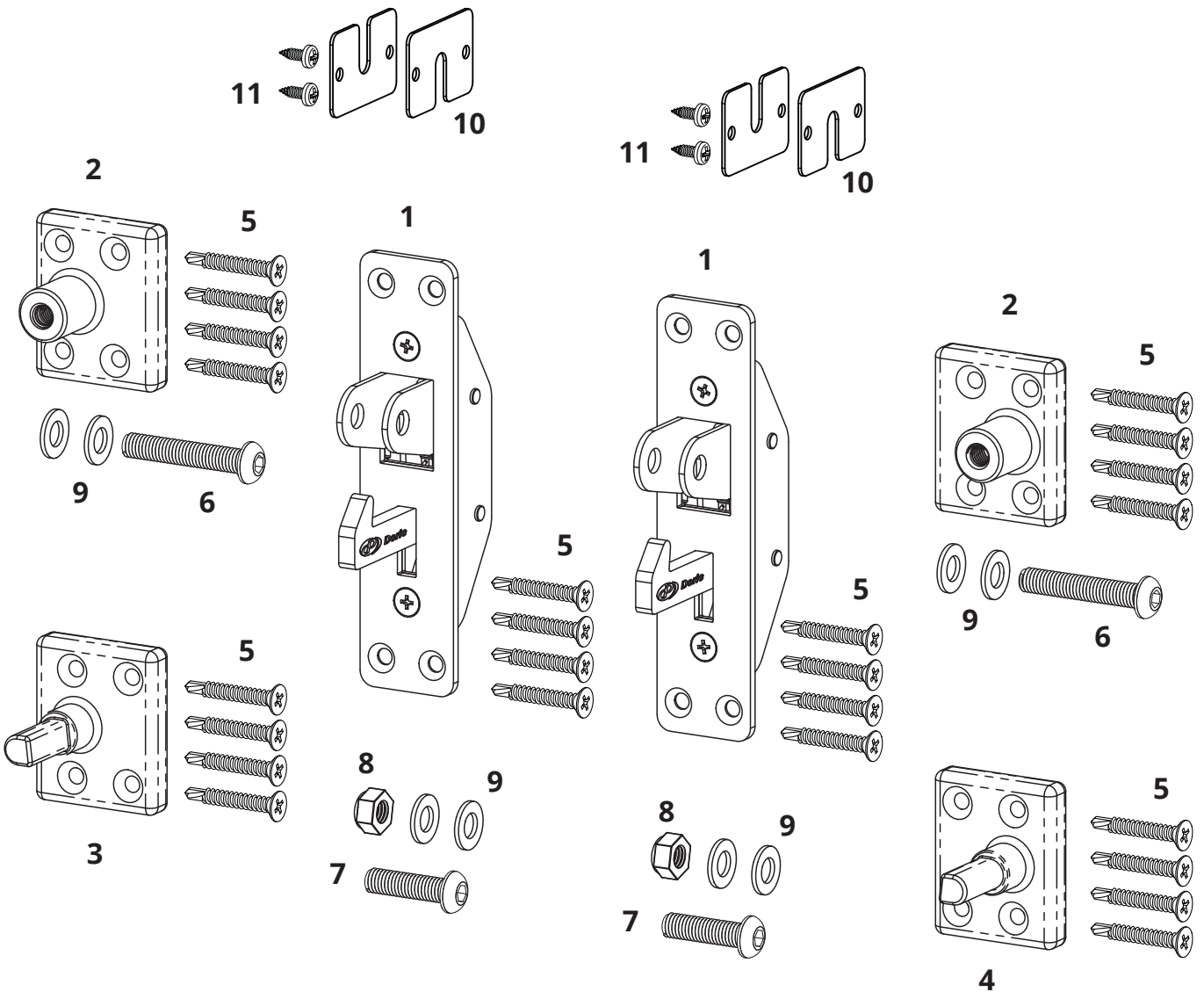
Ensure sure cable exiting actuator is positioned closet to the glass

The Cable will need to have a bit of slack left in the cable to allow for movement when the sash opens and closes.



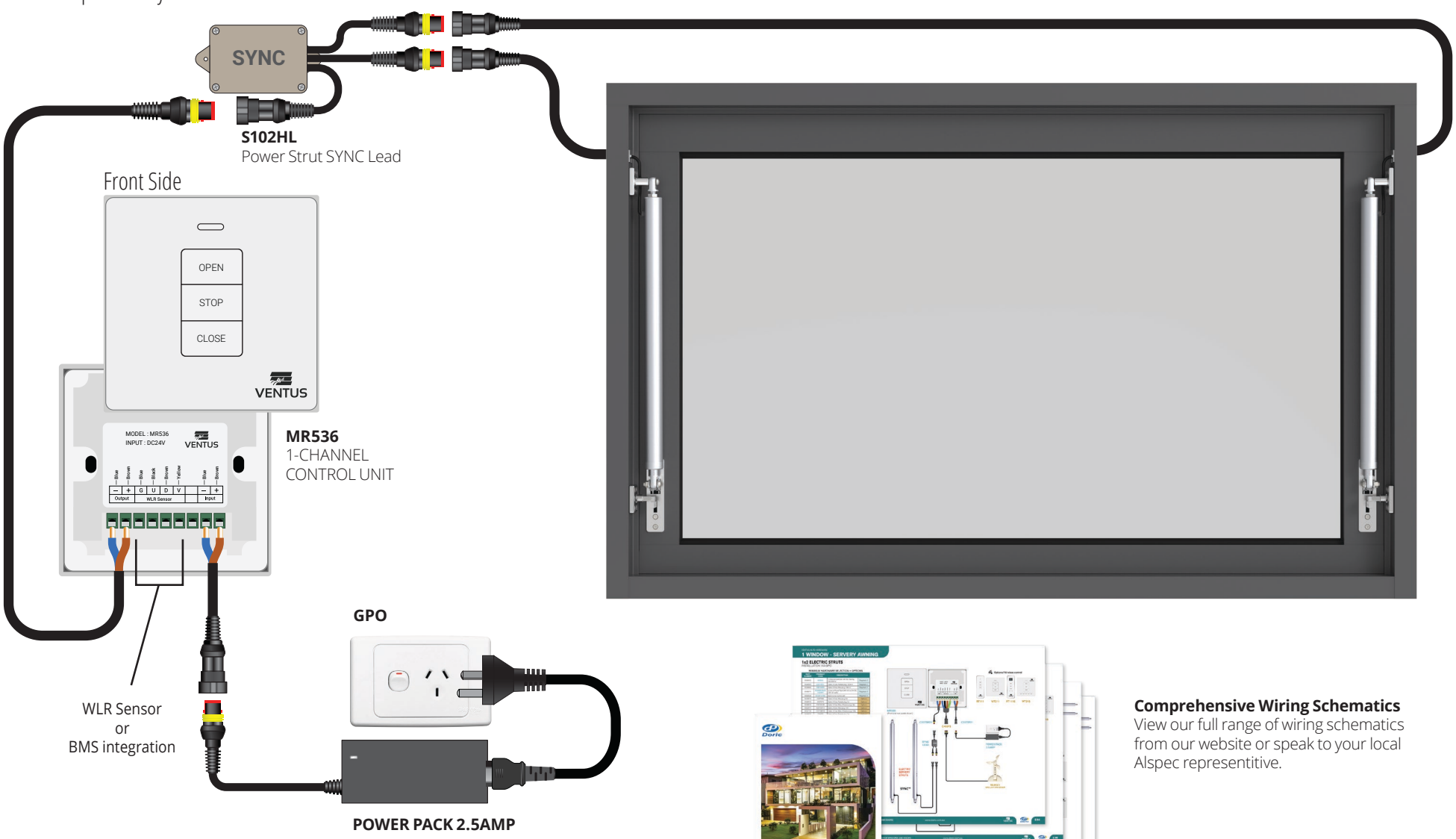
BILL OF MATERIALS

Item No.	Name	Qty
1	Latch Box	2
2	Top Bracket	2
3	LH Latch Post	1
4	RH Latch Post	1
5	10G x 25mm Screw	24
6	M8 x 45mm Bolt	2
7	M8 x 30mm Bolt	2
8	M8 Nyloc Nut	2
9	M8 Washer	8
10	Cable Cover Plate	4
11	6G x 10mm Screw	4



WIRING EXAMPLE

Illustrative Purposes Only. Not to scale



Comprehensive Wiring Schematics
View our full range of wiring schematics from our website or speak to your local Alspec representitive.