HYBRID CURTAIN WALL

**HCW.D.102**

Horizontal Rail Deductions

**06.09**

**Hybrid Curtain Wall**

**Horizontal Rail Deductions**

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**HORIZONTAL TRANSOM SIZE** = (CTR to CTR) - 50mm

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**GLASS/PANEL OR WINDOW SIZE** = CTR to CTR - 22mm

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**HORIZONTAL NOSING AND THERMAL BREAK (HA101 & SMRTB15)**

**HORIZONTAL PRESSURE PLATE** = (CTR to CTR) - 54mm

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**HORIZONTAL CAP** = (CTR to CTR) - 51mm

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**CENTRE LINE SIZE**

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CTW Engineered Glazing Systems
Hybrid Curtain Wall
Drilling & Machining Details For Transom/Mullions HA101

DRILL Ø4.5 HOLES AND FIT WITH Ø4.8x30 PH WOOD SCREWS FIXING (SFSPW4830S) TRANSOM TO MULLION

NOTE: PUNCH TOOLING FOR THIS OPERATION AND HOLES Ø IS AVAILABLE FROM SENIOR ALUMINIUM SYSTEMS.
SFSPW4830S
Su/St 4.8x 30 PH Wood Screw

Page HCW.E.101 For Drilling & Cutting Details
Hybrid Curtain Wall

Pointing Detail At Typical Corner

SMRG4 GASKET

SEAL WITH PROPRIETARY GASKET SEALANT

POINT SEAL WITH PROPRIETARY GASKET SEALANT

SMRG4C CORNER GASKET

SEAL WITH PROPRIETARY GASKET SEALANT

TRIM

Trim Back Gasket Arrow At Corners As Shown

PREPARATION FOR SMRG4C CORNER GASKET
Machine Drainage Slots to Underside of Horizontal Cover Caps
75mm From Each End and 500mm Max Centres

Remove Retaining Nib Inline With Cap Drain Slot

Drill 5.0 Dia Pressure Relief Holes approx 1 metre Centres in Lower Level of Pressure Plate
Note: Ensure that Pressure Relief Holes and Drainage Slots do Not Align and are Positioned no closer than 50mm to each other

Pre-Drilled Fixing Holes - Ensure First Hole is no More Than 50mm From Either End Redrill if Necessary

Front Edge Of Slot In-Line With Inside Face Of Cap

Remove Retaining Nib Inline With Cap Drain Slot

Typical Drainage Detail Through Transom
GLASS AND GASKETS OMITTED FOR CLARITY
TORQUE SETTING 6Nm
Hybrid Curtain Wall
Sealing Detail At Cruciform Joint

FILL IN AND POINT THERMAL BREAK WITH TREMSIL 500 FULL WIDTH OF VERTICAL PRESSURE PLATE

POINT WITH TREMSIL 500 AFTER FIXING PRESSURE PLATES, THIS SHOULD BE DONE IMMEDIATELY BEFORE FITTING COVER CAP (SHOWN EXPLODED FOR CLARITY)
NOTE: Glass & Gaskets
Not Shown For Clarity

SCWPPP
Plastic Pressure Plate

SCW002
Cover Cap

Point Seal
With Tremsil 500

SMRCB

SFS1093480
Self Drilling Screw
c/w Washer

MULLION JOINT
Hybrid Curtain Wall

Mullion Splice Joint

DETAIL F
SEE PAGE HCW.E.108

M10 LOCK NUT
M10 HEX NUT
NYLON ISOLATING WASHER
HA150F FIXING BRACKET

M10 x 100LG HEX HD BOLT STAINLESS STEEL BY OTHERS TO ENGINEERS DESIGN

NOTES:-
BRACKET DESIGN TO BE CHECKED BY STRUCTURAL ENGINEERS.
ALL FIXING BOLTS AND ISOLATION MATERIALS BY OTHERS.
BACK PLATE OF BRACKETS MUST BE IN CONTINUOUS CONTACT
WITH SUBSTRATE SURFACES THE CAPACITY OF ANCHOR USED IS
DEPENDENT ON THE SITE FIXING CONDITIONS APPLICABLE TO
EACH INDIVIDUAL CASE, EG. SUBSTRATE CONDITIONS.
IT IS ESSENTIAL FOR ALL BRACKET TYPES, THAT A CHECK IS
COMPLETED TO ENSURE THAT THE TENSION AND SHEAR FORCES
APPLIED CAN BE CARRIED THROUGH THE STUD FIXINGS.
THIS BRACKET IS ALSO AVAILABLE IN BAR LENGTH - HA150.

MULLION SLEEVE
HT50080 HA151
HT50120 HA152
HT50160 HA153
HT50220 HA154
HA50300 HA155 x 2

DETAIL B
SEE PAGE HCW.E.108

M10 LOCK NUT
M10 HEX NUT
NYLON ISOLATING WASHER
HA150F FIXING BRACKET

M10 x 100LG HEX HD BOLT STAINLESS STEEL
Hybrid Curtain Wall
Mullion Movement Joint - Floor Mounted

DETAIL C
SEE PAGE HCW.E.108

M10 LOCK NUT
M10 HEX NUT
NYLON ISOLATING WASHER

HA150F FIXING BRACKET

M10x100LQ HEX HD BOLT STAINLESS STEEL BY OTHERS TO ENGINEERS DESIGN

MULLION JOINT

SLEEVE TO SUIT MULLION

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Hybrid Curtain Wall
Mullion Movement Joint - Suspended

DETAIL F
SEE PAGE HCW.E.108

M10 LOCK NUT
M10 HEX NUT
NYLON ISOLATING WASHER

SLEEVE TO SUIT MULLION

6 Gap Between Mullions

M10×100LG HEX HD BOLT STAINLESS STEEL BY OTHERS TO ENGINEERS DESIGN

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Hybrid Curtain Wall
Mullion Splice Joint Drilling Details

Drilling Details For Splice Joint Brackets
Hybrid Curtain Wall

Cill Fixing Detail

NOTES:-
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REDUCE TIMBER HORIZONTAL BY 14mm

<table>
<thead>
<tr>
<th>TRANSOM/MULLION</th>
<th>DIM 'B'</th>
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<tbody>
<tr>
<td>HT50080</td>
<td>55mm</td>
</tr>
<tr>
<td>HT50120</td>
<td>95mm</td>
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<td>HT50160</td>
<td>135mm</td>
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<td>HT50220</td>
<td>195mm</td>
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<td>HT50300</td>
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HCW.E.115

Hybrid Curtain Wall
Floor Bracket Detail

08.10

TCW002CT

TCW001CTF

TRANSOM

Ø12.7

Ø10

HA101

SMRTB15

CUT & DRILLED TO SUIT

15

7mm
Hybrid Curtain Wall
Head And Cill Details

FIXINGS TO SUIT MEMBRANE/FLASHING MATERIAL. ANY ADHESIVE MUST BE SUITABLE FOR SMP002 (RIGID PVC) AND MEMBRANE/FLASHING MATERIAL.

DPM TO STRUCTURE (BY OTHERS) MAX 2mm THICKNESS

REMOVE NIBS TO CLEAR SCREW HEADS

DETAL TO SUIT STRUCTURE

SCW094CUT Glass Support

REMOVE NIBS TO CLEAR SCREW HEADS

SFSCS07 No8x16 C’SK ST SCREW

MAX 2mm PRESSING (BY OTHERS)
Hybrid Curtain Wall

Jamb Detail

MAX 2mm THICKNESS DPM TO STRUCTURE (BY OTHERS)

SFSCS07
No.6x16 C'SK ST SCREW

REMOVE NIBS TO CLEAR SCREW HEADS

FIXINGS TO SUIT MEMBRANE/FLASHING MATERIAL. ANY ADHESIVE MUST BE SUITABLE FOR SMP002 (RIGID PVC) AND MEMBRANE/FLASHING MATERIAL.

SCW002

SCWPPP

SMRTB15
SCW007 CAP TO BE FITTED IN 3m LENGTHS MAXIMUM.
HORIZONTAL PRESSURE PLATES MAY RUN CONTINUOUS
JOINTS SHOULD BE IN MIDDLE OF TRANSOMS NOT IN LINE
WITH MULLIONS.

SCW007PLT -
GLUE FLUSH INTO
CAPPING AND LOCATE
SQUARE END INTO
PORTS ON RETURN
NOTE: 90° CORNER SHOWN
TRIM END TO SUIT ANGLE
OF CAPPING

SFSPS28 Screw
(2 Per Endcap)
#8x12mmLG

SCW007

USE 30° CUT END
TO ASSIST LOCATION
GLUE INTO ONE SIDE
OF CAPPING

SCWEC End Cap

SCW007PLT
NOTE: WHEN USING DOOR & WINDOW INSERTS, PACK & FIX TO SUIT OPERATION OF THE PRODUCT CONCERNED. REFER TO RELEVANT FABRICATION MANUAL.