



Leading Window & Door Systems

Wintec Aluminium



Since our beginning in 1997, we have developed a range of window and door products that are innovative, functional and stylish.

Wintec Aluminium windows and doors are an all Australian designed and manufactured product, with modern designs and quality finish at the forefront of the Wintec philosophy.

An ongoing commitment to product development and service to our Australia wide fabricator base ensures that no matter where you are, you have access to the latest designs in the Window and Door industry.

“Australia’s Leading Window and Door Systems”

Products and Services

Aluminium Windows & Doors

Wintec have products to suit all areas in Australia – consisting of, Sliding windows, Sliding doors, Awning and Casement windows, Double Hung windows, Louvres, Sliding Multi Track doors, French doors and Bi-folding doors .

Window & Door Testing Laboratory

The Wintec designed products are tested to Australian standard AS2047-1999 in NATA accredited laboratory No 14093. This ensures your windows and doors comply with the building code of Australia [BCA] and are suited to your particular location. In line with the BCA requirements Wintec windows and doors carry a 7 year guarantee.



Test Laboratory



Accreditation number 14093

Wintec Aluminium's dedication to good design practice required an in-house test laboratory to carry out R&D testing and formal NATA accredited testing.

The test laboratory has been accredited to ISO/IEC17025.

TESTING

The methods of test for windows and doors are specified in AS2047:1999 Windows in buildings – selection and installation. The tests specified in this Standard are given in the AS4420 suite of Standards.

AS4420.2 DEFLECTION TEST

Windows and doors shall be designed to control or limit the deflection of structural members at the Serviceability Limit State.

No structural member in a completely assembled and glazed window or door shall deflect by an amount greater than span/150 for "housing", Span/180 for "other residential" and some "housing" or Span/250 for "commercial".



AS4420.3 OPERATING FORCE TEST

The operating force test measures the forces required to operate windows and doors with moving sashes. The size of the operating force depends on the weight of the sash, the arrangement and compression of seals and the configuration of rollers or slides.



AS4420.4 AIR INFILTRATION TEST

The air infiltration rate is a measure of the ability of the window or door to resist the ingress or egress of air through the window at a nominated static air pressure. The air infiltration rate is important with regard to the thermal performance of windows and doors, and is used in the calculation of the window energy rating. There is also some correlation between the air infiltration rate and the sound transmission characteristics of the window or door.



Sliding Window System in Test Rig

AS4420.5 WATER PENETRATION RESISTANCE TEST

Water penetration resistance is a measure of the ability of the window or door to resist the ingress of water spray under positive air pressure to the interior of the building.

The window or door shall be designed such that there shall be no penetration of uncontrolled water through the window or door at a static positive air pressure.

The water penetration level is defined as the maximum static air pressure at which no penetration of uncontrolled water occurs for a given volume and application of water spray.



AS4420.6 ULTIMATE STRENGTH TEST

Structural members of a window and door that are likely to be subjected to stress resulting from actions by wind on the assembly shall be designed so that the stress due to the ULS design wind loads does not exceed the factored limit state stress of the material. The Ultimate Limit State is the maximum load carrying resistance of the window.

Wintec Pressure Conversion Chart



Pa	m/sec	km/hr	mm H ₂ O	mph	psf
75	11.18	40.25	7.65	25.00	1.57
100	12.91	46.47	10.20	28.87	2.09
150	15.81	56.92	15.30	35.35	3.13
200	18.26	65.73	20.40	40.82	4.18
250	20.41	73.48	25.50	45.64	5.22
300	22.36	80.50	30.60	50.00	6.27
400	25.82	92.95	40.80	57.73	8.36
500	28.87	103.92	51.00	64.55	10.45
600	31.62	113.84	61.20	70.71	12.53
700	34.16	122.96	71.40	76.37	14.62
800	36.51	131.45	81.60	81.65	16.71
900	38.73	139.42	91.80	86.60	18.80
1000	40.83	146.97	102.00	91.28	20.89
1100	42.82	154.14	112.20	95.74	22.98
1200	44.72	160.99	122.40	100.00	25.07
1300	46.55	167.57	132.60	104.08	27.16
1400	48.30	173.89	142.80	108.01	29.25
1500	50.00	180.00	153.00	111.80	31.34
1600	51.64	185.90	163.20	115.47	33.42
1700	53.23	191.62	173.40	119.02	35.51
1800	54.77	197.18	183.60	122.47	37.60
1900	56.27	202.58	193.80	125.83	39.69
2000	57.74	207.84	204.00	129.09	41.78
2100	59.16	212.97	214.20	132.28	43.87
2200	60.55	217.99	224.40	135.39	45.98
2300	61.91	222.88	234.60	138.44	48.05
2400	63.25	227.68	244.80	141.42	50.14
2500	64.55	232.37	255.00	144.33	52.23
3000	70.71	254.55	306.00	158.11	62.67
3500	76.38	274.95	357.00	170.78	73.12
4000	81.65	293.93	408.00	182.57	83.56
4500	86.60	311.76	459.00	193.64	94.01
5000	91.29	328.63	510.00	204.12	104.45
5500	95.74	344.67	561.00	214.08	114.90
6000	100.00	359.99	612.00	223.60	125.34
6500	104.08	374.69	663.00	232.73	135.79
7000	108.01	388.84	714.00	241.51	146.23
8000	115.47	415.68	816.00	258.19	167.12
8200	116.91	420.85	836.40	261.40	171.30
8400	118.32	425.95	856.80	264.56	175.48
8500	119.02	428.48	867.00	266.13	177.57
9000	122.48	440.90	918.00	273.85	188.01
10000	129.10	464.75	1020.00	288.66	208.90



NOTES

1. U_w is the whole window U -value
2. $SHGC_w$ is the whole window solar heat gain coefficient
3. T_{vw} is the whole window visible (light) transmittance
4. Percentage improvement figures are compared with using base-case Generic Window 1 (3mm clear in standard aluminium frame)
5. A negative percentage improvement figure indicates performance worse than the base-case window
6. A positive percentage improvement figure indicates performance better than the base-case window
7. Maximum air infiltration is 5.0L/s.m² at a positive pressure difference of 75 Pa as measured according to AS 2047
8. Static performance (U_w , $SHGC_w$, T_{vw} , T_{sw}) calculated using Window 5.2 and Therm 5.2 software (LBNL), 2000-2003
9. Annual energy performance (stars and % improvements) calculated using Nationwide House Energy Rating Software (AccuRate) according to procedures of WERS 2008.
10. Results disclosed at National Fenestration Rating Council (NFRC) regulations.



07-May-08

Wintec Aluminium				%	%	Total Window System Values - NFRC			
Window ID	Glazing	Cooling Stars	Heating Stars			U_w	$SHGC_w$	T_{vw}	Air Inf.
48mm Aluminium Sliding Window - Single Glazed									
WAS_001_01	3Clr	☆	☆☆☆	8%	18%	6.5	0.77	0.79	0.13
WAS_001_02	4Clr	☆	☆☆☆	10%	18%	6.4	0.75	0.78	0.13
WAS_001_03	4EG	☆☆	☆☆	32%	8%	6.4	0.51	0.65	0.13
WAS_001_04	6.38DLam	☆	☆☆☆	13%	19%	6.3	0.72	0.78	0.13
WAS_001_05	6.38CP	☆☆☆	☆☆☆☆	46%	30%	4.5	0.46	0.52	0.13
48mm Direct Aluminium Sliding Window - Double Glazed									
WAS_002_01	3/6/3	☆☆	☆☆☆☆☆	29%	46%	4.0	0.68	0.71	0.13
48mm Aluminium Sliding Window - Double Glazed									
WAS_003_01	4/8/4	☆☆	☆☆☆☆☆	35%	43%	4.1	0.62	0.66	0.13
WAS_003_02	4EG/8/4	☆☆☆☆	☆☆☆☆☆	52%	32%	4.1	0.39	0.55	0.13
WAS_003_03	4EG/10/4EA	☆☆☆☆	☆☆☆☆	59%	37%	3.4	0.35	0.50	0.13
300 Series Aluminium Sliding Window - Double Glazed									
WAS_004_01	4/8/4	☆☆	☆☆☆☆☆	35%	43%	4.0	0.62	0.66	0.78
WAS_004_02	4EG/8/4	☆☆☆☆	☆☆☆☆☆	52%	32%	4.0	0.39	0.55	0.78
WAS_004_03	4EG/10/4EA	☆☆☆☆	☆☆☆☆	59%	37%	3.3	0.35	0.50	0.78
Aluminium Sliding Door - Single Glazed									
WAS_005_01	6.38DLam	☆	☆☆☆	15%	22%	6.0	0.72	0.78	0.76
WAS_005_02	6.38DLamGy	☆☆	☆☆☆	31%	16%	6.0	0.55	0.39	0.76
WAS_005_03	6.38CP	☆☆☆	☆☆☆☆	48%	34%	4.2	0.45	0.52	0.76
Aluminium Sliding Door - Double Glazed									
WAS_006_01	4/10/4	☆☆	☆☆☆☆☆	34%	47%	3.8	0.64	0.69	0.76
WAS_006_02	4EG/10/4	☆☆☆☆	☆☆☆☆	53%	35%	3.8	0.40	0.57	0.76
WAS_006_03	4EG/10/4EA	☆☆☆☆	☆☆☆☆	59%	40%	3.2	0.36	0.53	0.76
WAS_006_04	6.38CP/8/4	☆☆☆☆	☆☆☆☆	56%	40%	3.3	0.39	0.46	0.76
Aluminium Awning Window - Double Glazed									
WAS_007_01	4/8/4	☆☆☆	☆☆☆☆☆	39%	57%	4.3	0.56	0.58	0.28
WAS_007_02	4EG/8/4	☆☆☆☆	☆☆☆☆☆	53%	47%	4.3	0.36	0.48	0.28
WAS_007_03	4EG/10/4EA	☆☆☆☆	☆☆☆☆	59%	52%	3.7	0.32	0.44	0.28
Aluminium Casement Window - Double Glazed									
WAS_008_01	4/8/4	☆☆☆	☆☆☆☆☆	40%	60%	4.0	0.56	0.58	0.42
WAS_008_02	4EG/8/4	☆☆☆☆	☆☆☆☆	55%	50%	4.0	0.35	0.48	0.42
WAS_008_03	4EG/10/4EA	☆☆☆☆	☆☆☆☆	61%	55%	3.4	0.31	0.45	0.42
Aluminium Double Hung Window - Double Glazed									
WAS_009_01	4/8/4	☆☆	☆☆☆☆	37%	34%	4.4	0.57	0.61	3.57
WAS_009_02	4EG/8/4	☆☆☆☆	☆☆☆☆	52%	23%	4.4	0.36	0.50	3.57
WAS_009_03	4EG/10/4EA	☆☆☆☆	☆☆☆☆	58%	28%	3.8	0.32	0.46	3.57
48mm Aluminium Fixed Window - Single Glazed									
WAS_010_01	3Clr	☆	☆☆☆	6%	27%	6.0	0.80	0.83	
WAS_010_02	4Clr	☆☆	☆☆☆	8%	27%	5.9	0.78	0.82	
WAS_010_03	4EG	☆	☆☆☆	33%	16%	5.9	0.53	0.68	
WAS_010_04	6.38DLam	☆☆☆	☆☆☆☆	12%	27%	5.8	0.75	0.82	
WAS_010_05	6.38CP	☆	☆☆	48%	39%	3.9	0.47	0.54	

Acoustic Performance Wintec Aluminium Windows & Doors

The table below represents the acoustic performance of Wintec Aluminium Windows & Doors. The Rw (Weighted Sound Reduction Index) ratings are the results of tests conducted at the National Acoustic Laboratory December 2007 in accordance with AS1191-2002 .



WORLD RECOGNISED
ACCREDITATION
NO. 14093



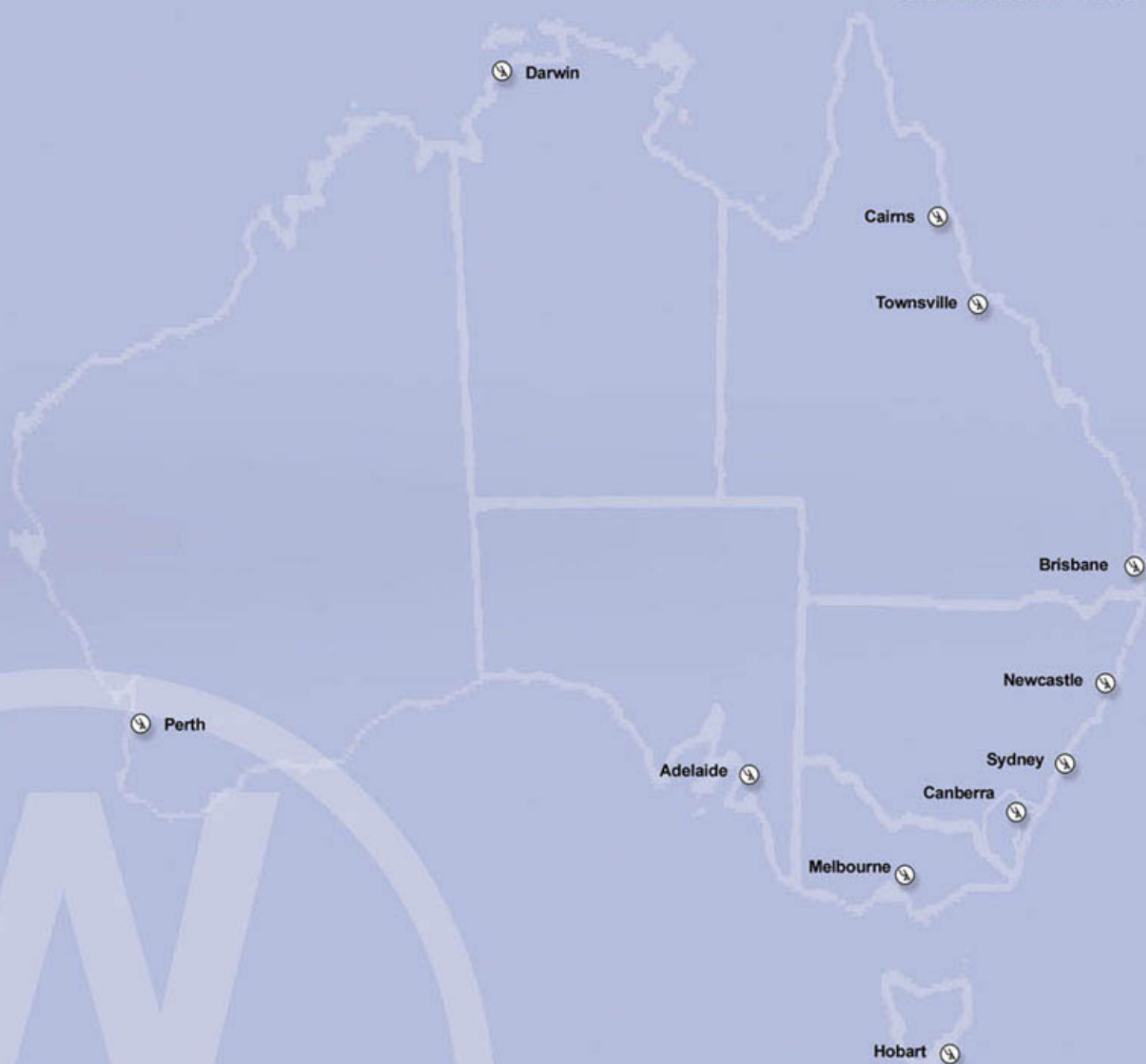
WINDOW TYPE	GLASS	SEALS	Rw	STC	Test Report
Sliding Window	4.00	4.8 Qlon + Fin Pile	30	29	ATF2101
	6.38	4.8 Qlon + Fin Pile	31	31	ATF2100
Sliding Door	4.00	4.8 Qlon + Fin Pile	30	30	ATF2096
	6.38	4.8 Qlon + Fin Pile	32	32	ATF2095
	10.38	4.8 Qlon + Fin Pile	35	34	ATF2094
Awning & Casement	4.00	4.8 Qlon / Double Seals on Sash	27	27	ATF2098
	6.38	4.8 Qlon / Double Seals on Sash	31	31	ATF2097
Double Hung	4.00	4.8 Qlon + Fin Pile	28	27	ATF2102
	6.38	4.8 Qlon + Fin Pile	31	31	ATF2103

ULLRICH

Wintec Aluminium Stock



***Wintec Aluminium sections are stocked
throughout Ullrich Aluminium branches
Australia wide***



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