TEST REPORT

SKG-IKOB
Certificatie

bezoekadres
Poppenbouwing 56
4191 NZ Geldermalsen

postadres
Postbus 202
4190 CE Geldermalsen

T +31 (0)88 244 01 00
F +31 (0)88 244 01 01
E info@skgikob.nl
I www.skgikob.nl

Report number	**15.00798**
Date of test	**26 August 2015**
Date report	**23 November 2015**
Applicant	**Reynaers Aluminium N.V.** **Oude Liersebaan 266** **B-2570 Duffel** **Belgium**
Project number applicant	**TC15_112 Vista - Chelsea Bridge London**
Size report	This report consists of 21 pages (including appendices)
Subject	Determination of the ● Air leakage (Infiltration & Exfiltration) according CWCT section 5 ● Water penetration - Static according CWCT section 6 ● Water penetration - Hose according CWCT section 9 ● Wind resistance - Serviceability according CWCT section 11 ● Wind resistance - Safety according CWCT section 12 of an aluminium curtain walling with sliding and tilt window with sizes W x H: 4604 x 5502 mm constructed from the profile system: CW 50
Inspector	R. de Graaff
Technical manager	ir. J.T. Boersma
Conclusion	The curtain walling with sliding and tilt window of Reynaers meets the classification as hereby mentioned:

	Grade
● Air leakage - Infiltration	**A4**
● Air leakage - Exfiltration	**Pass**
● Water penetration - Static	**R7**
● Water penetration - Hose	**Pass**
● Wind resistance - Serviceability	**1650 Pa**
● Wind resistance - Safety	**2475 Pa**

CONTENT

1. PURPOSE OF THE TEST

SKG-IKOB was ordered by Reynaers Aluminium N.V. - Duffel to perform various tests on a curtain walling with sliding and tilt window, to classify the

- Air leakage
- Water penetration
- Wind resistance

The test are performed as an Initial Type Testing (ITT) based on CWCT Test Methods for Systemized Building Envelopes - Dec 05

2. METHOD OF INVESTIGATION

The construction was delivered for testing on: **26 August 2015**

The construction was produced by and at the adress of the applicant.

SKG-IKOB has verified all details of the construction with reference to the supplied drawings.

The testobject was placed in the test rig and tested for:

Air leakage	CWCT section 5
Water penetration	CWCT section 6
Water penetration - Hose	CWCT section 9
Wind resistance - Serviceability	CWCT section 11
Wind resistance	CWCT section 12

The sequence of testing was according CWCT: Test Methods for Systemized Building Envelopes - Part 8 Section 8.13.5

1	Air leakage - Infiltration	CWCT section 5
2	Air leakage - Exfiltration	CWCT section 5
3	Water penetration - Static	CWCT section 6
4	Wind resistance - Serviceability	CWCT section 11
5	Air leakage - Infiltration	CWCT section 5
6	Air leakage - Exfiltration	CWCT section 5
7	Water penetration - Static	CWCT section 6
10	Water penetration - Hose	CWCT section 9
11	Wind resistance - Safety	CWCT section 12

The test was performed with the measuring equipment and test rig of: **Reynaers**

on the location: **Duffel**

SKG-IKOB has verified and approved the calibration status of the equipment.

The last calibration date was: **14 July 2015**

The ambient temperature during the test was approx. : **22,1 ºC**

The air pressure was approx. **1016 hPa**

The air humidity was approx. **62,3 %**

3. CONSTRUCTION TESTED

The construction was produced with profile system: **CW 50**
Drawings of the construction were received and are appended to this report (Appendix 2)

Technical specification:

Construction:	Description	Article nr.
Mullion		**034.2505.xx**
Transom		**034.3526.xx**
Transom		**034.1625.xx**
Pressure Plate		**034.1060.xx**
Insulation glass	Toughened 10 - 16 - 8.8.2	
Panel	Kingspan 2 - 30 - 2	

4. OBSERVATIONS AND RESULTS

4.1 Air leakage

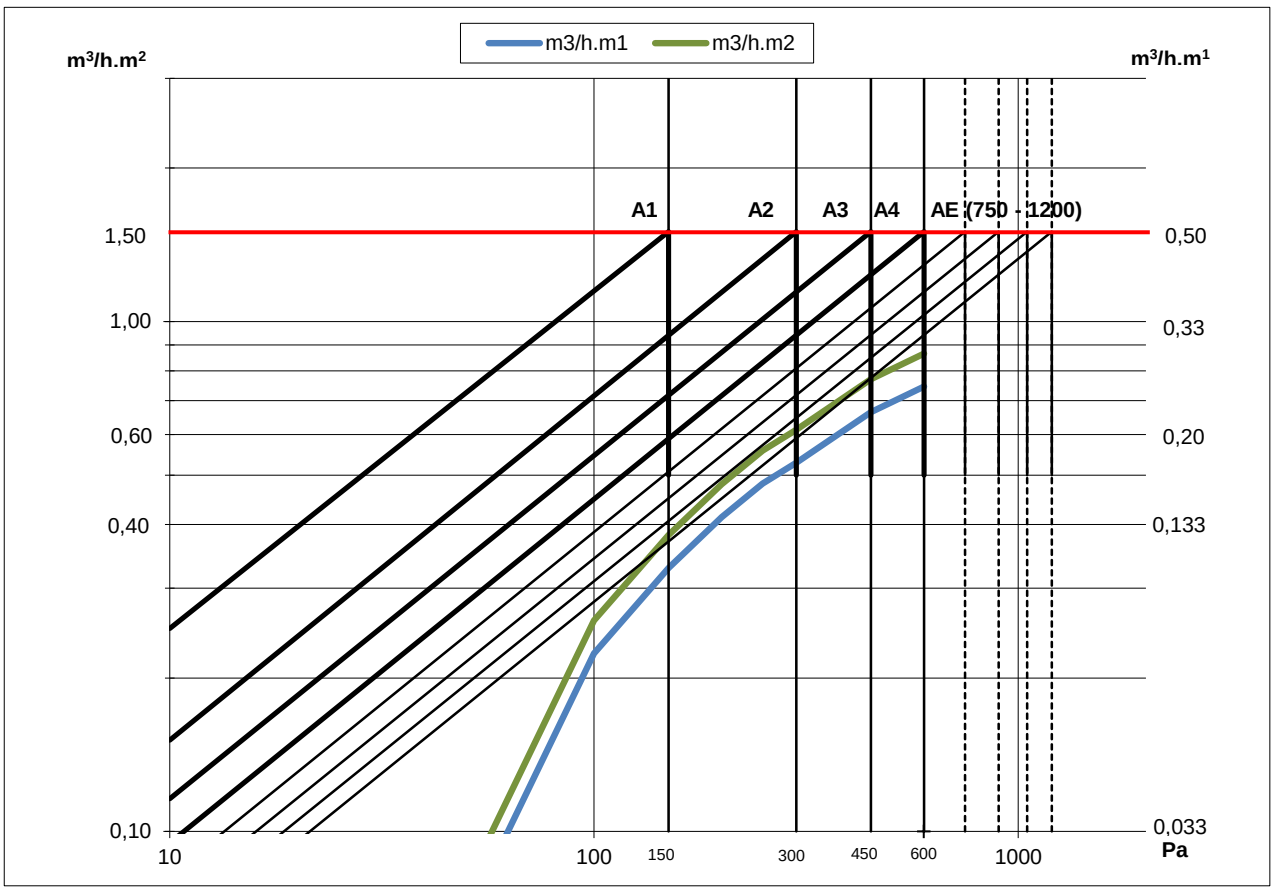
The results of the air permeability measurements under positive key pressure in m3/h per m1 joint lenght and per m2 surface are shown in table and graph below.

The joint length Lf of the element was **88,18 m^1**

The surface A of the tested construction was **25,33 m^2**

For the calculation of the normalized air flow the measured value is adjusted by: **0,996**

Pressure in Pa	Q_f (m^3/h)	Q_f/L_f (m^3/hm^1)	Q_f/A (m^3/hm^2)
50	1,99	0,02	0,08
100	6,57	0,07	0,26
150	9,66	0,11	0,38
200	12,15	0,14	0,48
250	14,14	0,16	0,56
300	15,53	0,18	0,61
450	19,52	0,22	0,77
600	21,91	0,25	0,86

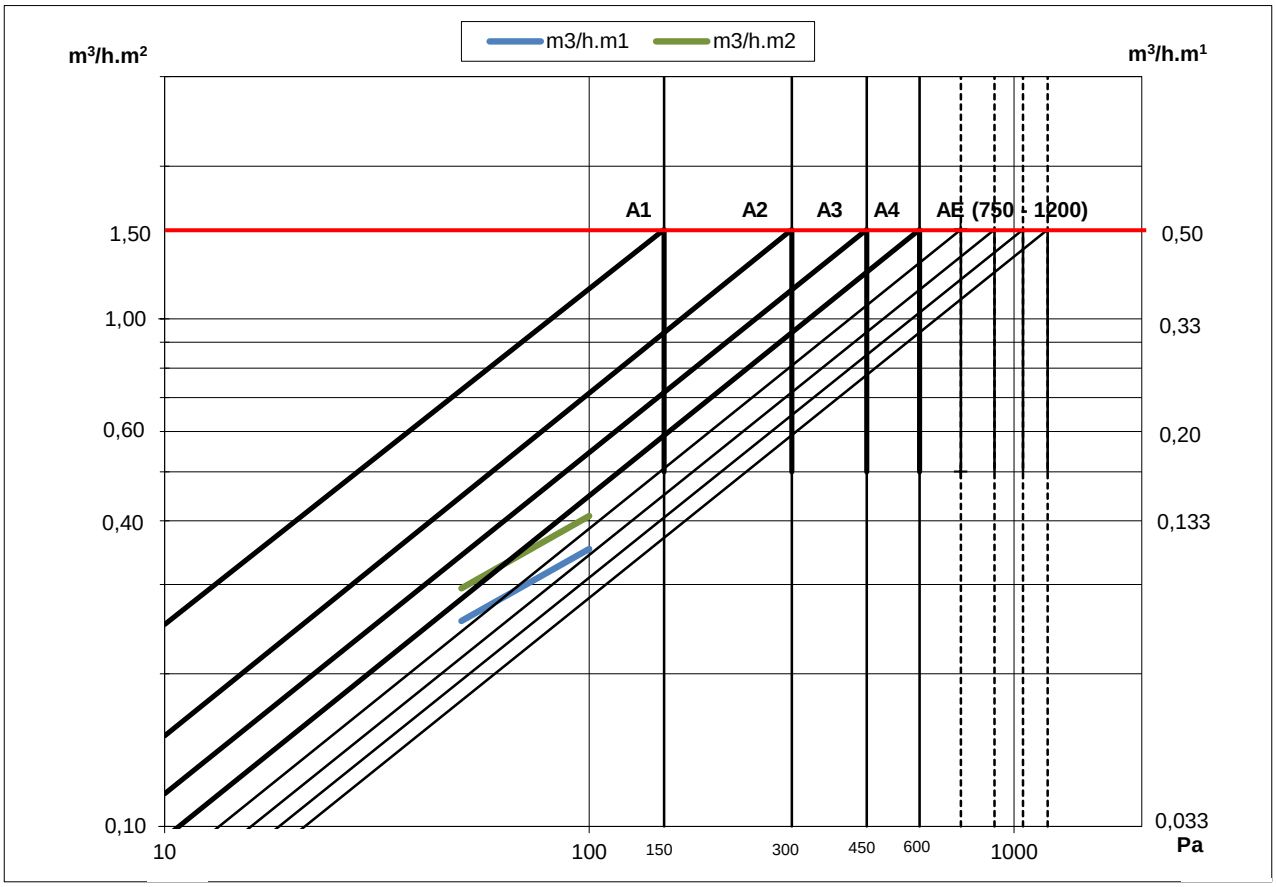


Result: at positive test presure

- Air permeability based on length of joint **Grade A4**
- Air permeability based overall area **Grade A4**

The results of the air permeability measurements under negative key pressure in m3/h per m1 joint lenght and per m2 surface are shown in table and graph below.

Pressure in Pa	Q_f (m^3/h)	Q_f/A (m^3/hm^1)	Q_f/L_f (m^3/hm^2)
-50	7,47	0,08	0,29
-100	10,36	0,12	0,41



4.2 Water penetration

The results of the water tightness test are shown in table below.

Note:
The amount of water in liters / h used for spraying the construction was: **5168 L/h**

Pressure in Pa	t (min).	Water leakage
0	15	no
50	5	no
100	5	no
150	5	no
200	5	no
300	5	no
450	5	no
600	5	no

Result:
The construction was watertight up to a pressure of: **600 Pa**

4.3 Wind resistance

4.3.1 Test on bending

Designload: 1650 Pa

The tables show the bending in response to various key pressures

Note:

The position of the displacement devices (V1. V2 en V3) is shown in the elevation drawing of the tested construction (see annex 1).

Mullion 1 L= 2520

Maximum allowable bending f in mm (max.=15): 1/200xL **12,60 mm**

Positive pressure					Negative pressure				
Pressure in Pa	**V1**	**V2**	**V3**	**f**	**Pressure in P**	**V1**	**V2**	**V3**	**f**
0	0,00	0,00	0,00	**0,00**	**0**	0,00	0,00	0,00	**0,00**
412,5	0,42	1,43	0,30	**1,07**	**-412,5**	0,37	1,19	0,30	**0,86**
825	0,82	2,75	0,57	**2,06**	**-825**	1,04	2,85	0,67	**2,00**
1237,5	1,24	4,11	0,84	**3,07**	**-1237,5**	2,00	4,38	0,99	**2,89**
1650	1,71	5,52	1,06	**4,14**	**-1650**	2,89	6,11	1,31	**4,01**
0	0,15	0,47	0,12	**0,34**	**0**	0,12	0,32	0,12	**0,20**

Result:

The maximum bending at wind resistance design load is: **4,14** mm

Within 1 hour, the residual deflection had decreased to less than 5%

This is less than the maximal allowable bending: **Satisfies the requirement**

Mullion 2 L= 2285

Maximum allowable bending f in mm (max.=15): 1/200xL **11,43 mm**

Positive pressure					Negative pressure				
Pressure in Pa	**V4**	**V5**	**V6**	**f**	**Pressure in P**	**V4**	**V5**	**V6**	**f**
0	0,00	0,00	0,00	**0,00**	**0**	0,00	0,00	0,00	**0,00**
412,5	1,11	2,20	1,46	**0,92**	**-412,5**	2,17	2,52	1,58	**0,65**
825	2,12	3,95	2,20	**1,79**	**-825**	4,44	5,70	3,79	**1,59**
1237,5	3,36	5,85	3,14	**2,60**	**-1237,5**	6,29	8,30	5,79	**2,26**
1650	4,69	7,80	3,96	**3,48**	**-1650**	8,14	10,96	7,82	**2,98**
0	0,25	0,35	0,82	**-0,18**	**0**	0,35	0,42	0,59	**-0,05**

Result:

The maximum bending at wind resistance design load is: **3,48** mm

Within 1 hour, the residual deflection had decreased to less than 5%

This is less than the maximal allowable bending: **Satisfies the requirement**

4.3.2 Repeated test for Air leakage

to confirm the wind resistance - safety

After the tests were performed as described under 4.3.1 above the air permeability test was repeated.

The requirement is that the increase of the air permeability at maximum pressure is not more than 0,3 m3/h per m2 (0,1 m3/h per meter joint length) as found in the classification test for air permeability.

The results of the air permeability measurements under positive key pressure are shown in table below.

Positive pressure 600 Pa	Result:		Increase	
	based on surface			
	Test 1	Test 2		
	1,01	1,06	0,05	< 0,3 Meets
	based on joint lenght			
	Test 1	Test 2		
	0,29	0,29	0,00	< 0,1 Meets
Negative pressure -100 Pa	Result:		Increase	
	based on surface			
	Test 1	Test 2		
	0,38	0,60	0,22	< 0,3 Meets
	based on joint lenght			
	Test 1	Test 2		
	0,11	0,17	0,06	< 0,1 Meets

The increase of the air permeability was less than maximum allowed.

4.3.3 Repeated test for Water penetration

to confirm the wind resistance - safety

The results of the water tightness test are shown in table below.
The amount of water in liters / h used for spraying the construction was: **5168 L/h**

Pressure in Pa	t (min)	Water leakage
0	15	no
50	5	no
100	5	no
150	5	no
200	5	no
300	5	no
450	5	no
600	5	no

Result:
The construction was watertight up to a pressure of: **600 Pa**

4.3.4 Hose spray test

The results of the Hose spray water tightness test are shown in table below.

Note:
The amount of water in liters / h used for spraying the construction was: **20,5 L/ min.**

Position [1)]	t (min)	Water leakage
1	4	no
2	4	no
3	4	no
4	4	no
5	4	no
6	4	no
7	4	no
8	4	no
9	4	no
10	4	no
11	4	no
12	4	no

[1)] Positions are indicated on page 13

4.3.5 Strength test

The construction was loaded to a positive and a negative key pressure of: **2475 Pa**

It was established that the construction did not show any signs of distortion.

5. CLASSIFICATION

	Grade
Air permeability based on length of joint	**A4**
Air permeability based overall area	**A4**
Air leakage	**A4**
Water penetration	**R7**
Wind resistance - Serviceability	**1650 Pa**
Wind resistance - Safety	**2475 Pa**

Drawn up at Geldermalsen on: **23 November 2015**

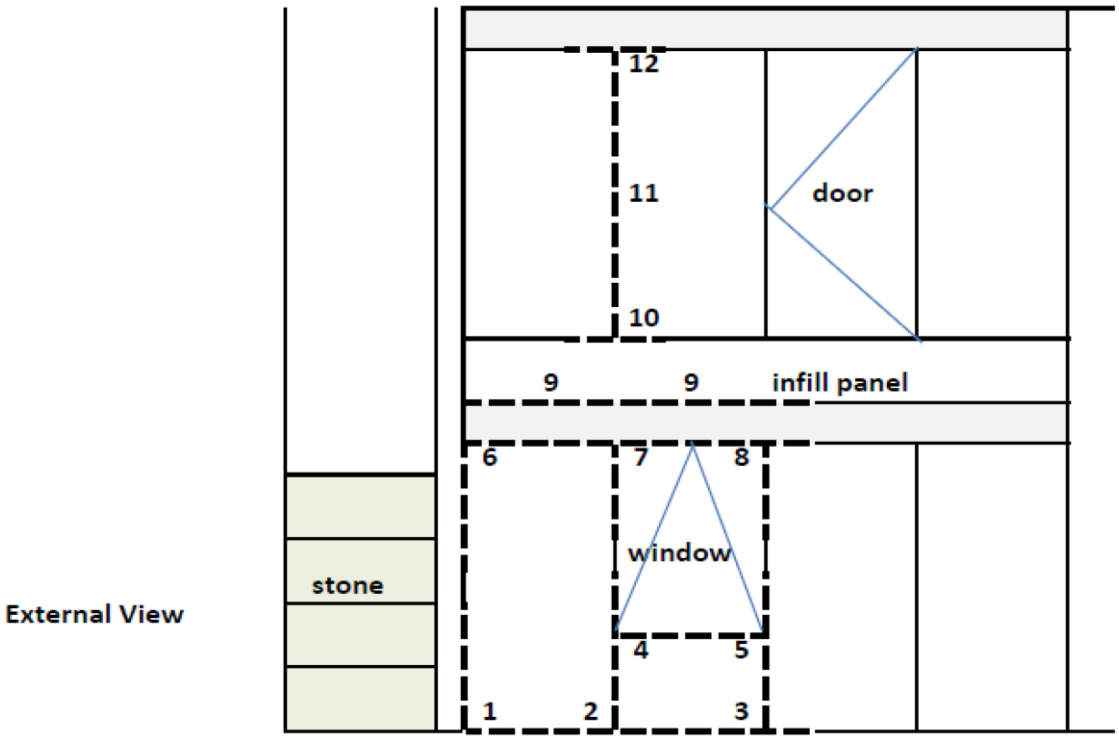
ir. J.T. Boersma
Technical Manager

6.1 APPENDIX 1 Photos of the tested construction

inner side

outer side

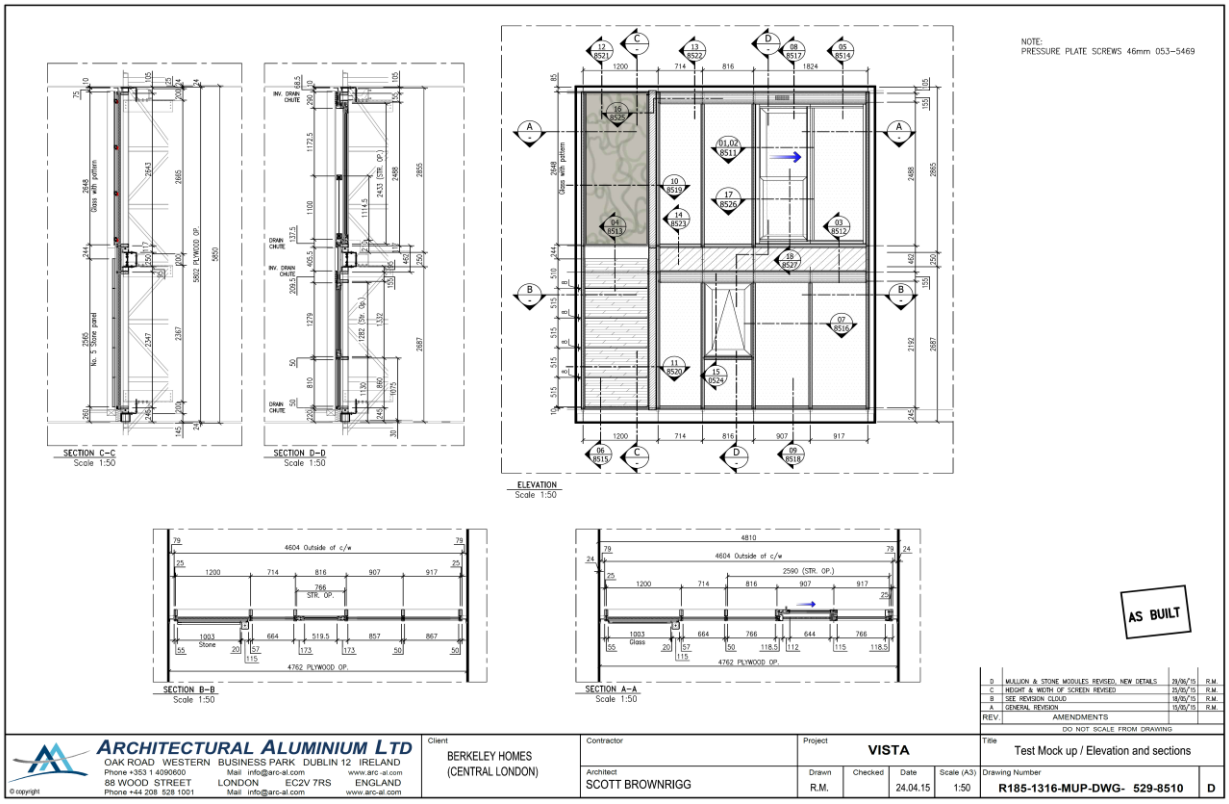
Hose spray test

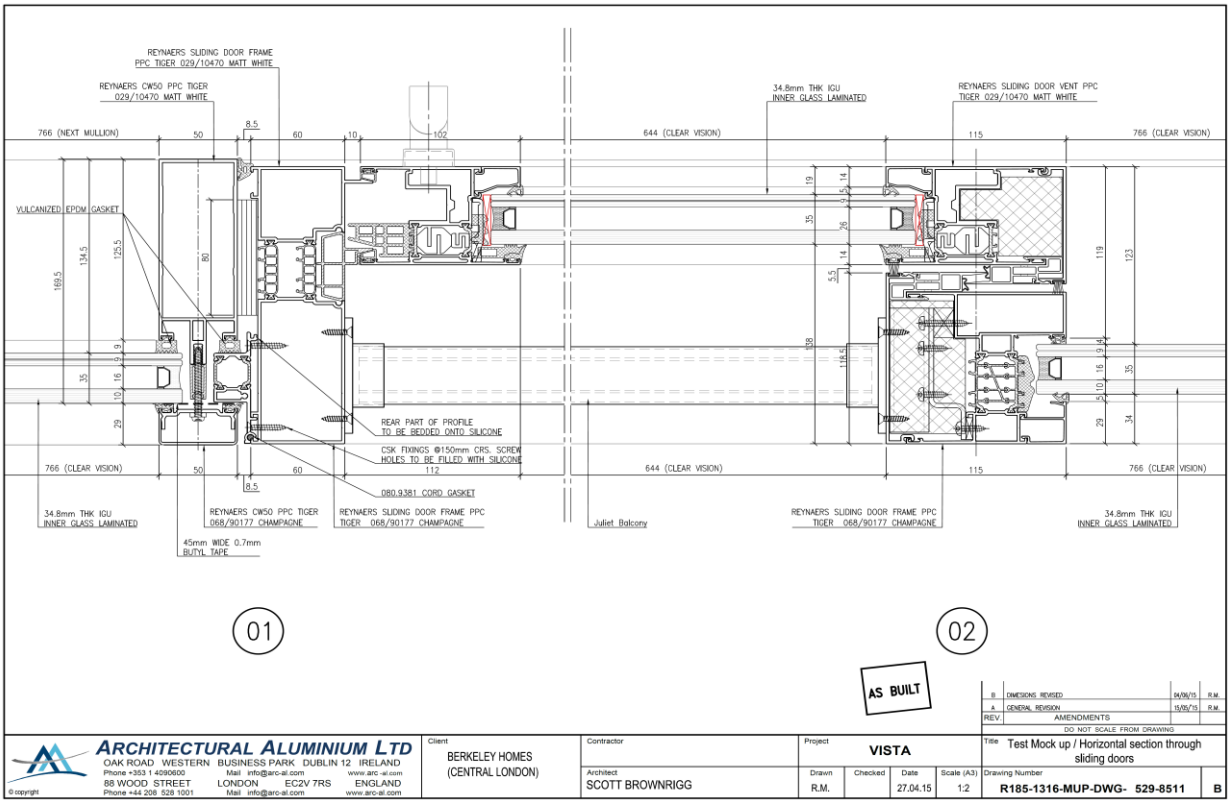


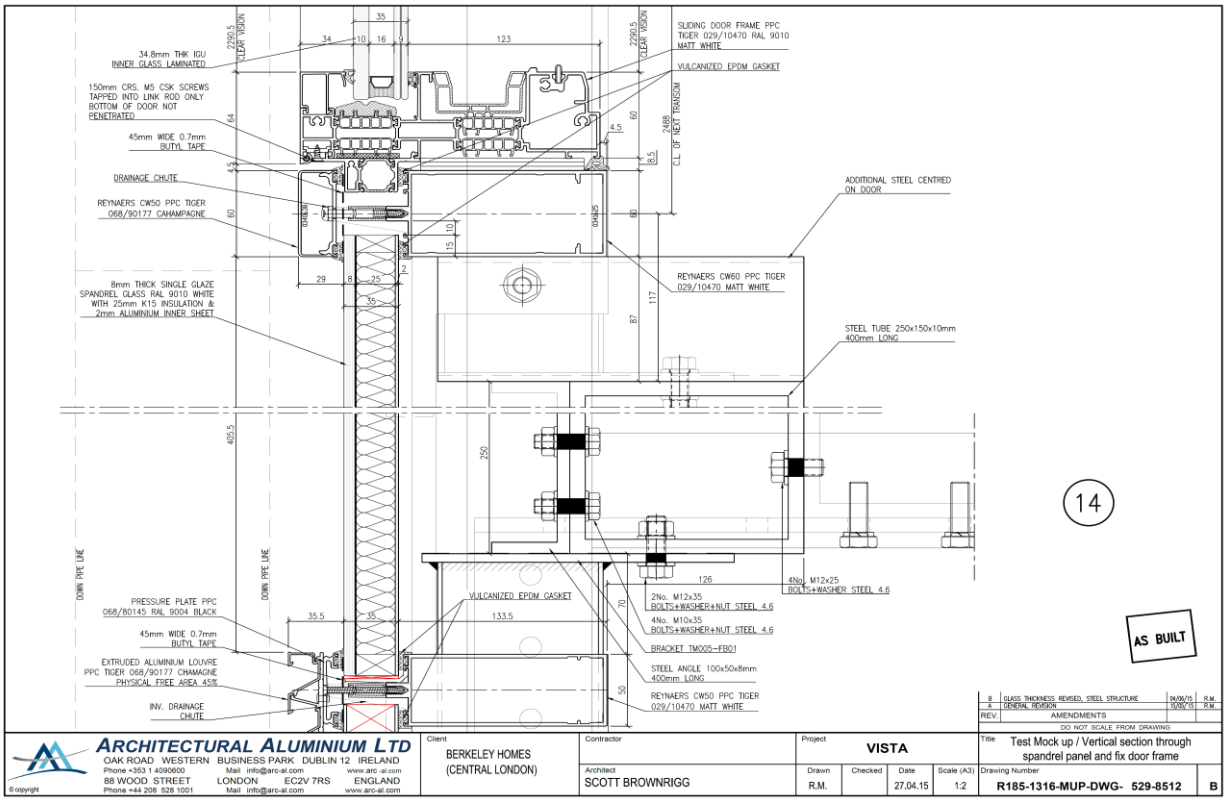
External View

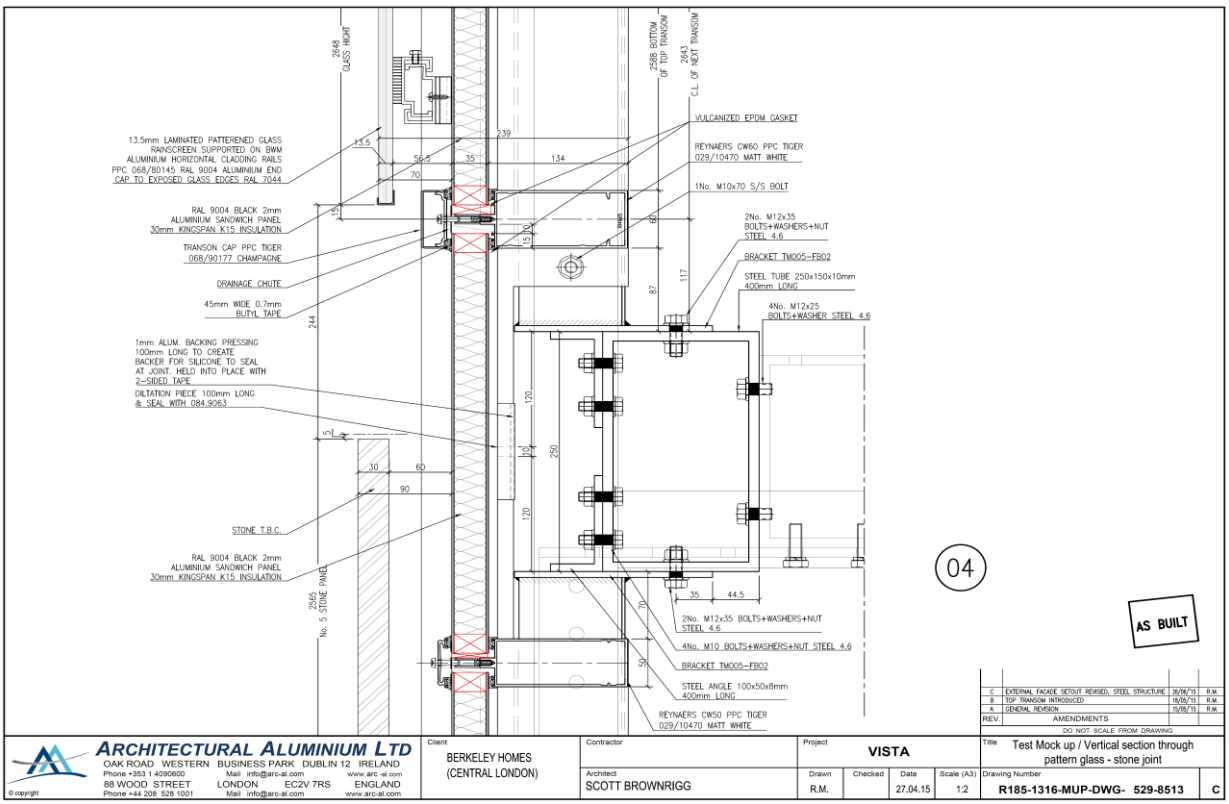
Positions Hose spray test

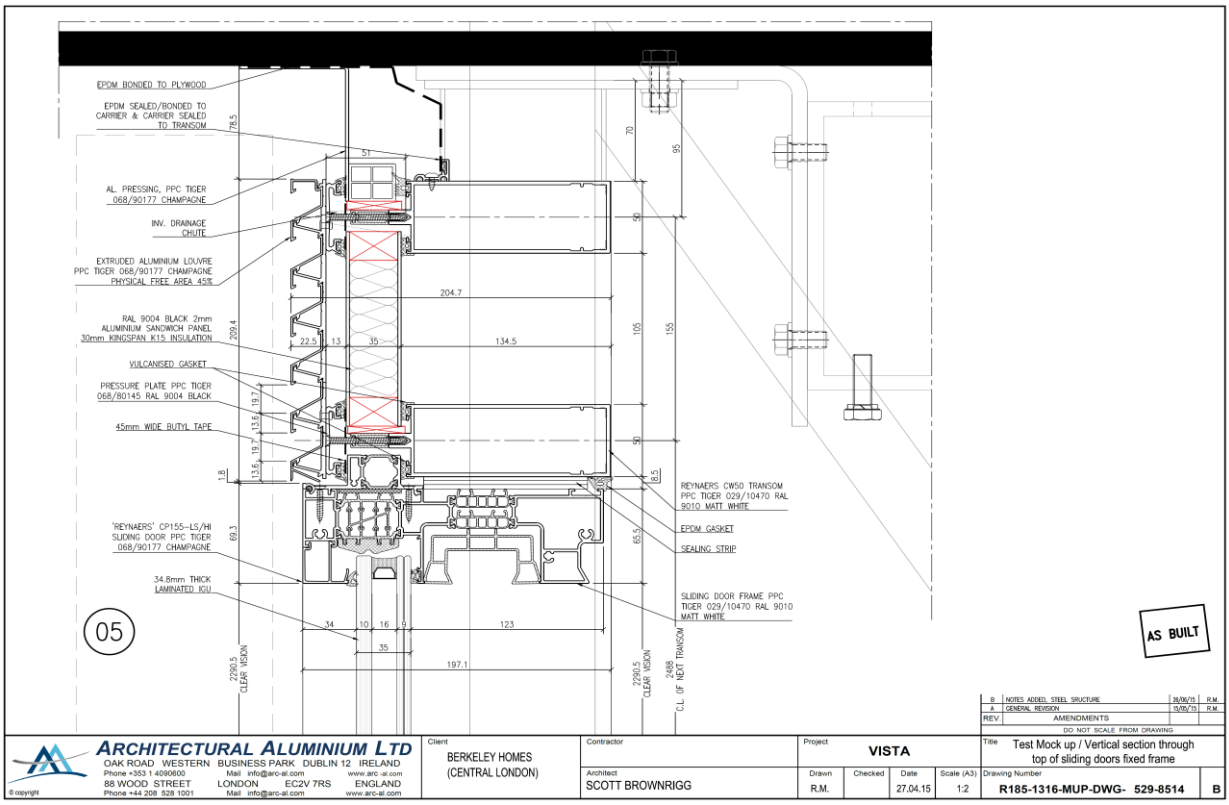
6.2 APPENDIX 2 Drawings of the tested construction

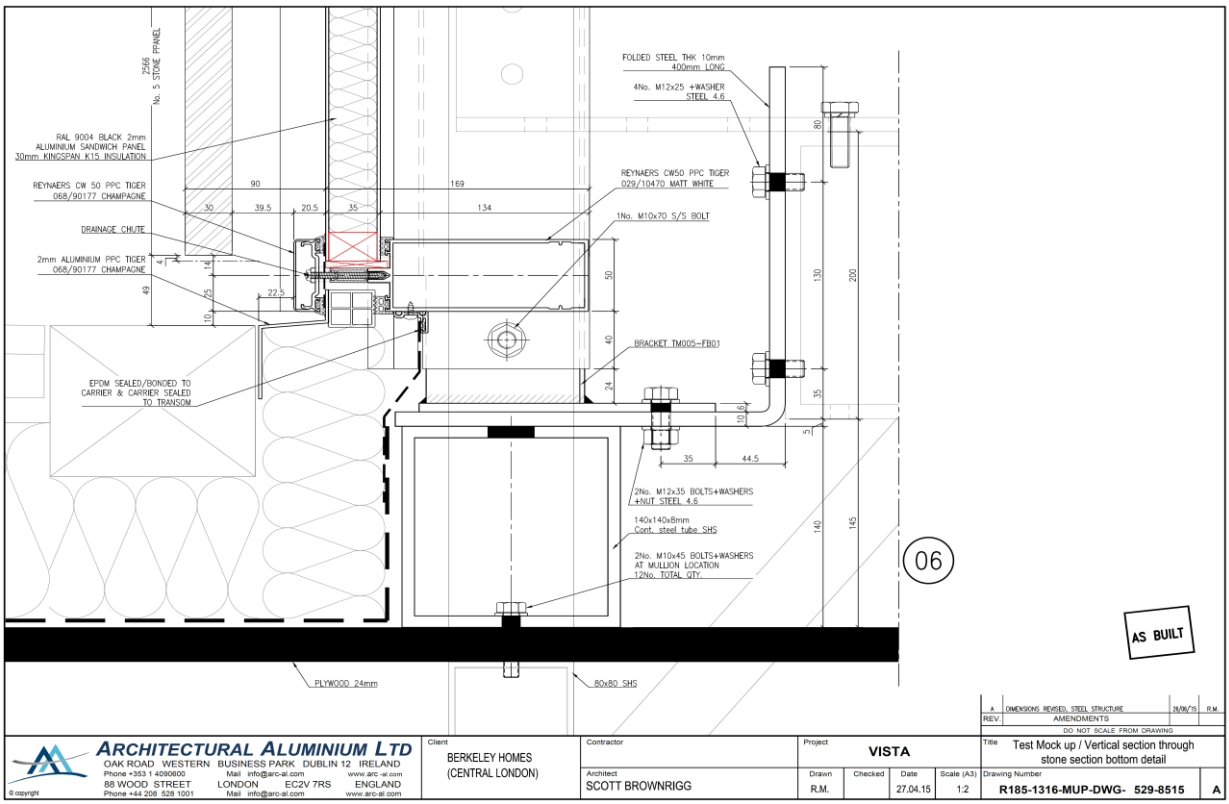


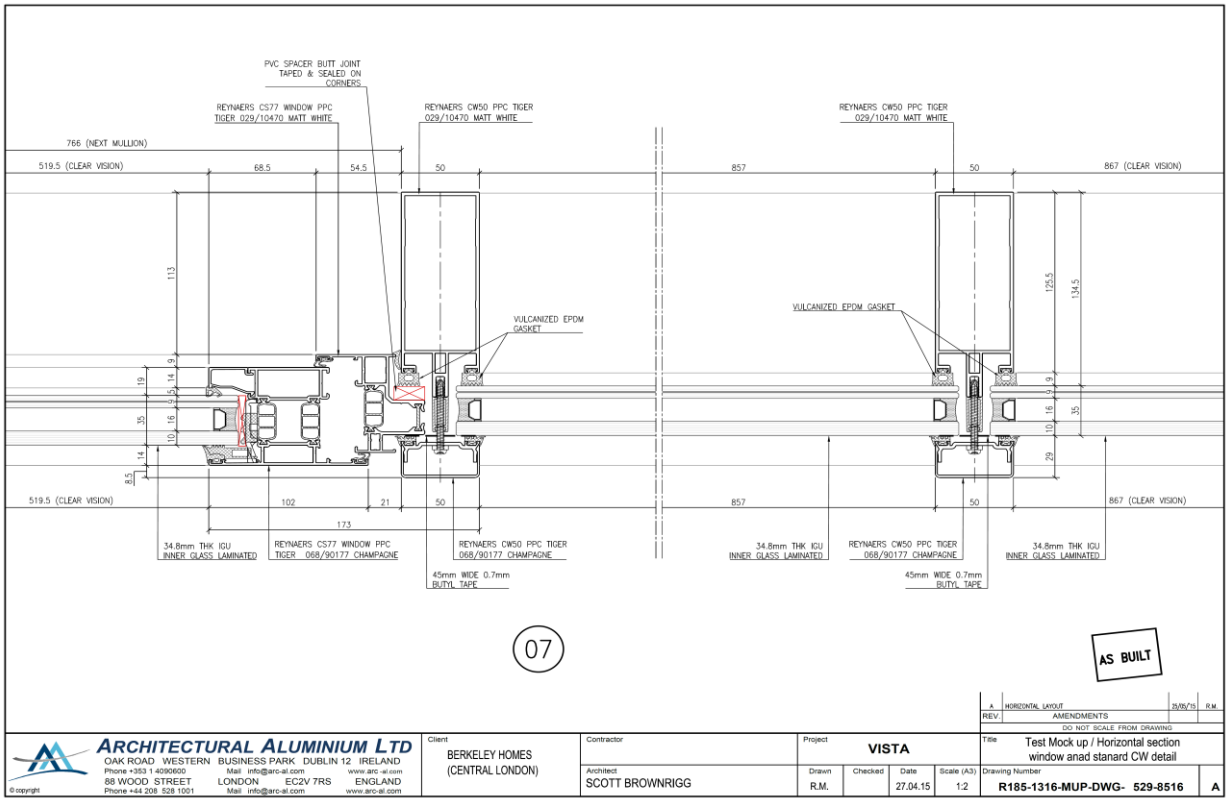


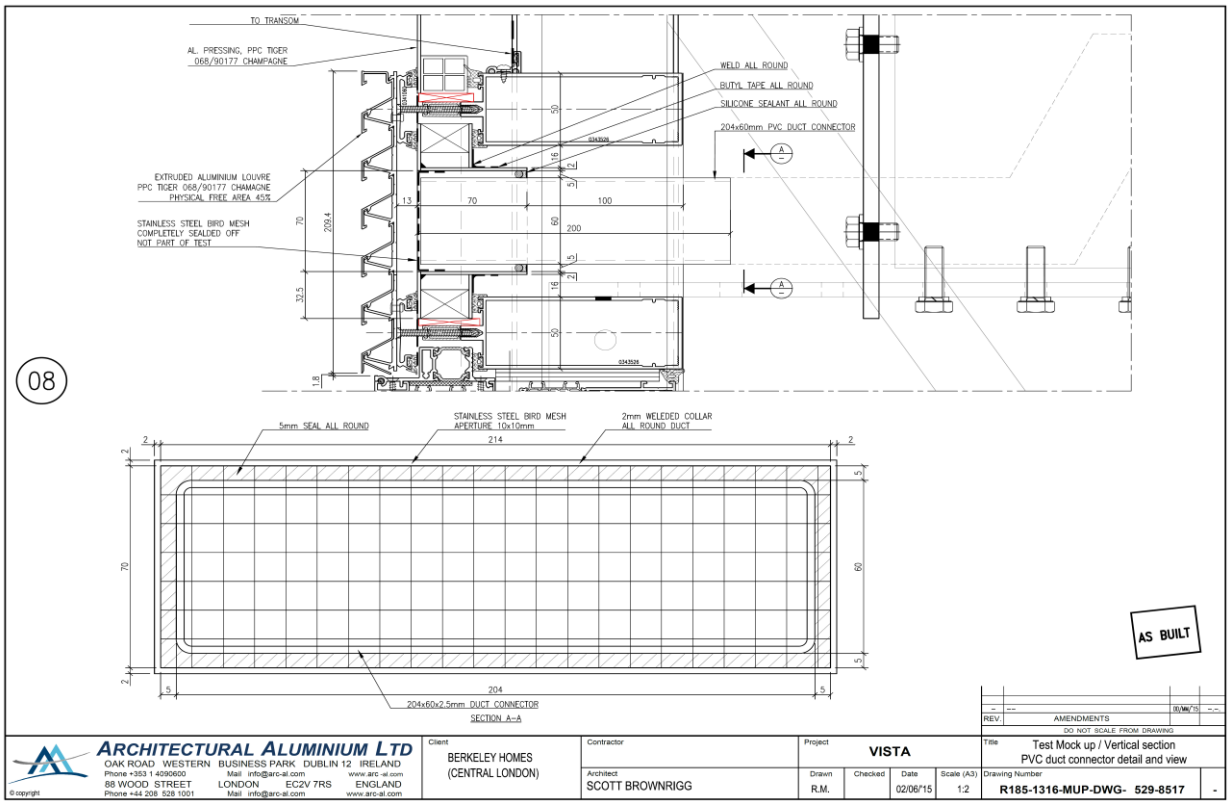

34.8mm THK IGU INNER GLASS LAMINATED
150mm CRS. M5 CSK SCREWS TAPPED INTO LINK ROD ONLY BOTTOM OF DOOR NOT PENETRATED
45mm WIDE 0.7mm BUTYL TAPE
DRAINAGE CHUTE
REYNAERS CW50 PPC TIGER 068/90177 CAHAMPAGNE
8mm THICK SINGLE GLAZE SPANDREL GLASS RAL 9010 WHITE WITH 25mm K15 INSULATION & 2mm ALUMINIUM INNER SHEET
PRESSURE PLATE PPC 068/80145 RAL 9004 BLACK
45mm WIDE 0.7mm BUTYL TAPE
EXTRUDED ALUMINIUM LOUVRE PPC TIGER 068/90177 CHAMAGNE PHYSICAL FREE AREA 45%
INV. DRAINAGE CHUTE
SLIDING DOOR FRAME PPC TIGER 029/10470 RAL 9010 MATT WHITE
VULCANIZED EPDM GASKET
ADDITIONAL STEEL CENTRED ON DOOR
REYNAERS CW60 PPC TIGER 029/10470 MATT WHITE
STEEL TUBE 250x150x10mm 400mm LONG
VULCANIZED EPDM GASKET
2No. M12x35 BOLTS+WASHER+NUT STEEL 4.6
4No. M10x35 BOLTS+WASHER+NUT STEEL 4.6
BRACKET TM005-FB01
STEEL ANGLE 100x50x8mm 400mm LONG
REYNAERS CW50 PPC TIGER 029/10470 MATT WHITE
4No. M12x25 BOLTS+WASHER STEEL 4.6
DOWN PIPE LINE
14
AS BUILT
B GLASS THICKNESS REVISED, STEEL STRUCTURE 04/06/15 R.M.
A GENERAL REVISION 15/05/15 R.M.
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
© copyright
Client BERKELEY HOMES (CENTRAL LONDON)
Contractor
Project VISTA
Architect SCOTT BROWNRIGG
Drawn R.M. Checked Date 27.04.15 Scale (A3) 1:2
Title Test Mock up / Vertical section through spandrel panel and fix door frame
Drawing Number R185-1316-MUP-DWG- 529-8512 B

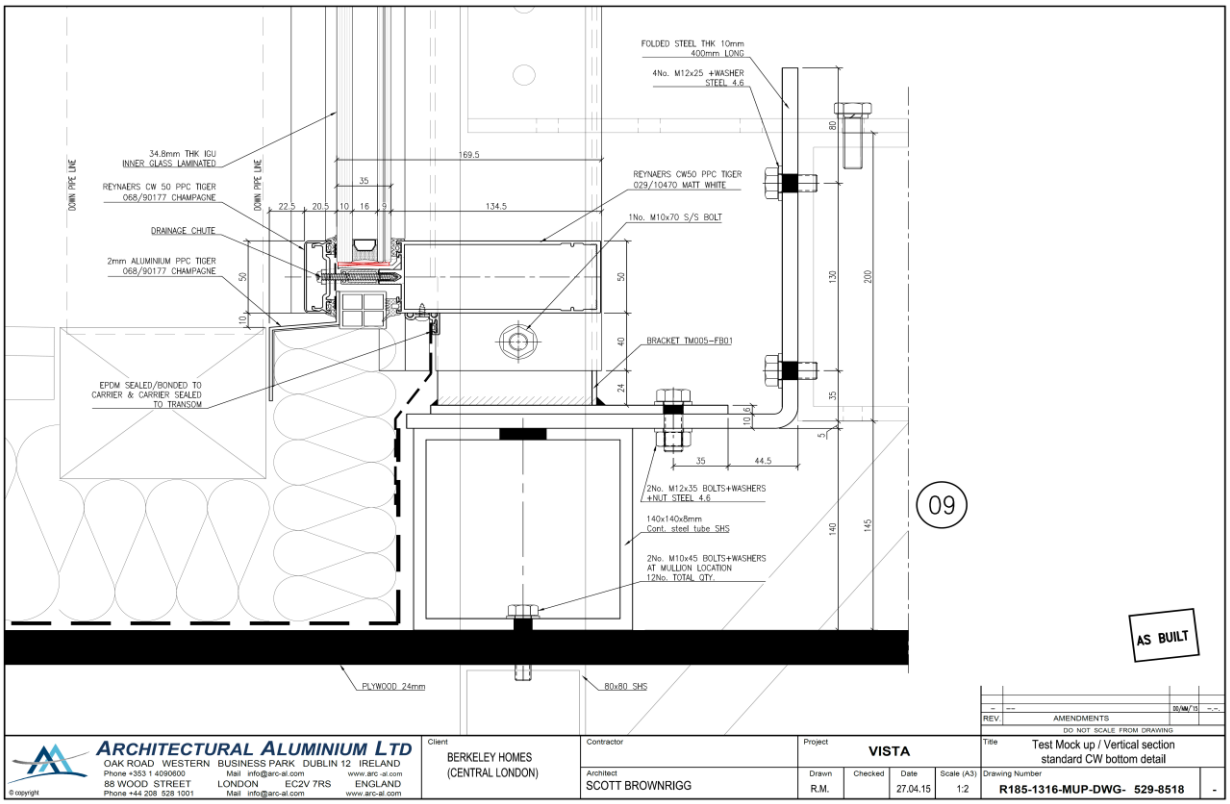

13.5mm LAMINATED PATTERENED GLASS RAINSCREEN SUPPORTED ON BWM ALUMINIUM HORIZONTAL CLADDING RAILS
PPC 068/80145 RAL 9004 ALUMINIUM END CAP TO EXPOSED GLASS EDGES RAL 7044
RAL 9004 BLACK 2mm ALUMINIUM SANDWICH PANEL 30mm KINGSPAN K15 INSULATION
TRANSON CAP PPC TIGER 068/90177 CHAMPAGNE
DRAINAGE CHUTE
45mm WIDE 0.7mm BUTYL TAPE
1mm ALUM. BACKING PRESSING 100mm LONG TO CREATE BACKER FOR SILICONE TO SEAL AT JOINT. HELD INTO PLACE WITH 2-SIDED TAPE
DILTATION PIECE 100mm LONG & SEAL WITH 084.9063
STONE T.B.C.
RAL 9004 BLACK 2mm ALUMINIUM SANDWICH PANEL 30mm KINGSPAN K15 INSULATION
No. 5 STONE PANEL
VULCANIZED EPDM GASKET
REYNAERS CW60 PPC TIGER 029/10470 MATT WHITE
1No. M10x70 S/S BOLT
2No. M12x35 BOLTS+WASHERS+NUT STEEL 4.6
BRACKET TM005-FB02
STEEL TUBE 250x150x10mm 400mm LONG
4No. M12x25 BOLTS+WASHER STEEL 4.6
2No. M12x35 BOLTS+WASHERS+NUT STEEL 4.6
4No. M10 BOLTS+WASHERS+NUT STEEL 4.6
BRACKET TM005-FB02
STEEL ANGLE 100x50x8mm 400mm LONG
REYNAERS CW50 PPC TIGER 029/10470 MATT WHITE
04
AS BUILT
C EXTERNAL FACADE SETOUT REVISED, STEEL STRUCTURE 26/06/15 R.M.
B TOP TRANSOM INTRODUCED 18/05/15 R.M.
A GENERAL REVISION 15/05/15 R.M.
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
© copyright
Client BERKELEY HOMES (CENTRAL LONDON)
Contractor
Project VISTA
Architect SCOTT BROWNRIGG
Drawn R.M. Checked Date 27.04.15 Scale (A3) 1:2
Title Test Mock up / Vertical section through pattern glass - stone joint
Drawing Number R185-1316-MUP-DWG- 529-8513 C

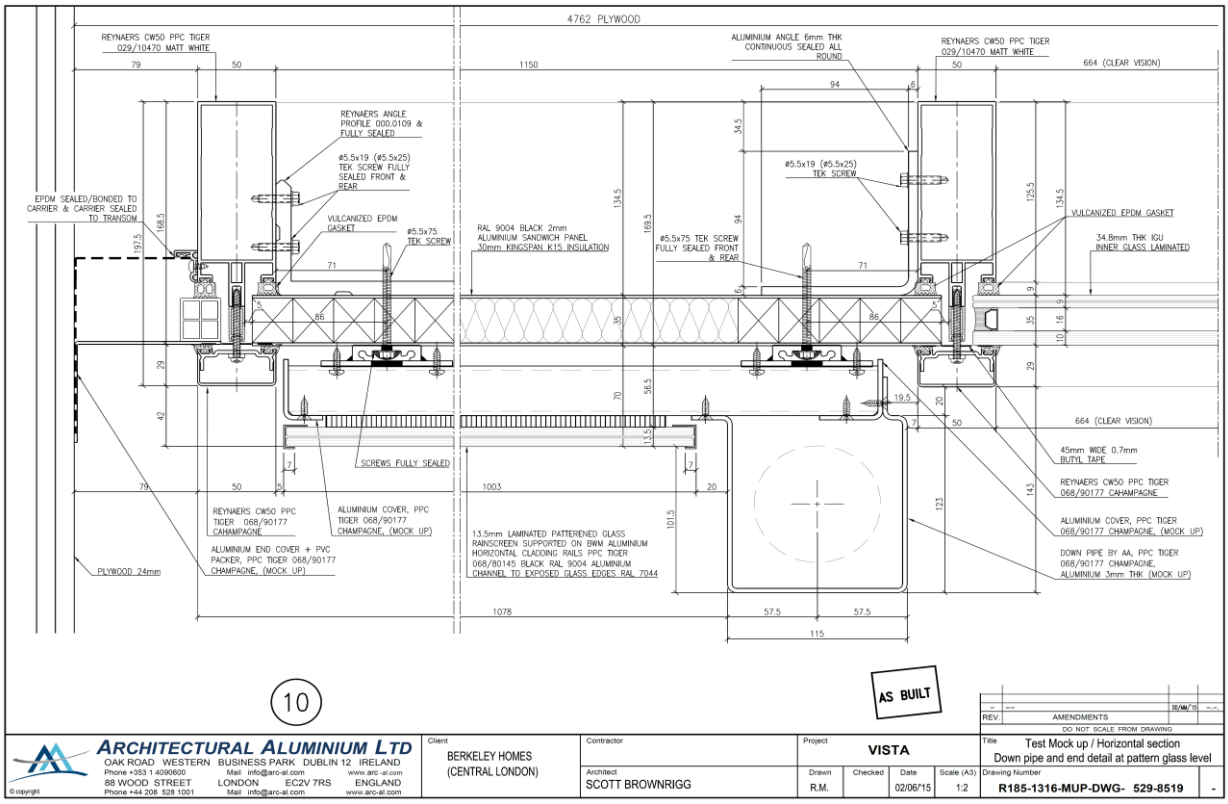

EPDM BONDED TO PLYWOOD
EPDM SEALED/BONDED TO CARRIER & CARRIER SEALED TO TRANSOM
AL. PRESSING, PPC TIGER 068/90177 CHAMPAGNE
INV. DRAINAGE CHUTE
EXTRUDED ALUMINIUM LOUVRE PPC TIGER 068/90177 CHAMPAGNE PHYSICAL FREE AREA 45%
RAL 9004 BLACK 2mm ALUMINIUM SANDWICH PANEL 30mm KINGSPAN K15 INSULATION
VULCANISED GASKET
PRESSURE PLATE PPC TIGER 068/80145 RAL 9004 BLACK
45mm WIDE BUTYL TAPE
'REYNAERS' CP155-LS/HI SLIDING DOOR PPC TIGER 068/90177 CHAMPAGNE
34.8mm THICK LAMINATED ICU
REYNAERS CW50 TRANSOM PPC TIGER 029/10470 RAL 9010 MATT WHITE
EPDM GASKET
SEALING STRIP
SLIDING DOOR FRAME PPC TIGER 029/10470 RAL 9010 MATT WHITE
05
AS BUILT
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
88 WOOD STREET LONDON EC2V 7RS ENGLAND
BERKELEY HOMES (CENTRAL LONDON)
SCOTT BROWNRIGG
VISTA
R.M.
27.04.15
1:2
Test Mock up / Vertical section through top of sliding doors fixed frame
R185-1316-MUP-DWG- 529-8514
B

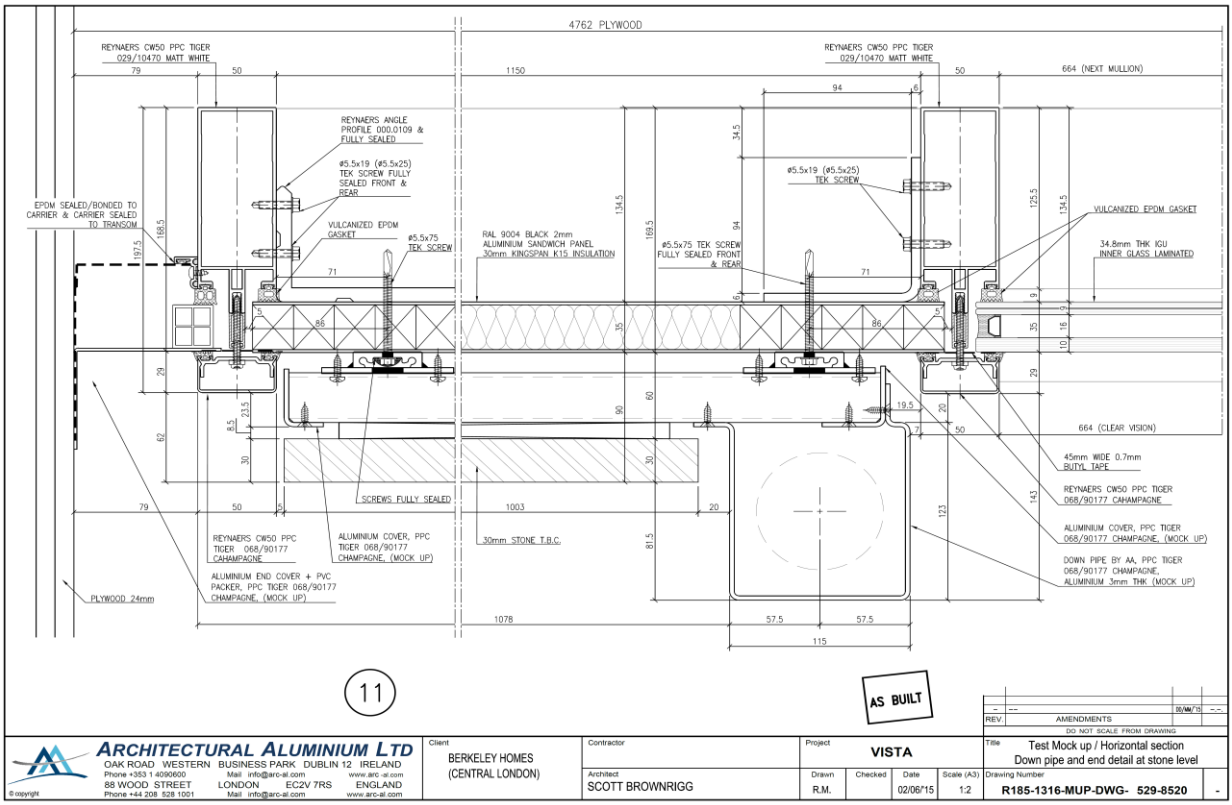

No. 5 STONE PPANEL
RAL 9004 BLACK 2mm ALUMINIUM SANDWICH PANEL 30mm KINGSPAN K15 INSULATION
REYNAERS CW 50 PPC TIGER 068/90177 CHAMPAGNE
DRAINAGE CHUTE
2mm ALUMINIUM PPC TIGER 068/90177 CHAMPAGNE
EPDM SEALED/BONDED TO CARRIER & CARRIER SEALED TO TRANSOM
FOLDED STEEL THK 10mm 400mm LONG
4No. M12x25 +WASHER STEEL 4.6
REYNAERS CW50 PPC TIGER 029/10470 MATT WHITE
1No. M10x70 S/S BOLT
BRACKET TM005-FB01
2No. M12x35 BOLTS+WASHERS +NUT STEEL 4.6
140x140x8mm Cont. steel tube SHS
2No. M10x45 BOLTS+WASHERS AT MULLION LOCATION 12No. TOTAL QTY.
PLYWOOD 24mm
80x80 SHS
06
AS BUILT
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
88 WOOD STREET LONDON EC2V 7RS ENGLAND
BERKELEY HOMES (CENTRAL LONDON)
SCOTT BROWNRIGG
VISTA
R.M.
27.04.15
1:2
Test Mock up / Vertical section through stone section bottom detail
R185-1316-MUP-DWG- 529-8515
A

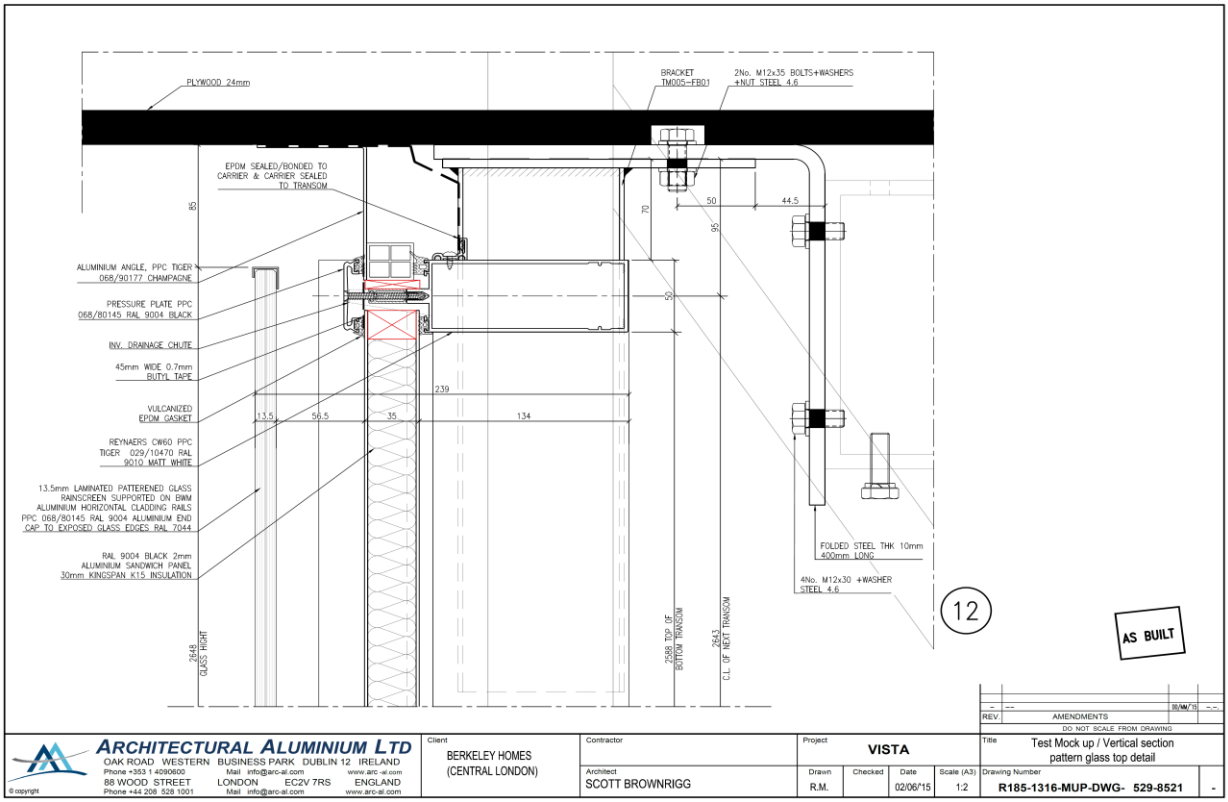

PVC SPACER BUTT JOINT TAPED & SEALED ON CORNERS
REYNAERS CS77 WINDOW PPC TIGER 029/10470 MATT WHITE
REYNAERS CW50 PPC TIGER 029/10470 MATT WHITE
766 (NEXT MULLION)
519.5 (CLEAR VISION)
68.5
54.5
50
857
867 (CLEAR VISION)
VULCANIZED EPDM GASKET
113
125.5
134.5
102
21
173
34.8mm THK IGU INNER GLASS LAMINATED
REYNAERS CS77 WINDOW PPC TIGER 068/90177 CHAMPAGNE
REYNAERS CW50 PPC TIGER 068/90177 CHAMPAGNE
45mm WIDE 0.7mm BUTYL TAPE
07
AS BUILT
A HORIZONTAL LAYOUT 25/05/15 R.M.
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
© copyright
Client BERKELEY HOMES (CENTRAL LONDON)
Contractor
Architect SCOTT BROWNRIGG
Project VISTA
Drawn R.M. Checked Date 27.04.15 Scale (A3) 1:2
Title Test Mock up / Horizontal section window anad stanard CW detail
Drawing Number R185-1316-MUP-DWG- 529-8516 A

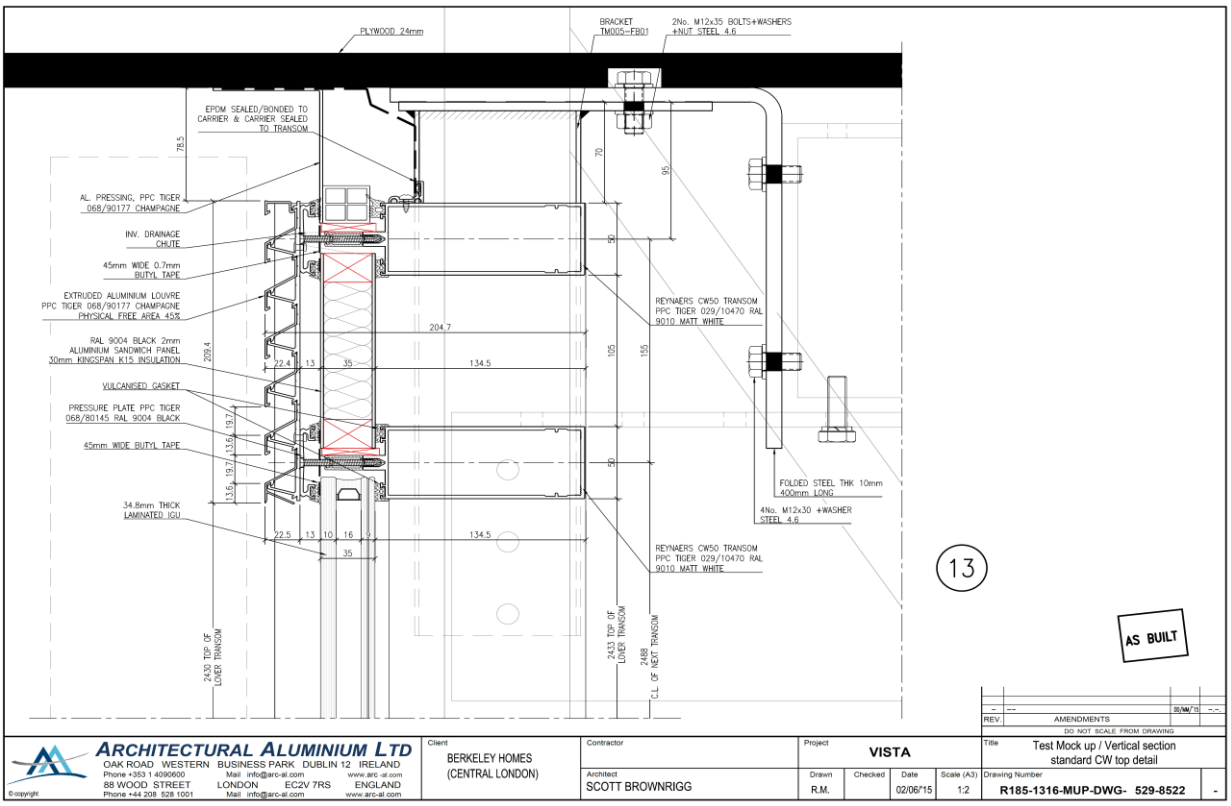

TO TRANSOM
AL. PRESSING, PPC TIGER 068/90177 CHAMPAGNE
WELD ALL ROUND
BUTYL TAPE ALL ROUND
SILICONE SEALANT ALL ROUND
204x60mm PVC DUCT CONNECTOR
EXTRUDED ALUMINIUM LOUVRE PPC TIGER 068/90177 CHAMAGNE PHYSICAL FREE AREA 45%
STAINLESS STEEL BIRD MESH COMPLETELY SEALDED OFF NOT PART OF TEST
70
100
200
204.4
32.5
08
5mm SEAL ALL ROUND
STAINLESS STEEL BIRD MESH APERTURE 10x10mm
2mm WELEDED COLLAR ALL ROUND DUCT
214
204
204x60x2.5mm DUCT CONNECTOR
SECTION A-A
AS BUILT
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
© copyright
Client BERKELEY HOMES (CENTRAL LONDON)
Contractor
Architect SCOTT BROWNRIGG
Project VISTA
Drawn R.M. Checked Date 02/06/15 Scale (A3) 1:2
Title Test Mock up / Vertical section PVC duct connector detail and view
Drawing Number R185-1316-MUP-DWG- 529-8517 -

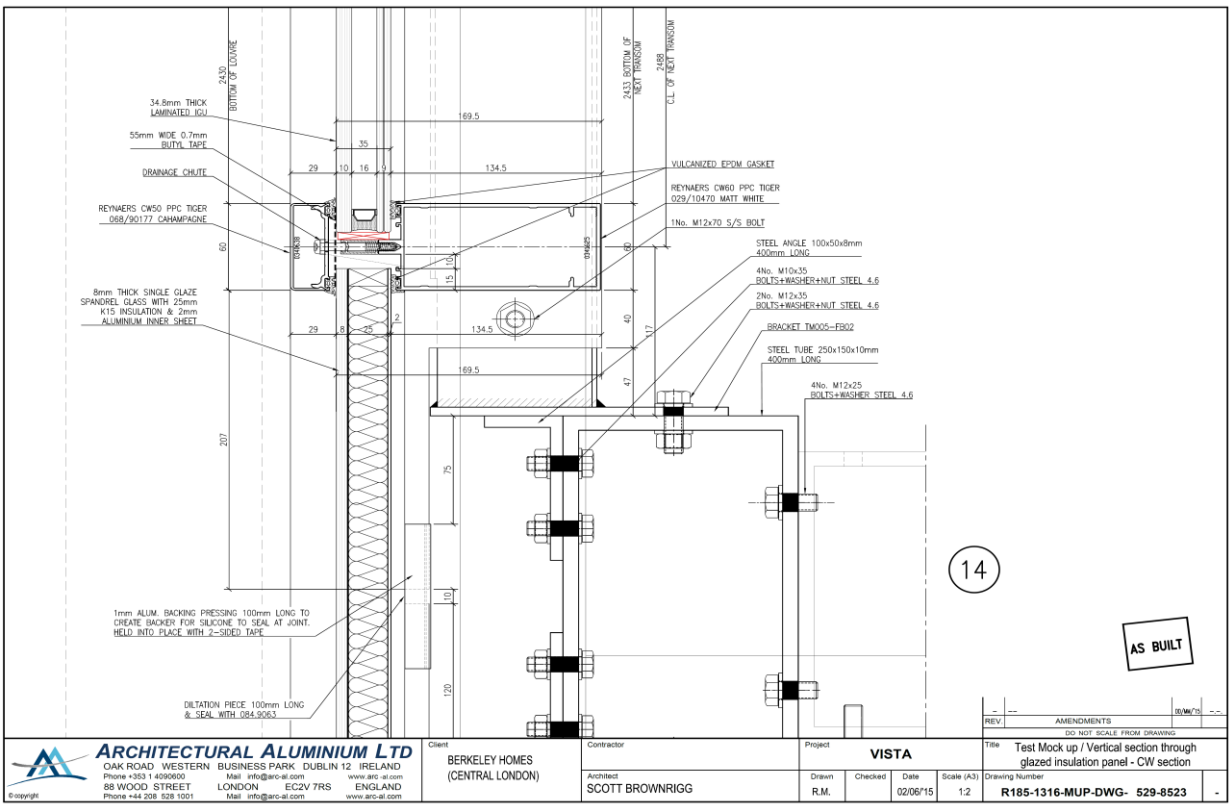

FOLDED STEEL THK 10mm 400mm LONG
4No. M12x25 +WASHER STEEL 4.6
34.8mm THK IGU INNER GLASS LAMINATED
REYNAERS CW 50 PPC TIGER 068/90177 CHAMPAGNE
DRAINAGE CHUTE
2mm ALUMINIUM PPC TIGER 068/90177 CHAMPAGNE
REYNAERS CW50 PPC TIGER 029/10470 MATT WHITE
1No. M10x70 S/S BOLT
BRACKET TM005-FB01
EPDM SEALED/BONDED TO CARRIER & CARRIER SEALED TO TRANSOM
2No. M12x35 BOLTS+WASHERS +NUT STEEL 4.6
140x140x8mm Cont. steel tube SHS
2No. M10x45 BOLTS+WASHERS AT MULLION LOCATION 12No. TOTAL QTY.
09
AS BUILT
PLYWOOD 24mm
80x80 SHS
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
88 WOOD STREET LONDON EC2V 7RS ENGLAND
BERKELEY HOMES (CENTRAL LONDON)
SCOTT BROWNRIGG
VISTA
R.M.
27.04.15
1:2
Test Mock up / Vertical section standard CW bottom detail
R185-1316-MUP-DWG- 529-8518

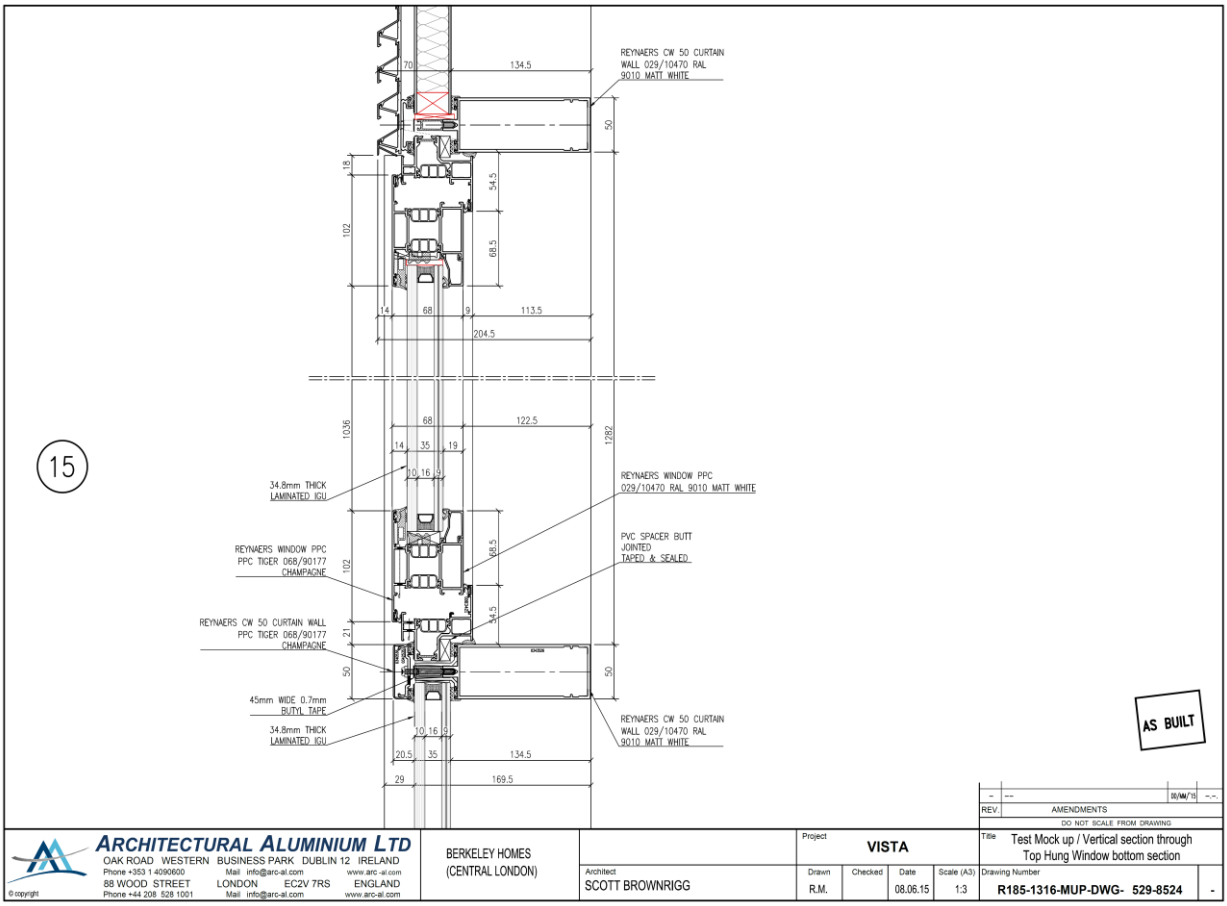

4762 PLYWOOD
REYNAERS CW50 PPC TIGER 029/10470 MATT WHITE
ALUMINIUM ANGLE 6mm THK CONTINUOUS SEALED ALL ROUND
664 (CLEAR VISION)
REYNAERS ANGLE PROFILE 000.0109 & FULLY SEALED
ø5.5x19 (ø5.5x25) TEK SCREW FULLY SEALED FRONT & REAR
EPDM SEALED/BONDED TO CARRIER & CARRIER SEALED TO TRANSOM
VULCANIZED EPDM GASKET
ø5.5x75 TEK SCREW
RAL 9004 BLACK 2mm ALUMINIUM SANDWICH PANEL 30mm KINGSPAN K15 INSULATION
VULCANIZED EPDM GASKET
34.8mm THK IGU INNER GLASS LAMINATED
SCREWS FULLY SEALED
45mm WIDE 0.7mm BUTYL TAPE
REYNAERS CW50 PPC TIGER 068/90177 CAHAMPAGNE
ALUMINIUM COVER, PPC TIGER 068/90177 CHAMPAGNE, (MOCK UP)
ALUMINIUM END COVER + PVC PACKER, PPC TIGER 068/90177 CHAMPAGNE, (MOCK UP)
13.5mm LAMINATED PATTERENED GLASS RAINSCREEN SUPPORTED ON 8MM ALUMINIUM HORIZONTAL CLADDING RAILS PPC TIGER 068/80145 BLACK RAL 9004 ALUMINIUM CHANNEL TO EXPOSED GLASS EDGES RAL 7044
DOWN PIPE BY AA, PPC TIGER 068/90177 CHAMPAGNE, ALUMINIUM 3mm THK (MOCK UP)
PLYWOOD 24mm
10
AS BUILT
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
88 WOOD STREET LONDON EC2V 7RS ENGLAND
BERKELEY HOMES (CENTRAL LONDON)
SCOTT BROWNRIGG
VISTA
R.M.
02/06/15
1:2
Test Mock up / Horizontal section Down pipe and end detail at pattern glass level
R185-1316-MUP-DWG- 529-8519

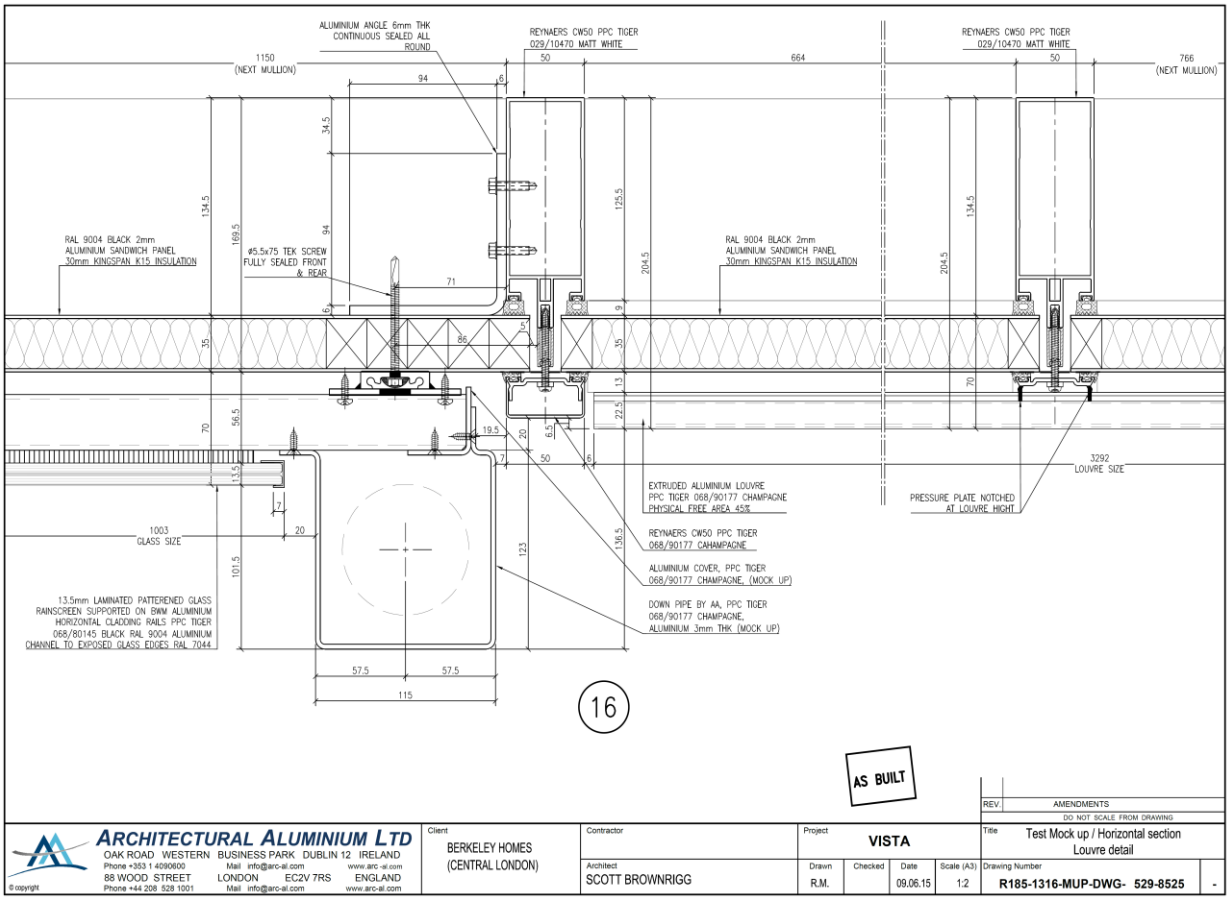

4762 PLYWOOD
REYNAERS CW50 PPC TIGER 029/10470 MATT WHITE
REYNAERS CW50 PPC TIGER 029/10470 MATT WHITE
664 (NEXT MULLION)
REYNAERS ANGLE PROFILE 000.0109 & FULLY SEALED
ø5.5x19 (ø5.5x25) TEK SCREW FULLY SEALED FRONT & REAR
ø5.5x19 (ø5.5x25) TEK SCREW
EPDM SEALED/BONDED TO CARRIER & CARRIER SEALED TO TRANSOM
VULCANIZED EPDM GASKET
ø5.5x75 TEK SCREW
RAL 9004 BLACK 2mm ALUMINIUM SANDWICH PANEL 30mm KINGSPAN K15 INSULATION
ø5.5x75 TEK SCREW FULLY SEALED FRONT & REAR
VULCANIZED EPDM GASKET
34.8mm THK IGU INNER GLASS LAMINATED
664 (CLEAR VISION)
45mm WIDE 0.7mm BUTYL TAPE
REYNAERS CW50 PPC TIGER 068/90177 CAHAMPAGNE
SCREWS FULLY SEALED
30mm STONE T.B.C.
REYNAERS CW50 PPC TIGER 068/90177 CAHAMPAGNE
ALUMINIUM COVER, PPC TIGER 068/90177 CHAMPAGNE, (MOCK UP)
ALUMINIUM END COVER + PVC PACKER, PPC TIGER 068/90177 CHAMPAGNE, (MOCK UP)
ALUMINIUM COVER, PPC TIGER 068/90177 CHAMPAGNE, (MOCK UP)
DOWN PIPE BY AA, PPC TIGER 068/90177 CHAMPAGNE, ALUMINIUM 3mm THK (MOCK UP)
PLYWOOD 24mm
1078
57.5
57.5
115
11
AS BUILT
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
Client BERKELEY HOMES (CENTRAL LONDON)
Contractor
Architect SCOTT BROWNRIGG
Project VISTA
Drawn R.M.
Checked
Date 02/06/'15
Scale (A3) 1:2
Title Test Mock up / Horizontal section Down pipe and end detail at stone level
Drawing Number R185-1316-MUP-DWG- 529-8520


PLYWOOD 24mm
BRACKET TM005-FB01
2No. M12x35 BOLTS+WASHERS +NUT STEEL 4.6
EPDM SEALED/BONDED TO CARRIER & CARRIER SEALED TO TRANSOM
ALUMINIUM ANGLE, PPC TIGER 068/90177 CHAMPAGNE
PRESSURE PLATE PPC 068/80145 RAL 9004 BLACK
INV. DRAINAGE CHUTE
45mm WIDE 0.7mm BUTYL TAPE
VULCANIZED EPDM GASKET
REYNAERS CW60 PPC TIGER 029/10470 RAL 9010 MATT WHITE
13.5mm LAMINATED PATTERENED GLASS RAINSCREEN SUPPORTED ON EWM ALUMINIUM HORIZONTAL CLADDING RAILS PPC 068/80145 RAL 9004 ALUMINIUM END CAP TO EXPOSED GLASS EDGES RAL 7044
RAL 9004 BLACK 2mm ALUMINIUM SANDWICH PANEL 30mm KINGSPAN K15 INSULATION
FOLDED STEEL THK 10mm 400mm LONG
4No. M12x30 +WASHER STEEL 4.6
2648 GLASS RIGHT
2588 TOP OF BOTTOM TRANSOM
2643 C.L. OF NEXT TRANSOM
12
AS BUILT
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
Client BERKELEY HOMES (CENTRAL LONDON)
Contractor
Architect SCOTT BROWNRIGG
Project VISTA
Drawn R.M.
Checked
Date 02/06/'15
Scale (A3) 1:2
Title Test Mock up / Vertical section pattern glass top detail
Drawing Number R185-1316-MUP-DWG- 529-8521


PLYWOOD 24mm
BRACKET TM005-FB01
2No. M12x35 BOLTS+WASHERS +NUT STEEL 4.6
EPDM SEALED/BONDED TO CARRIER & CARRIER SEALED TO TRANSOM
AL. PRESSING, PPC TIGER 068/90177 CHAMPAGNE
INV. DRAINAGE CHUTE
45mm WIDE 0.7mm BUTYL TAPE
EXTRUDED ALUMINIUM LOUVRE PPC TIGER 068/90177 CHAMPAGNE PHYSICAL FREE AREA 45%
RAL 9004 BLACK 2mm ALUMINIUM SANDWICH PANEL 30mm KINGSPAN K15 INSULATION
VULCANISED GASKET
PRESSURE PLATE PPC TIGER 068/80145 RAL 9004 BLACK
45mm WIDE BUTYL TAPE
34.8mm THICK LAMINATED IGU
REYNAERS CW50 TRANSOM PPC TIGER 029/10470 RAL 9010 MATT WHITE
FOLDED STEEL THK 10mm 400mm LONG
4No. M12x30 +WASHER STEEL 4.6
REYNAERS CW50 TRANSOM PPC TIGER 029/10470 RAL 9010 MATT WHITE
2430 TOP OF LOWER TRANSOM
2433 TOP OF LOWER TRANSOM
2488 C.L. OF NEXT TRANSOM
13
AS BUILT
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
Client BERKELEY HOMES (CENTRAL LONDON)
Contractor
Project VISTA
Architect SCOTT BROWNRIGG
Drawn R.M. Checked Date 02/06/15 Scale (A3) 1:2
Title Test Mock up / Vertical section standard CW top detail
Drawing Number R185-1316-MUP-DWG- 529-8522


2430 BOTTOM OF LOUVRE
34.8mm THICK LAMINATED IGU
55mm WIDE 0.7mm BUTYL TAPE
DRAINAGE CHUTE
REYNAERS CW50 PPC TIGER 068/90177 CAHAMPAGNE
8mm THICK SINGLE GLAZE SPANDREL GLASS WITH 25mm K15 INSULATION & 2mm ALUMINIUM INNER SHEET
2433 BOTTOM OF NEXT TRANSOM
2488 C.L. OF NEXT TRANSOM
VULCANIZED EPDM GASKET
REYNAERS CW60 PPC TIGER 029/10470 MATT WHITE
1No. M12x70 S/S BOLT
STEEL ANGLE 100x50x8mm 400mm LONG
4No. M10x35 BOLTS+WASHER+NUT STEEL 4.6
2No. M12x35 BOLTS+WASHER+NUT STEEL 4.6
BRACKET TM005-FB02
STEEL TUBE 250x150x10mm 400mm LONG
4No. M12x25 BOLTS+WASHER STEEL 4.6
1mm ALUM. BACKING PRESSING 100mm LONG TO CREATE BACKER FOR SILICONE TO SEAL AT JOINT. HELD INTO PLACE WITH 2-SIDED TAPE
DILTATION PIECE 100mm LONG & SEAL WITH 084.9063
14
AS BUILT
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
Client BERKELEY HOMES (CENTRAL LONDON)
Contractor
Project VISTA
Architect SCOTT BROWNRIGG
Drawn R.M. Checked Date 02/06/15 Scale (A3) 1:2
Title Test Mock up / Vertical section through glazed insulation panel - CW section
Drawing Number R185-1316-MUP-DWG- 529-8523


15
REYNAERS CW 50 CURTAIN WALL 029/10470 RAL 9010 MATT WHITE
34.8mm THICK LAMINATED IGU
REYNAERS WINDOW PPC 029/10470 RAL 9010 MATT WHITE
PVC SPACER BUTT JOINTED TAPED & SEALED
REYNAERS WINDOW PPC PPC TIGER 068/90177 CHAMPAGNE
REYNAERS CW 50 CURTAIN WALL PPC TIGER 068/90177 CHAMPAGNE
45mm WIDE 0.7mm BUTYL TAPE
34.8mm THICK LAMINATED IGU
REYNAERS CW 50 CURTAIN WALL 029/10470 RAL 9010 MATT WHITE
AS BUILT
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
BERKELEY HOMES (CENTRAL LONDON)
Project VISTA
Architect SCOTT BROWNRIGG
Drawn R.M.
Date 08.06.15
Scale (A3) 1:3
Title Test Mock up / Vertical section through Top Hung Window bottom section
Drawing Number R185-1316-MUP-DWG- 529-8524
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING


ALUMINIUM ANGLE 6mm THK CONTINUOUS SEALED ALL ROUND
REYNAERS CW50 PPC TIGER 029/10470 MATT WHITE
1150 (NEXT MULLION)
664
766 (NEXT MULLION)
RAL 9004 BLACK 2mm ALUMINIUM SANDWICH PANEL 30mm KINGSPAN K15 INSULATION
#5.5x75 TEK SCREW FULLY SEALED FRONT & REAR
EXTRUDED ALUMINIUM LOUVRE PPC TIGER 068/90177 CHAMPAGNE PHYSICAL FREE AREA 45%
REYNAERS CW50 PPC TIGER 068/90177 CAHAMPAGNE
ALUMINIUM COVER, PPC TIGER 068/90177 CHAMPAGNE, (MOCK UP)
DOWN PIPE BY AA, PPC TIGER 068/90177 CHAMPAGNE, ALUMINIUM 3mm THK (MOCK UP)
PRESSURE PLATE NOTCHED AT LOUVRE HIGHT
3292 LOUVRE SIZE
1003 GLASS SIZE
13.5mm LAMINATED PATTERENED GLASS RAINSCREEN SUPPORTED ON BWM ALUMINIUM HORIZONTAL CLADDING RAILS PPC TIGER 068/80145 BLACK RAL 9004 ALUMINIUM CHANNEL TO EXPOSED GLASS EDGES RAL 7044
16
AS BUILT
ARCHITECTURAL ALUMINIUM LTD
OAK ROAD WESTERN BUSINESS PARK DUBLIN 12 IRELAND
Phone +353 1 4090600 Mail info@arc-al.com www.arc-al.com
88 WOOD STREET LONDON EC2V 7RS ENGLAND
Phone +44 208 528 1001 Mail info@arc-al.com www.arc-al.com
Client BERKELEY HOMES (CENTRAL LONDON)
Contractor
Project VISTA
Architect SCOTT BROWNRIGG
Drawn R.M.
Date 09.06.15
Scale (A3) 1:2
Title Test Mock up / Horizontal section Louvre detail
Drawing Number R185-1316-MUP-DWG- 529-8525
REV. AMENDMENTS
DO NOT SCALE FROM DRAWING