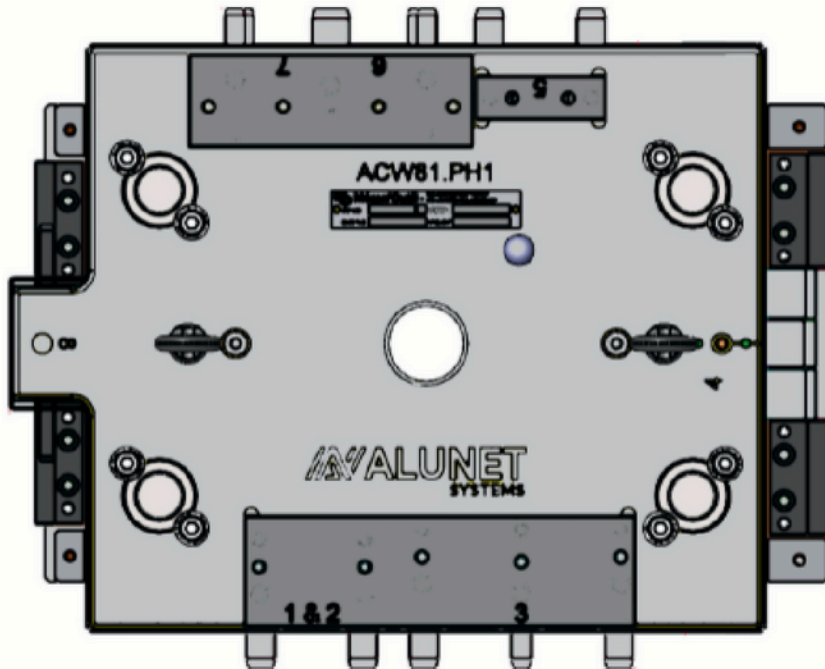




# Aluminium Window Fabrication



## Punching The Profiles



Cut all profiles according to the cutting list. When this is completed, you can now punch the profiles. Below is a list of stations on the punch (numbered accordingly) and their uses.

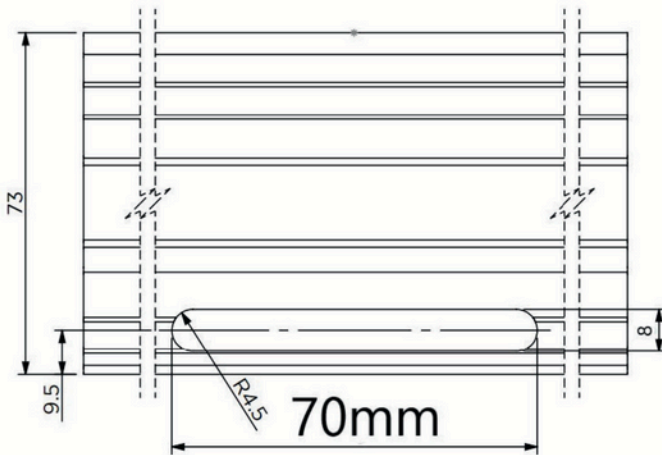
**\*\*Before punching any non screw ported Mullions/Transoms, you will need to mill them out. See routing details on the next page for the dimensions.\*\***

Station	Profile & Use
1 & 2	Outer frame (ACW81.111/112/113/114) cleat holes.
3	Reverse adaptor (ACW81.331) cleat holes.
4	Outer frame/ mullion drainage for sash openings. (small face)
<b>**5**</b> SEE ABOVE	Screw ported mullion/Transom (ACW81.442/444/446) cleat holes. <b>(ONLY PUNCH BOTTOM SIDE OF THE TRANSOM)</b>
6 & 7	Sash (ACW81.221) cleat holes.
8	Face drain holes for Transom/reverser and frame. <b>APPROX 100mm IN FROM THE TOP OF THE MITRE)</b>

Both the drainage punches (stations 4&8) have centre lines marked on the punch head, mark up where you want the centre of your drainage hole/slot and line it up with the line on the punch.

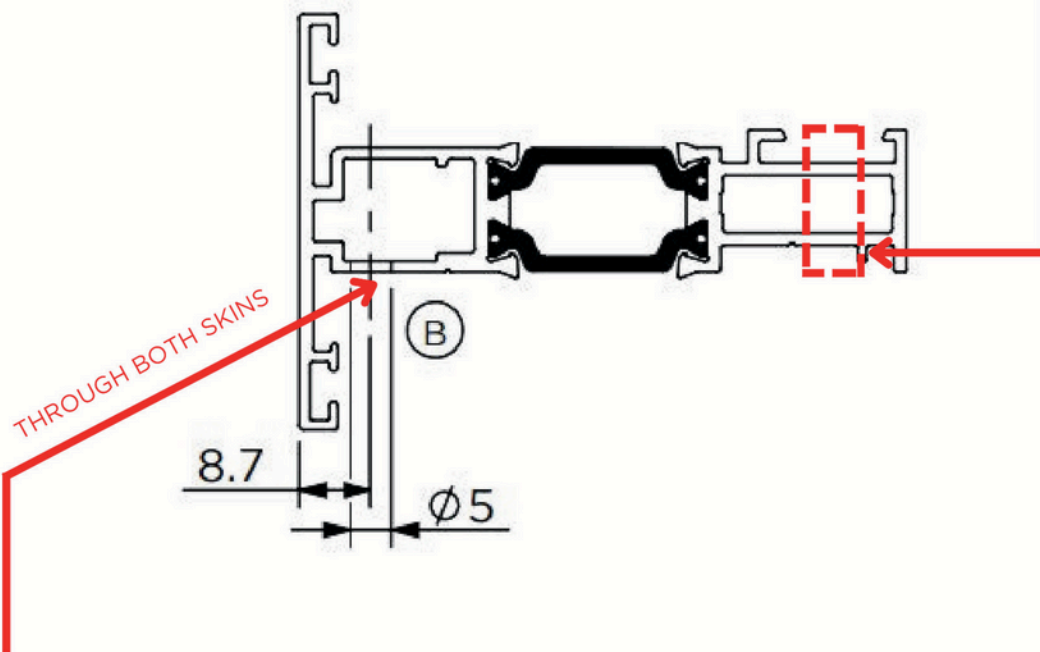
## Routing Details

### Sash Gearbox Routing



Router out a 70-75mm slot (8-9mm wide) for the gearbox of the locking mechanism to fit into. This slot should be centered on the handle side of the sash and just behind the little leg of the sash.

### Sash Drainage Routing



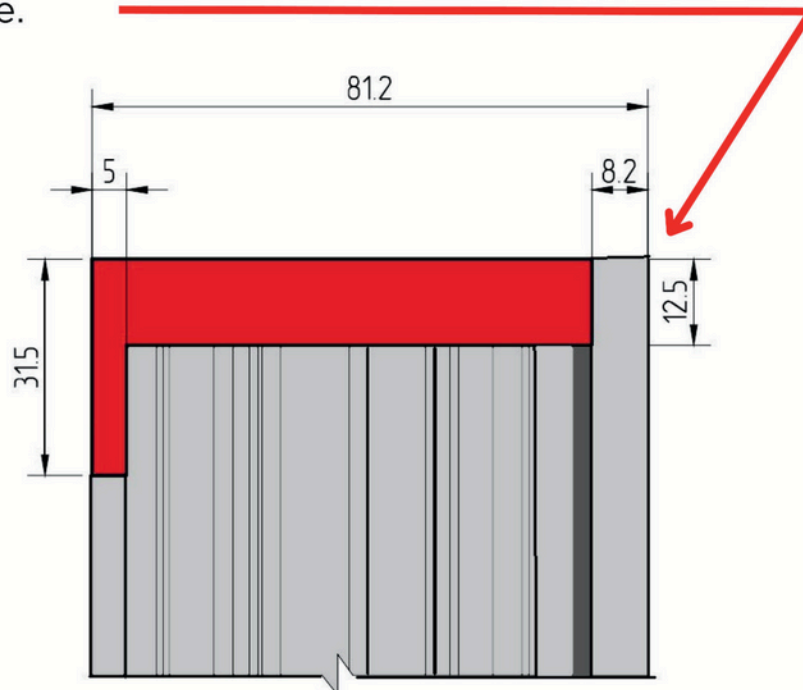
Make 5mm drain slots/holes in the front edge of the bottom rail of the sash for drainage. These slots/holes should be approx. 200mm apart to allow for maximum drainage of the sash profile.

# Routing Details

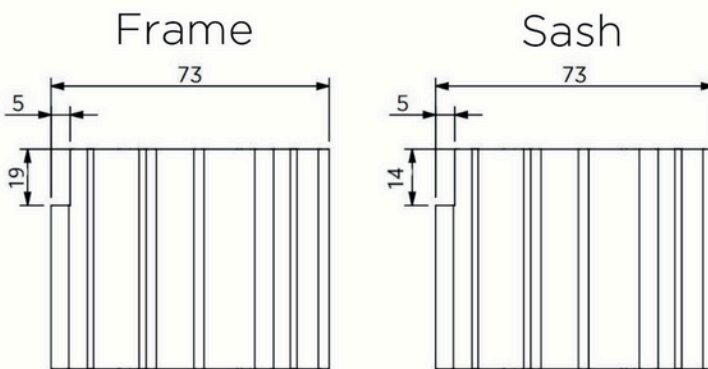
## Mullion/Transom Routing

**\*\*This needs routing before it will fit in the punch\*\***

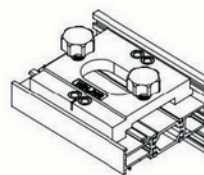
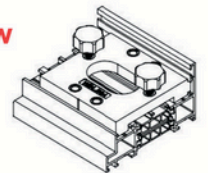
This detail should be routed out of both ends of the standard flush mullions/transoms (screw ported or non-screw ported) to fit onto the flush outer frame.



We also sell a SLIM mullion/transom which can be inserted into the frame or the sash. Below is the routing details for each:



**Use WIN.JIG4 for the screw ported standard mullions, to drill the frame holes.**



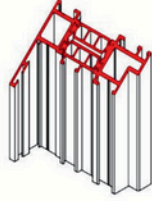
**Use WIN.JIG6 for the screw ported slim mullions, to drill the frame/sash holes.**

Mark the centre line of your mullion/transom, slide the jig in from the end and line the jig up with the centre mark.

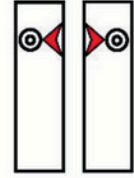


# Cleats and Chevrons

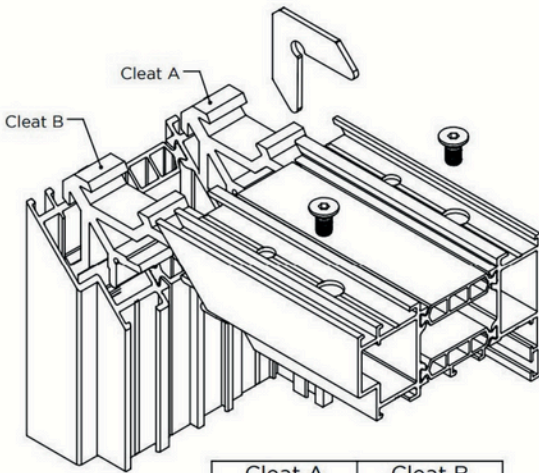
**SILICONE THE ENDS OF ALL PROFILES BEFORE ASSEMBLY**



**Make sure the off-set holes on the cleats are to the outside of the profile.**

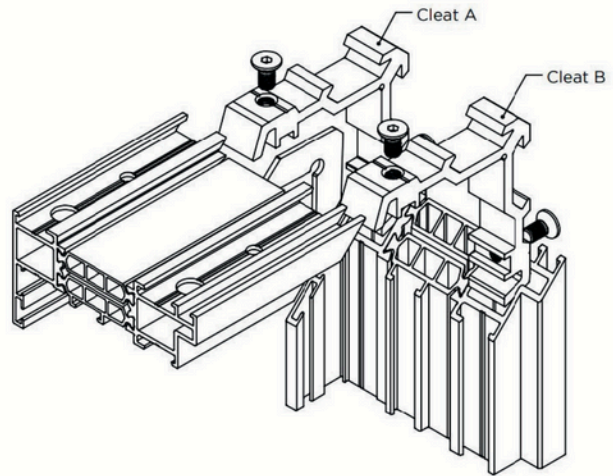


## Standard Frame



Cleat A	Cleat B
ACW81.883	ACW81.883

## Slim Frame

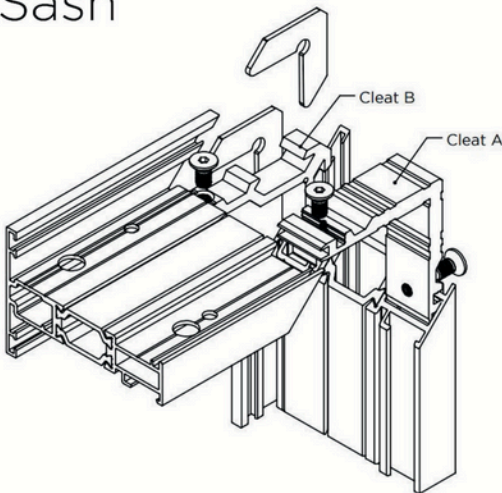


Cleat A	Cleat B
ACW81.881	ACW81.881

1x Chevron ACW81.894

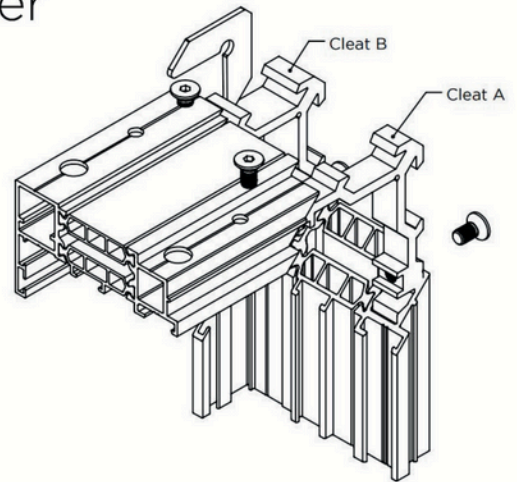
1x Chevron ACW81.894

## Sash



Cleat A	Cleat B
ACW81.886	ACW81.882

## Reverser



Cleat A	Cleat B
ACW81.882	ACW81.881

**COUNTERSINK:**  
Outer holes so the screw sits flat.

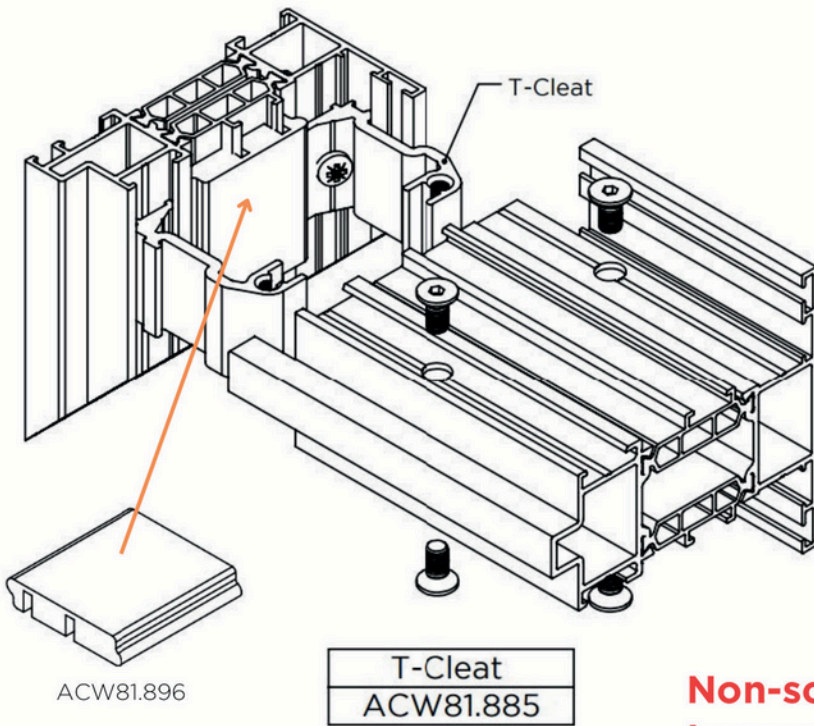
Outer holes so friction stay sits flat.

2x Chevron ACW81.894

1x Chevron ACW81.894

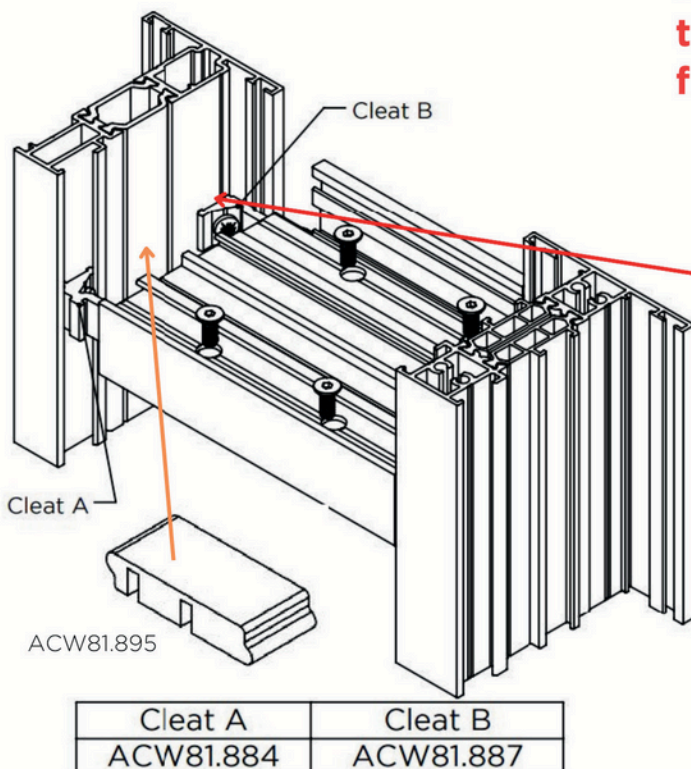
# Cleats and Chevrons

## Standard Mullion/Transom

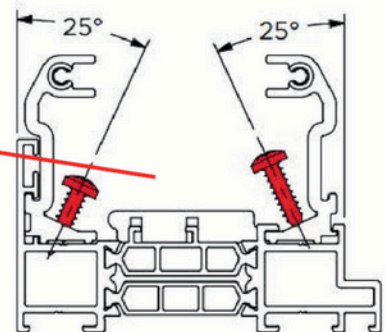


**Non-screw ported mullions/transoms.**

## Slim Mullion/Transom



**Make sure to put the mullion/transom in before assembling the frame.**

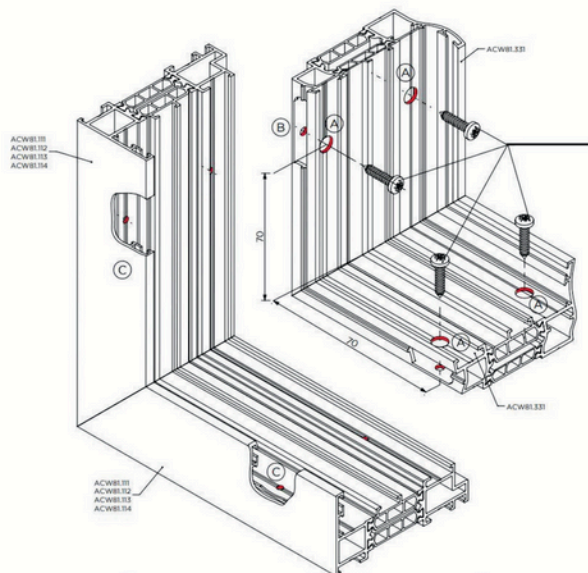
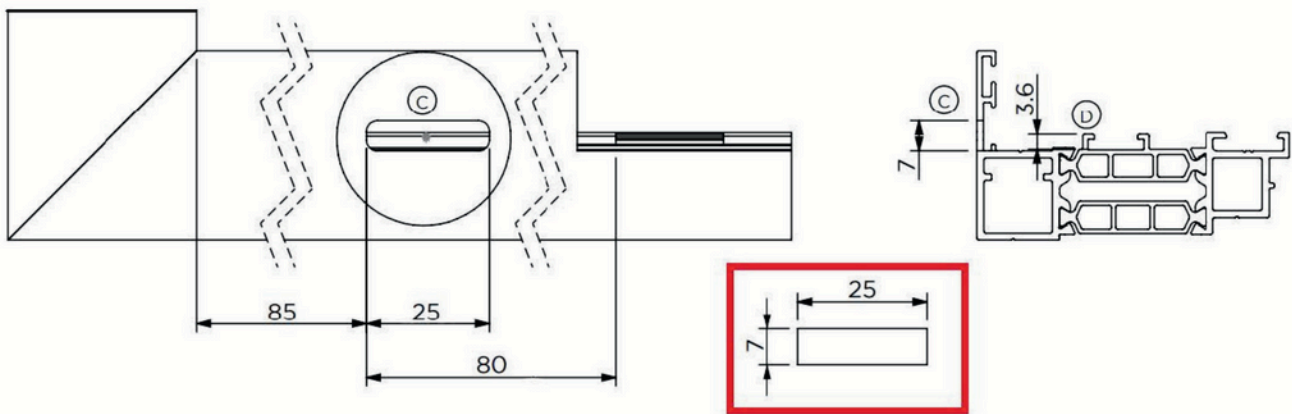




# Reverse Adaptor Prep

## Reverser Drainage

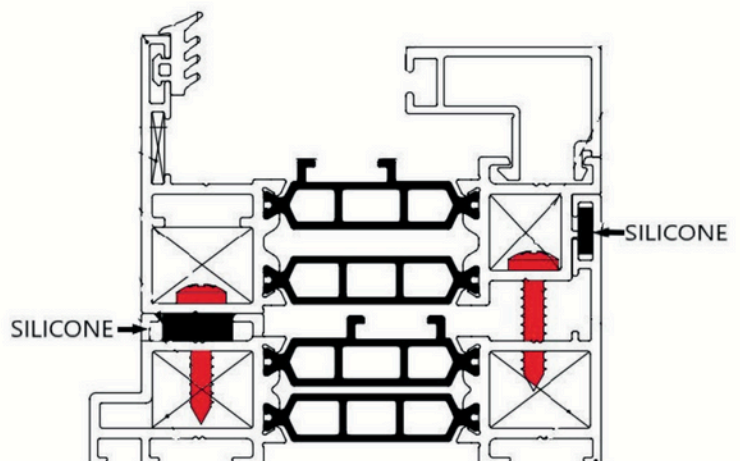
Use station 8 on the punch tool to punch out the face drain holes on the bottom section of your reverser. First mark up the centres of the drain holes from each end (as shown below), then line this mark up with the centre line on the punch before pressing the pedal. We suggest that any bars over 700 should have a hole punched in the centre of the bar also.



## Reverser Fixing Holes

Drill holes (9mm top skin, 3.5mm bottom skin) approximately 450mm apart on every side of your reverser. Screw in with 19mm pan head screws.

**WHEN FIXED, FILL THE HOLES WITH SILICON TO PREVENT WATER INGRESS.**



**Silicone the following areas before fixing the reverser to the frame.**

# Espag Prep Details

## Beading

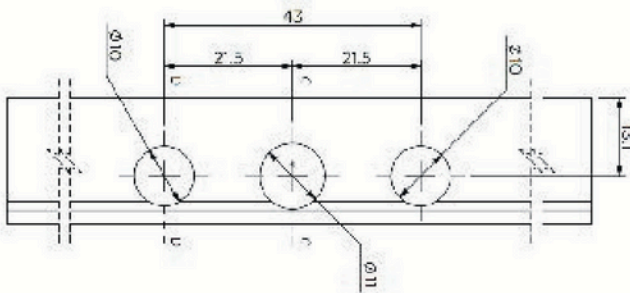
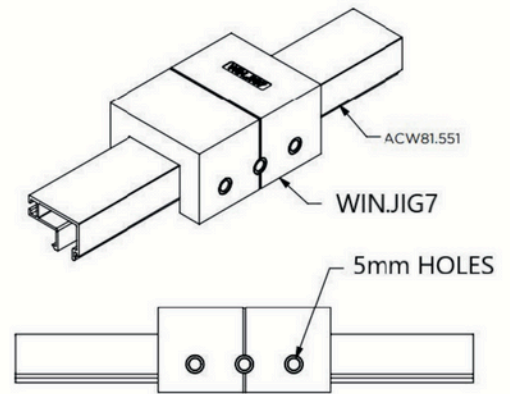
Once your sash has been assembled, you can now bead the sash. Since the handle sits on the bead, always start with beading the handle side of your sash first, no matter which orientation, this is so that the fitters will only have to take 3 beads out when glazing.

## Handle Drilling

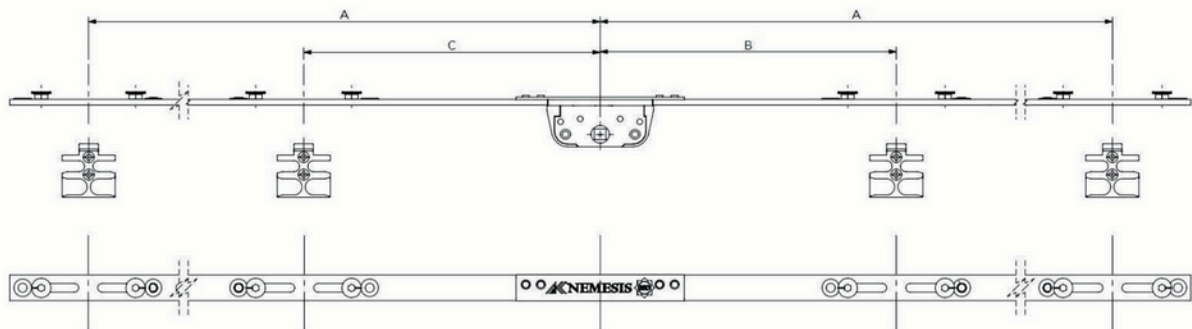
First, router out a slot for the gearbox in the sash ( See routing details page), place beading into the sash and mark the centre point on the face of the bead.

Push WIN.JIG7 onto the bead and line up the centre mark on the jig with the centre mark on the bead and drill 5mm holes through the jig (one skin of aluminium).

Take the jig off and open up the holes to 10,11,10 as shown below.



Now your bead has been drilled for the handle holes, place your espag into the sash and screw on the handle (in the open position). Now you can screw the espag onto the sash using 16mm countersunk screws.

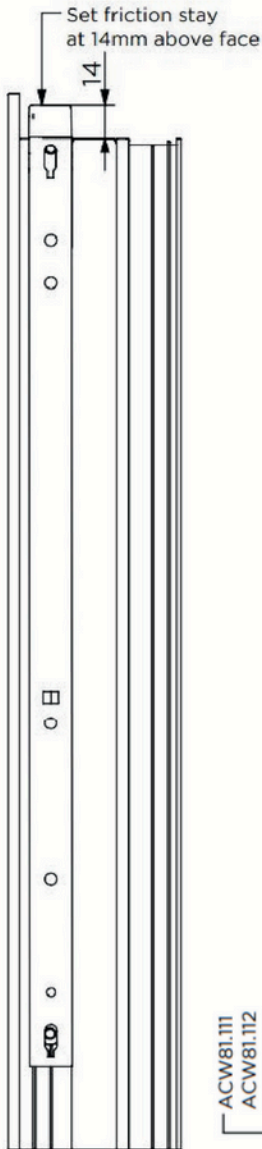


	NEM280207 (LH/RH)	NEM400207 (LH/RH)	NEM550207 (LH/RH)	NEM700207 (LH/RH)	NEM850207 (LH/RH)	NEM100020 7 (LH/RH)	NEM1150207 (LH/RH)	NEM130020 7 (LH/RH)
	LOCK LENGTH mm							
	280	400	550	700	850	1000	1150	1300
	QUANTITY OF STRIKE PLATES							
	2	2	2	2	2	3	3	4
	DISTANCE TO STRIKE PLATE CENTRE							
A	151.5	151.5	226.5	301.5	376.5	451.5	526.5	601.5
B	-	-	-	-	-	108	108	183.5
C	-	-	-	-	-	-	-	183.5



# Friction Stays

## Placement



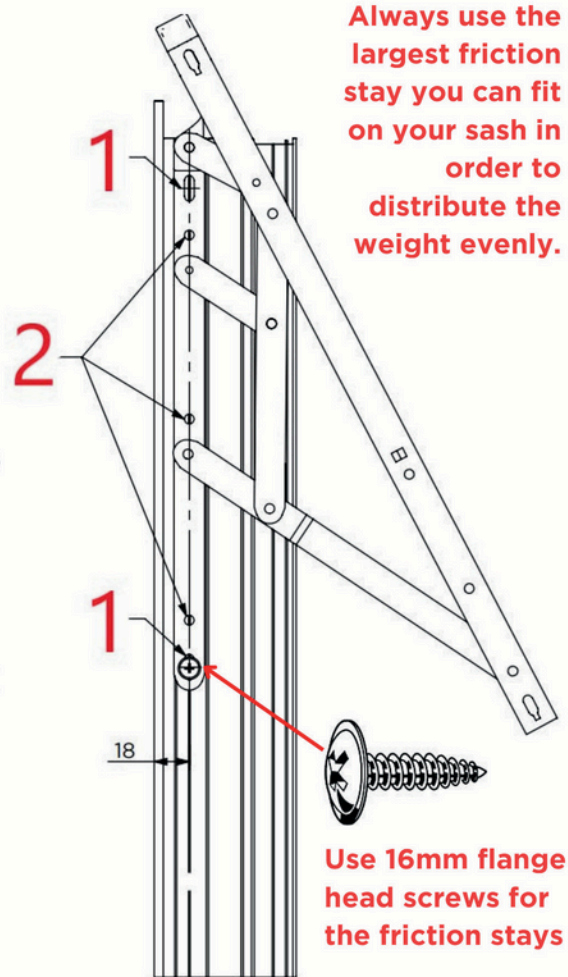
Mark off the fixing holes on to the top of the friction stay.

Place the friction stay on the sash 14mm away from the edge of the profile as shown.

Continue the marks from section 1 onto the sash. Pre drill fixing holes on the dye line (18mm up from the front face).

Screw the friction stay onto the sash **ONLY THROUGH THE TWO SASH END HOLES (1)**.

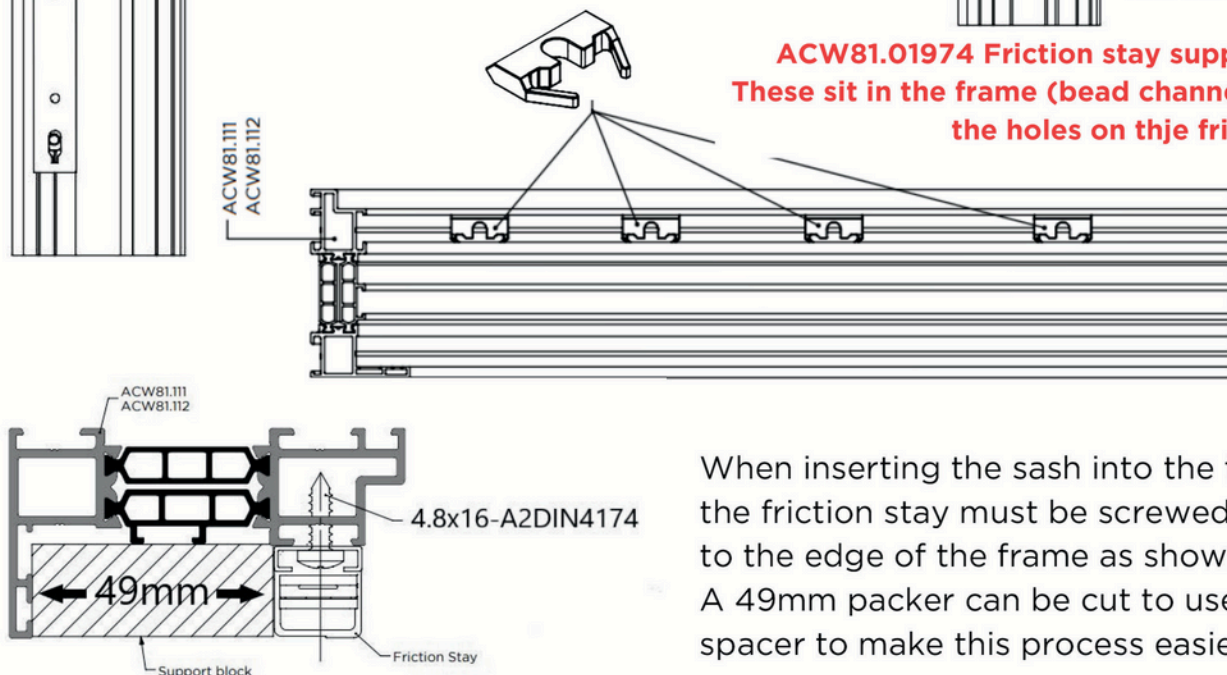
Only screw the final fix holes (2) once the sash is in the frame and adjusted.



**Always use the largest friction stay you can fit on your sash in order to distribute the weight evenly.**

**Use 16mm flange head screws for the friction stays**

**ACW81.01974 Friction stay support (pk6). These sit in the frame (bead channel), behind the holes on the friction stay.**



When inserting the sash into the frame, the friction stay must be screwed on level to the edge of the frame as shown. A 49mm packer can be cut to use as a spacer to make this process easier.

## Gaskets



**ACW584**  
For sash & frame  
(where sash is)



**DBA1-135**  
Captive Glazing  
Gasket



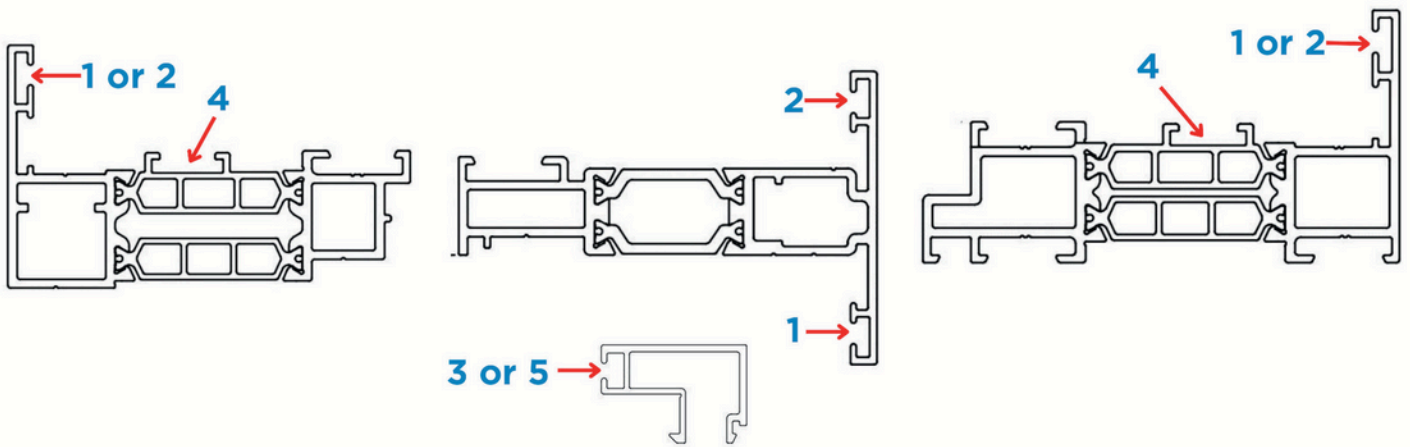
**DBA1-136**  
Wedge Glazing  
Gasket 6.2mm



**DBA1-131R**  
OPTIONAL Centre  
Seal Gasket



**DBA1-139**  
Wedge Glazing  
Gasket 8.3mm



## PAS24 Windows

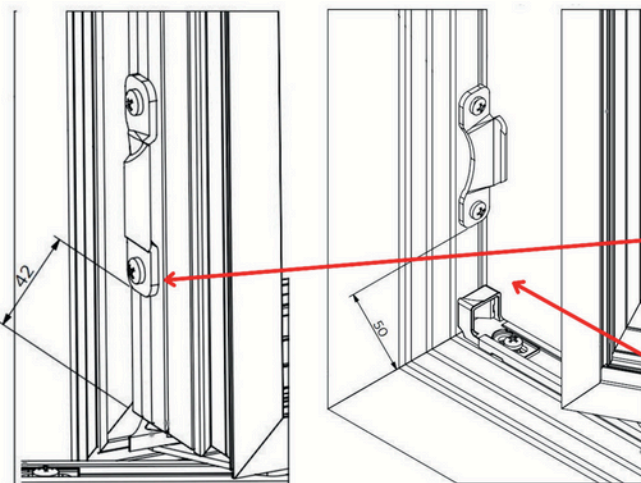
### Anti Jemmy Hooks

(excluder) ACW81.ASD-St1

Screw on the anti jemmy blocks on the top and bottom of the sash and frame (hinged side) in the following positions:

42mm up/down from the edge of the metal on the sash (not the outer face) as shown here.

50mm up/down from the inside edge of the frame as shown here.



### Run Up Blocks

ACW81.891

Screw two run up blocks onto each corner of the frame for PAS24 Windows as shown below.

These should also be used for larger sashes on the bottom of the frame to reduce sagging of the sash.

