

Certificate of Testing



Certificate Number: 2010/43

Date: September 2010

System: Kratos P-52 Curtain walling

Manufacturer: Blyweert Beaufort Aluminium
Queensway Meadows
Newport
NP19 4SQ

- Tests performed:**
- Air permeability ✓
 - Watertightness – static ✓
 - Watertightness – dynamic ✓
 - Wind resistance – serviceability ✓
 - Wind resistance – safety ✓
 - Hose test. ✓

In accordance with 'Standard for systemised building envelopes', CWCT, 2006

Signed:

Handwritten signature of Alan P. Walker in black ink.

..... Test Witness

Signed:

Handwritten signature of Stephen Leadbetter in black ink.

..... Director

Description of components tested

- Glazing system: **Kratos P-52 Curtain walling**
- Framing material: Aluminium 6063
- Glass units: 6/16/6 sealed units both panes toughened
- Mullion - Type: P-52-335
Box size: 180 mm x 52 mm
- Transom - Type: P-52-120
Box size: 125 mm x 52 mm
- Transom connection: Overlap joint
Sealing piece A-52-208 between ends of transoms and side of mullion
- Drainage and ventilation: Mullion drained and ventilated
Drainage spouts above mullion joint and at bottom of mullion
- Curtain wall seals
Inner seal - Type: Gasket, No A-GS-204, 8.5mm for transom and No A-GS-210, 15mm for mullion
Jointing: Corners butt jointed and sealed with butyl sealant
Material: EPDM
Outer seal - Type: Gasket No A-GS-201
Jointing: Butyl Sealant
Material: EPDM
- Mullion bracket: Intermediate bracket: pair of stainless steel angles fixed to slab edge and with bolt through mullion.
(Brackets were to facilitate test on wall and are not part of certified system)
Base bracket: pair of stainless steel angles fixed to ground and pair of bolts through mullion.
- Mullion movement joint: Coupling sleeve P-52-535 to provide structural connection.
Cover piece in mullion drainage channels and silicone sealant between cut ends of mullion for remainder of perimeter.
- Opening light: Included to test interface detail only.

Testing laboratory

Technology Centre
Vinci Construction UK Ltd
Stanbridge Road
Leighton Buzzard
Bedfordshire
LU7 4QH

Registration No: UKAS No 0057

Independent testing authority: Technology Centre
Vinci Construction UK Ltd
Stanbridge Road
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Bedfordshire
LU7 4QH

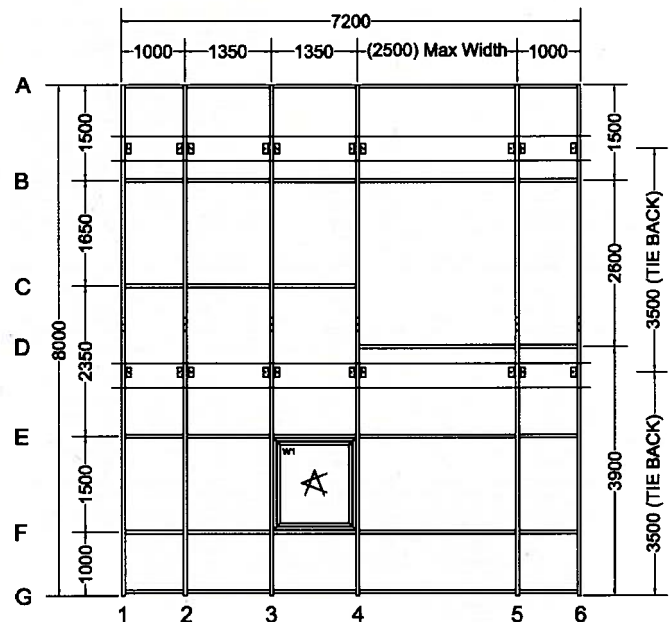
Witness: Alan Keiller
Centre for Window & Cladding Technology
University of Bath
Claverton Down
Bath BA2 7AY

Date of test: May/June 2010

Summary of results

- Air permeability: PASS
Pressure: 600Pa (infiltration)
600Pa (exfiltration)
- Leakage rate (max): 0.19 m³/hour/m² (infiltration fixed glazing)
0.10 m³/hour/m² (exfiltration fixed glazing)
- Watertightness - static: PASS
Test pressure: 600Pa
- Watertightness - dynamic: PASS (Dynamic aero engine)
- Wind resistance serviceability: PASS
Test pressure: 2400Pa
- Wind resistance safety: PASS
Test pressure: 3600Pa
- Hose test: PASS

Elevation of test sample



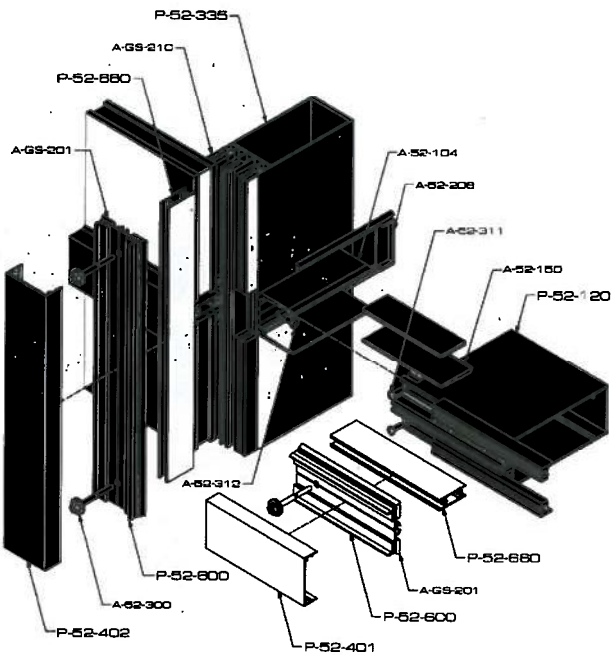
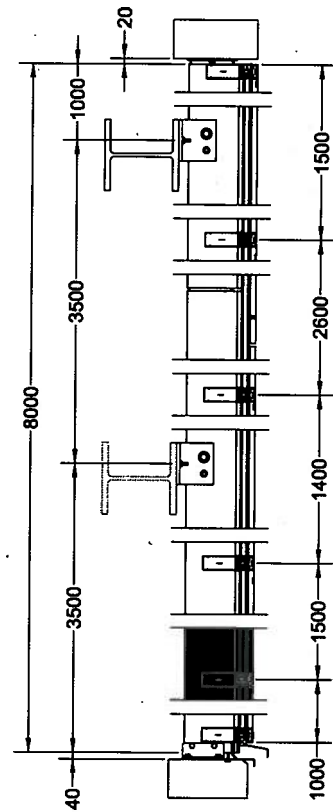
Wind resistance - serviceability test

Result: PASS
 Pressure: 2400 Pa

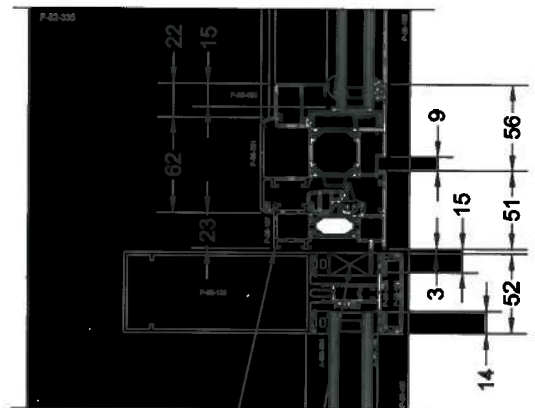
Deflections

Member	Length (L) (mm)	Measured Deflection (d)			
		Pos (mm)	Neg (mm)	Pos d/L	Neg d/L
Mullion 4 upper span	3500	7.7	1/455	-7.9	1/443
Mullion 4 lower span	3500	8.6	1/407	-9.0	1/389
Transom F span 4-5	2450	7.4	1/331	-7.5	1/327

Section through test wall



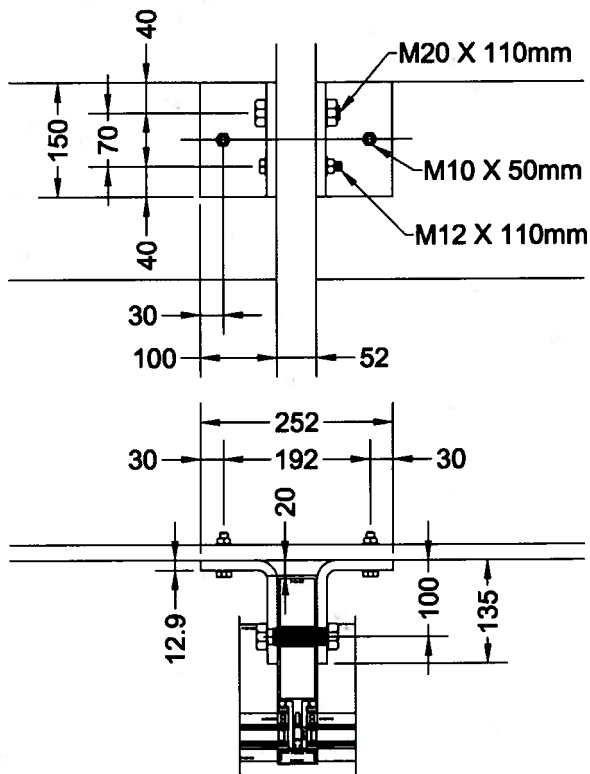
Exploded view of mullion/transom joint



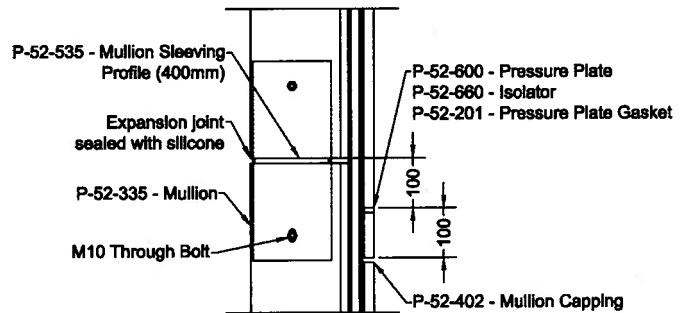
Perimeter of Opening Light to be sealed with silicone
 Window support block to be sealed to window profile using silicone

Transom/opening light details

Bracket details



Mullion Joint Details



Fabricator: Blyweert Beaufort Aluminium
Queensway Meadows
Newport
NP19 4SQ

Installer: Blyweert Beaufort Aluminium
Queensway Meadows
Newport
NP19 4SQ

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