

A Z U M A
Design

Laboratory Report

Date

01-February-2016

Customer **YINTEC**

306A CROWN STREET, WOLLONGONG NSW 2500

Test No :

AZT0009.16



NATA Accredited Laboratory No : 15147

Azuma Design Pty Limited
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Accreditation Number : 15147
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AZUMA DESIGN

TESTING LABORATORY REPORT



SIGNATORIES	Reported by: Jayden Mudford <i>J. Mudford</i>
	Checked by: Robert Irwin <i>R. Irwin</i>

Date:	01-Feb-16
Test No:	AZT0009.16

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Wind and Water Penetration Testing

Testing to AS2047 and as per test method AS4420.0 to .6

Manufacturer / Customer

YINTEC

Test Sample Data

Deflection Ratio

1
250

Unit type	SLIDING DOOR	
Unit code	0	
Size	H (mm)	2690
	W (mm)	2500
Design Pa:	0	

Tested For	Y / N	Rating	Units
Structural Deflection Positive	Yes	1500	Pa
Structural Deflection Negative	Yes	1500	Pa
Air Infiltration	Yes	75	Pa
Operating Force Initial / Constant	Yes	180/110	N
Water Penetration	Yes	200	Pa
Ultimate Strength Positive	Yes	3000	Pa
Ultimate Strength Negative	Yes	3000	Pa

Test Unit Specifications

Results

Frame	Sash	Glass	Sizes		Area sq m	Glass Type	Structural Framing Member	Span (mm)	Allowable Deflection	Deflection Result	Actual Ratio	Test Press (Pa)	Results
			H	W									
Frame			2690	2500	6.73		Interlock P	2490	9.96	0.00		1500	
Sash	SLIDING		2570	1250	3.21		Interlock N	2490	9.96	0.00		1500	
	FIXED		2570	1250	3.21		Mullion P	0		0.00			
			0	0	0.00		Mullion N	0		0.00			
Glass	Thickness (mm)		H	W			Transom P	0		0.00			
	SLIDING	10.38x12x	2422	1142	2.77	TOUGHENED	Transom N	0		0.00			
	FIXED	0	2422	1142	2.77	TOUGHENED	H/L Trans P	0		0.00	0		
		0	0	0	0.00		H/L Trans N	0		0.00	0		
		0	0	0	0.00		H/L Mullion P	0		0.00			
							H/L Mullion N	0		0.00			
							Meet Stile 1,2,3	0		0.00			
							Meet Stile 1,2,3	0		0.00			
							Meet Stile 4,5,6	0		0.00	0		
							Meet Stile 4,5,6	0		0.00	0		

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Test equipments

The test equipment and methods used in the above test comply with the requirements of AS 4420.1-6.

Test Specimen

See drawings at the end of this report.

Test Methods

The test sample was fixed into the rig as outlined in AS 4420.1.

Deflection Test

The test sample was subjected to both positive and negative pressure as prescribed in AS 4420.2. After the initial settling in of the unit at 50% of the required test pressure, the differential pressure was then applied slowly until the nominated design pressure was reached in positive. This process was then repeated for the negative.

Results of Test

The test unit satisfied the requirements of AS 4420.2 in both the positive and negative deflection at the nominated design pressure.

Observations

Nil

Operating Force Test

A force gauge was attached to the operating handle of the sash to determine the force required to set the sash in motion and thereafter to maintain motion as per AS 4420.3.

Force in Newtons

		Opening Force	Closing Force
Initiating Movement	Sash 1	0	0
Sustaining Movement	Sash 1	0	0
Initiating Movement	Sash 2	230	130
Sustaining Movement	Sash 2	60	55
Initiating Movement	Sash 3	0	0
Sustaining Movement	Sash 3	0	0

Results of test

The test unit failed the requirement of AS 4420.3.

Observations

NIL

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Air Infiltration Test

The test was first completely sealed as per AS 4420.4 to determine the air leakage of the test rig. It was then subjected to 75 Pa of both positive and negative pressure. Differential pressures were recorded. The test sample was then unsealed and subjected to 75 Pa of both positive and negative pressure. Differential pressures were recorded and air leakage then calculated. The actual leakage of the test sample was then determined.

Barometric pressure (Pbar): 996 Air temperature (°C): 21

Max Pressure (Pa)	SEALED		UNSEALED	
	Positive (Pa)	Negative (Pa)	Positive (Pa)	Negative (Pa)
75	10	4	218	265

Test Pressure	Pressure Direction	Building / Window Type	Allowable leakage flow L/s m ²	Test results			
				l s ⁻¹ m ⁻² Positive	l s ⁻¹ m ⁻² Negative	Pos +	Neg -
75 Pa	+/-	Air conditioned	1.0	1.59	1.96	N/A	N/A
75 Pa	+	Non air conditioned	5.0	1.59	1.96	Passed	

Results of test

The test unit satisfied the requirement for a non air-conditioned classification. The test unit was tested to AS 4420.4. The net flow readings are as per previous page.

Observations

NIL

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WATER PENETRATION

Water was applied to the exterior of the test sample with no less than 0.05 ls-1m² for a period of five minutes at zero pressure. After five minutes, a nominated pressure was applied for fifteen minutes as per AS 4420.5.

Maximum pressure (Pa) applied for 15 minutes (Nominated pressure)

200

Results of test

The test unit satisfied the requirement of AS 4420.5 in positive pressure at the nominated design pressure.

Observations

Silicone seal sil to sub sill

ULTIMATE STRENGTH TEST

The test sample shall be subjected to a smoothly increasing differential pressure. The pressure shall be conducted in both a positive and negative direction as per AS 4420.6. The test pressure shall be .

Max. pressure reached for 10 seconds	
Positive	Negative
3000	3000

Results of test :

	Y or N
Dislodgement of any glass?	No
Dislodgement of a frame or any part of a frame?	No
Removal of alignment with or without its framing sash from a frame?	No
Loss of support of a frame such as when it is unstable in its opening in the building structure?	No
Failure of any sash, locking device, fasteners or supporting stay which would allow an opening light to come open?	No


The test unit satisfied the requirement of AS 4420.6.

Observations


NIL

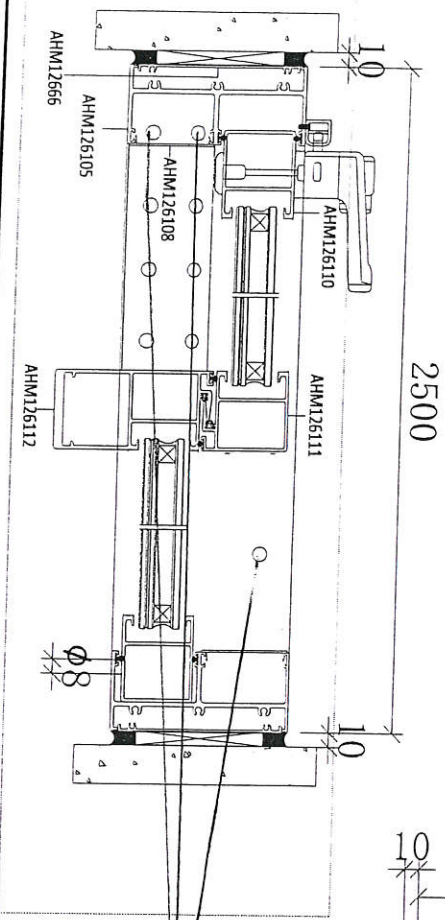
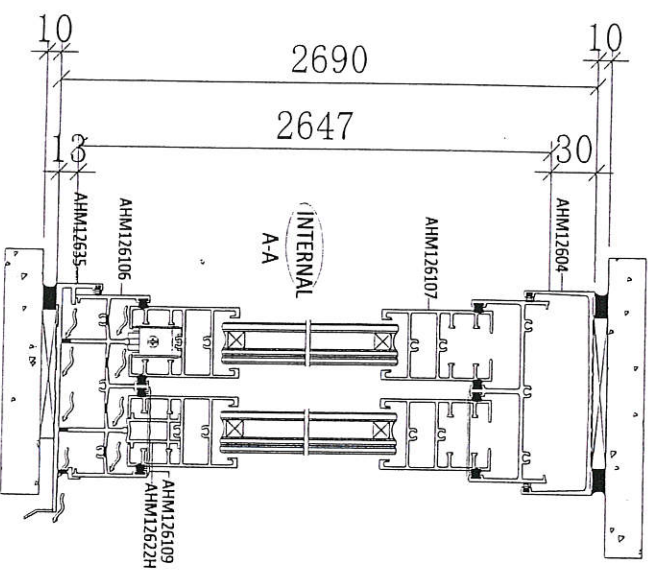
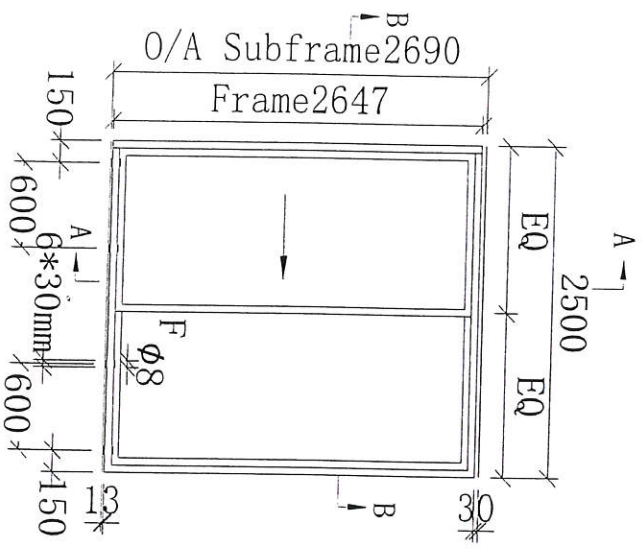
Applicable for type 1

10.38mm clear+12A+5mm clear 126mm

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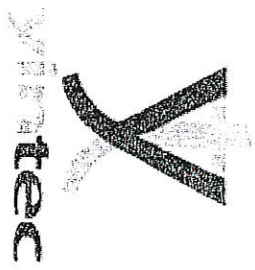
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Checked by: 



8mm DRAW HOLES

As 0009-16



Address: 89 Toolijooa Road,
 Toolijooa, NSW 2534, Australia
 Contact: Mr. Chris Cafe
 Tel: 61-458008776
 E-mail: Chris@yintec.net.au

NO.	DATE	AMENDMENT
		Drawings

CUSTOMER:
 HAMILTON MARINO

PROJECT:

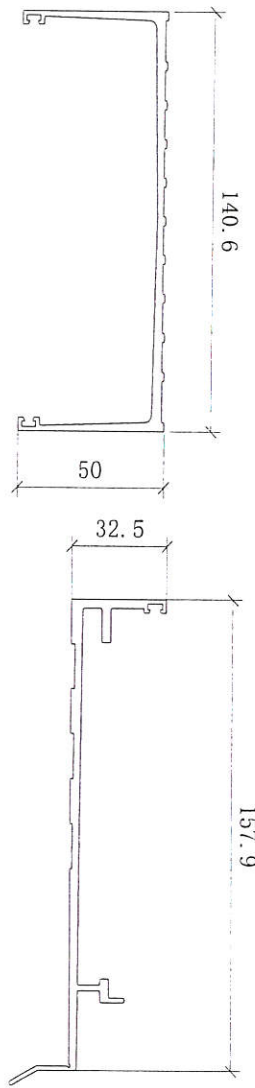
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JOB NO.:

COLOR:

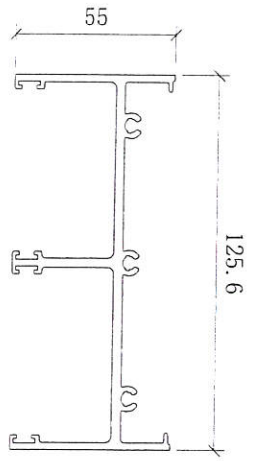
SCALE:

Draws 6 01 2

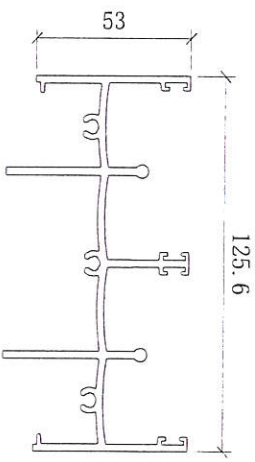


AHM12604

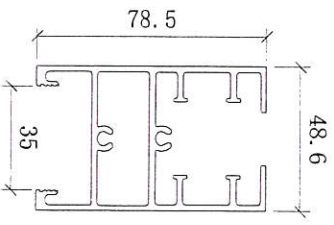
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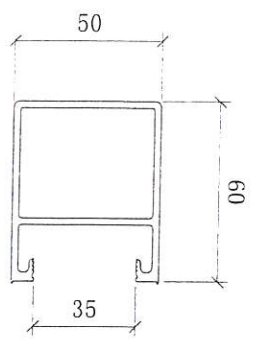
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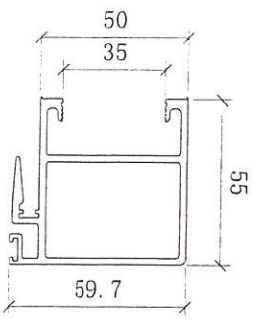
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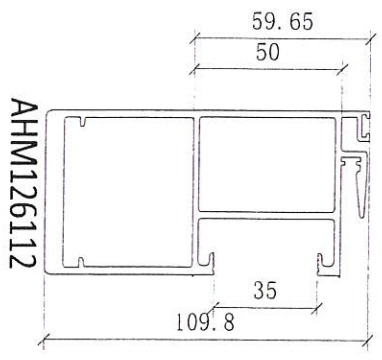
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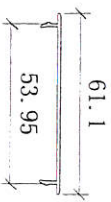
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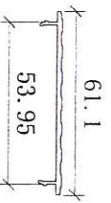
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AHM126112




AHM126108




AHM126109



AHM12666

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APPROVED FOR CONSTRUCTION BY YINTEC

Yintec

Amendment No#:	1
DATE:	30/10/2015

Address: 89 Toolijooa Road,
Toolijooa, NSW 2534, Australia
Contact: Mr. Chris Cafe
Tel: 61-458008776
E-mail: Chris@yintec.net.au

NO.	DATE	AMENDMENT
		Drawings

CUSTOMER:
HAMILTON MARINO

PROJECT:

DRAWING TITLE:

JOB NO.:

COLOR:

SCALE: