

AA185BM MCFC Installation

Toolbox presentation

Kawneer UK Document No.: MCFC TBT V1

Item 1A – 1E Pre-installation checks

1A - Off site machining as per manufacturers recommendations. Check that all bar end preparations are correct and report any discrepancies.

1B - Check correct internal glazing gaskets pre-fitted to transoms & mullions are the correct thickness for the configuration of the screen.

1C - Check correct Thermal breaks, Thermal supports or Consoles have been supplied fitted flush with the ends of the overlapped transoms:

Ground & first floors – Inverted consoles.

All other floors – PVC Thermal breaks (with sealed ends) OR Thermal break supports OR Consoles.

Item 1A – 1E Pre-installation checks

1D - Check correct preparations in mullions for Brise Soleil brackets and vertical consoles.

1E - Check that all contact surfaces that are to be sealed have been degreased, cleaned and all swarf removed from recesses and chambers with cleaner (690-700).

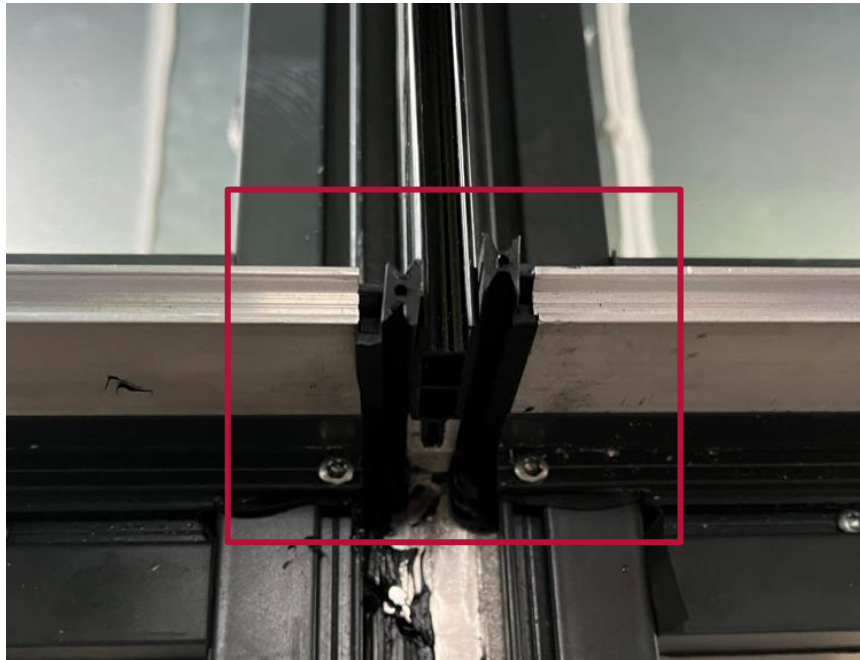
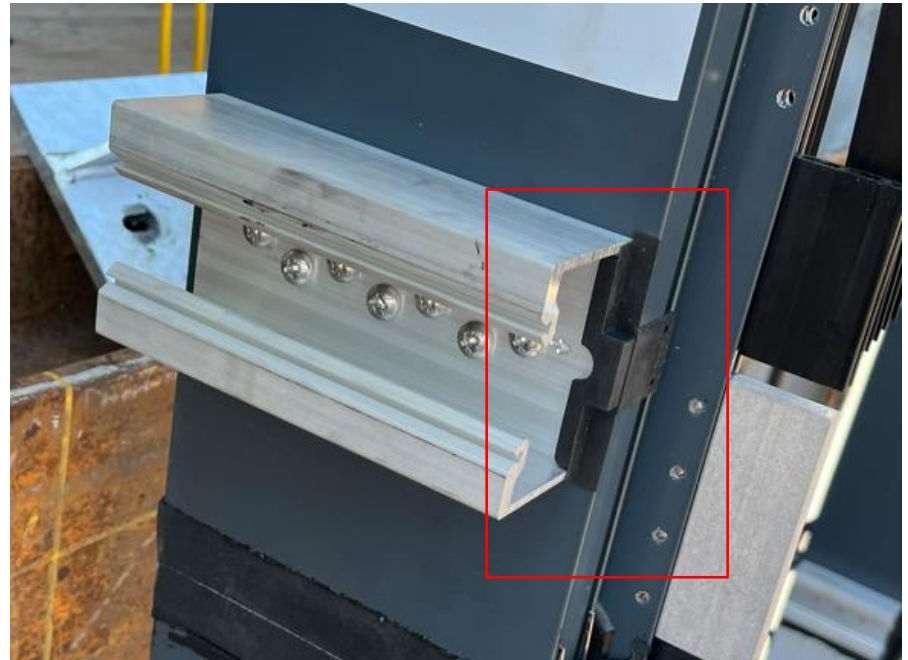
Item 2 & Item 3 – Pre-installation checks (Slide 3)

2 - Correct transom drainage moulding (692-587) to suit thermal break length (36mm) centralised at transom centres. Check it is inserted BEFORE transoms are inserted over shear blocks.

3 - Shearblocks in correct place:

Standard connection - Set 8mm from front face of mullion.

Mullion onto transom – Set 17.2mm from front face of Transom



Item 2 & Item 3 – Pre-installation checks (Slide 4)

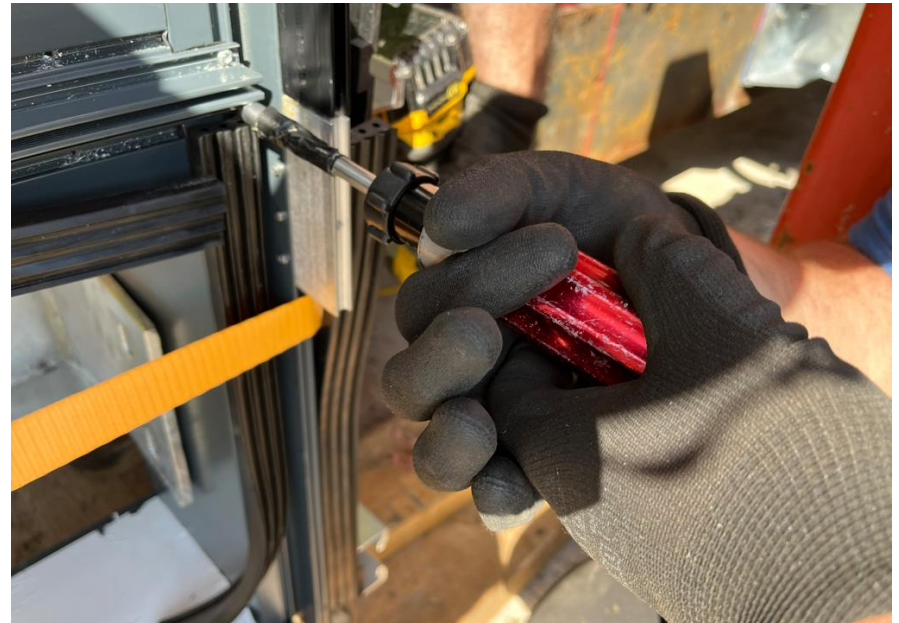
4 - Check all tie back brackets are in correct location, levelled, aligned, bolted “torqued” and sprayed off.



Item 5 & Item 6 – Grid assembly. (Slide 5 & 6)

5 - Check that a “wee blob” of DC791 applied behind overlapped transom sealing piece (692-568) Before transom is inserted over shearblocks.

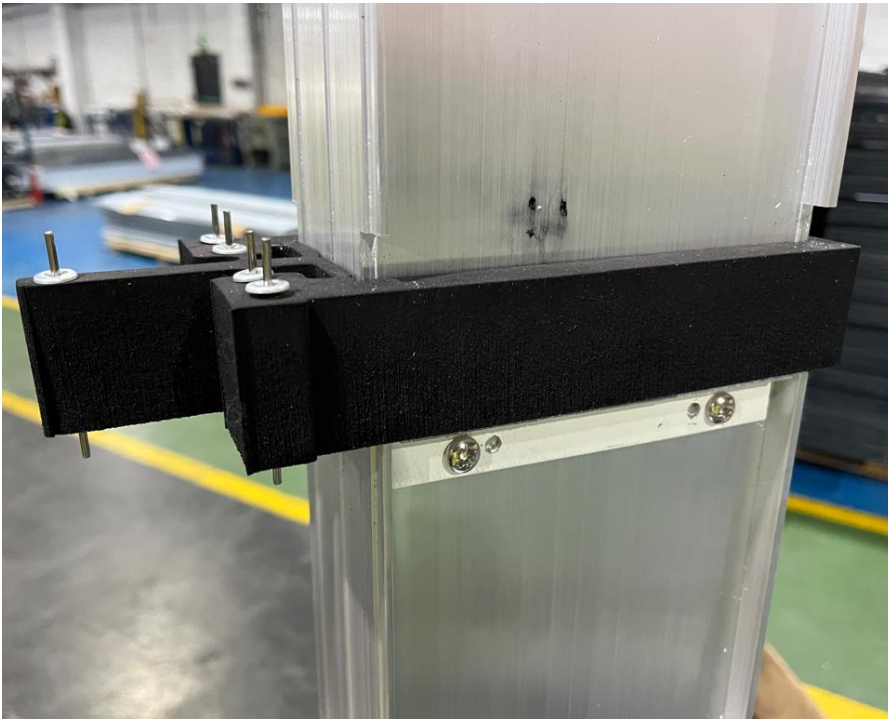
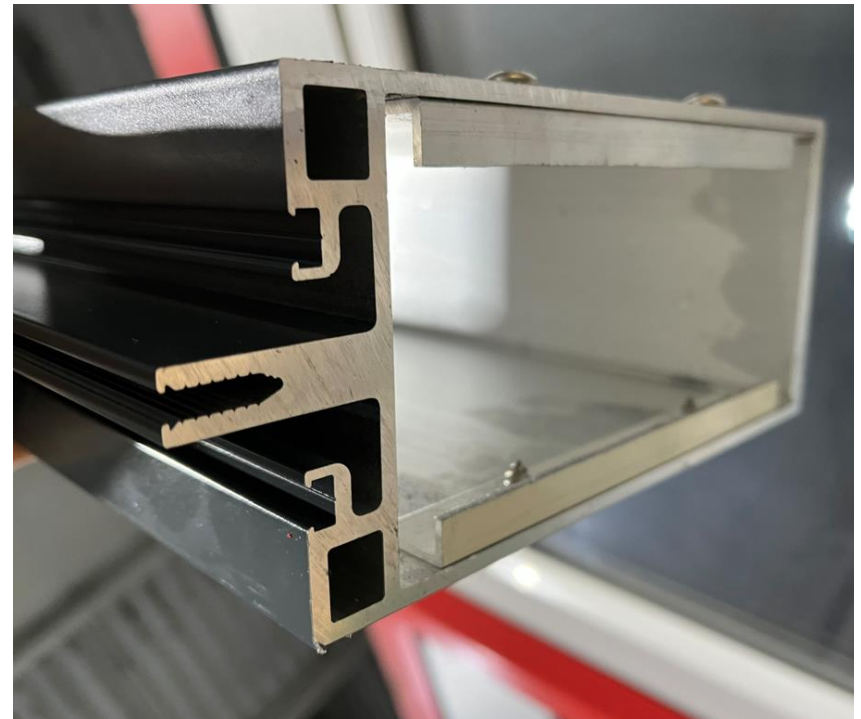
6 - Correct transom fixing screws (237-597). Check transom face is aligned with mullion. (Tightened to 2.5Nm)



Item 7 – 30mm Expansion Joint installation (Slide 7 & 8)

7A - Check ends of “LOWER” mullion of the joint has been supplied to site fitted correctly with the spigot assembly. (fixed with 2 No. angles 694-731)

7B - Check ends of “UPPER” mullion of the joint has been supplied to site fitted correctly with 2 No. angles (694-731) fixed to the inside of the mullion sides.

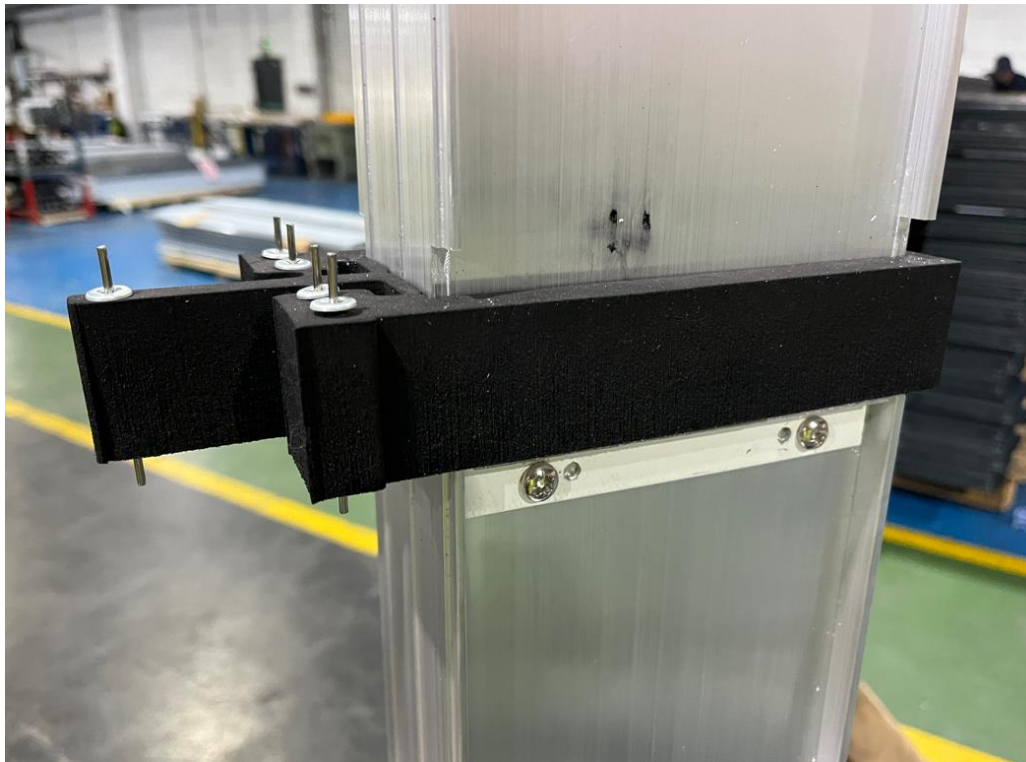


Item 7 – 30mm Expansion Joint installation (Slide 9)

7C - Check correct foam piece fitted CAREFULLY down spigot is correct:

(694-728) – Intermediate

(694-729) – Jambs (Handed Left or Right) – Check correct side.

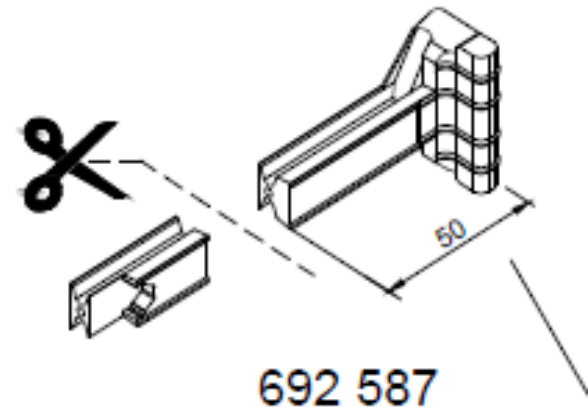


Item 7 – 30mm Expansion joint installation (Slide 10 & 11)

7D - Check DC791 Applied around cut face of LOWER mullion BEFORE fitting FOAM piece.

7E - Check that Mullion drainage pieces (692-587) are cut to 50mm long.

7F – Check DC791 Applied around contact surface of the TOP FACE of foam piece including the voids for drainage piece BEFORE sliding mullion spigot assembly into LOWER Mullion.



Item 7 – 30mm Expansion joint installation (Slide 12)

7F – Check DC791 Applied around contact surface of the TOP FACE of foam piece including the voids for drainage piece BEFORE sliding mullion spigot assembly into LOWER Mullion.



Item 7 – 30mm Expansion joint installation (Slide 13 & 14)

7G - After applying DC791 to underside of UPPER MULLION DRAINAGE CHANNEL, check that drainage piece (692-587) is fitted so that UNDERSIDE OF SPOUT is FLUSH with UNDERSIDE OF UPPER MULLION. Carefully lower the UPPER mullion onto the LOWER mullion.



Item 7 – 30mm Expansion joint installation (Slide 15 & 16)

7H - Check that suitable support is provided BETWEEN TRANSOMS to establish 30mm Expansion joint and protect the pieces from damage.

7J - Ensure the mullion Expansion gap of 30mm is aligned in both planes.



Item 7 – 30mm Expansion joint installation (Slide 17)

7K - Check that temporary pressings are inserted over expansion pieces and clamped on to support the back and side faces until DC791 has cured overnight.



Item 8 – 55mm Expansion joint installation (Slide 18 & 19)

8A -Check that Mullions noses have been Nibbed 10mm x 14mm deep on both ends of mullions each side of the 55mm Expansion joint for sealing pieces.

(694-711) – UPPER mullion piece (694-712) – LOWER mullion piece



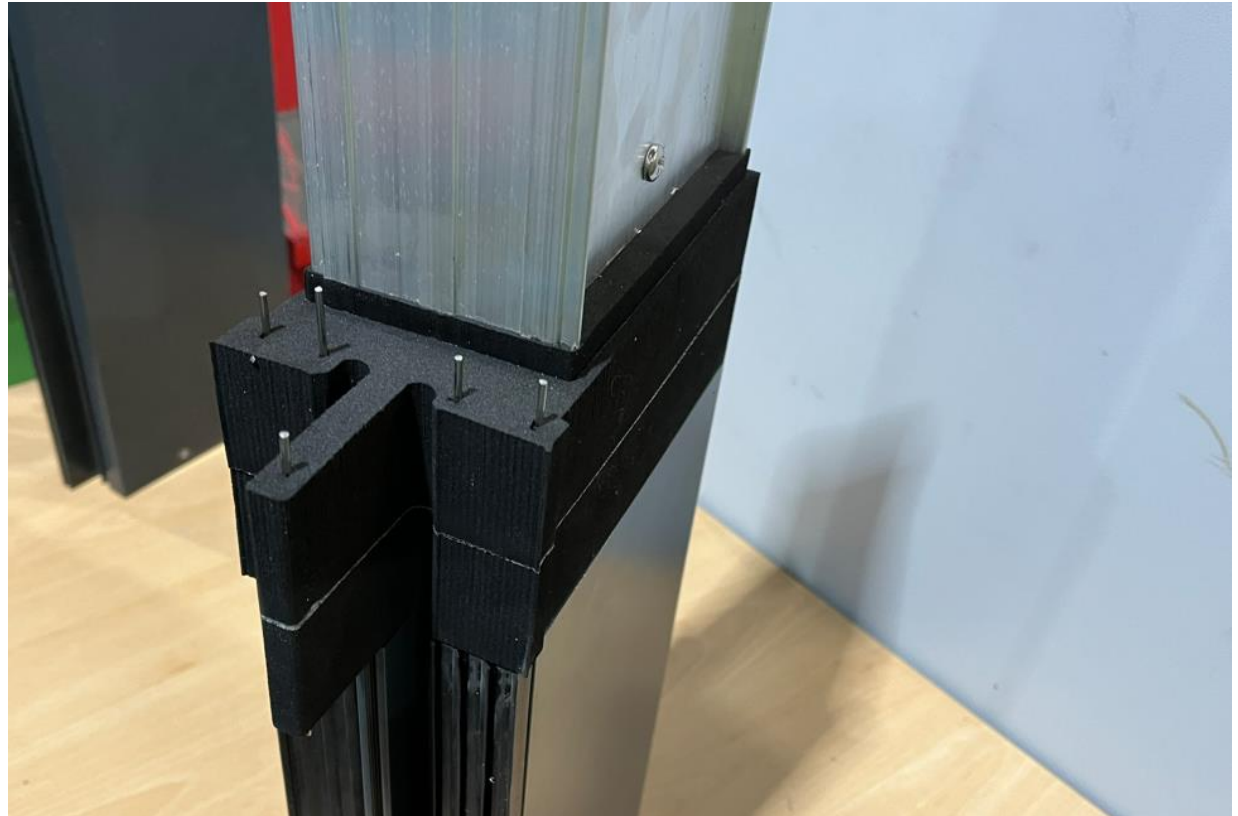
Item 8 – 55mm Expansion joint installation (Slide 20)

8B -Check correct foam piece is fitted and that spigot assembly is correct. Check correct handing.

(692-710) – Intermediate

(692-720) – Left hand Jamb

(692-721) – Right hand Jamb



Item 8 – 55mm Expansion joint installation (Slide 21 & 22)

8C - Check DC791 Applied around cut face of LOWER mullion.

8D - Check voids in both ends of the mullions are packed with foam and sealed flush with DC791

8E - Check correct fitting of LOWER mullion piece (694-712) flush with top edge of LOWER mullion



Item 8 – 55mm Expansion joint installation (Slide 23 & 24)

8C - Check DC791 Applied around cut face of LOWER mullion.

8D - Check voids in both ends of the mullions are packed with foam and sealed flush with DC791

8E - Check correct fitting of LOWER mullion piece (694-712) flush with top face of LOWER mullion



Item 8 – 55mm Expansion joint installation (Slide 25)

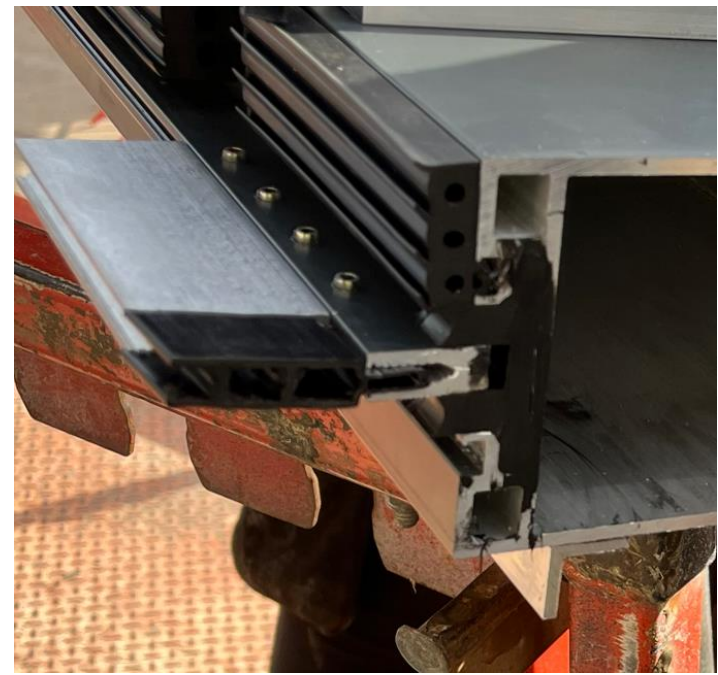
8F - Check correct insertion of mullion spigot assembly.



Item 8 – 55mm Expansion joint installation (Slide 26 & 27)

8G -Check DC791 Applied around cut face of THE FOAM PIECE or The underside face of the UPPER Mullion

8H - Check correct fitting of UPPER mullion piece (694-711) is fitted FLUSH with the UNDERSIDE of the UPPER MULLION



Item 8 – 55mm Expansion joint installation (Slide 28)

8G -Check DC791 Applied around cut face of THE FOAM PIECE or The underside face of the UPPER Mullion



Item 8 – 55mm Expansion joint installation (Slide 29 & 30)

8I – Carefully lower the UPPER MULLION over the LOWER MULLION to establish the 55mm Expansion joint gap.

8J - Check that suitable support is provided BETWEEN TRANSOMS to establish 55mm Expansion joint and protect the pieces from damage.



Item 8 – 55mm Expansion joint installation (Slide 31 & 32)

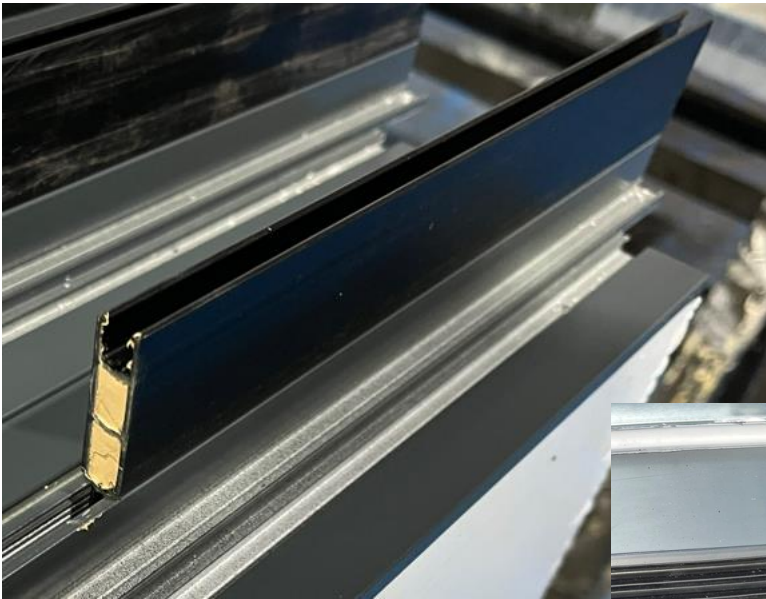
8K - Ensure mullion expansion joints is aligned in both planes.

8L - Check that temporary pressings are inserted over expansion pieces and clamped on to support the back and side faces until DC791 has cured overnight.



Item 9 – Thermal Break support options (Slide 33, 34 & 35)

9 - Check Thermal supports or Consoles are fitted flush with the ends of the overlapped transoms.
Ground & first floors – Inverted consoles. All other floors – PVC (with sealed ends) OR Thermal break supports OR “standard” Consoles.



Item 9 – Thermal Break support options (Slide 36 & 37)

- 9 - Increased weight Consoles are fixed with 2 No. fixing screws (272-904) – 1No. For “Jamb” applications. Vertical components (inverted or otherwise) are fixed with 4 No. Spirol pins (6003-158).
 - 2No. When inverted above doorways. Spirol pins driven in with tool (271-003) or similar.
- Check presence of fixing screws under inverted consoles.



Item 9 – Thermal Break support options (Slide 38, 39 & 40)

9A - Console rebates fitted with sealing piece 694-696. Sealed over with DC791 and tooled flush.



Item 10 – Back Tray installation (Slide 41 & 42)

10A - Check Back trays fixed and sealed around full perimeter including folded returns (with Pirostop).

10B - Check Pirostop sealant applied around perimeter of tie back brackets and over bolt heads.



Item 10 – Back Tray installation (Slide 43 & 44)

10C -. Check that Brise Soleil brackets are located and fixed with 8No. 18mm spirol pins. (Applied with tool 271-003 or similar)

10D - All insulation material installed AFTER preparation and sealing of internal glazing gaskets.



Item 11 – internal Glazing Gasket Fitting / Sealing (Slide 45 & 46)

11 & 11A – General notes. Check that all contact surfaces that are to be sealed have been de-greased, cleaned and all swarf removed from recesses and chambers with cleaner (690-700).

THIS INCLUDES GLAZING GASKETS AND CORNER MOULDS. Glazing gaskets correctly seated within gasket races – check corners. Apply Seals on glazing gaskets JUST PRIOR to glazing.

TIP – MARK AND CUT ALL LINEAR GASKETS TO LENGTH FIRST BEFOREHAND



Item 11 – internal Glazing Gasket Fitting / Sealing (Slide 47)

11B –. Apply a Bead of DC791 sealant along the top surface of the transom overlaps UNDER corner moulds and tool in.



Item 11 – internal Glazing Gasket Fitting / Sealing (Slide 48 & 49)

11C –. Check DC791 sealant applied 30mm in from corners before fitting corner moulds.

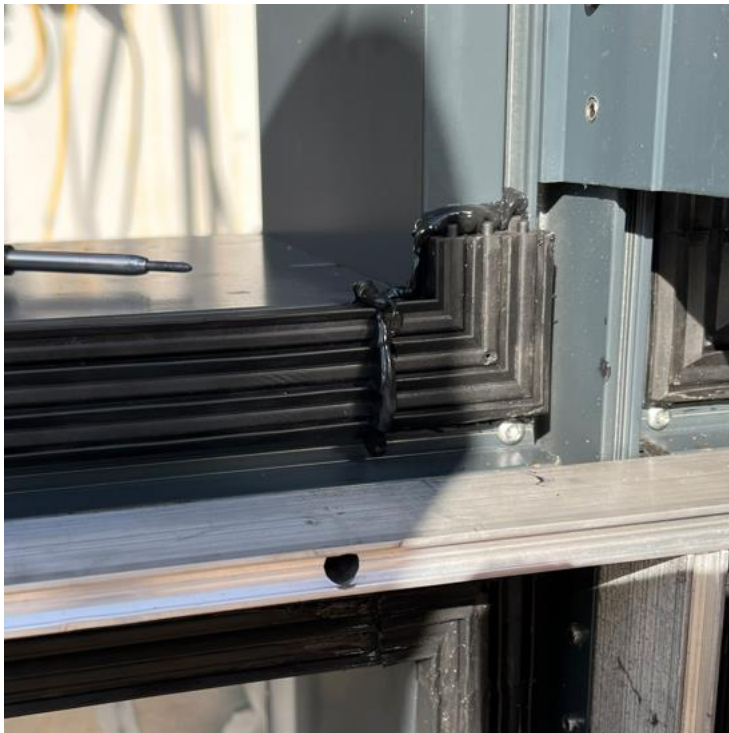
11D - Check DC791 applied to faces of corners moulds before application of linear gaskets.

Tips - Mark edge of corner moulds on Mullions/transoms. Moulds best fitted with flat screwdriver.



Item 11 – internal Glazing Gasket Fitting / Sealing (Slide 50 & 51)

11E – Check that excess sealant is cleaned off the front face of the linear gasket/corner mould joints. Check the mullion drained rebates and remove any excess that might impede drainage.



Item 11 – internal Glazing Gasket Fitting / Sealing (Slide 52 & 53)

11E – Check that excess sealant is cleaned off the front face of the linear gasket/corner mould joints. Check the mullion drained rebates and remove any excess that might impede drainage.



Item 11 – internal Glazing Gasket Fitting / Sealing (Slide 54-60)

APPLICABLE TO 30mm & 50mm EXPANSION JOINT DETAILS

11F - Measure and cut internal glazing gaskets first to length each side of the expansion joint detail.



Item 11 – internal Glazing Gasket Fitting / Sealing (Slide 54-60)

APPLICABLE TO 30mm & 50mm EXPANSION JOINT DETAILS

11F - Check DC791 sealant applied to exposed face of expansion foam pieces and 100mm down from expansion foam pieces into gasket recess.



Item 11 – internal Glazing Gasket Fitting / Sealing (Slide 54-60)

APPLICABLE TO 30mm & 50mm EXPANSION JOINT DETAILS

11G - Using a thin screwdriver lift the projecting pins in the expansion pieces to align with holes in the linear gaskets.



Item 11 – internal Glazing Gasket Fitting / Sealing (Slide 54-60)

APPLICABLE TO 30mm & 50mm EXPANSION JOINT DETAILS

11H - Check that excess sealant is cleaned off the front face of the linear gasket/expansion foam piece. Check the mullion drained rebates and remove any excess that might impede drainage.



Item 12 – Perimeter Gasket Fitting / Sealing (Slide 61)

12 – General notes. Check that all contact surfaces that are to be sealed have been de-greased, cleaned and all swarf removed from recesses and chambers with cleaner (690-700).

THIS INCLUDES GLAZING GASKETS AND CORNER MOULDS. Glazing gaskets correctly seated within gasket races – check corners. Apply Seals on glazing gaskets JUST PRIOR to glazing.

TIP – MARK AND CUT OR MITRE ALL PERIMETER GASKETS TO LENGTH FIRST



Item 12 – Perimeter Gasket Fitting / Sealing (Slide 62 & 63)

12A - Check that Moulding (692-655) has been mitred correctly at 45° for external corners at the head and cill of the perimeter of the screen.

TIP – USE A CLEAN NEW SHARPE BLADE & CUT SLOWLY WITH THE CORRECT KNIFE.



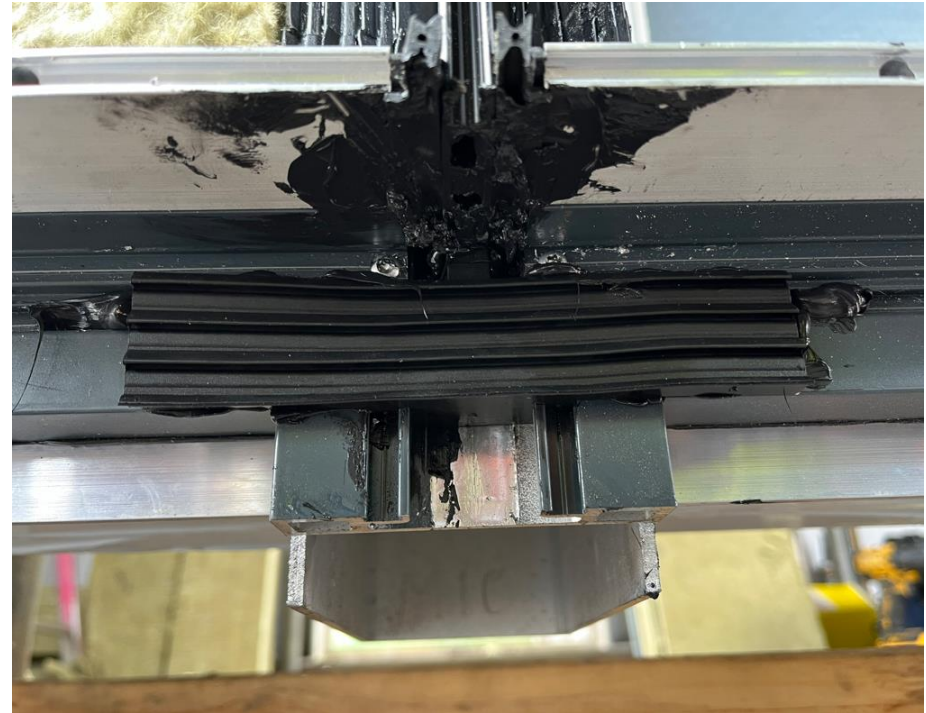
Item 12 – Perimeter Gasket Fitting / Sealing (Slide 64)

12B - Check that perimeter linear gasket (692-569) has been cut and either mitred at 45° or square cut with moulding (692-655)



Item 12 – Perimeter Gasket Fitting / Sealing (Slide 65 & 66)

12C - Check that corner moulds (692-655) can push down mullion heads or up mullion cills unimpeded before being sealed with linear gaskets (692-569). Apply a small bead of DC791 sealant on the top of the moulding before inserting.



Item 12 – Perimeter Gasket Fitting / Sealing (Slide 67 & 68)

12D - Check DC791 applied to faces of all perimeter moulds before application of linear gaskets



Item 12 – Perimeter Gasket Fitting / Sealing (Slide 69 & 70)

12E - Check that excess sealant is cleaned off the front face of the linear gasket/corner mould joints.



Item 12 – Perimeter Gasket Fitting / Sealing (Slide 71)

12F - Check application of DC791 over mullion nose & thermal breaks at the head of the screen and tooled off. Check spouts are not blocked



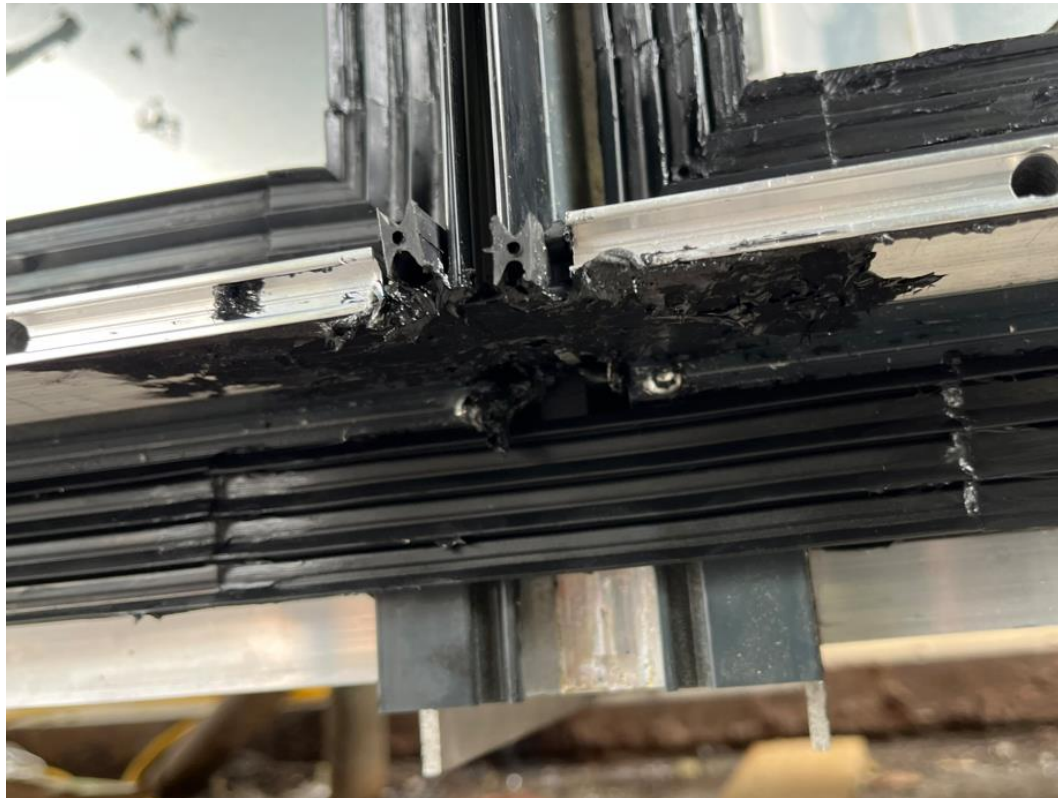
Item 13 Drainage piece sealing – (Slide 72)

Ensure overlapped transom sealing pieces are fitted and sealed in correctly with DC791.

Ensure the underside of the drainage pieces are sealed in:

BOTTOM ROW OF TRANSOMS ALONG CILL.

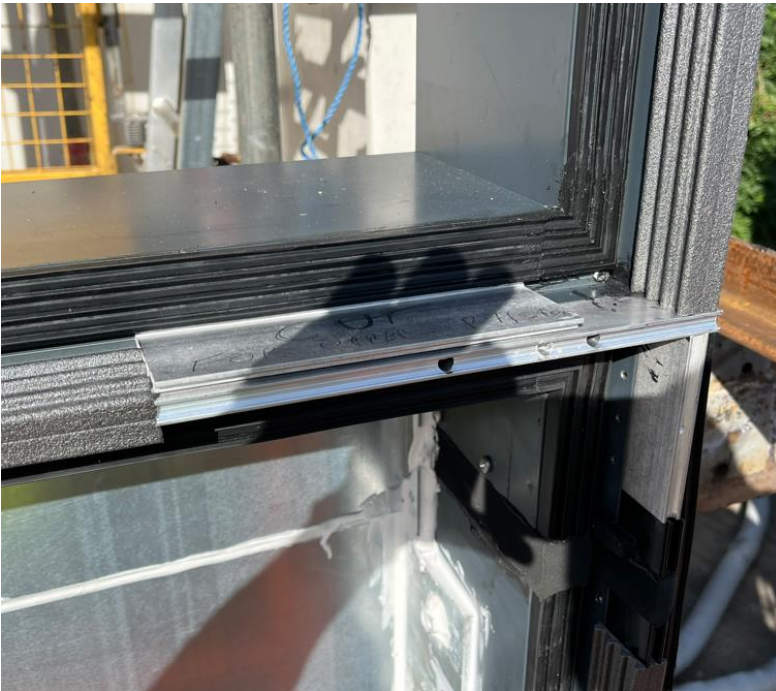
UNDER ROW OF TRANSOMS ABOVE EXPANSION JOINT.



Item 14 – Glass setting block positions (Slide 73 & 74)

Glass support positions correct – 20mm in from edge of mullion.

Self-adhesive SETTING BLOCKS to be installed AFTER fitting SETTING BLOCK SUPPORTS



Item 14 – Protection of Glass from Projecting fin brackets (Slide 75)

ENSURE ADEQUATE PROTECTION BEEN MADE TO PROTECT GLASS UNITS FROM PROJECTING FIN BRACKETS
PRIOR TO GLAZING.



Item 15 – Glass units and panels Centralised (Slide 76)

Glazing units and insulated panels positioned centrally within rebate and correct size.



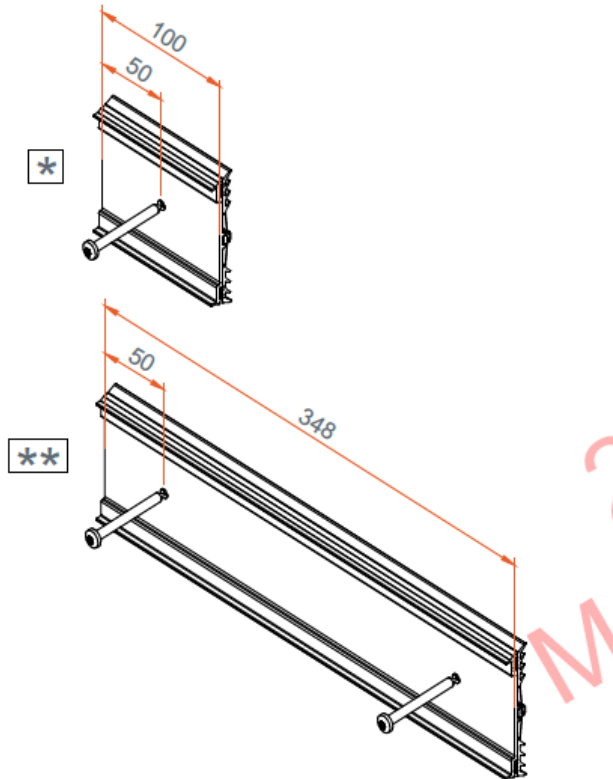
Item 16 – Temporary Stitch plating requirements (Slide 77)

Are stitch pressure plates adequate and have not been in-situ for too long.

2 fix stitch plates – 350mm from corners & 1000mm centres therein (6Nm)

1 fix stitch plates – 175mm from corners & 500mm centres therein (6Nm)

Cut and prep the pressure plate 692 556 as per details below.



Apply external glazing gasket 692 571 to temporary glazing clips before use.

Item 17 – Thermal Break Installation (Slide 78 - 81)

17A - Hi Foam thermal break (36mm) is fitted AFTER glazing.

17B - Check that 50mm lengths of PVC vertical thermal break (36mm - 271-490) are fitted at the head and cill of mullions adjacent to drainage spouts (692-587)

NB: Depending on Expansion joint position a 30mm piece of PVC thermal break should be pre-fixed to the top of the “LOWER” mullion and pinned in with Spirol pin (6003-158)



Item 17 – Thermal Break Installation (Slide 82 & 83)

17C - Check that HI Foam vertical thermal breaks 36mm (5000-357) is fitted in between Brise soleil brackets and full length down the perimeter jambs. NB: 2metre lengths can be butt jointed.

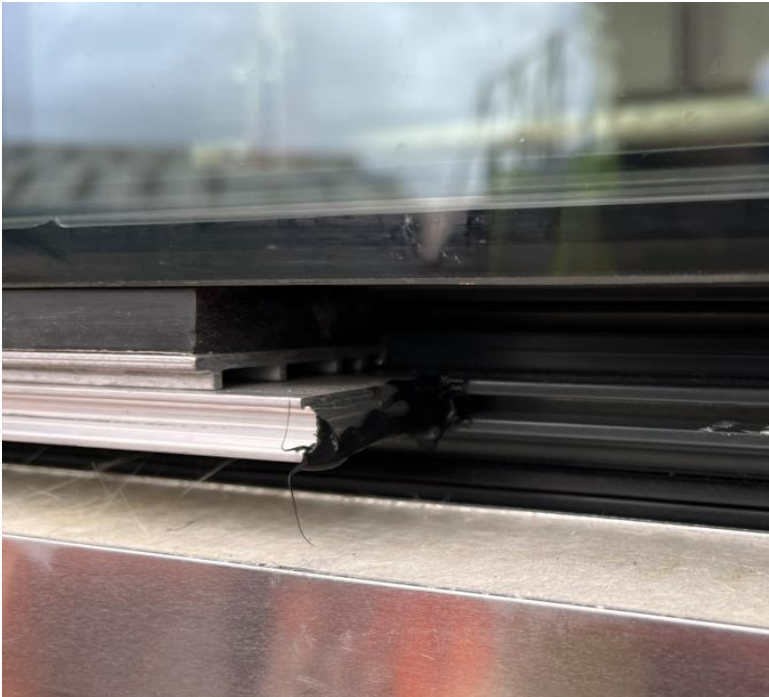


Item 17 – Thermal Break Installation (Slide 84 & 85)

17D - Check that a small bead of DC791 Sealant is applied along the exposed ends of :

Ground & first floors – Inverted consoles, PVC Thermal breaks (with sealed ends), Thermal break supports & Standard consoles. DC791 also applied to end of drainage spouts.

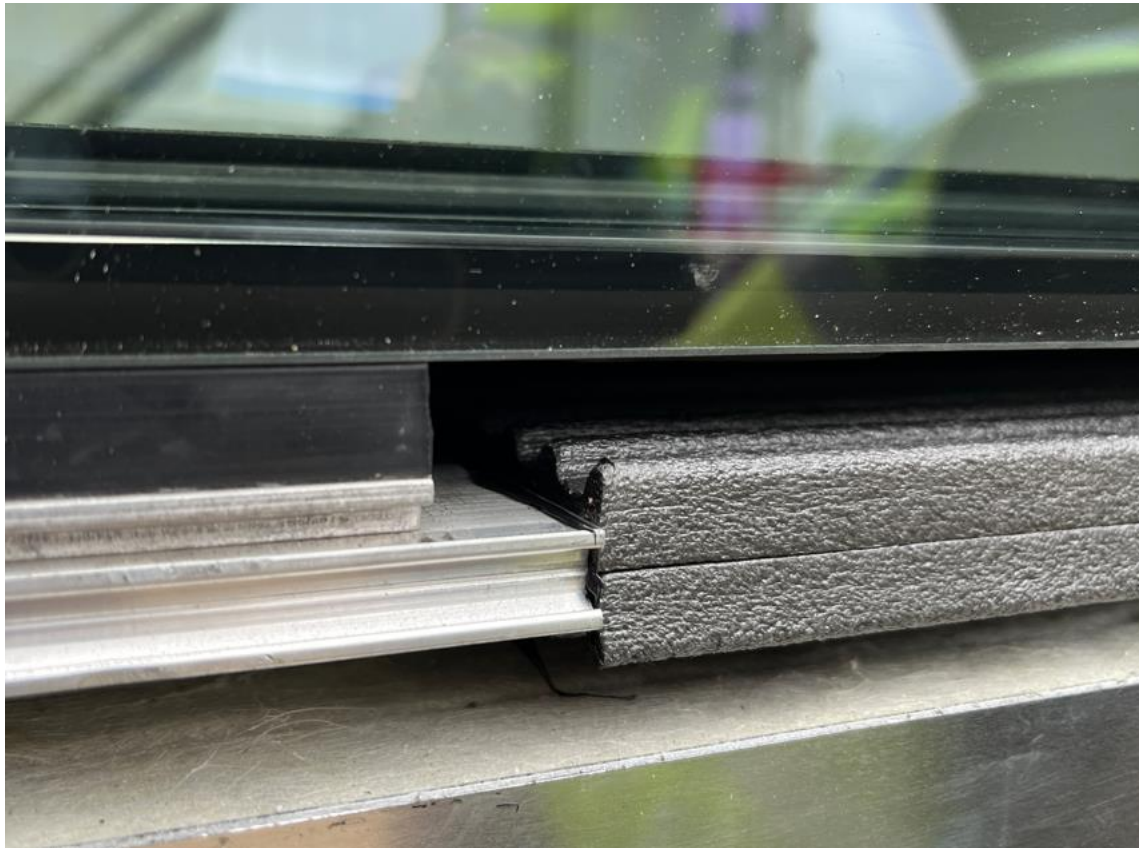
TIP – Do not apply too much DC791 into Thermal break recess. This will impede fitting of the HI Foam Thermal break.



Item 17 – Thermal Break Installation (Slide 86)

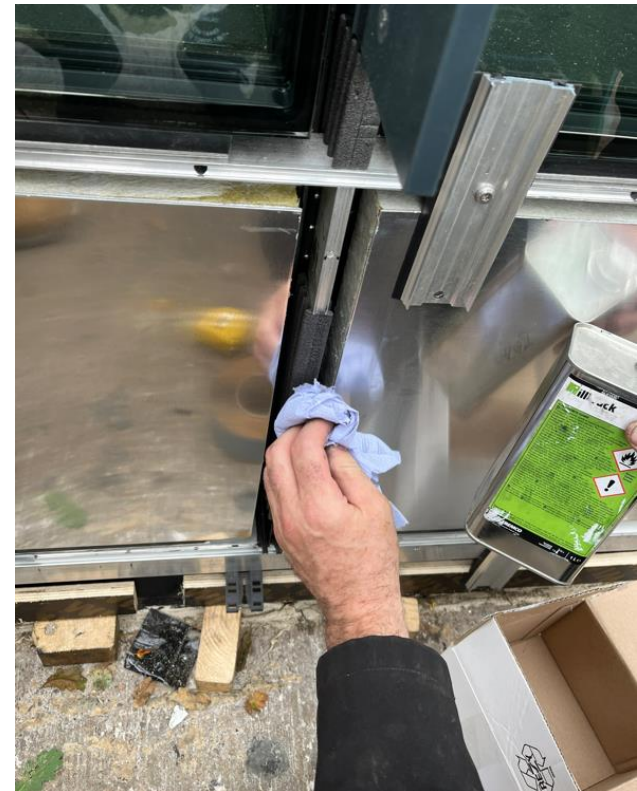
17E - Check that HI Foam horizontal thermal breaks 36mm (5000-357) are cut to dead size and fitted in a CONTINUOUS SINGLE PIECE.

17F - Check and tool off excess DC791 from the joints.



Item 18 – Butyl tape application (Slide 87)

Check that all contact surfaces that Butyl tape is to be applied to has been cleaned with cleaner (690-700). THIS INCLUDES Consoles or thermal break supports.



Item 18 – Butyl tape application (Slide 88 & 89)

18A - Vertical butyl tape 270 117 (62mm) is fitted over the full height of panels glazed over expansion transom joints and terminates 150mm each side of transoms above or below (INCLUDING PROXIMITY OF BRISE SOLEIL BRACKETS).



Item 18 – Butyl tape application (Slide 90, 91 & 92)

18B - Working from the underneath up, Vertical butyl tape 270 117 (62mm) is fitted 150mm below, around & 150mm above Brise Soleil brackets, applied over glass units or panels glazed each side.

USE A SHARP PAIR OF SCISSORS

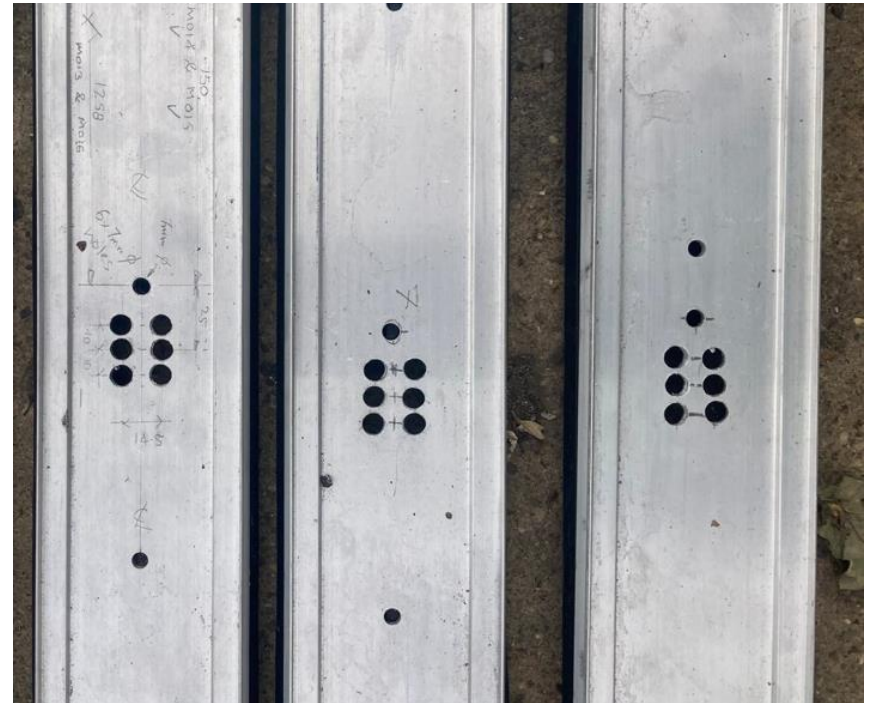
TIP – Cut 2 strips at 165 & cut a 15mm “T” in one end

Cut 1 strip at 230mm, fold and cut it in half along its full length into the 2 side pieces.



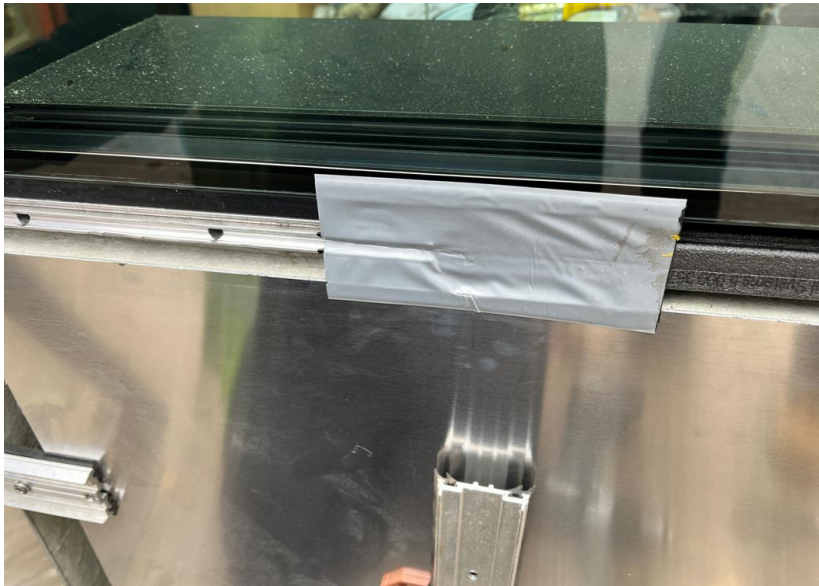
Item 18 – Butyl tape application (Slide 93 & 94)

18C -Vertical butyl tape 270 117 (62mm) cut out for Ventilation slots 21x25mm behind ventilation slots in vertical pressure plates at drainage spouts and additional pressure equalisation slots for increased weight consoles.



Item 18 – Butyl tape application (Slide 95 & 96)

18D - Horizontal butyl tape **270-118 (82mm) 150mm Long**, is positioned 50mm over consoles, thermal breaks or thermal break supports and 100mm over HI foam 5000-357.



Items 19, 20 & 21 – Pressure plate Application (Slide 97)

19 – Pre inspection check. Pressure plates cut to correct length and correct orientation – check end seals.

20 - Pressure plate end pads in place? Check sealant DC791 in end pad (692-597) joints with linear gaskets.

21 - Fitting vertical pressure plates first, Establish expansion joints 55mm & 30mm respectively taking care to centralise vertical plates each side of the expansion joint with Drainage spouts and Brise Soleil bracket slots elsewhere.



Item 22 – Pressure plate Application 55mm Exp. Joint (Slide 98 & 99)

22 - All P/P fixings holes used. Check end dims and centres. - **55mm Expansion joint.**

IN UPPER pressure plate: First hole 26mm up & 4.5mm dia for Joint strap fixing screw 330 226.

First Pressure plate fixing screw position lines up with hole for Console position

In LOWER pressure plate: First hole position 26mm for STD pressure plate fixing screw in Butt strap 694-715.

Remaining holes centred as per blast requirements.



Item 23 – Pressure plate Application 30mm Exp. Joint (Slide 100 & 101)

23 - All P/P fixings holes used. Check end dims and centres. - **30mm Expansion joint.**

IN UPPER pressure plate: First hole 26mm up & 4.5mm dia for Joint strap fixing screw 330 226.

First Pressure plate fixing screw position lines up with hole for console position

In LOWER pressure plate: First hole position 26mm for STD pressure plate fixing screw in Butt strap 694-715.

Remaining holes centred as per blast requirements.



Item 24 – Pressure Plate Application (Slide 102)

24 - Fit pressure plate joint piece 694-713 trapping it behind vertical pressure plates and butt strap (694-715).

NB: for 30mm Expansion joint, cut down joint piece 694-713 to 30mm

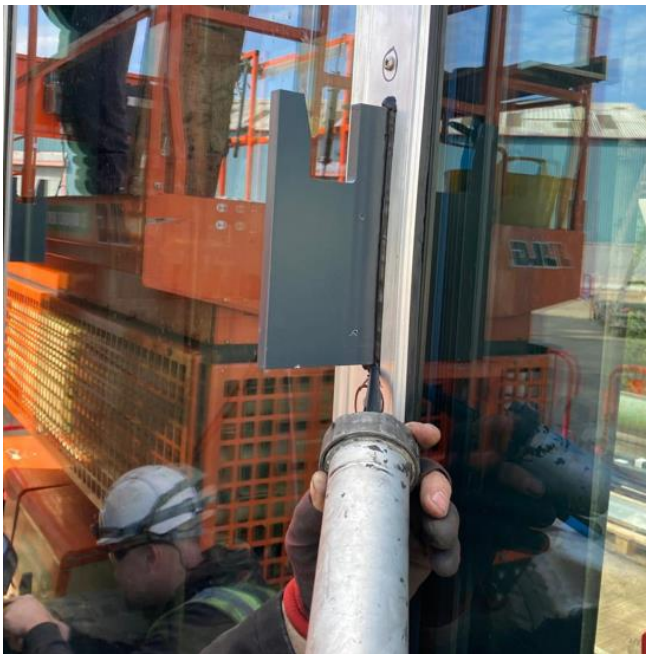
BACK OFF LOWER PRESSURE PLATE SCREW HALF A TURN.



Item 25 – Pressure Plate Application (Slide 103-105)

Where Pressure plates are installed over Brise Soleil brackets, apply a bead of DC791 seal around the pressure plate and the Brise Soleil brackets.

Pressure plate gasket 692-571 cut out around slots for brackets, drainage spout and console positions.



Item 26 – Pressure Plate Application (Slide 106)

106 - Ensure drainage paths are clear. Drainage spouts project through slots correctly. Spouts centralised with slots.



Item 27 – Pressure Plate Application (Slide 107)

107 - Pressure plate screws 59mm long (271-471) torqued to correct level (6Nm)



Item 28 – Pressure Plate Application (Slide 108)

28 - Where first pressure plate screw is required at “inverted consoles” Screw 028-710 is to be used to fix through into console in lieu of standard pressure plate screw at the base of the screen. Inverted consoles supplied to site pre-drilled.



Item 29 & 30 – Pressure plate installation (Slide 109 & 110)

29 - Drainage slot cover plates (273-752) fitted. NB: check that the drain slot covers have been fitted correctly at the head of the vertical pressure plates where the preparation is “inverted”

30 - Any redundant pressure plate holes capped off with sealant (DC971).



Item 31 & 33 – Ventilation & Pressure Plate Sealing (Slide 111 & 112)

31 - Sealant applied at head of pressure plate to prevent run off water entering.

33 - Sufficient air gap at head/base of vertical face cap to allow safe drainage/pressure equalisation.



Item 32 – Face cap installation (Slide 113, 114 & 115)

Check face caps are secure and no excessive gaps evident at mullion/transom joints. Ensure Vertical face caps trap Joint piece 694-713. Face cap joint piece 699-714 fitted behind Lower cap.

30mm Expansion joint – Face cap gap 19mm

50mm Expansion Joint – Face cap gap 25mm

Centralise caps over Brise Soleil Bracket locations



Item 32 – Face Cap Installation (Slide 116 & 117)

33 - Horizontals centralised between verticals with drain slots underside.



Item 34 – Internal gasket compression check (Slide 118)

34 - Check internal gaskets are not lipped. Check compression between glass and gaskets with 0.6 feeler gauge.



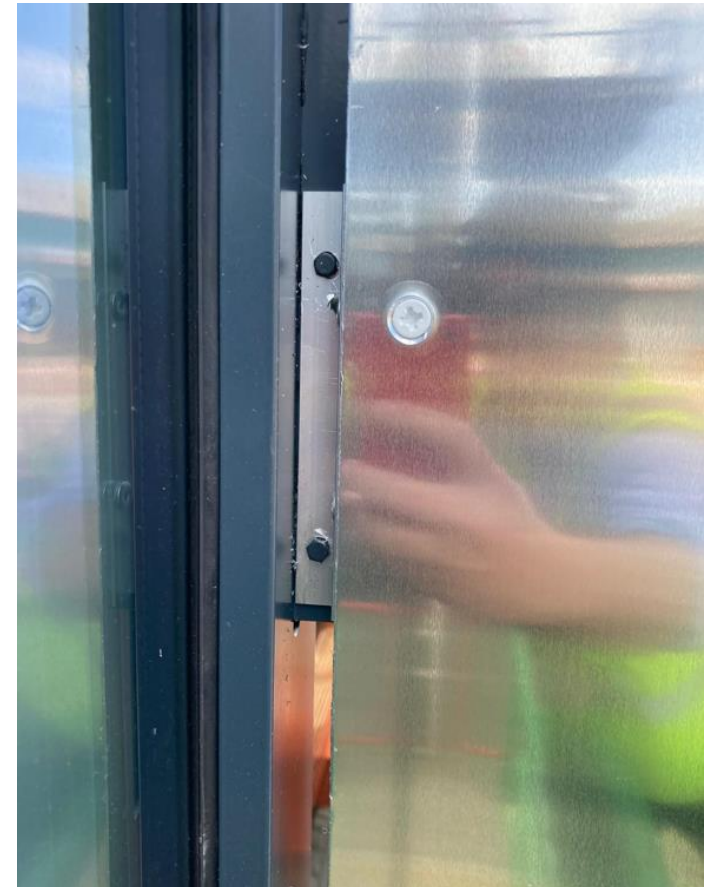
Item 35 – EPDM membrane & interface (Slide 119)

35 - Consider supporting the EPDM membranes behind the jamb EPDM membrane carriers at the expansion joint details. Usually a back-up plate behind the perimeter EPDM carrier angles.



Item 36 – Brise Soleil Bracket fixing (Slide 120 & 121)

36 - Brise Soleil fins are “hooked on” over and onto projecting Brise Soleil Brackets and bolted through pre-determined holes in both the fins and the brackets to FK project specific detail.



AA185BM MCFC Installation Toolbox

THANK YOU – ANY QUESTIONS?





Section 2 Procedures

Quality Management System

Quality Assurance Checklist

Contract: MCFC NS EXPANSION CURTAIN WALLING

Contract Number: F1681

Client: SISK

Date: _____

Checklist Number: NSE-FKG-HT-QAC-CW-_____

Phase & Level (s): _____

Mast Climber: _____

DESCRIPTION OF WORKS: Curtain Wall AA185 BM and Glazing Installation

Item number	Activity	YES	NO	N/A	CHECKED FK:	COMMENTS
1.	Area handover with relevant grid lines and datums in place.					
2.	Installation of the brackets, levelled, aligned, bolted and torqued checked & sprayed, where applicable packers and/or shims to be installed in accordance FK drawings. Note: Pull out test to be completed by Manufacture cover on separate report.					
3.	Installation of mullions and transoms face aligned & tightened to 2.5Nm in accordance FK drawings.					
30mm Mullion Joint (Expansion +/- 9mm) Assembly & Sealing Sequence						
4.	Check that all contact surfaces that are to be sealed have been de-greased, cleaned and all swarf removed from recesses and chambers. End of "Lower" mullion of the joint has been supplied to site fitted correctly with the spigot assembly. Ends of "Upper" mullion of the joint has been supplied to site fitted correctly with with 2 No. angles (694-731) fixed to the inside of the mullion sides.					
5.	Check correct foam piece fitted CAREFULLY down spigot is correct: (694-728) – Intermediate (694-729) – Jambs (Handed Left or Right) – Check correct side.					
6.	Check DC791 Applied around cut face of LOWER mullion BEFORE fitting FOAM piece & Mullion drainage pieces (692-587) are cut to 50mm long.					

Quality Management System

Section 2 Procedures

7.	Check DC791 Applied around contact surface of the TOP FACE of foam piece including the voids for drainage piece, after applying DC791 to underside of UPPER MULLION DRAINAGE CHANNEL, check that drainage piece (692-587) is fitted so that UNDERSIDE OF SPOUT is FLUSH with UNDERSIDE of UPPER MULLION ensuring that suitable support is provided BETWEEN TRANSONS to establish 30mm Expansion Joint.					
Back Tray Fixing & Sealing, Brise Soleil						
8.	Check that back trays are installed in line FK drawings and sealed around full perimeter. NOTE: All insulation to be installed AFTER the preparation and sealing of internal glazing gaskets.					
9.	Check that Brise Soleil brackets are located and fixed with 8no. 18mm spirol pins.					
Internal & Perimeter glazing gasket fitting, sealing and setting bocks						
10.	Check that all contact surfaces that are to be sealed have been de-greased, cleaned and all swarf removed from recesses. Apply bead of DC791 30mm mullion joint (to allow +/-9mm expansion) in from corners before fitting corner moulds & linear gaskets before application. Applicable to 30mm mullion joint (to allow +/- 9mm expansion) DC791 sealant applied to exposed face of expansion foam pieces and 100mm down from expansion foam pieces into gasket recess.					
11.	Check that perimeter linear gasket and/or vulcanised gasket (692-569) has been cut and either mitred at 45° or square cut with moulding (692-655) and application of DC791 over mullion nose & thermal breaks at the head of the screen and tooled off ensuring spouts are not blocked.					

Quality Management System

Section 2 Procedures

Temporary Glazing, Panels and/or Louvres, Stitch plating						
12.	Check glass support positions are correct 20mm in from edge of mullion, ensure glazing units, spandrel glass panel louvres units and insulate panels are positioned centrally within rebate, all stitch plates to be in line manufacture recommendations with Torque setting of 6Nm.					
13.	Check where applicable perimeter pressings, cills and head flashings are installed in accordance FK drawings.					
14.	HI Foam thermal break (36mm) to be installed AFTER glazing, vertical thermal breaks 36mm (5000-357) is fitted in between Brise soleil brackets and full length down the perimeter jambs (TB in 2m lengths can be butt jointed), that HI Foam horizontal thermal breaks 36mm are cut to dead size and fitted in a continuous single piece.					
15.	Vertical butyl tape 62mm is fitted over the full height of panels glazed over expansion transom joints. Vertical butyl tape 62mm is fitted 150mm below, around & 150mm above Brise Soleil brackets, applied over glass units or panels glazed each side. Horizontal butyl tape 150mm Long, is positioned 50mm over consoles or thermal break supports and 100mm over HI foam.					
Pressure Plate Application & Caps Install						
16.	Pressure plates installed in accordance FK drawings and torqued to 6 Nm. Where Pressure plates are installed over Brise Soliel brackets, apply a bead of DC791 seal around the pressure plate and the Brise Soleil brackets ensuring drainage paths are clear and projects through slots correctly.					

Quality Management System

Section 2 Procedures

17.	Check that face caps are secure with no excessive gaps evident at mullion/transom joints.					
18.	EPDM Interfacing substrate and Curtain wall installed in accordance FK drawings.					
Rainscreen, Copings & Fins Install						
19.	Rainscreen & Copings build up substructure, insulation & panels to be installed in accordance FK drawings.					
20.	Project Fins installed in accordance FK drawings.					
21.	Area complete.					



Section 2 Procedures

Quality Management System

Quality Assurance Checklist

Contract: MCFC NS EXPANSION STADIUM

Contract Number: F1681

Client: SISK

Date: _____

Checklist Number: NSE-FKG-HT-QAC-FB-002

Phase & Level (s): _____

Mast Climber: _____

DESCRIPTION OF WORKS: COMPOSITE PANELS

Item number	Activity	YES	NO	N/A	CHECKED FK:	COMMENTS
1.	Is structure suitable for use and has handover been received from sisk??					HO Cert required by others
2.	Check all materials are free from damage and stored correctly.					
HOLD POINT						
3.	Have brackets been installed in correct locations and using correct fixings as per detail?					
4.	Check support channel is installed and correct fixings have been used					
5.	Where applicable ensure drip flashing is installed with mastic bead between structure and flashing.					
6.	Where applicable check trims have been fitted to allow for 30mm expansion gap and sealed with membrane clamped to rear of trims					Upload photo at this point
HOLD POINT						
7.	Ensure panels are installed square and to correct position as per drawing					
8.	Final Inspection					



Section 2 Procedures

Quality Management System

Quality Assurance Checklist

Contract: MCFC NS EXPANSION FIRESTOPS

Contract Number: F1681

Client: SISK

Date: _____

Checklist Number: NSE-FKG-HT-QAC-FB-_____

Phase & Level (s): _____

Mast Climber: _____

DESCRIPTION OF WORKS: FIRESTOP VERTICAL SIDERISE CW-CB30 90/30 min (75mm) & HORIZONTAL SIDERISE CW-FS120 (120MM)

Item number	Activity	YES	NO	N/A	CHECKED FK:	COMMENTS
VERTICAL SIDERISE CW-CB30 90/30 MIN (75mm)						
1.	Have the Brackets B65/110 being installed at 600mm?					
2.	Has the Vertical Siderise CW-CB30 90/30 (75mm) being installed with 10% compression?					
3.	Has joints between lengths been tightly abutted?					
4.	Have joints between abutting lengths been taped with Siderise RFT on BOTH sides?					
HORIZONTAL SIDERISE CW-FS120 (120mm)						
5.	Have the Brackets B65/110 being installed at 600mm?					
6.	Has the Horizontal Siderise CW-FS120 (120mm) being installed with 10% compression?					
7.	Has joints between lengths been tightly abutted?					
8.	Have joints between abutting lengths been taped with Siderise RFT on TOP side?					



INSPECTION & TEST PLAN

Contract Name:	MCFC	Reference:	F1681	ITP Ref:	FK - ITP – 001 (Rev05)
Inspection / Test Activity:	CURTAIN WALL & GLAZING INSTALLATION				
Name of Subcontractor (S/C):	FK				
ITP agreed for use by Sisk; Name:	SISK	Date:	03/02/25	Person assigned to manage this activity:	Chris Lane / Andy Lowe / Liam Creaser / Ben Heslin

Definitions of Inspection frequency:

Inspection Codes: H = Hold Point A = Approval D = Daily Inspection R20 = 20% Inspection R100 = 100% Inspection N = Notification Point W = Witness RI = Random Inspection R10 = 10% Inspection

H = Hold Point means no work on that specific element can continue until a satisfactory check is carried out by the specified party.

S = Surveillance means that note is taken of correctness of item during routine visits by the specified party

W = Witness means an inspection is carried out in the presence of the relevant party (this can be followed by a percentage if not all such inspections need to be witnessed)

Item	Stage	Activity - Curtain Walling and Glazing	Method of Inspection & Test	Acceptance Criteria	Frequency of Inspection	Inspection				Quality checklist document
						FK	Sisk	Client	Other	
1.	Construction Compliance	Take receipt of the installation area, visual inspection of ground conditions and work area with correct paperwork in place.	Trade contractor and Sisk engagement to take place once each area is available.	Area released complete with access & ground bearing check	For each completed area	H	H			SISK Handover documentation
2.	Materials	Check of all materials supplied conform with all technical documentation, drawings and specifications, prior to installation.	Physical site inspection by FK site management team	Construction issue drawings and specifications & approved technical submissions.	Each delivery	R100				FK Quality Checklist Document
3.	Construction Compliance.	Structural opening handover, relevant grid lines and datums in place.	Visual check by FK	FK specification drawings.	Prior to starting an elevation/area/CW screen.	H	H			FK Quality Checklist Document
4.	Construction Compliance.	Inspect that the curtain wall grid work is lined level and plumb and set out as per the FK construction drawings.	FK site management team	FK specification drawings.	Once installed prior to Glass or vents	H	W			FK Quality Checklist Document
5.	Construction Compliance	Inspection of CW brackets & bolts, installed correctly and have been torqued to correct setting as per manufacturers recommendations.	FK site management team	FK specification drawing & calculations submitted.	Prior to Glass being fitted	H	W			FK Quality Checklist Document
6.	Construction Compliance.	Check all gaskets/expansion joint is installed correctly and in accordance with FK drawings.	FK site management team	FK specification drawing. Fixing suppliers requirements	Prior to Glass being fitted	W	W			FK Quality Checklist Document
7.	Construction Compliance.	Inspect all glazed in elements – backing trays, seals, insulation, glass or spandrel glass, louvres or plenums are fitted correctly. i.e. right orientation and correct pressure plates.	FK site management team	FK specification drawing. Glass manufacturers requirements	Inspect once glazed in element is installed into prepared opening.	W	W			FK Quality Checklist Document
8.	Construction Compliance.	Inspection of Fire Stopping Cavity Barriers, please refer to related ITP Ref 003 for further information/area references.	FK site management team	FK specification drawing & approved technical submission.	Following spandrel glass installation	H	W			FK Quality Checklist Document
9.	Construction Compliance.	Inspection of perimeter pressings, EPDM membranes are in place and correct location.	FK site management team	FK specification drawing.	Inspect once installed prior to removal of access.	H	W			FK Quality Checklist Document
10.	Construction Compliance.	Inspection of rainscreen & coping sub-structure build up and inspection of areas complete.	FK site management team	FK specification drawing.	Inspect once installed prior removal of access.	H	W			FK Quality Checklist Document
11.	QA Compliance.	Final inspection prior to hand - over	Physical site inspection by FK and Sisk	FK specification drawing	On all completed Installation	H	H			FK QA Handover document



INSPECTION & TEST PLAN





INSPECTION & TEST PLAN

Contract Name:	MCFC	Reference:	F1681	ITP Ref:	FK - ITP – 004 (Rev02)
Inspection / Test Activity:	KALZIP MAIN ROOF & SKYBAR				
Name of Subcontractor (S/C):	FK				
ITP agreed for use by Sisk; Name:	SISK	Date:	05/02/25	Person assigned to manage this activity:	Chris Lane, Andy Lowe, Ben Heslin, Liam Creaser, (or persons deemed to be carrying out management inspections)

Definitions of Inspection frequency:

Inspection Codes: H = Hold Point A = Approval D = Daily Inspection R20 = 20% Inspection R100 = 100% Inspection N = Notification Point W = Witness RI = Random Inspection R10 = 10% Inspection

H = Hold Point means no work on that specific element can continue until a satisfactory check is carried out by the specified party.

S = Surveillance means that note is taken of correctness of item during routine visits by the specified party

W = Witness means an inspection is carried out in the presence of the relevant party (this can be followed by a percentage if not all such inspections need to be witnessed)

Item	Stage	Activity - Curtain Walling and Glazing	Method of Inspection & Test	Acceptance Criteria	Frequency of Inspection	Inspection				Quality checklist document
						FK	Sisk	Client	Other	
1.	Construction Compliance	Take receipt of the installation area, visual inspection of conditions and work area with correct paperwork in place.	Trade contractor and Sisk engagement to take place once each area is available.	Area released complete with access.	For each completed area	H	H			SISK Handover documentation
2.	Materials	Check of all materials supplied conform with all technical documentation, drawings and specifications, prior to installation.	Physical site inspection by FK site management team	Construction issue drawings and specifications & approved technical submissions.	Each delivery	R100				FK Quality Checklist Document
3.	Construction Compliance.	Structural handover, relevant grid lines in place.	Visual check by FK	FK specification drawings.	Prior to starting each bay/phase	H	H			FK Quality Checklist Document
4.	Construction Compliance.	Inspect that the Kalzip Deck-D60 is in place and correct direction of lay, fixed in every pan and purlin then side lap stitched at 500mm Ctr's as per FK drawings.	FK site management team	FK specification drawings.	Once installed prior to build up	H	W			FK Quality Checklist Document
5.	Construction Compliance	Inspection of VCL fully taped and no damage together with VCL sealing tape (SKYBAR ONLY)	FK site management team	FK specification drawing	Prior to build up being installed	H	W			FK Quality Checklist Document
6.	Construction Compliance.	Check all kalzip build up is in place and correct centres for E-clips, tophats, and fixings. Check E-clips have correct size thermal isolator fitted as per FK Drawings	FK site management team	FK specification drawing.	Prior to Panel being fitted	W	W			FK Quality Checklist Document
7.	Construction Compliance.	Inspect insulation (SKYBAR ONLY) and acoustic matting (MAIN ROOF ONLY)	FK site management team	FK specification drawing.	Inspect once in place prior to panel being fitted	D	W			FK Quality Checklist Document
8.	Construction Compliance.	Inspect Kalzip sheets are laid correctly, zipped fully at the end of each day.	FK site management team	FK specification drawing &	Inspect prior to flashing install	W	W			FK Quality Checklist Document
9.	Construction Compliance.	Inspection of all flashings checking fillers are in place and fixed as per fk drawings.	FK site management team	FK specification drawing.	Inspect once installed prior to removal of access.	H	W			FK Quality Checklist Document
10.	QA Compliance.	Final inspection prior to hand - over	Physical site inspection by FK and Sisk	FK specification drawing	On all completed Installation	H	H			FK QA Handover document



INSPECTION & TEST PLAN

Contract Name:	MCFC	Reference:	F1681	ITP Ref:	FK – ITP – 003 (Rev.04)
Inspection / Test Activity:	FIRE STOPPING				
Name of Subcontractor (S/C):	FK				
ITP agreed for use by Sisk; Name:	SISK	Date:	25/10/2024	Person assigned to manage this activity:	Alex Sousa & Chris Thompson
Definitions of Inspection frequency: Inspection Codes: H = Hold Point A = Approval D = Daily Inspection R20 = 20% Inspection R100 = 100% Inspection N = Notification Point W = Witness RI = Random Inspection R10 = 10% Inspection H = Hold Point means no work on that specific element can continue until a satisfactory check is carried out by the specified party. S = Surveillance means that note is taken of correctness of item during routine visits by the specified party W = Witness means an inspection is carried out in the presence of the relevant party (this can be followed by a percentage if not all such inspections need to be witnessed)					

Item	Stage	Activity - Fire Stopping	Method of Inspection & Test	Acceptance Criteria	Frequency of Inspection	Inspection				Quality checklist document
						FK	Sisk	Client	Other	
1.	Construction Compliance	Take receipt of the area	FK Visual inspection of area.	Area released complete with access.	For each completed area	H	H			SISK Handover documentation
2.	Materials	Check materials supplied conform with all technical documentation including drawings and specifications, prior to installation.	FK physical site inspection.	Construction issue drawings and specifications.	Each delivery	R100	W			FK Quality Checklist Document
3.	Area Pre-inspection	Inspection of slab type of cavities.	FK physical site inspection.	FK specification drawing.	Once Curtain Wall Stick works installed prior to Glass installation	H	W			FK Quality Checklist Document
4.	Firestopping Installation	Inspection of brackets, correctly positioned in line with FK specification drawings & manufacture guidance.	FK physical site inspection.	FK specification drawing. Fixing suppliers requirements	On installation	R100	W			FK Quality Checklist Document
5.	Firestopping Installation	Inspection of cavity barriers correctly compressed into the holes with no gaps and all joints taped in accordance with FK specification detail & manufacture guidance.	FK physical site inspection.	FK specification drawing. Fire stop manufacturers requirements	Inspect once installed.	R100	W			FK Quality Checklist Document
6.	Final Inspection	Final inspection prior to hand over	FK physical site inspection.	FK specification drawing	On all completed areas installed	H	H			FK quality Handover document



INSPECTION & TEST PLAN

Contract Name:	MCFC	Reference:	F1681	ITP Ref:	FK – ITP - 006 (Rev.02)
Inspection / Test Activity:	COMPOSITE WALL CLADDING				
Name of Subcontractor (S/C):	FK				
ITP agreed for use by Sisk; Name:	SISK	Date:	05/02/2025	Person assigned to manage this activity:	Chris Lane, Andy Lowe, Ben Heslin, Liam Creaser, (or persons deemed to be carrying out management inspections)

Definitions of Inspection frequency:

Inspection Codes: H = Hold Point A = Approval D = Daily Inspection R20 = 20% Inspection R100 = 100% Inspection N = Notification Point W = Witness RI = Random Inspection R10 = 10% Inspection

H = Hold Point means no work on that specific element can continue until a satisfactory check is carried out by the specified party.

S = Surveillance means that note is taken of correctness of item during routine visits by the specified party

W = Witness means an inspection is carried out in the presence of the relevant party (this can be followed by a percentage if not all such inspections need to be witnessed)

Item	Stage	Activity – Composite Wall Cladding	Method of Inspection & Test	Acceptance Criteria	Frequency of Inspection	Inspection				Quality checklist document
						FK	Sisk	Client	Other	
1.	Construction Compliance Handover	Secondary steelwork handover	Visual site inspection by FK and Sisk	Steel contractors drawings Area released complete with access	Before each wall cladding phase	H	H			Sisk handover certificate
2.	Materials Delivery	Delivery checks of wall cladding system materials inclusive of fixings before being installed	Physical site inspection by FK site management team	FK specification drawing	Inspection each delivery	RI				FK Quality Checklist Document
3.	Ground Inspection	Inspection of ground conditions	Physical site inspection by FK site management team	FK ground bearing checklist	Daily	D	D			FK Ground Bearing Checklist
4.	Construction Compliance Flashings	Installation of support substructure angles and flashings	Physical site inspection by FK site management team	FK specification drawing	Inspection at the end of each phase	R20	W			FK Quality Checklist Document
5.	Construction Compliance Seals	Installation of seals to angles and/or flashings	Physical site inspection by FK site management team	FK specification drawing	Inspection at the end of each phase	R20	W			FK Quality Checklist Document
6.	Construction Compliance	Fire Barriers installed in accordance with the specification drawings	Physical site inspection by FK site management team	FK specification drawing	Inspection at the end of each phase	R50	H			FK Quality Checklist Document
7.	Construction Compliance	Louvre installed in accordance with the specification drawings	Physical site inspection by FK site management team	FK specification drawing	Inspection at the end of each phase	R20	W			FK Quality Checklist Document
8.	Construction Compliance	Copings installed in accordance with the specification drawings	Physical site inspection by FK site management team	FK specification drawing	Inspection at the end of each phase	R50	W			FK Quality Checklist Document
9.	Construction Compliance Cladding	Installation of the vertical and/or horizontal cladding panels in accordance with the specification drawings	Physical site inspection by FK site management team	FK specification drawing	Random inspection at the end of each phase	R20	W			FK Quality Checklist Document
10.	QA Compliance.	Final inspection prior to hand- over	Physical site inspection by FK and Sisk	FK specification drawing	On all completion of each phase of walls	H	H			FK QA Handover document



INSPECTION & TEST PLAN

Contract Name:	MCFC	Reference:	F1681	ITP Ref:	FK – ITP - 008 (Rev.02)					
Inspection / Test Activity:	POLYCARBONATE East & West Gable									
Name of Subcontractor (S/C):	FK									
ITP agreed for use by Sisk; Name:	SISK	Date:	05/02/2025	Person assigned to manage this activity:	Chris Lane, Andy Lowe, Ben Heslin, Liam Creaser, (or persons deemed to be carrying out management inspections)					
Definitions of Inspection frequency: Inspection Codes: H = Hold Point A = Approval D = Daily Inspection R20 = 20% Inspection R100 = 100% Inspection N = Notification Point W = Witness RI = Random Inspection R10 = 10% Inspection H = Hold Point means no work on that specific element can continue until a satisfactory check is carried out by the specified party. S = Surveillance means that note is taken of correctness of item during routine visits by the specified party W = Witness means an inspection is carried out in the presence of the relevant party (this can be followed by a percentage if not all such inspections need to be witnessed)										
Item	Stage	Activity – Soffits Install	Method of Inspection & Test	Acceptance Criteria	Frequency of Inspection	Inspection				Quality checklist document
						FK	Sisk	Client	Other	
1.	Construction Compliance Handover	Cladding Rail System	Visual site inspection FK and Sisk	Area released complete with access	Before each Polycarbonate wall cladding phase	H	H			Cladding rail system Sisk Handover certificate
2.	Materials Delivery	Delivery checks of Polycarbonate Wall cladding materials inclusive of fixings before being installed	Physical site inspection by FK site management team	FK specification drawing	Random inspection each delivery	RI				FK Quality Checklist Document
3.	Ground Inspection	Inspection of ground conditions	Visual site inspection by FK site management team and Sisk	FK ground bearing checklist	Daily	D	D			Sisk Handover Certificate
4.	Construction Compliance	Flashings/ cills & air seals installed as per specification drawings	Physical site inspection by FK site management team	FK specification drawing	Inspection at the end of each phase	R20	W			FK Quality Checklist Document
5.	Construction Compliance	Polycarbonate gable panels installed as per specification drawings	Physical site inspection by FK site management team	FK specification drawing	Inspection at the end of each phase	R20	W			FK Quality Checklist Document
6.	QA Compliance.	Final inspection prior to hand- over	Physical site inspection by FK site management team	FK specification drawing	On all completion of each phase of soffit	H	H			FK QA Handover document

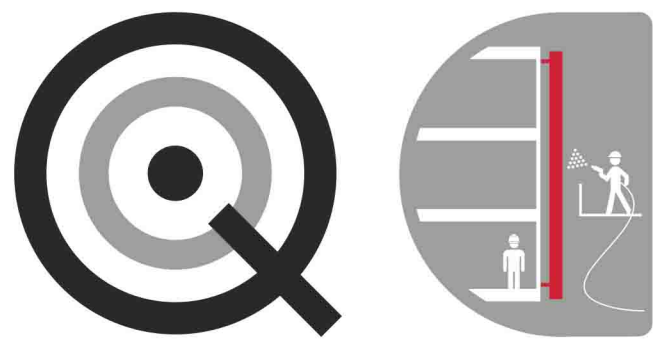


INSPECTION & TEST PLAN



Contract Name:	MCFC	Reference:	F1681	ITP Ref:	FKC – ITP – 010 (Rev.02)
Inspection / Test Activity:	MESH WALLCLADDING				
Name of Subcontractor	FK				
ITP agreed for use by Sisk (Name):	SISK	Date:	05/02/2025	Person assigned to manage this activity:	Chris Lane, Andy Lowe, Ben Heslin, Liam Creaser, (or persons deemed to be carrying out management inspections)
Definitions of Inspection frequency: Inspection Codes: H = Hold Point A = Approval D = Daily Inspection R20 = 20% Inspection R100 = 100% Inspection N = Notification Point W = Witness RI = Random Inspection R10 = 10% Inspection H = Hold Point means no work on that specific element can continue until a satisfactory check is carried out by the specified party. S = Surveillance means that note is taken of correctness of item during routine visits by the specified party W = Witness means an inspection is carried out in the presence of the relevant party (this can be followed by a percentage if not all such inspections need to be witnessed)					

Item	Stage	Activity – Wall Mesh Cladding	Method of Inspection & Test	Acceptance Criteria	Frequency of Inspection	Inspection				Quality checklist document
						FK	Sisk	Client	Other	
1.	Construction Compliance	Take receipt of the area	Trade contractor and Sisk engagement to take place once each area is available.	Area released complete with access	For each completed area	H	H			Previous contractor Handover documentation
2.	Materials	Check materials supplied conform with all technical documentation including drawings and specifications, prior to installation.	Document review	Construction issue drawings and specifications	Each delivery	R100				FK Quality Checklist Document and drawings
3.	Materials	Check delivery notes to ensure all materials delivered conform with all technical documentation and requisitions raised, prior to installation.	Physical site inspection and document review.	Construction issue drawings and specifications	Each delivery	R100				FK Quality Checklist Document
4.	Construction Compliance	Structural opening handover, relevant grid lines and datums in place.	Physical site inspection by FK and Sisk	FK construction issue drawings	Prior to starting an elevation/area.	H	H			FK Quality Checklist Document
5.	Construction Compliance	Delivery checks of framing, bracketry and panel materials before being installed	Physical site inspection by FK site management team	FK specification drawing	Prior to starting an elevation/area.	R100				FK Quality Checklist Document
6.	Construction Compliance	Inspection of ground conditions and work area	Physical site inspection by FK site management team	FK / Sisk ground bearing check	Before works start and then daily	W	W			FK Quality Checklist Document
7.	Construction Compliance	Inspection of cladding brackets & bolts, installed correctly and have been torqued to correct setting as per manufacturers recommendations.	Physical site inspection by FK site management team	FK specification drawing	Prior to panels being installed	W	W			FK Quality Checklist Document
8.	Construction Compliance	Ensure factory made panels meet the desired quality standards and specifications	Visual inspection by FK site management team	FK specification drawing	Prior to installation	R100	RI			FK Quality Checklist Document
9.	QA Compliance	Final inspection once mesh panels are installed prior to hand - over	Physical site inspection by FK and Sisk	FK specification drawing	On all completed Installation	H	H			FK QA Handover document

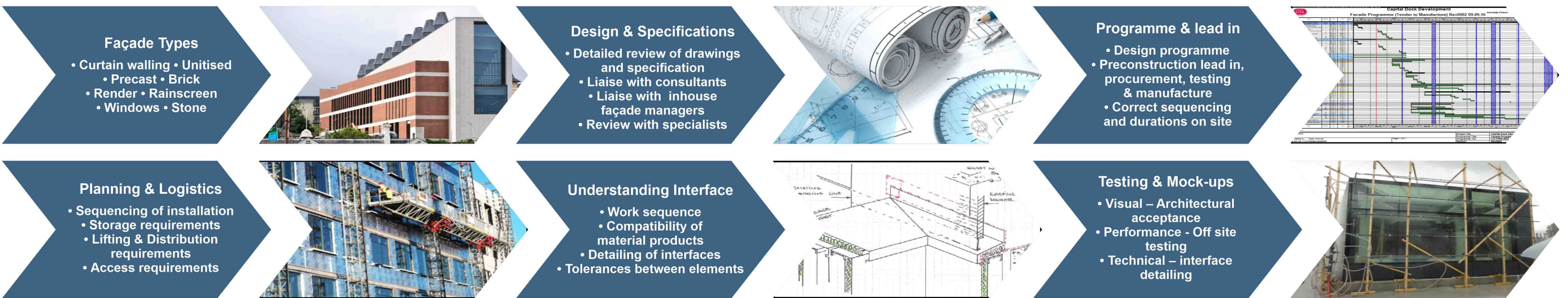


Façade Systems

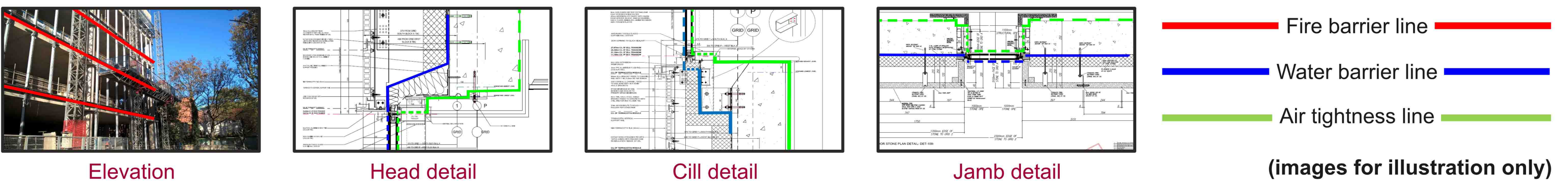
Guidance for the successful management of your façade package

GOLDEN RULE: Never assume that the installation is correct, always check !

1. Know your façades...



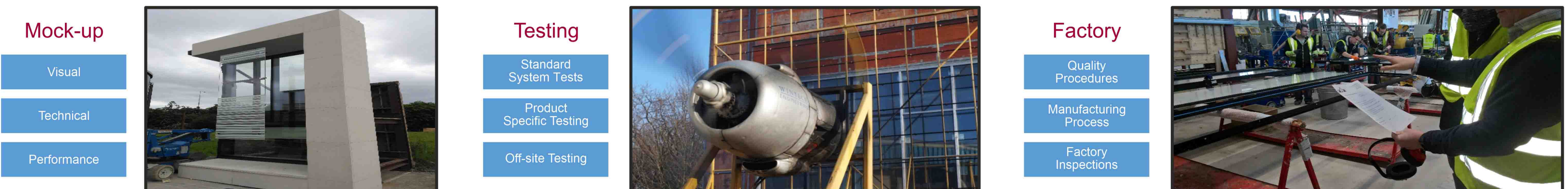
2. Know your water, air and fire lines...



3. Know your Quality Risks...

Curtain walling	Unitised	Precast/GRC (Glass fibre Reinforced Concrete)	Render	Rainscreen	Windows	Stone	Brickwork
EPDMs not fully bonded and lapped (ensure bonding agents are compatible and approved by the EPDM supplier)	Incorrect setting out and on site management of the tolerances of cast in channels	Incorrect placement or omission of cast-in elements i.e. channels and sockets	Do not use galvanised beads on external renders	The weatherline not tested/checked before the rainscreen is installed	Mitre joints not sealed properly	Sample range not agreed	DPCs and flashing incorrectly installed – failure to place weep holes
Drainage through Junctions and out via transom can be prone to issues - Drainage channels can block	Incorrect base line setting out and not taking tolerances of the system into account	Different onsite and design tolerances to interface materials	Renderers not compatible with sub strata material i.e. maybe only tested on a masonry construction	Range sample to be agreed on ceramics etc.	Incorrect gaskets installed	Offsite structural bonding. Not as agreed detail	Ties not installed /embedded correctly or at correct centres
Incorrect installation of expansion joints – Aluminium expands at 1mm / Meter with a delta of 20 Deg C	Units installed out of sequence or logistics not considered	Damage during onsite installation and exposed precast	Different tolerances on the base structure from the finished render	Interfaces between cavity barriers with system support rails to be agreed at the outset	Incorrect fixing / number of brackets	Site damage – hard to repair	Colouration issues on base brick and of the mortar Failure to mix pallets of brick before laying, to prevent batch shading
Fixings not torqued correctly	Long lead times for units in design and manufacture (Often up to 1 year for newly designed system)	GRC Panels - crazing / spalling to outer surfaces – review previous projects and sample for your project prior to proceeding, to help reference acceptable tolerances and client expectations	Temperature and environmental conditions – ensure you follow manufactures guidance during application	Carrier systems- ensure they are in to manufactures details risk on frame tolerances and bracket types – survey your frame to ensure correct bracket is used – maintaining the air Gap	EPDMs not fully bonded and lapped	System Fixings not tested / checked on site	Weather protection and curing issues with the mortar – also ensure Full perps and full mortar Beds to make sure it's structurally correct and it also prevents water ingress
Gaskets not installed correctly or incorrect Gasket's installed	Mechanical damage to panels requiring on site repairs. (finish compromised)	Fixings not torqued correctly	Incorrect location and construction of movement joints leading to cracking	Cross check panel fixing detail and also certification and longevity of same (cavity is a wet zone and metal protection needs to match)	Incorrect glass specification or glass incorrectly installed	Discolouration caused by leaching of sealant oils into stone panel edges – prime edges with propriety stone sealer or use specialist mastic	Ensure clean cavities and that the cavity widths are maintained. Efflorescence on the brick surface
Failure to isolate incompatible materials leading to galvanic corrosion	Proper planning - Ensure all preceding trades are complete and erection crew are given a clear run	Incomplete mastic weather lines, especially in hard to access areas	Discolouration if self-coloured renders – ensure same batch in same area. Scaffold ties to be planned to ensure no patches	Correct choice of sheathing board – Moisture content, Biological resistance, frost resistance, durability.	Poor detailing of cills and interfaces with surrounding materials leading to ingress of water	Grade of stainless steel not as specified	Inadequate movement joints or bridging of movement joints by brickwork / Block panels. Joints panel sizes /joints 1mm/Meter Rule as a guide for expansion circa 6 to 8 m and ensure square panels and not rectangular
Do not pass hold points until all checks are validated	Do not pass hold points until all checks are validated	Ensure the lifting system is clearly defined and designed and only lift via the designed and designated way	Failure to specify algacides in render mix leading to discolouration	Movement and deflection heads of the backing system to be installed as per the design.	Insufficient clearance between edges of glass and frame leading to cracking of units	Thickness of stone – Design required	Do not pass hold points until all checks are validated

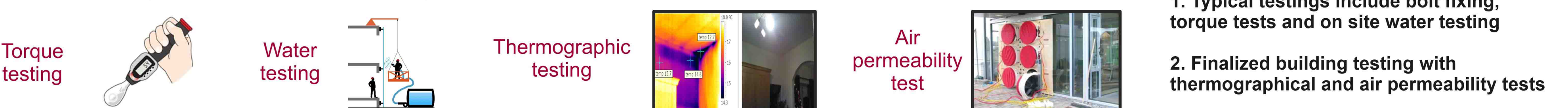
4. Know your off-site processes...



5. Know Your On Site Quality Controls...



6. Know your on-site testing requirements...



GOLDEN RULE: Never assume that the installation is correct, always check !



WE HAVE A PASSION FOR WHAT WE DO AND
A PRIDE IN WHAT WE DELIVER, **IT'S IN OUR DNA**

