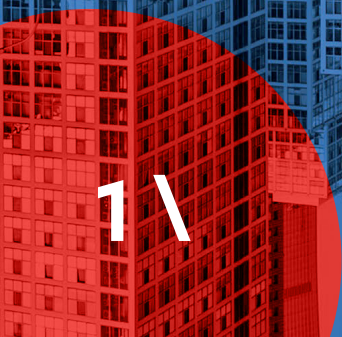


NTB - 102
SLIDE
HORIZONTAL
SLIDING
WINDOW
SYSTEM



BRITAL.AE

ABOUT US



International experience and talent

Brital Llc was initially established to design and market aluminium curtain wall systems and façade systems in the Gulf region of the Middle East. Brital is a British company which has at its disposal some of the most experienced and well qualified façade engineers and designers, several of whom hold a Masters Degree in façade Engineering. In addition the majority of our staff are members of the Society of Façade Engineering at either Member or Fellow level.

This combination of international experience and talent is behind the design and engineering of all Brital systems making them unique in that they have been designed from the beginning to be suitable for the Gulf climatic conditions and construction methods.

Over the past twenty years the company has grown its product and systems range significantly so that the product range available today from Brital encompasses all types of façade solutions ranging from doors and windows through to structurally glazed and unitised curtain wall systems. The majority of Brital systems are available in both thermally broken and standard versions. As a design company on-going system development ensures that new and innovative solutions and system enhancements are regularly added to the product range.

This is often done in consultation with Brital approved fabricators to ensure that our designs are relevant to the end user and the markets that they are used in. **Brital systems are only available from a network of approved fabricators thus ensuring both on-going quality assurance and local availability.** The aluminium profiles for the systems are extruded in the Gulf region by licensed extruders who meet Brital's exacting standards for the quality, accuracy and consistency of the profiles and sections supplied. Accessories and gaskets are specified in the system designs and again are available locally within the region.

All major Brital systems are designed to meet the CWCT standards and have been independently tested to ensure that they meet the specified performance thus ensuring that they meet or exceed the various standards commonly used in the region such as BS:EN, ASTM, AAMA, etc. Whilst Brital's design offices are located in the United Kingdom we also operate a Dubai branch office where locally resident engineers are available to provide on-going technical and practical support to projects and customers throughout the region, including shop drawing reviews, design proposals and general façade engineering assistance.

The image features a complex architectural wireframe of a skyscraper, rendered in a light blue color against a darker blue background. The wireframe shows the intricate structural details of the building, including floors, columns, and beams. In the background, there are technical drawings and diagrams, including a large circular diagram with a central crosshair and various angles and dimensions. The word "BENEFITS" is prominently displayed in the center in a bold, white, sans-serif font. The overall aesthetic is technical and professional, suggesting a focus on engineering or construction.

BENEFITS

Design team led by Technical Director and Chief Designer who both hold a Masters Degree in Facade Engineering and over 35 years cw design experience on projects around the world.



Systems designed specifically for the regional climates and conditions from a clean sheet of paper, not an adapted European market system.



UK design office with engineers also based at a regional office in Dubai.



All project shop drawings are reviewed for each and every Brital project by Brital designers and engineers, drawings can be stamped if required.



All senior Brital personnel are Fellows of the Society of Facade Engineering.



Brital is a design and engineering company and can respond quickly and efficiently to specific project design requirements.



All systems are integrated so doors, windows, sun shade system, etc., can be incorporated into the overall curtain wall.



20 years track record of hundreds of successful projects completed throughout the Middle East, Africa, Asia, Australia and beyond.



Locally extruded in the region so available in a timely and economical manner.



Locally extruded in the region so available in a timely and economical manner.



Only fabricated and installed by approved fabricators in each territory, so fabricators are familiar with the systems and thus minimise errors.



Systems designed to meet CWCT performance standards so exceed ASTM, AAMA, BS:EN, etc., specifications.



All systems tested at independent test laboratories in either UK or UAE, test reports available as required.



Systems designed to be simple to fabricate and install requiring no special machinery or experience, thus eradicating errors.



The system offers non thermally broken sections to suit the specific project requirements.

Introduction

The basic suite has equal leg outer frame sections to allow the sliding windows to be fitted between the reveal.

Various other profiles can be designed and incorporated allowing architects to achieve flexible designs.

The system is designed to accommodate 24mm double glazed units or 6mm single glazing using non beaded sash.

As with all Brital systems, the horizontal sliding window system is manufactured to exacting standards, enabling economy to be combined with strength to give many years of aesthetic, trouble-free operation.

Scope

This specification defines materials, construction, finishes and size limits for the sliding windows.

Materials

Aluminium profiles are extruded from aluminium alloy 6063 T6 complying with the recommendations of BS EN 12020 -2 : 2008 / BS EN 755 -9 : 2008

Finishes

The range of sections can be provided in either of the following range of finishes:

1. Anodised to BS1615 or BS3987 (Natural or Coloured)
2. Powder organic coated to BS6496

Subject to Brital Approval other finishes may also be used.

Construction

Frame members are mitre cut at 45°, corners are reinforced with cast aluminium mechanical cleats and crimped. The sash corner joints assembled using plastic moulded corner / roller using an Allen key. Interlock bars are cut, shaped and fixed securely to the sash by means of stainless steel screws.

All frame joints are sealed during construction against entry of water. Extruded gaskets and woolpile seals are provided to resist the ingress of water.

Glazing

The sash frame is assembled around the glass unit which are set against self adhesive EPDM gaskets externally and are fitted onto the frame / sash upstands.

For glass support, setting blocks and flat packers should be used.

Installation

Detailed installation instructions are provided which should be strictly followed.

Sliding Window Fittings

The sections are designed to suit clamp fixed horizontal sliding window fittings incorporate integral corner/roller and buffers with a variety of handle options. Brital are able to advise on a full range of fittings and accessories.

Rollers and corner cleats are available for the fly screens.

Brital recommend the use of restrictors to prevent the sliding window opening more than 100mm when fitted above ground floor level.

Size Limits for Sash sections

Horizontal Sliding windows Maximum & Minimum Moving Sash Sizes			
Sash Section	Max Height	Max Width	Min Width
BR-HS11 / BR-HS13 Moving Sash	1500mm	750mm	Height / 3

Maximum sash weight 40 Kg with
Corner / Roller Kit BR-0302.4 & BR-0302.5

Performance

The Brital Sliding window system has been designed to give the following levels of performance.

Air permeability - BS 6375 : Pt. 1 : 1983
test pressure 200 Pa

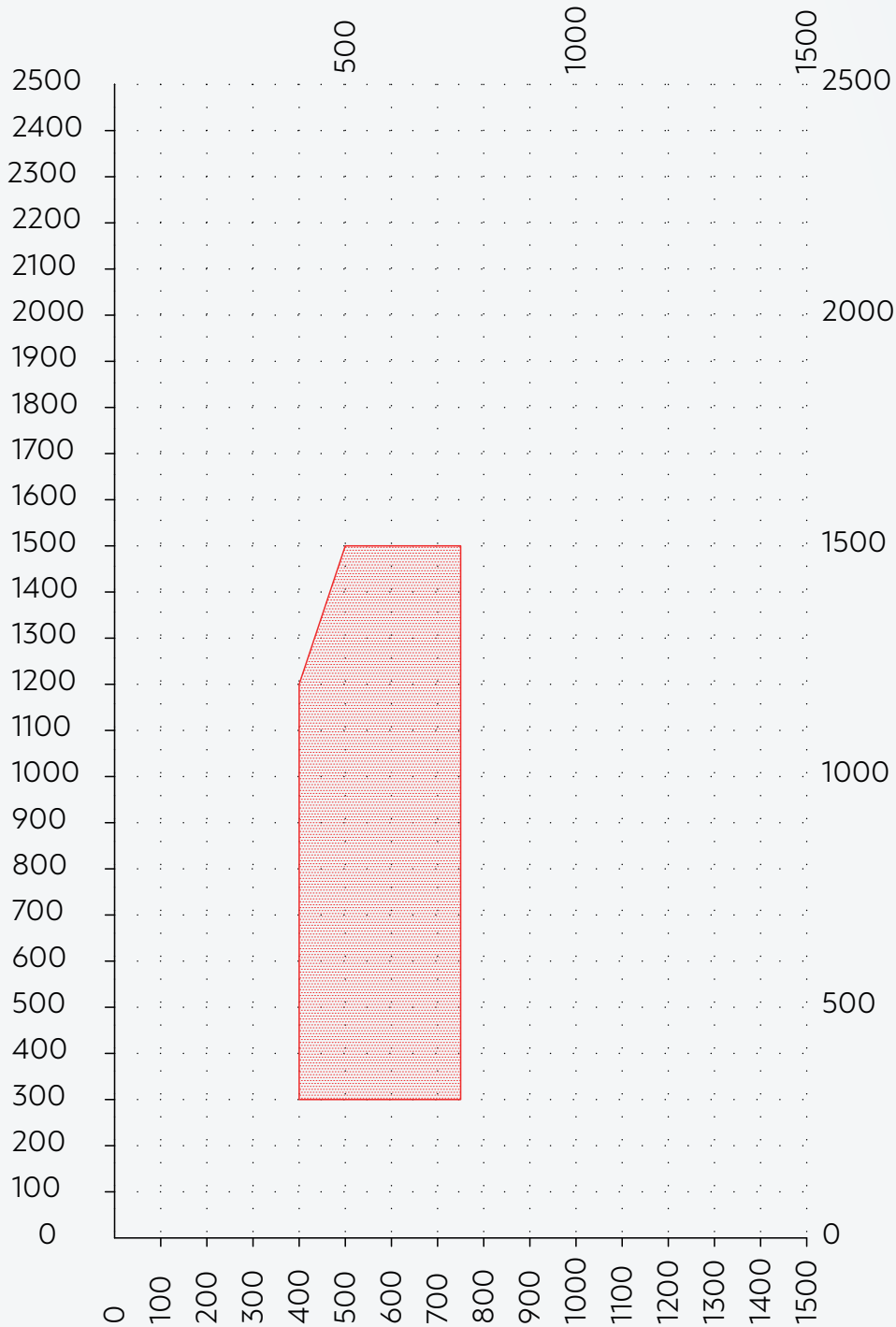
Water tightness - BS 6375 : Pt. 1 : 1983
test pressure 200 Pa


Wind resistance - BS 6375 : Pt. 1 : 1983
test pressure 1500 Pa

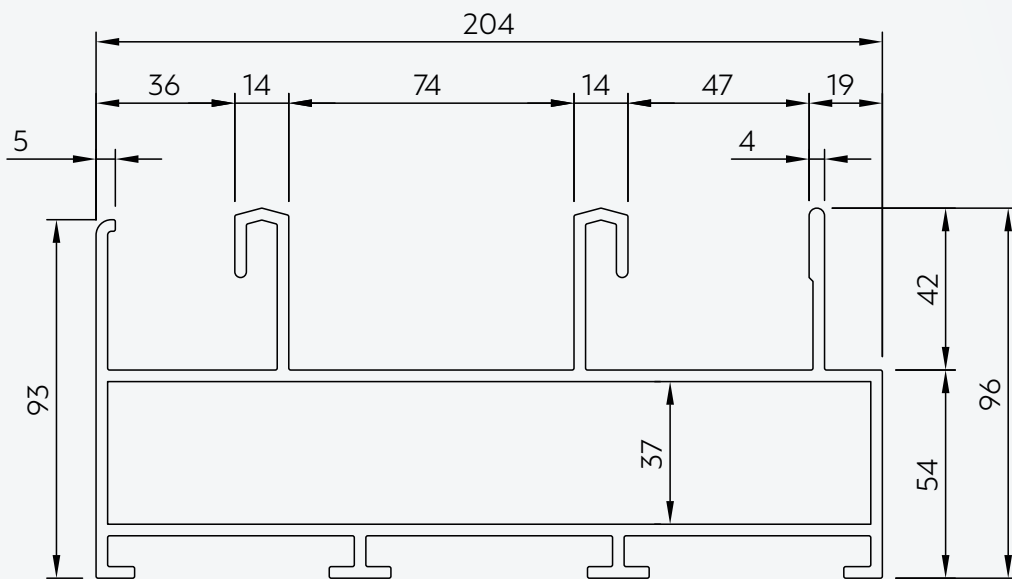
These levels of performance should be sufficient for any location within the Middle East, However should higher levels of performance be required for any reason, Brital's advice should be sought.

Development

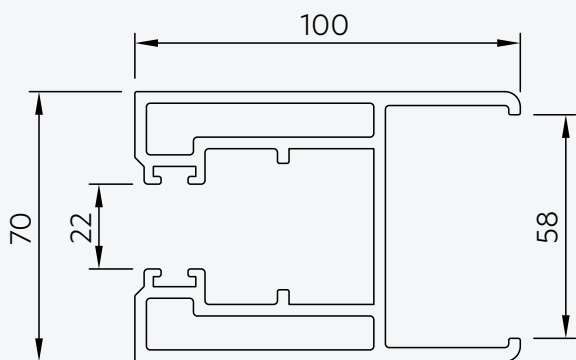
Our policy is to continually research the market for new and improved products. We must therefore retain the right to amend specifications without prior notice. It is recognised by Brital that in some instances special sections may be required for particular projects. When this occurs it may be possible to produce bespoke sections subject to there being sufficient quantity and adequate time.



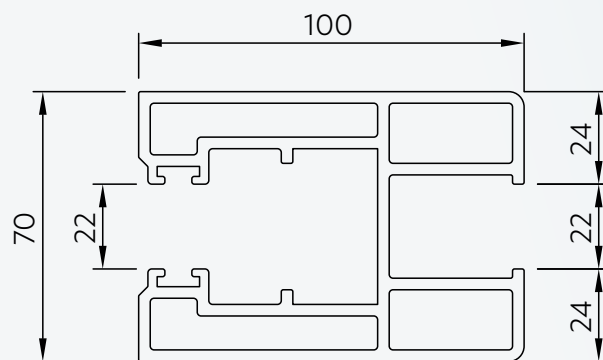
Maximum / minimum shutter sizes
 (shutters size should be within appropriate area)
 Red = () Moving sash (BR-HS11 or BR-HS13)



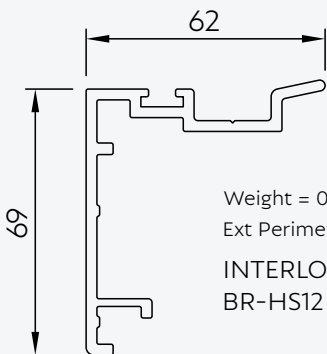
Weight = 1.586 Kgs/m
 Ext Perimeter = 537.90 mm
 Int Perimeter = 235 mm
OUTER FRAME
 BR-HS10



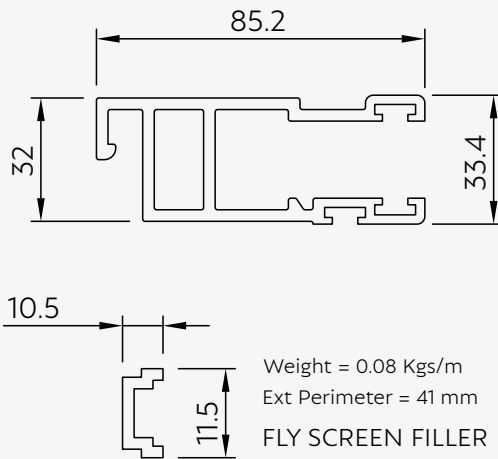
Weight = 0.945 Kgs/m
 Ext Perimeter = 307.16 mm
 Int Perimeter = 142.22 mm
MOVING SASH
 BR-HS11



Weight = 1.122 Kgs/m
 Ext Perimeter = 307.37 mm
 Int Perimeter = 235.71 mm
MOVING SASH
 BR-HS13

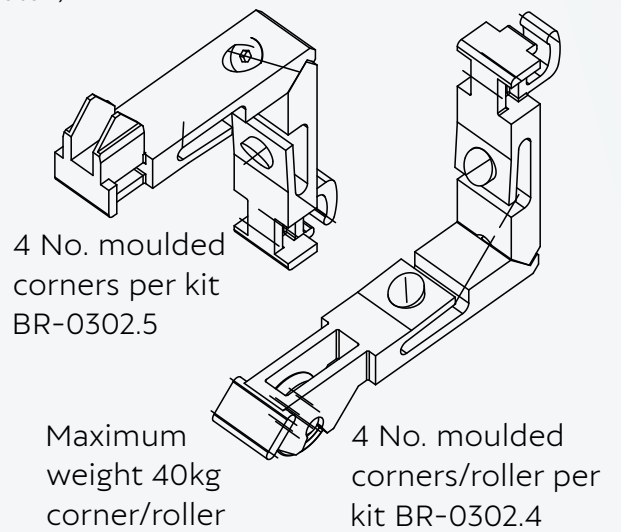
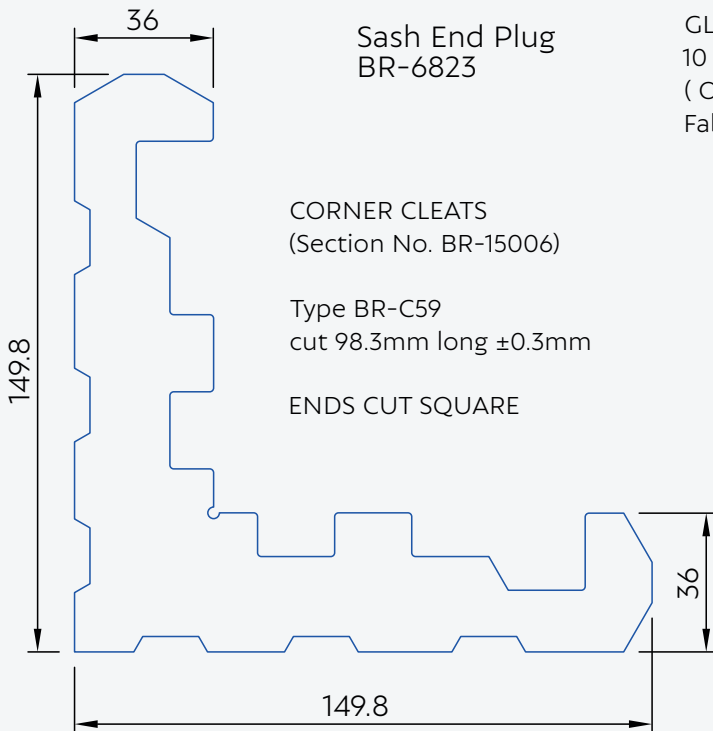
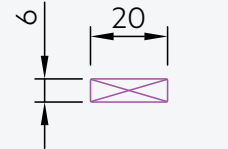
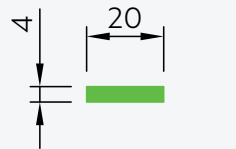
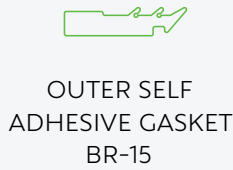
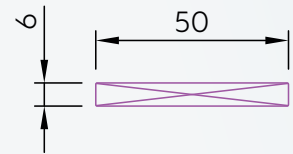
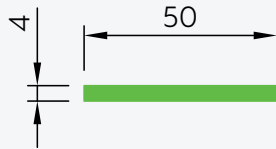
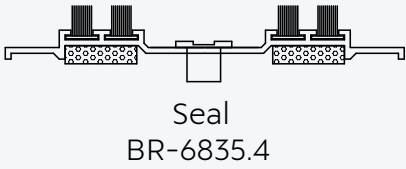
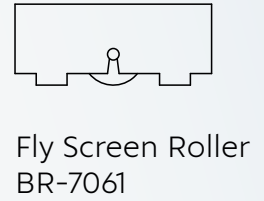
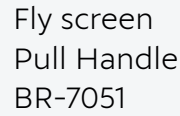
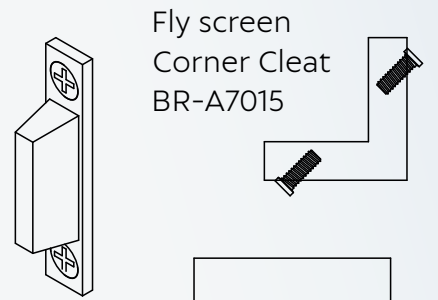
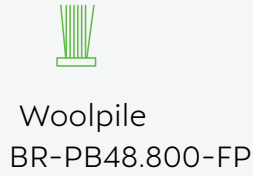
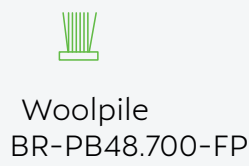
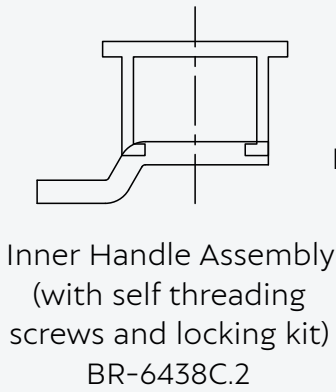


Weight = 0.33 Kgs/m
 Ext Perimeter = 178 mm
INTERLOCK
 BR-HS12



Weight = 0.50 Kgs/m
 Ext Perimeter = 220 mm
 Int Perimeter = 39 mm
FLY SCREEN
 BR-SL24

Weight = 0.08 Kgs/m
 Ext Perimeter = 41 mm
FLY SCREEN FILLER
 BR-SL25

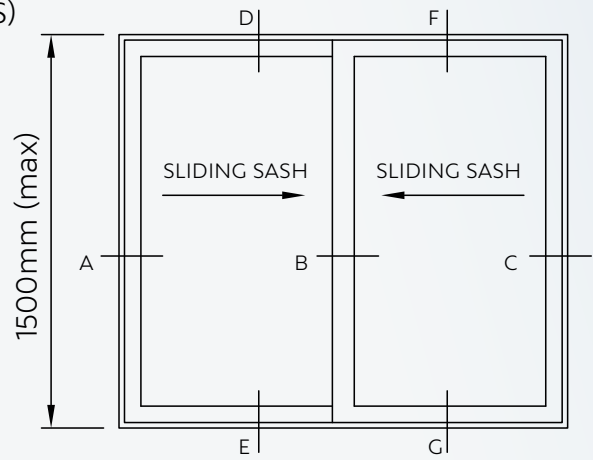
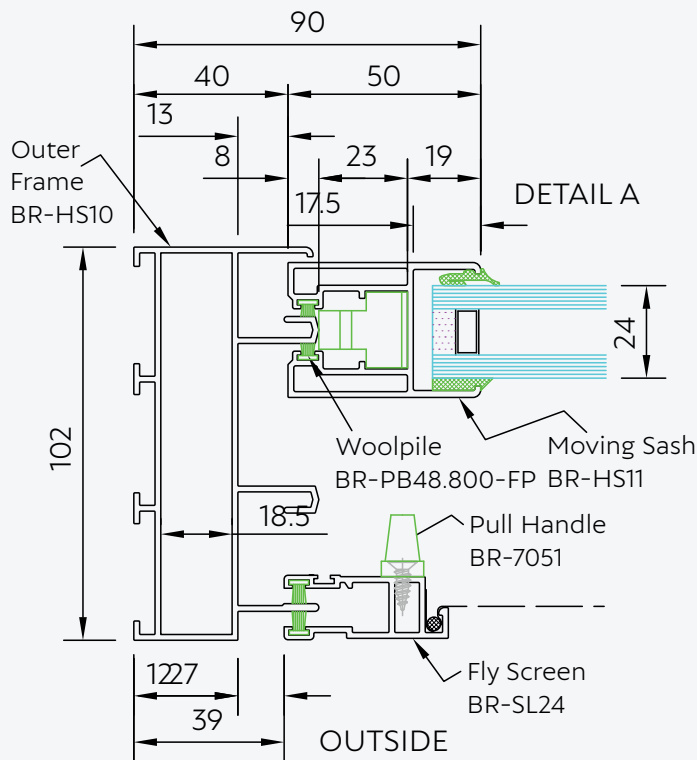


The following order of assembly should be followed for the best results :-

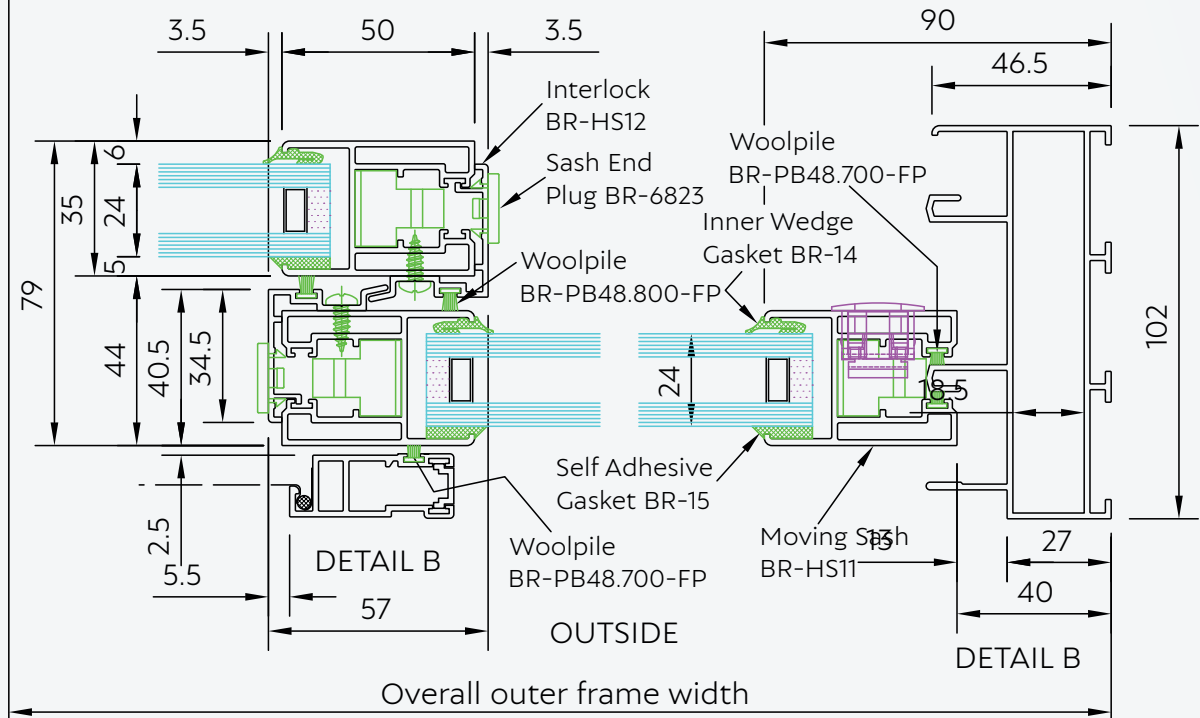
NON-BEAD GLAZED VERSION. (using moving sash BR-HS11 or BR-HS13)

1. All bars should be pre cut and machined as detailed in this manual.
2. The four outer frame bars should be assembled using the corner cleats BR-59 at each corner. Ensure all of the corner joints are fully sealed against water penetration. The latch keeps should be fitted at this stage.
3. Apply the self adhesive glazing gasket BR-15 to the glazing leg of the section ensuring the gasket is tightly mitred at the corners.
4. Offer the double glazing unit to the sash frame ensuring it is sitting on the setting blocks and packers at the cill and jambs.
5. The four mitred sash frame bars should be assembled around the double glazing unit using the plastic moulded corner kit BR-0302.5 at head and corner / roller kit BR-0302.4 at cill. Ensure all of the corner joints are fully sealed against water penetration. When assembling the sash frame ensure that the wool pile weather seals, two corners at head & two corner / roller at cill with buffers using (BR-0302.4 & BR-0302.5 kit) and the inner handle assembly BR-6438C.2 (with self-threading screws and locking kit) are fixed to the bars before the corners are assembled.
6. Interlock to be fixed to the sash using No 8 x 12mm pan headed stainless steel self tapping screws at 300mm centres.
7. Fit the inner glazing wedge BR-14 ensuring it is not stretched and that tight joints are formed at the corners.
8. Fix the outer frame into the window opening in the building ensuring it is square and that the bars are not bowed.
9. The sash frames are offered in position onto the tracks without any height adjustment, but ensure the sashes slide freely and that the cover on the weather seals is consistent at the head, cill and jambs.
10. Fit the sash end plugs BR-6823 to the both ends of the interlock bars at the meeting rails.
11. Locate and screw fix the seal BR-6838.4 and self adhesive foam seals to the outer frame at the head and cill, on centre line of the meeting rails.
Insert plastic drain plug into hole in seal BR-6838.4 at cill.

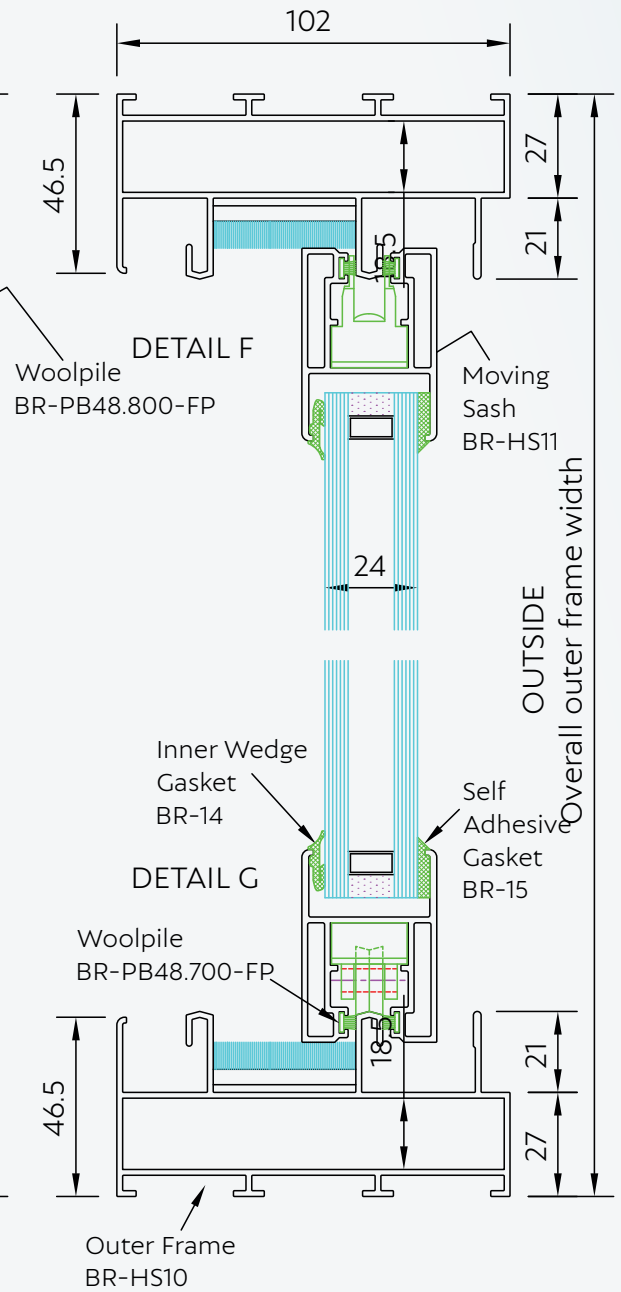
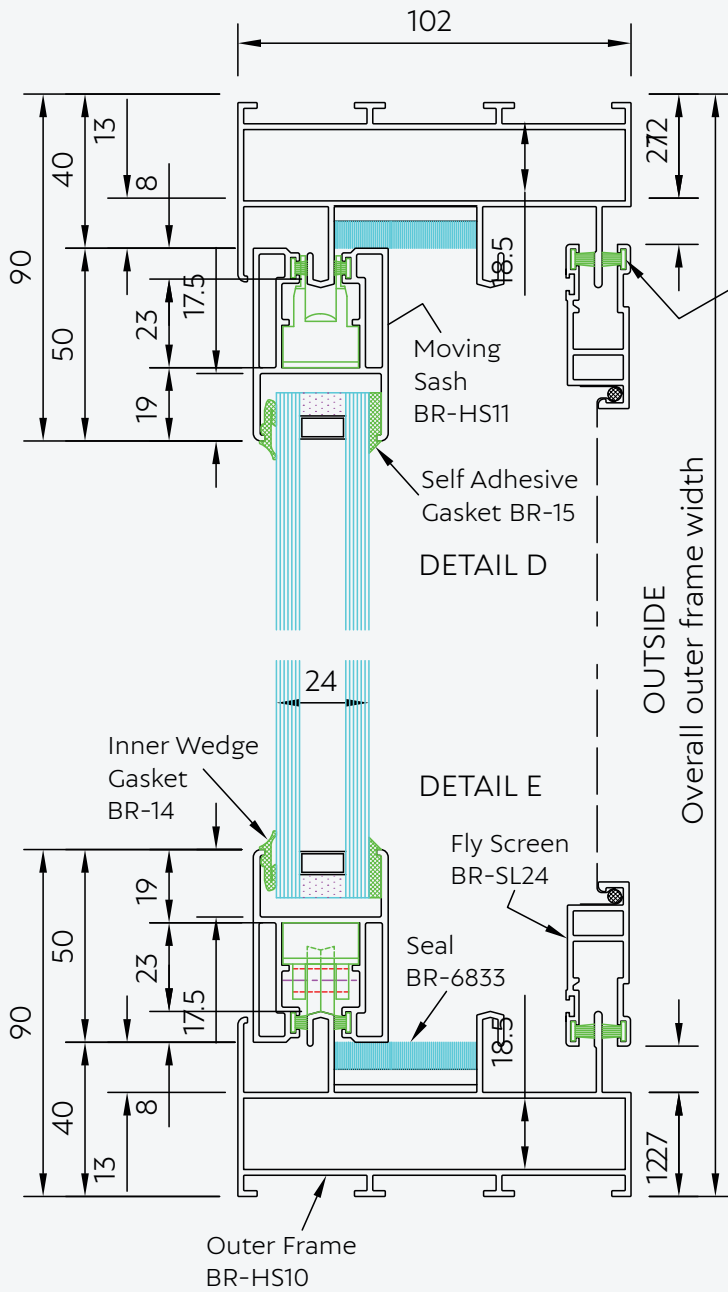
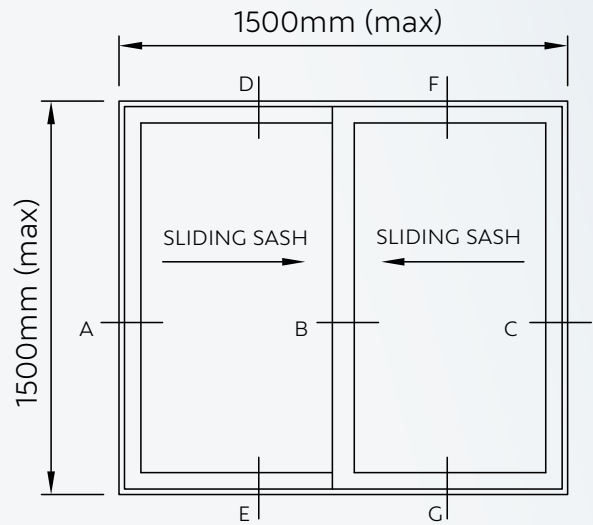
OUTSIDE ELEVATION
(HORIZONTAL SECTIONS)



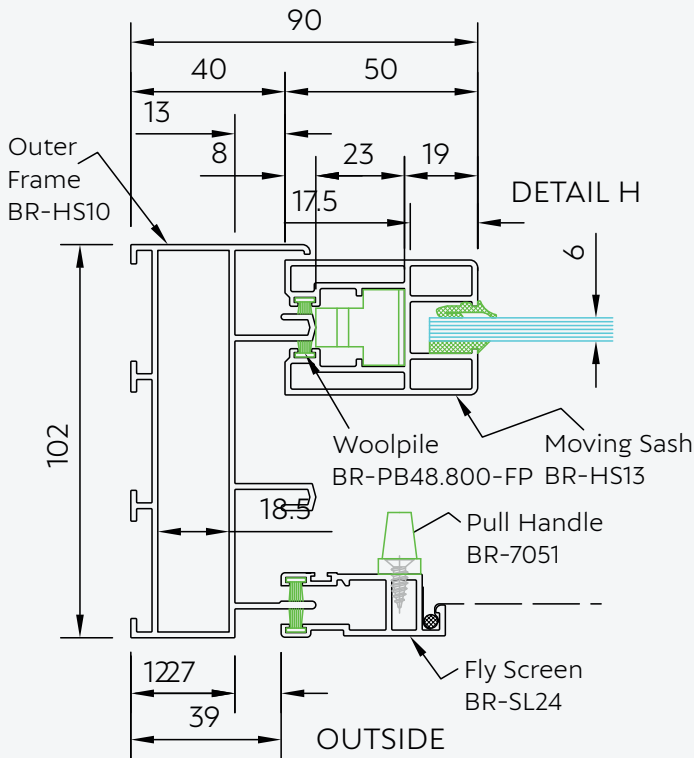
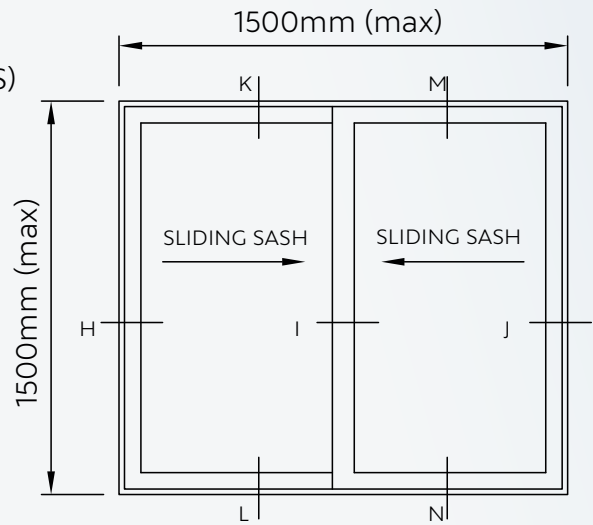
* For glazing options see section 9 of this manual.



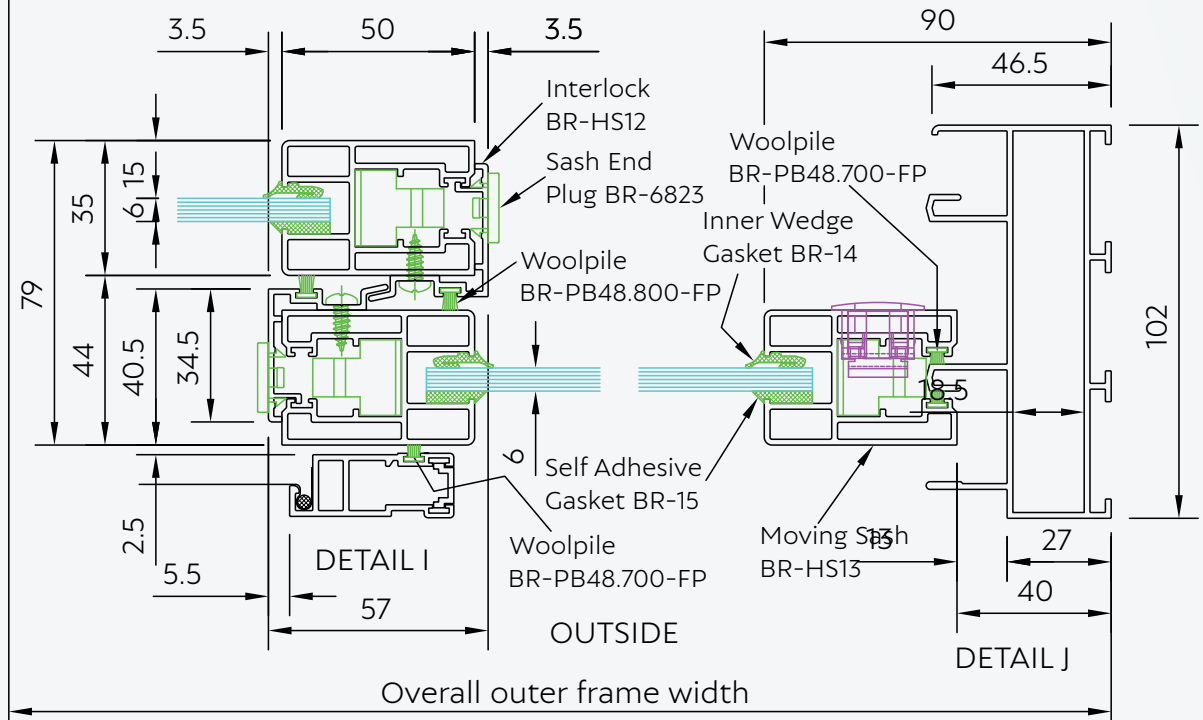
OUTSIDE ELEVATION
(VERTICAL SECTIONS)



OUTSIDE ELEVATION
(HORIZONTAL SECTIONS)

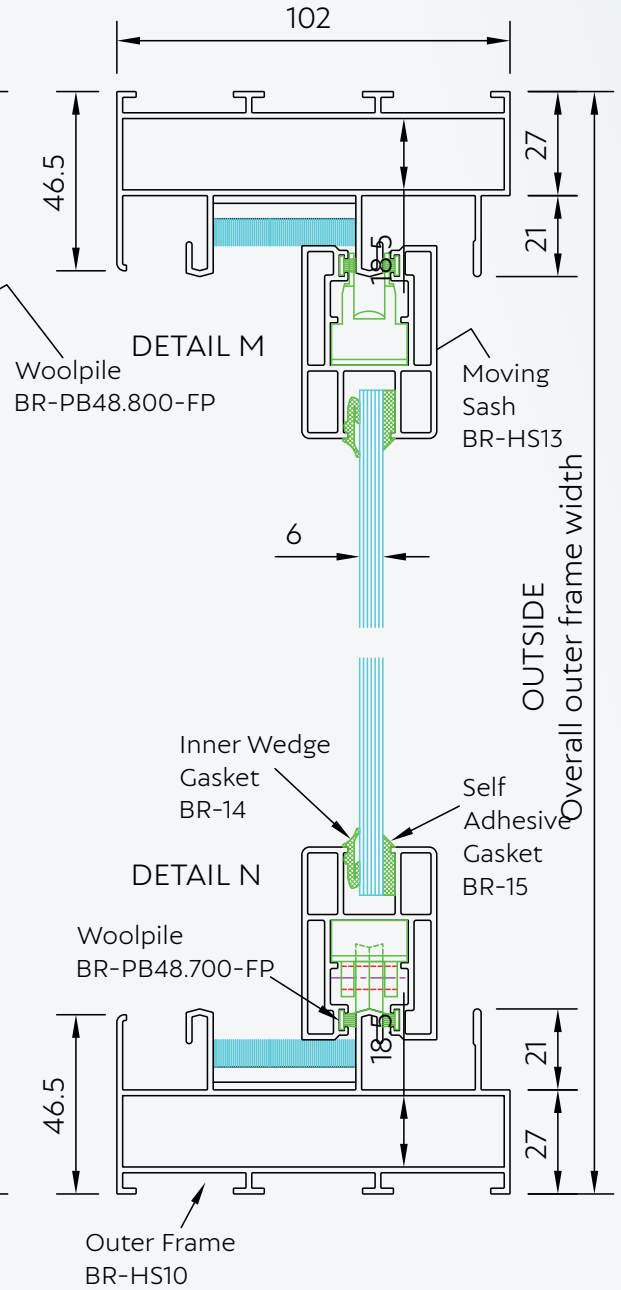
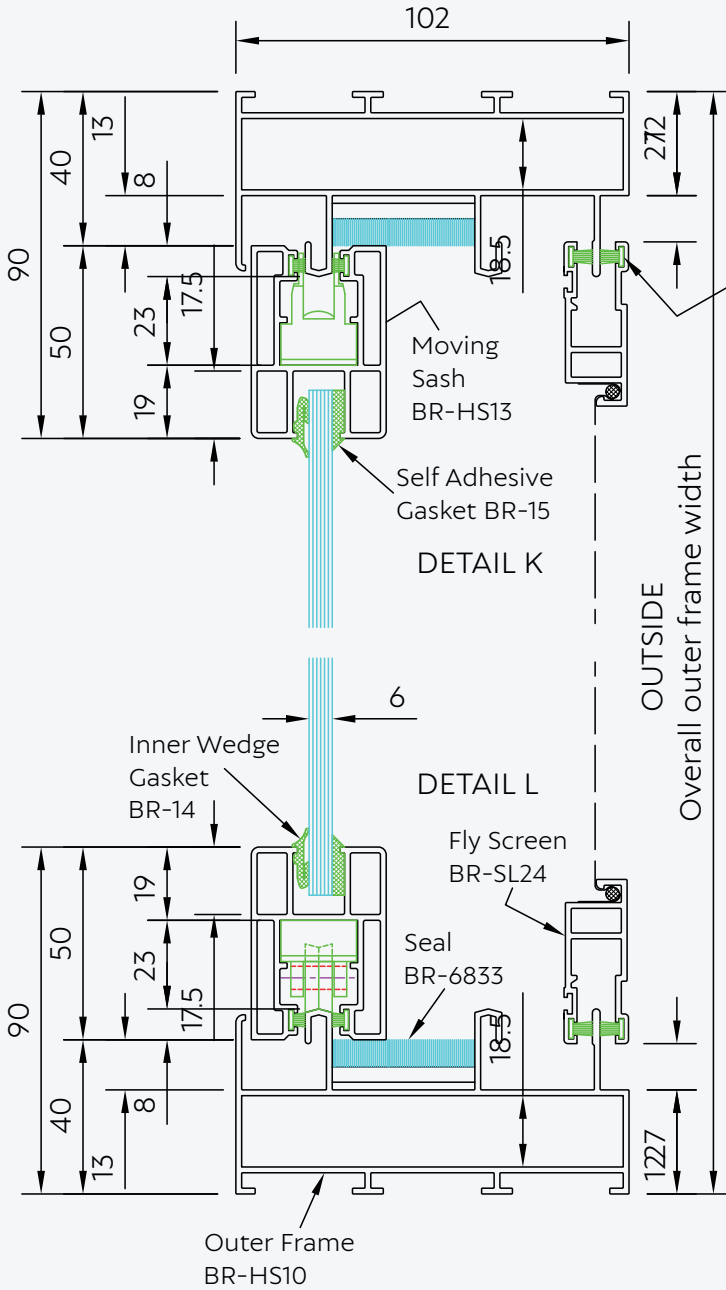
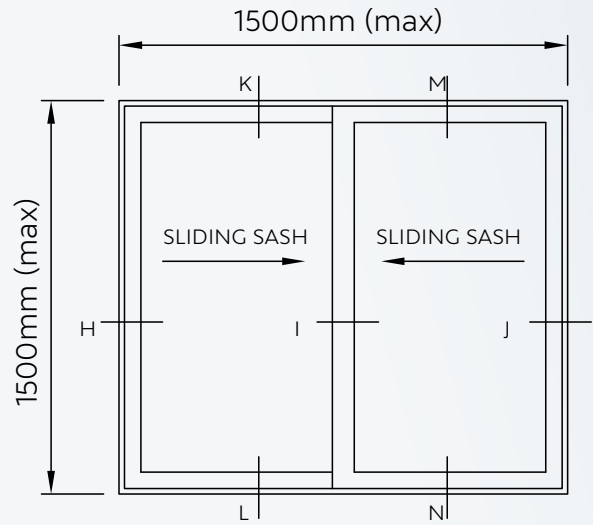


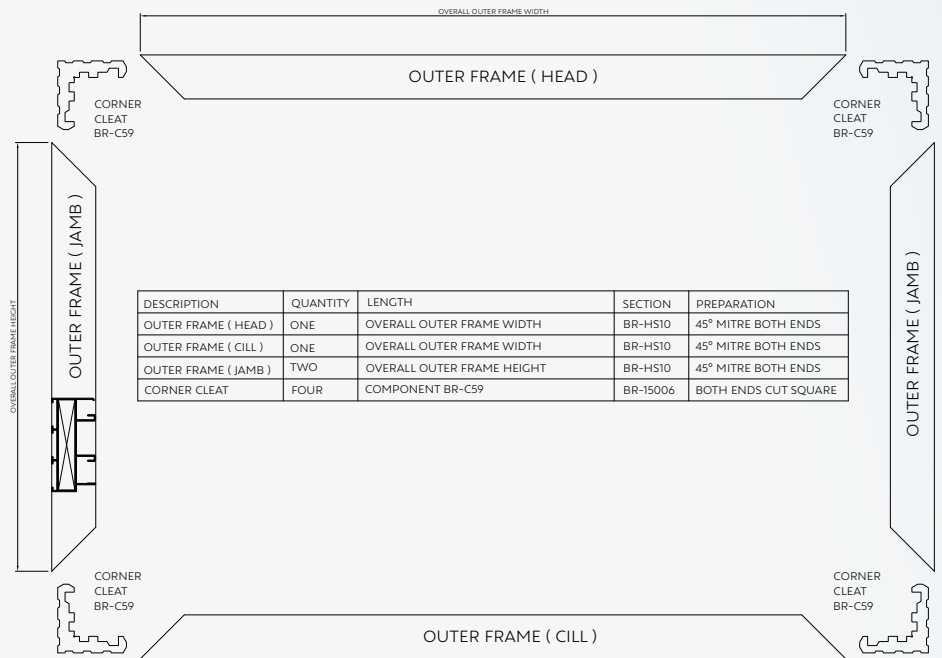
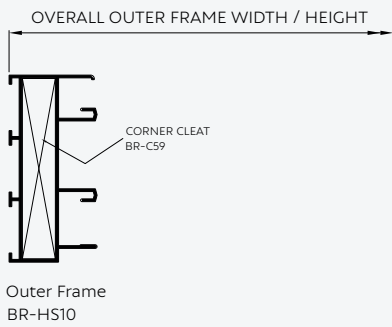
* For glazing options see section 9 of this manual.

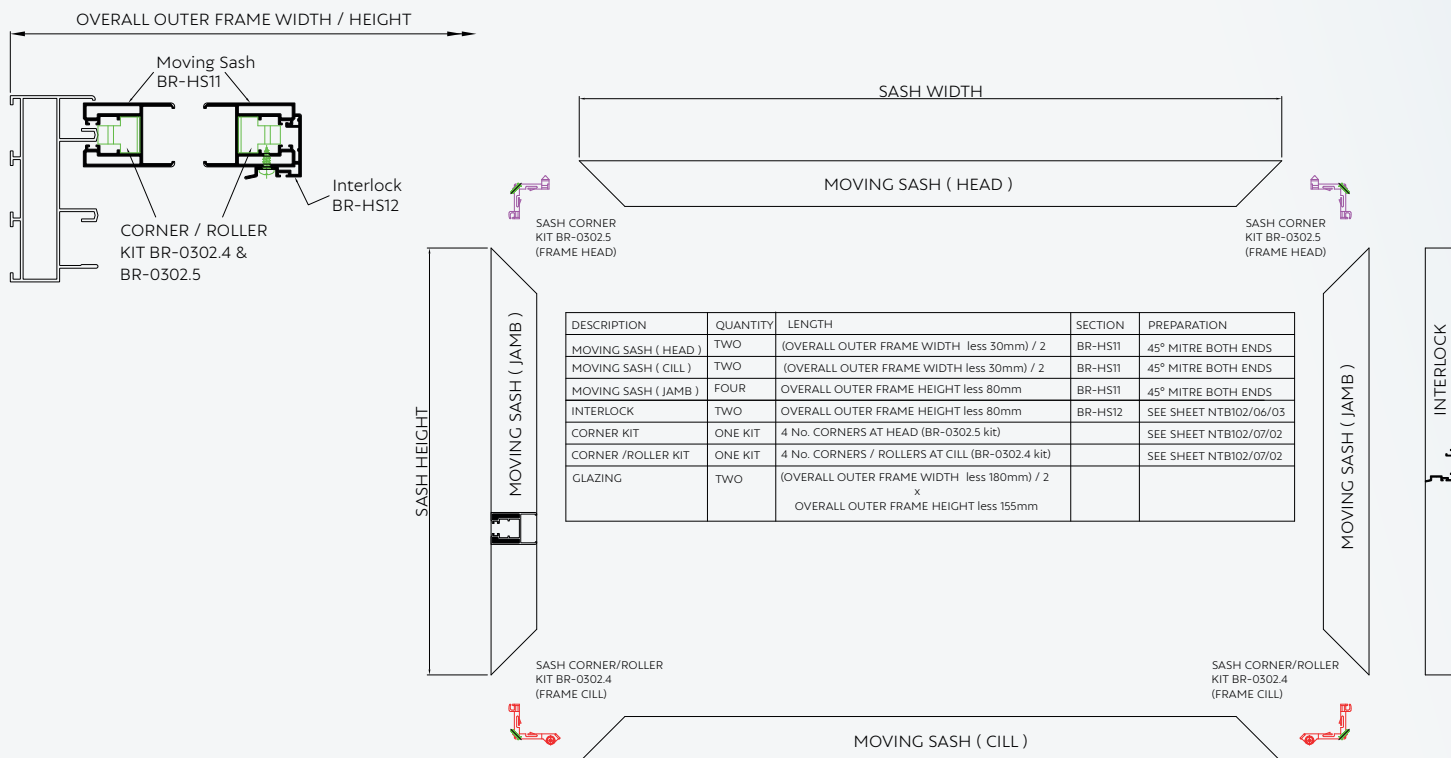


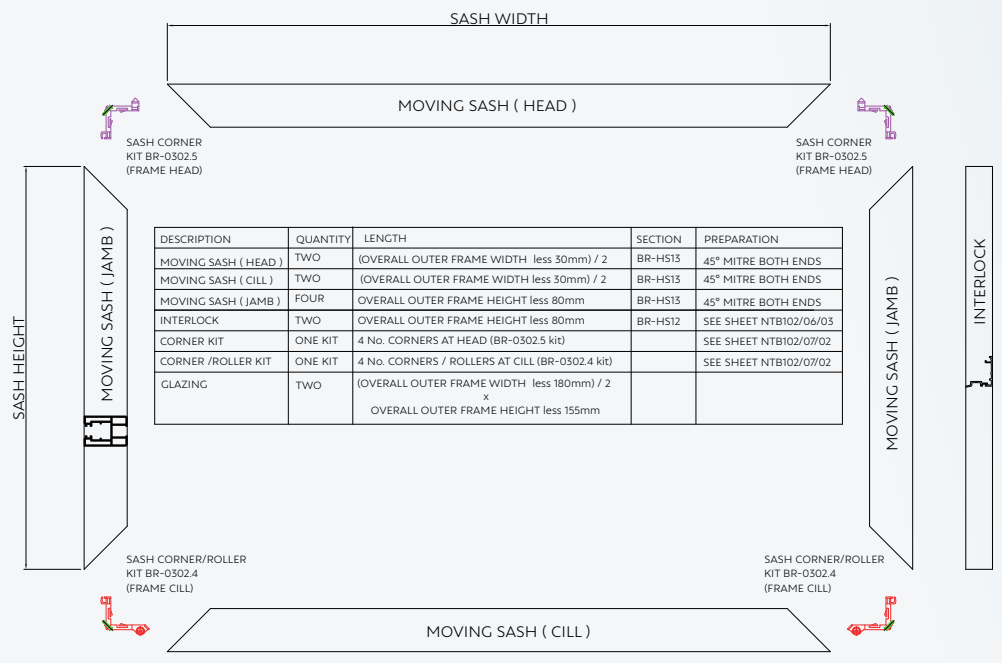
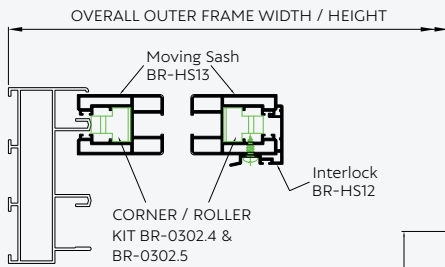
Overall outer frame width

OUTSIDE ELEVATION
(VERTICAL SECTIONS)

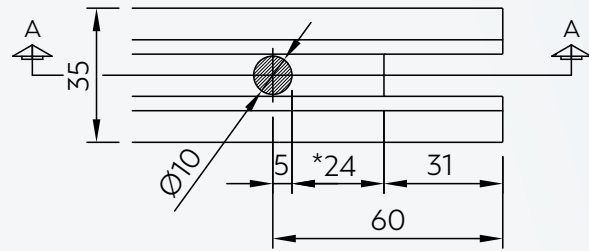
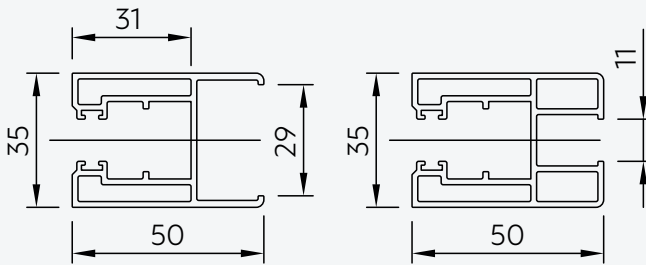
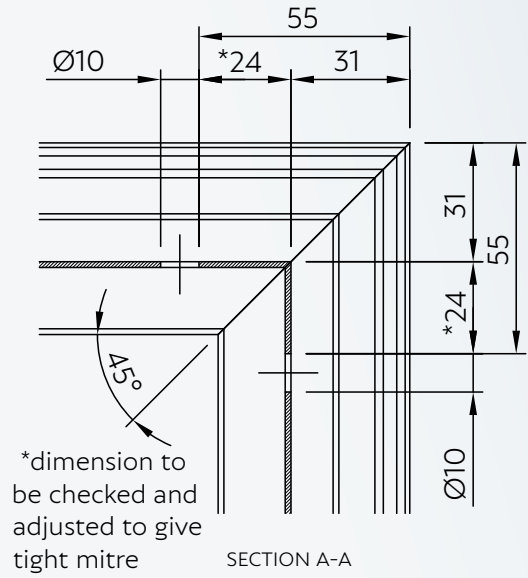
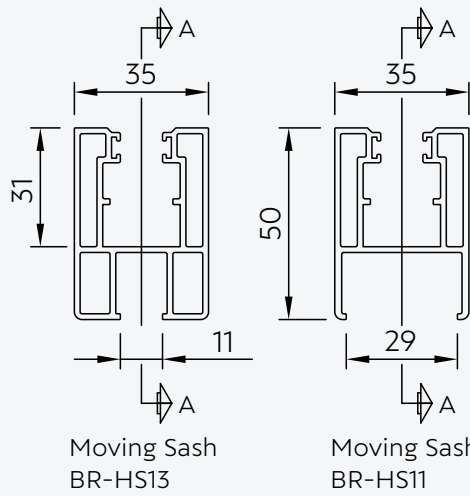








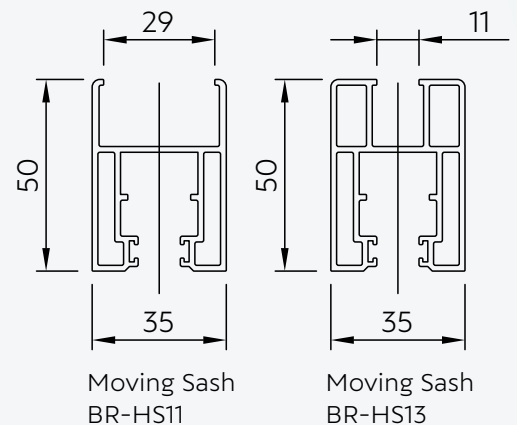
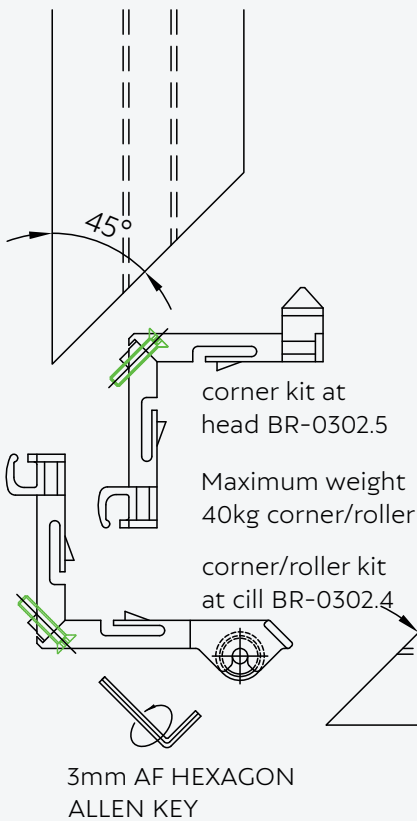
DESCRIPTION	QUANTITY	LENGTH	SECTION	PREPARATION
MOVING SASH (HEAD)	TWO	(OVERALL OUTER FRAME WIDTH less 30mm) / 2	BR-HS13	45° MITRE BOTH ENDS
MOVING SASH (CILL)	TWO	(OVERALL OUTER FRAME WIDTH less 30mm) / 2	BR-HS13	45° MITRE BOTH ENDS
MOVING SASH (JAMB)	FOUR	OVERALL OUTER FRAME HEIGHT less 80mm	BR-HS13	45° MITRE BOTH ENDS
INTERLOCK	TWO	OVERALL OUTER FRAME HEIGHT less 80mm	BR-HS12	SEE SHEET NTB102/06/03
CORNER KIT	ONE KIT	4 No. CORNERS AT HEAD (BR-0302.5 kit)		SEE SHEET NTB102/07/02
CORNER /ROLLER KIT	ONE KIT	4 No. CORNERS / ROLLERS AT CILL (BR-0302.4 kit)		SEE SHEET NTB102/07/02
GLAZING	TWO	(OVERALL OUTER FRAME WIDTH less 180mm) / 2 x OVERALL OUTER FRAME HEIGHT less 155mm		



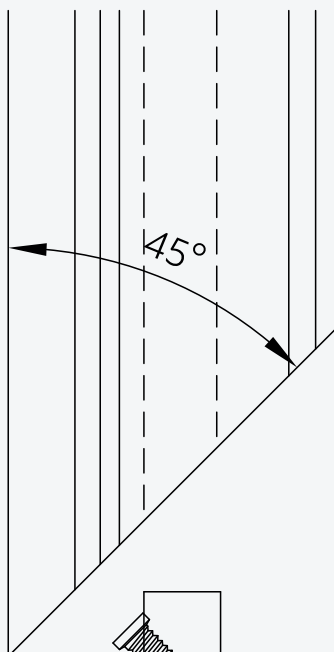
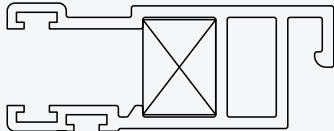
IMPORTANT: PLEASE READ THESE NOTES BEFORE CORNER ASSEMBLY.
BRITAL advise the use of adhesive to ensure the stability of corner joint.

HOLE PREPARATIONS IN THE END OF THE BARS MUST BE COMPLETED BEFORE ASSEMBLY

1. BEFORE APPLYING ANY ADHESIVE ENSURE ALL SURFACES TO BE GLUED ARE FREE FROM GREASE OR DUST. CLEAN ALL ALUMINIUM MATING SURFACES WITH METAL CLEANING AGENT.
2. APPLY SMALL GAP SEALANT TO THE MATING SURFACES OF THE MITRE CUT ALUMINIUM. SEALANT NEED ONLY BE APPLIED TO ONE SIDE OF THE MITRED JOINT.
3. INSERT SASH FRAME PLASTIC MOULDED CORNER / ROLLER CLEAT AND PUSH SECTIONS TOGETHER. ENSURE MITRED JOINT IS ALIGNED AND TRUE. TIGHTEN SCREW IN CLEAT TO CLOSE UP JOINT.
4. WIPE AWAY ANY EXCESS GLUE / SEALANT FROM THE MITRED JOINT USING A SUITABLE CLEANING AGENT. ENSURE ALL BEAD AND GASKET RECESSES ARE CLEAR OF ADHESIVE / SEALANT.
5. CHECK THE MITRE IS TIGHT ON BOTH SIDES AND THAT THERE IS NO MOVEMENT.



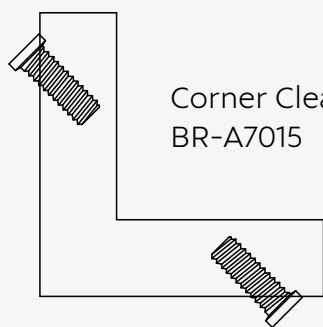
Fly Screen
BR-SL24



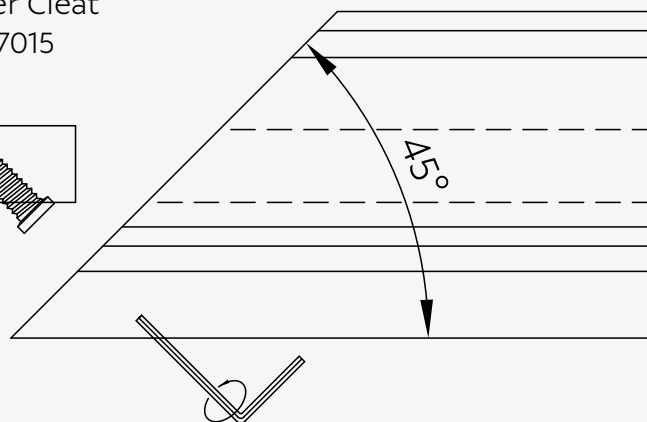
IMPORTANT: PLEASE READ THESE NOTES BEFORE CORNER ASSEMBLY.
BRITAL advise the use of adhesive to ensure the stability of corner joints.

NO HOLE PREPARATIONS ARE REQUIRED IN THE END OF THE BARS.

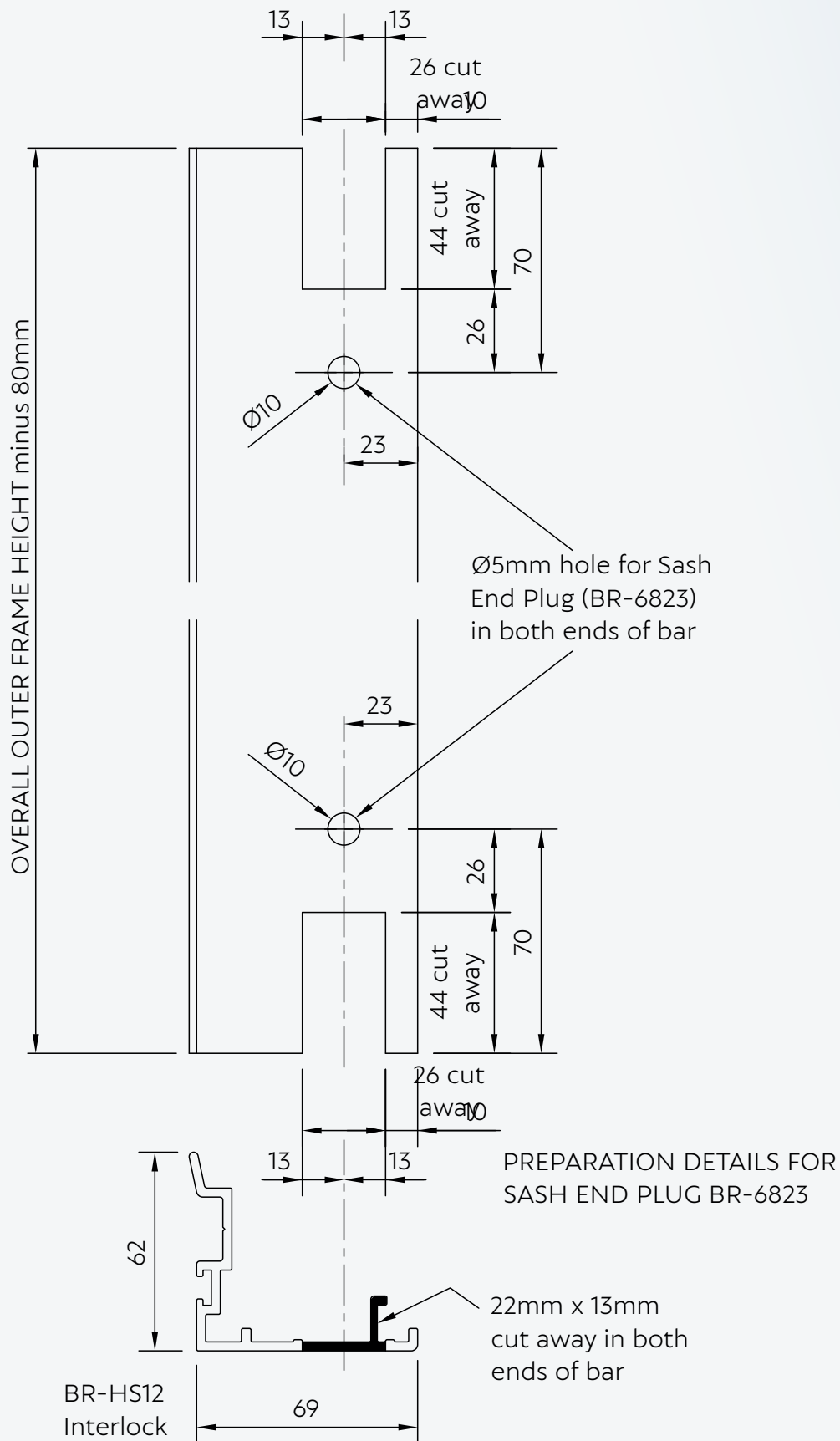
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2. APPLY SMALL GAP SEALANT TO THE MATING SURFACES OF THE MITRE CUT ALUMINIUM. SEALANT NEED ONLY BE APPLIED TO ONE SIDE OF THE MITRED JOINT.
3. INSERT CORNER CLEAT AND PUSH SECTIONS TOGETHER. ENSURE MITRED JOINT IS ALIGNED AND TRUE. TIGHTEN SCREW IN CLEAT TO CLOSE UP JOINT.
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5. CHECK THE MITRE IS TIGHT ON BOTH SIDES AND THAT THERE IS NO MOVEMENT.

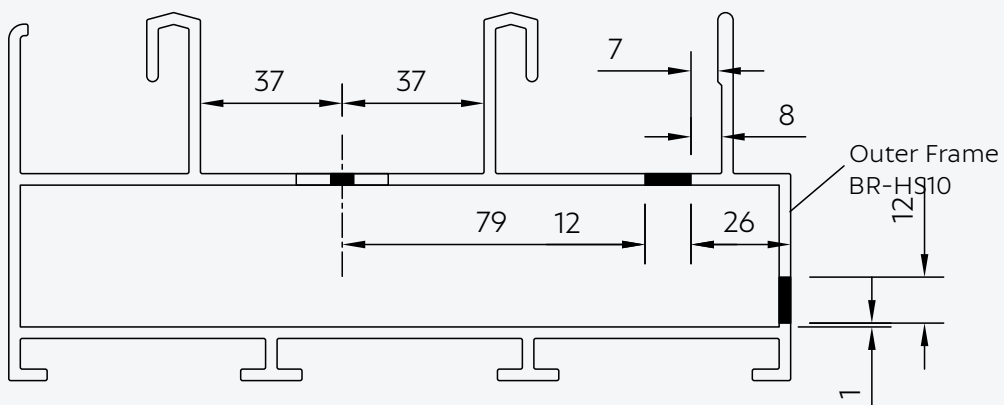
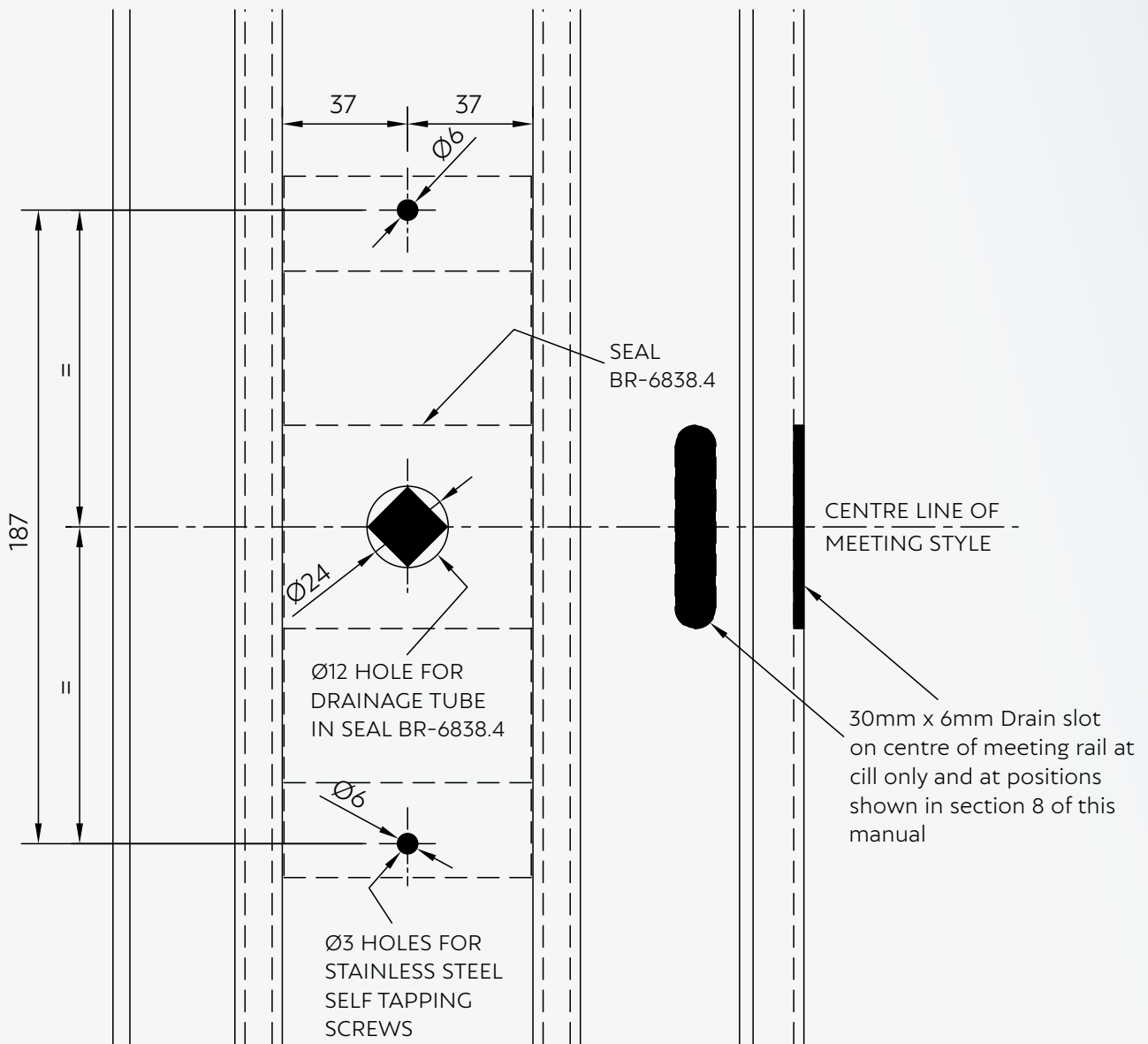


Corner Cleat
BR-A7015

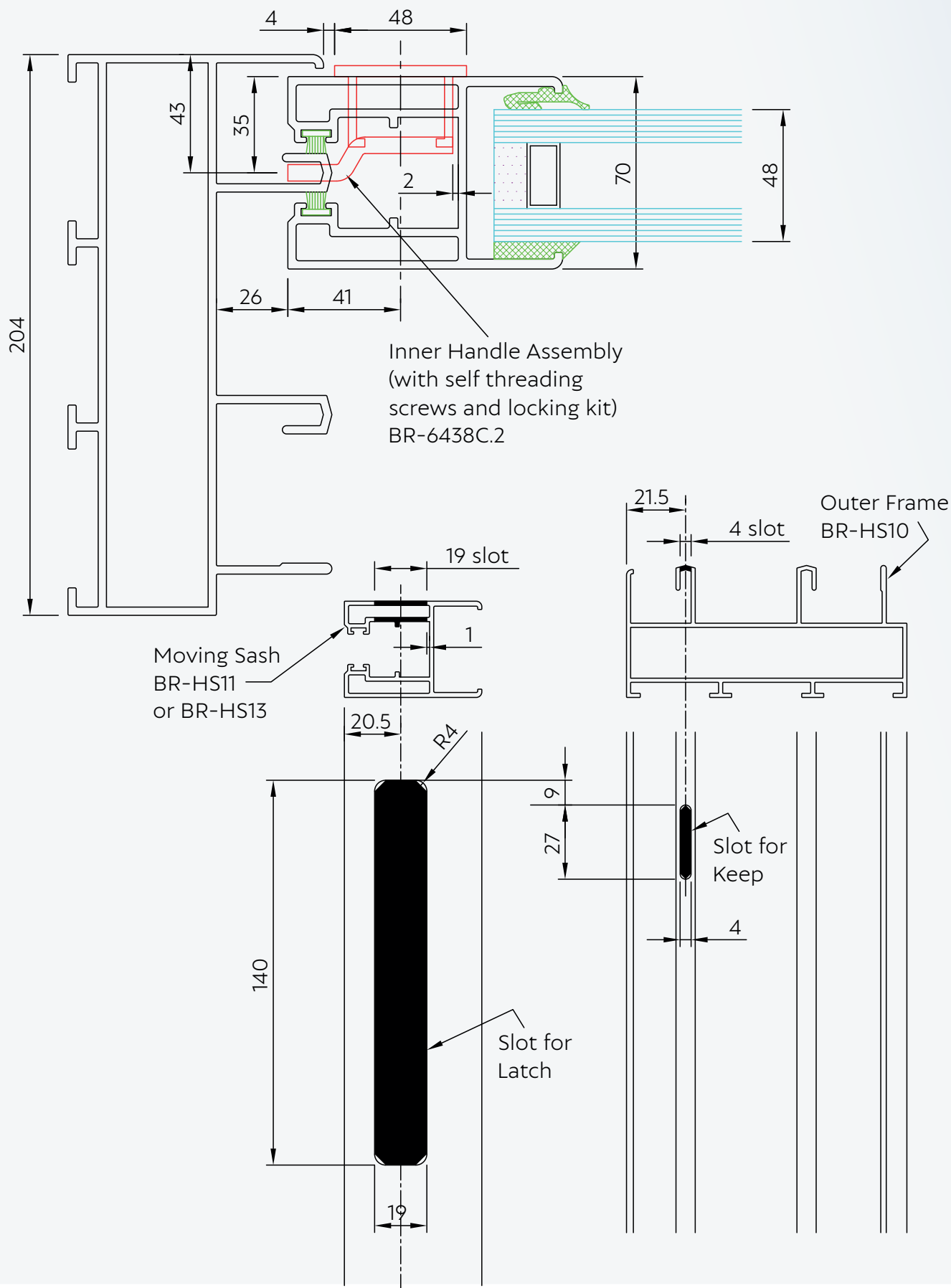


2.5mm ALLEN KEY

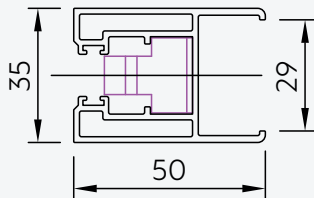
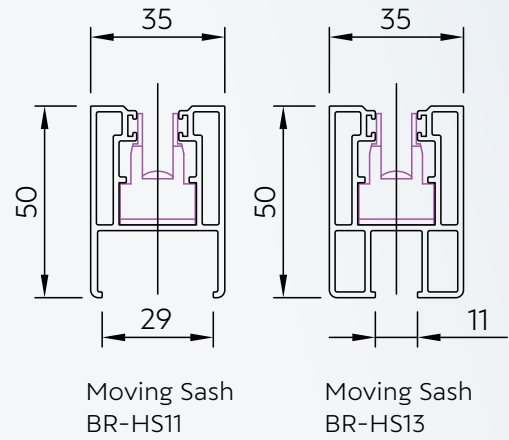
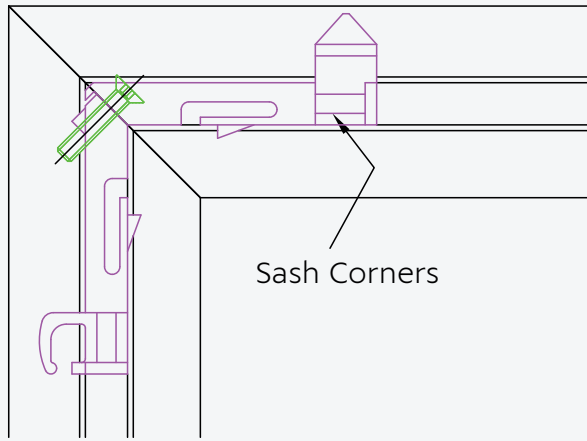




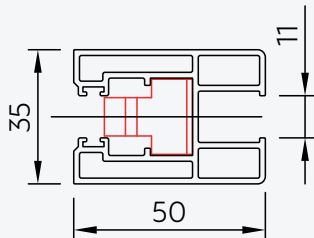
PREPARATION FOR SEAL BR-6833



ASSEMBLY DETAILS FOR SASH CORNER
KIT BR-0302.5 AT HEAD OF FRAME

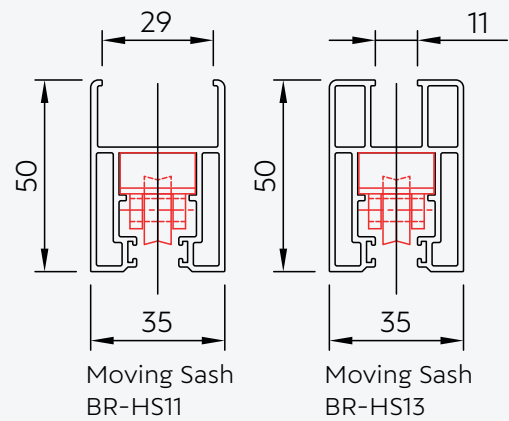
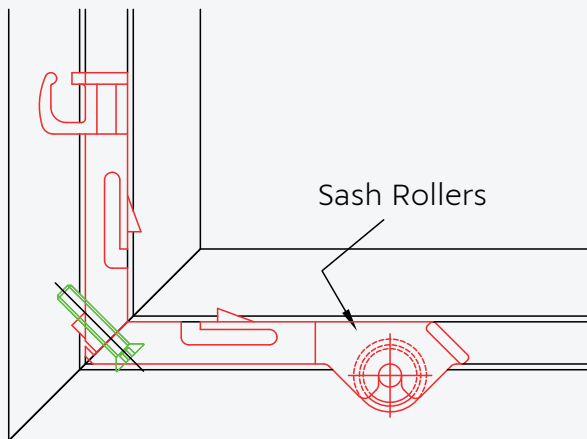


MOVING SASH
BR-HS11



OR MOVING SASH
BR-HS13

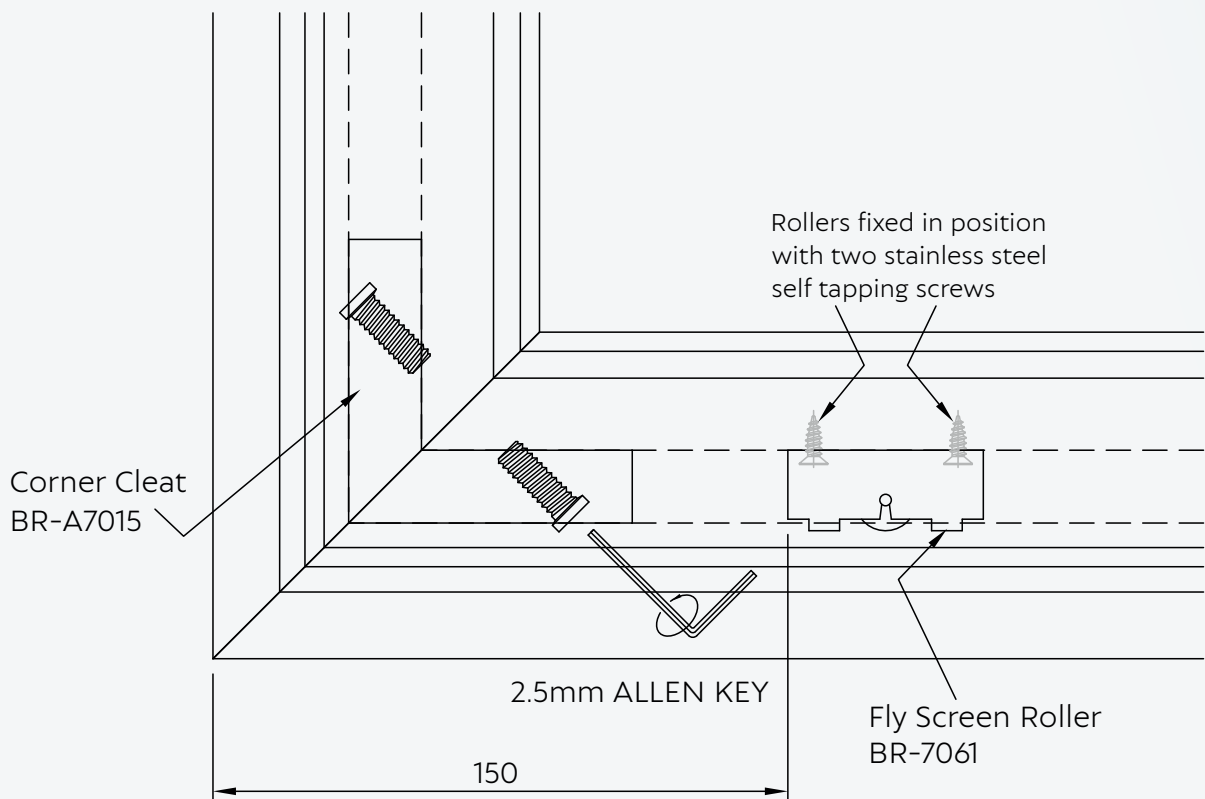
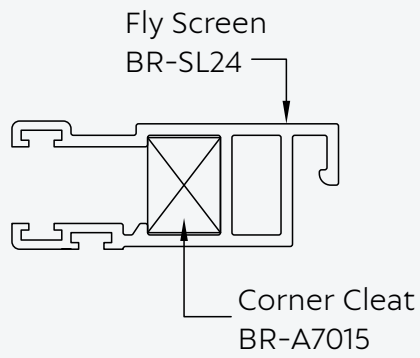
NOTE
Ensure roller/corners are fitted into
the profile at cill before assembling
corners at head

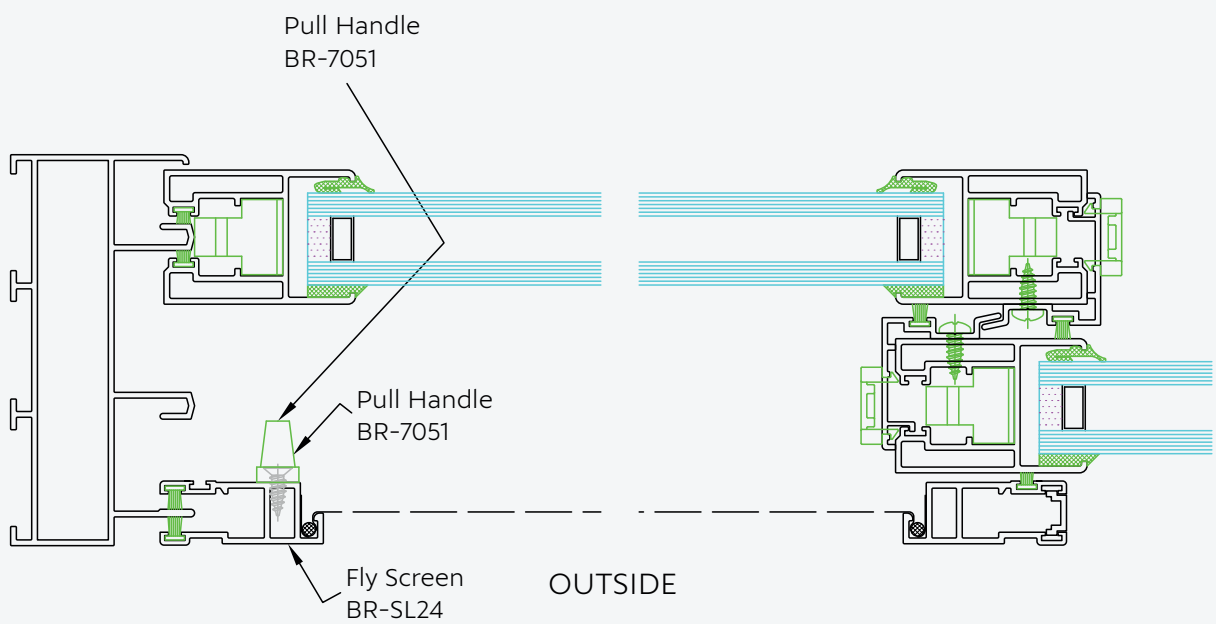
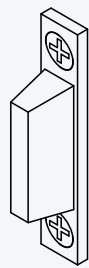
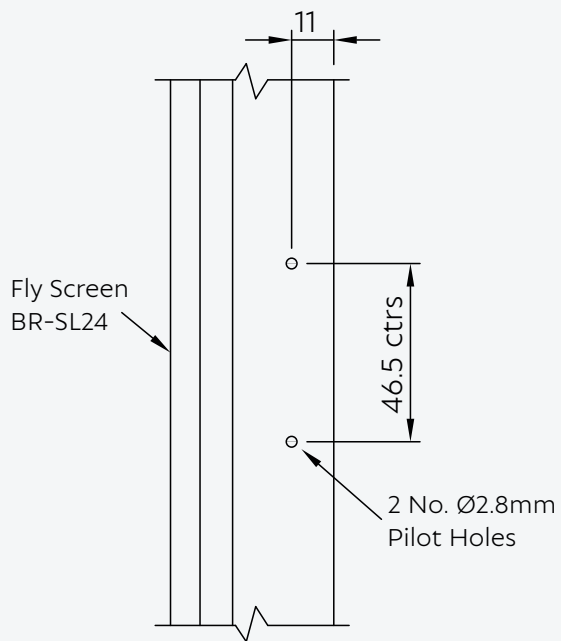


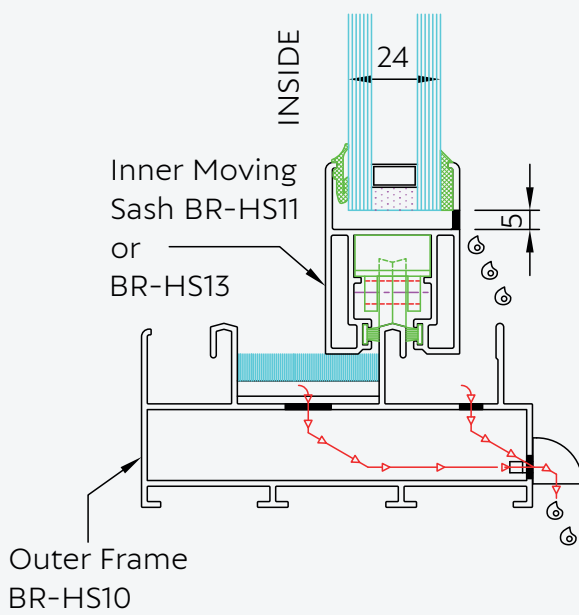
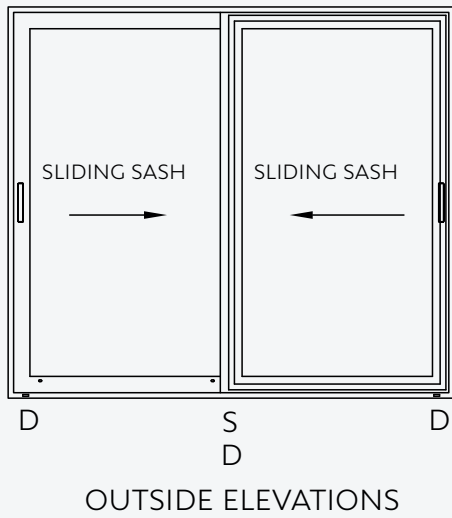
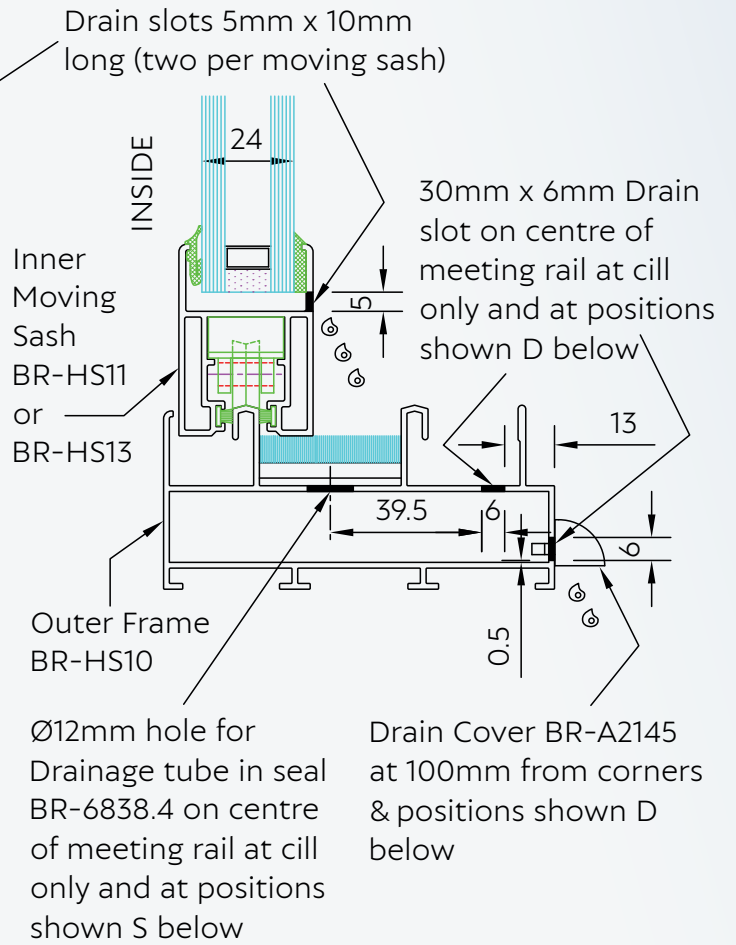
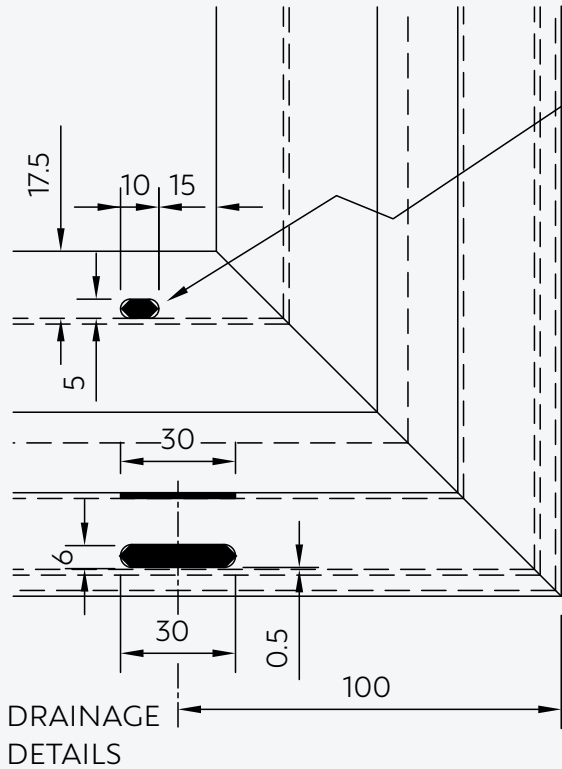
ASSEMBLY DETAILS FOR SASH CORNER / ROLLER
KIT BR-0302.4 AT CILL OF FRAME
(Maximum Sash Weight 40 Kg)

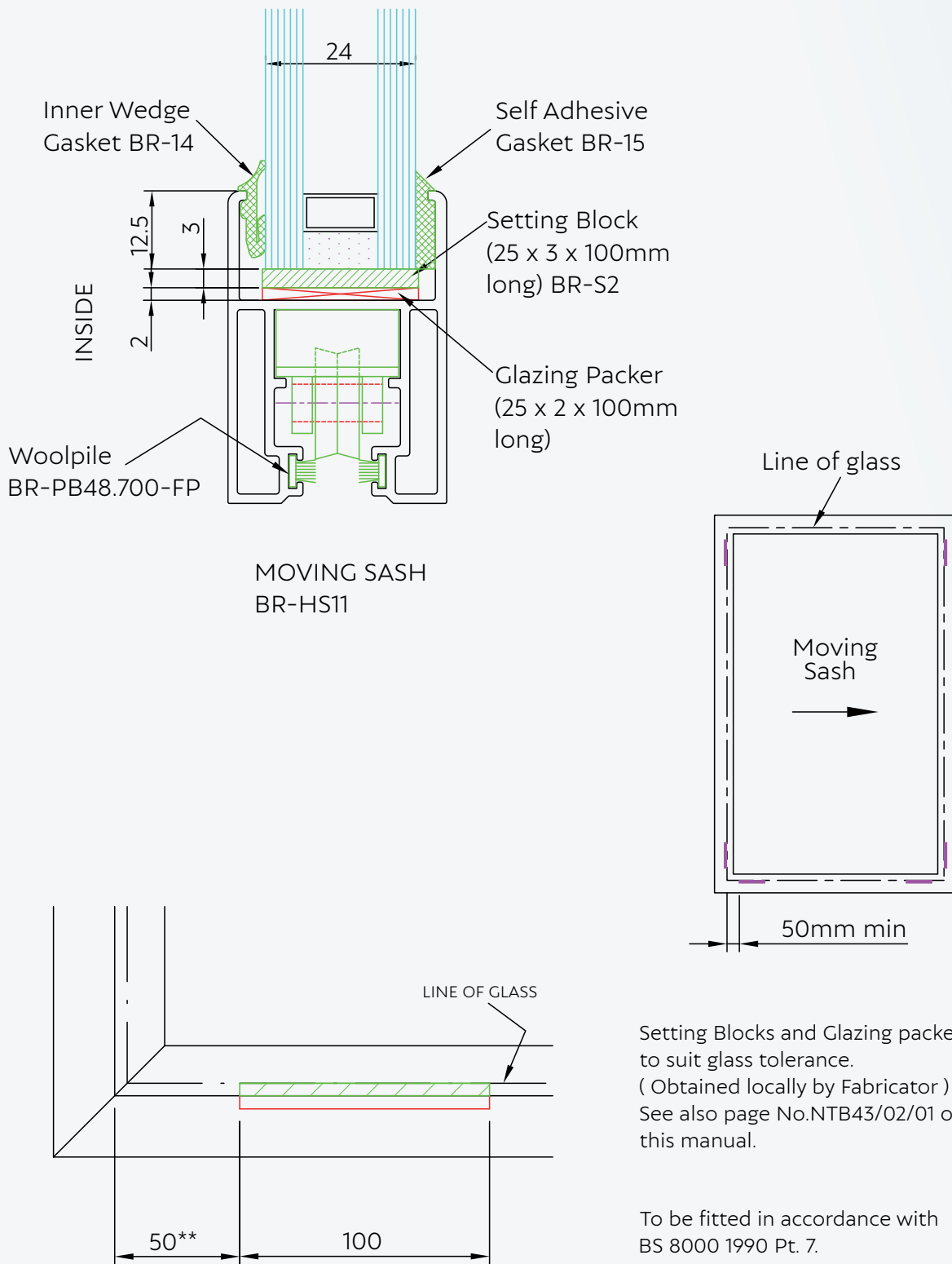
MOVING SASH
BR-HS11

MOVING SASH
BR-HS13





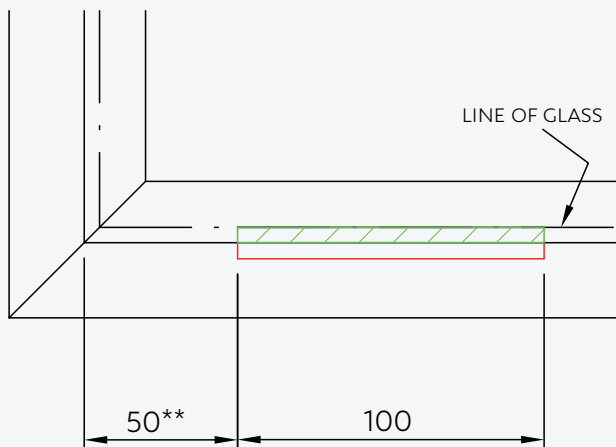
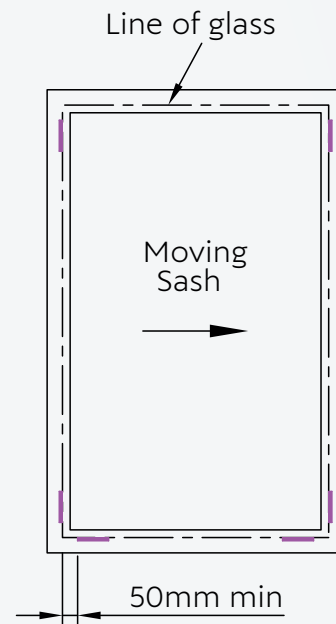
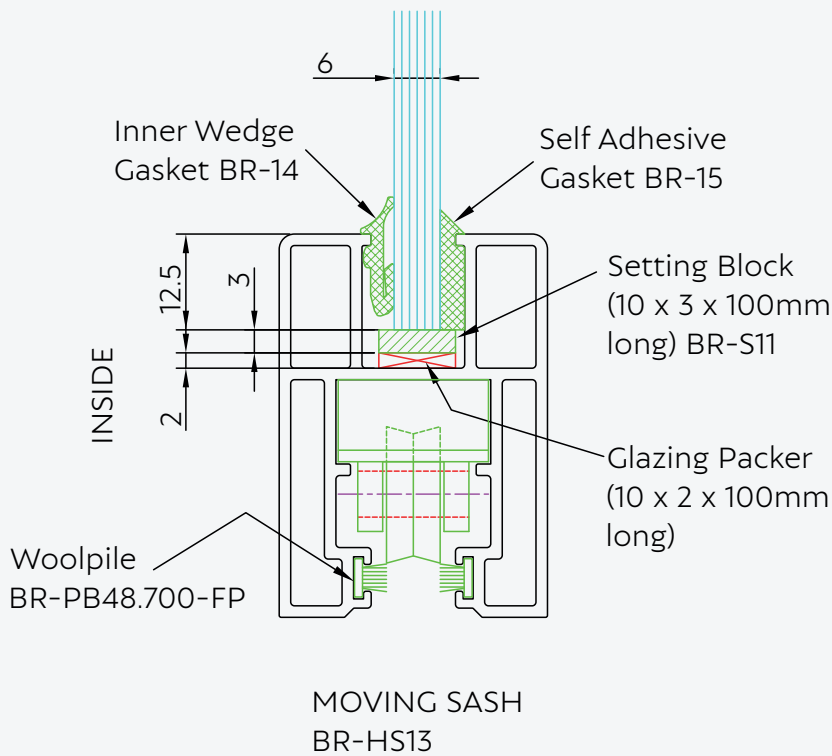




Setting Blocks and Glazing packers to suit glass tolerance. (Obtained locally by Fabricator) See also page No.NTB43/02/01 of this manual.

To be fitted in accordance with BS 8000 1990 Pt. 7.

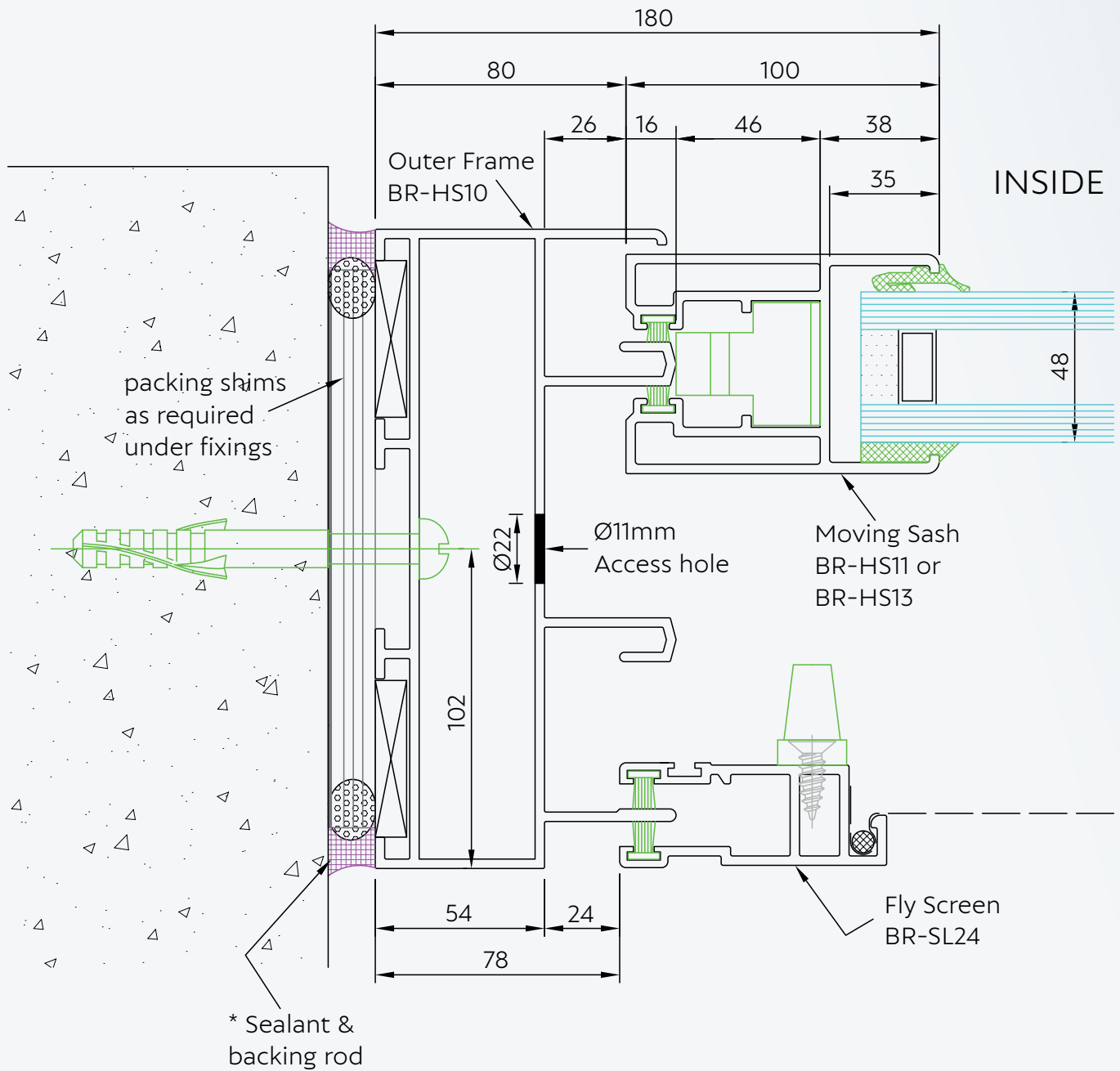
** = minimum dimension. Setting blocks to be positioned to avoid drainage slots.



Setting Blocks and Glazing packers to suit glass tolerance. (Obtained locally by Fabricator) See also page No.NTB43/02/01 of this manual.

To be fitted in accordance with BS 8000 1990 Pt. 7.

** = minimum dimension. Setting blocks to be positioned to avoid drainage slots.



* All sealants to be installed in strict accordance with manufacturers relevant details & BS 6093 to suit site conditions.



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