委托检验合同

编号(检验单位填写): (分分外 110分分 委托单位(签章) GUANGYA CURTAIN WALL & WINDOW DOOR SYSTEM ENGINEERING CO.,LTD YINTEC 生产单位 GUANGYA CURTAIN WALL & WINDOW DOOR SYSTEM ENGINEERING CO.,LTD 工程名称 (适用时) 委托单位地址 广东省佛山市南海区官窑镇马鞍岗工业区 邮政编码 528237 委托经办人 干宗泽 联系电话/传真 0757-81192860/0757-81192862 委 (签名) 托 样品名称 AHM85 铝合金悬窗 规格型号 2400mm*2180mm 单 样品生产日期 2011月6月1日 样品数量 1 樘 商标 位 填 检验依据 AS 2047-1999 写 结构侥度、空气渗透测试、操作力初步/常数测试、渗水试验、极限强度测试 检验项目 □自取 检验后样品 X送样 报告领取 □自取 样品来源 山邮寄 □抽样 处理方式 方式 X邮寄 口废弃 □国家建筑材料工业建筑五金水暖产品质量监督检验测试中心 检验单位 (签章) □北京市建筑五金水暖产品质量监督检验站 委托日期 样品状态 检 检验费用(人民币) 经办人(签名) 验 单 备注 位 填 1.检验单位自接到样品及相关资料齐全后 15 个工作日内完成检验,并出具检验报告;按照相关检测标准, 写 检验周期超过15个工作日的检测除外。 2.委托单位填写信息由委托单位确认其真实性。委托单位填写信息如有变动,请电话通知检验单位,申请 更改本合同。 3.委托单位要求取走检验后样品时,如果在收到检验报告后一个月内不取回,同时不说明情况的,检验后 样品由检验单位统一处理。

检验单位地址: 北京市丰台区永定门外大红门西路 4 号 100068 电话: 010-67235600

传真: 010-87815976

北京市石景山区金顶北路 69 号 100041 电话: 010-88751629 88751631

传真: 010-88751629

E-mail: zhiliang1612@sohu.com 网址: www.wjzj.org.cn

委托检验合同

首系统工会

编号 (检验单位填写): 另下外 1109~8

	委托单位(签章)	YINTEC			加盐		THE STATE OF THE S	
	生产单位	GUANGYA CURTA YINTEC			1	77		
		GUANGYA CURTA	IN WALL & W	INDOW I	DOOR SY	STEM E	ENGIN	EERING CO.,LTD
	工程名称				A 350	d 4 O C C S	TELON	
	(适用时)		_ , , , , , , , , , , , , , , , , , , ,			1		
	委托单位地址	广东省佛山市南海	×官窑镇马鞍岗	工业区		邮政组	編码	528237
委	/ TITE 1-1	王宗泽		联系电	话/传真	0757-8	119286	50/0757-81192862
托	11 HH H 14.	AHM85 铝合金推拉	注门	规格	型号	2028m	m*212	0mm
单	样品生产日期	2011月6月1日	样品数量	1	樘	商材	示	
位填写	检验依据	AS 2047-1999						
		结构侥度、空气渗透	透测试、操作力	初步/常	数测试、	渗水试验	公、极 阝	艮强度测试
	检验项目							
	样品来源	X 送样 □抽样	检验后样品 处理方式		□自取 □邮寄 □废弃		示领取 可式	□自取 X邮寄
	检验单位 (签章)	□国家建筑材料 □北京市建筑五	Minnes	2000		金验测试	中心	
	样品状态	经	检测专用	草	委托日期		2011	9.28
检验	经办人(签名)	吴林	1	检验	费用(人)	民币)	1678	0.7
单位	备注							
填气	1.检验单位自接到检验周期超过15	样品及相关资料齐全 个工作日的检测除外。 息由委托单位确认其	•					按照相关检测标准,通知检验单位,申请
	国 会太佐国							

检验单位地址: 北京市丰台区永定门外大红门西路 4 号 100068 电话: 010-67235600 传真: 010-87815976

北京市石景山区金顶北路 69 号 100041 电话: 010-88751629 88751631 传真: 010-88751629

3.委托单位要求取走检验后样品时,如果在收到检验报告后一个月内不取回,同时不说明情况的,检验后

E-mail: zhiliang1612@sohu.com 网址: www.wjzj.org.cn

样品由检验单位统一处理。



Report No. GTDM1109007

Tests to Parts of

AS 2047-1999 Windows in buildings- Selection

and installation And AS 4420.0-6-1996

Windows-Methods of test

Awning aluminum window AHM85

Client: Yintec

Guangya Curtain Wall & Window Door System Engineering CO.,LTD
October 18, 2011

National Building Material Industry Hardware And Plumbing Equipment Quality Supervision And Test Center

Dahongmen 4 West Road, Fengtai District, Beijing

THIS REPORT MAY ONLY BE REPRODUCED IN FULL

THE EVALUATION TO AS 2047-1999 WINDOWS IN BUILDINGS-SELECTION INSTALLATION AND AS 4420.0-6-1996 WINDOWS-METHODS OF TEST.

REPORT No. GTDM1109007

Client:

Yintec

Guangya Curtain Wall & Window Door System Engineering CO.,LTD

AD. Nanhai District of Foshan City, Guangdong Province, Ma Gang Industrial Zone, Guan Yaozhen

SPECIMEN:

Awning aluminum window AHM85 manufactured by (Yintec) Guangya Curtain Wall & Window Door System Engineering CO.,LTD

NOTE: The HPT accepts no responsibility for selection of specimens. The results in this report apply to the specimen tested and may be not applicable to other specimens of the same product.

TESTS:

Specimen was selected for testing by client and evaluation in accordance with AS2047-1999 Windows in buildings - Selection and installation And AS4420.0-6-1996 Windows - Methods of test.

The results for compliance with the specification are shown in the following pages under the relevant clause numbers.

CNAS L1449

China National Accreditation Service for Conformity Assessment, accredits this Laboratory. The tests reported herein have been performed in accordance with its scope of accreditation Accreditation No.L1449

Compile: Quanyanti

Verification:

Approval:

NATIONAL BUILDING MATERIAL INDUSTRY HARDWARE AND PLUMBING EQUIPMENT QUALITY SUPERVISION AND TEST CENTER TEST REPORT OF WINDOOR PHYSICAL PERFORMANCE

Client	Yintec Guangya Curtain Wall &Window Door	Test Category	Commissioning test
Manufacturer	System Engineering CO.,LTD Yintec Guangya Curtain Wall &Window Door System Engineering CO.,LTD	Sample Arrived Date	September 28, 2011
Type / Model	Awning aluminum window AHM85	Sample State	Undamaged
Size	2400×2180×85 (mm)	Test Date	October 13, 2011
Tests 7	Five Items in total: Deflection, Operating force, Air Tightness, Water Tightness And Breaking Strength Test	Test Equipment	Physical properties test equipment of doors and windows 3YS-301-1
Reference Documents	AS2047—1999 Windows in buildings-Selection AS4420.0-6—1996 Windows—Methods of tes		
Windows or Doors area	Width:2.40 (m) ×height	:: 2.18 (m) = 5.	23 m ²
Glass Varieties	Flat Glass Sealan	t Type	Wet
Glass Inlaid Materials	Silicon Seal between	en sections	Rubber
The Maximum Size of Glass	Width: 1120 mm Length: 2030 mm Ti	hickness: 6 (mm	
Test Conclusions	According to AS 2047-1999, the samp grade N4 of water tightness, grade N4 performance meets the requirements and The	of breaking s	strength). The operating
Remarks	window material: Aluminum	PF	

THIS REPORT MAY ONLY BE REPRODUCED IN FULL

84		PRE	<i>il</i> /'	第一 第		Individ	Test
No.	Test items	Standard Descrip	tion	Test i	results //	ual Decisio	Report
2		DDD	77	10 E		(n)	1 age
#Z		In the application of the wind pressure, the man ratio of span and defle	kimum	Positive Pressure	1500 Pa: 1/256	7/N4	4~5
	Deflection	not more than 1/250 (Classification value)	O.C.	Negative Pressure	-1500 Pa: 1/252	N4	4~5
7		appendix 1) Initial Operating	#	7 7		<i>P</i>	P
2	Operating (A)	Force: ≤180	#2	P	52	Pass	6
#Z	Force (N)	Sustained Operating For ≤110	orce:	PA	4	Pass	6
07			194)	7 7	- 77	7	7
Ø.		Air Conditioning Class (Positive	75Pa: ≤1.0	Positive Pre	essure <0.1 essure 0.1	Pass	7
74		Pressure, Negative Pressure)	150Pa: ≤1.0	Positive Pre		Pass	7
3			\$1.0	regative i ii	essure 0.2	#	34
3	Air Tightness (L/m ² ·s)	Non-air-conditioning	75Pa: ≤5.0	# #		12	72
7		Class (Positive	7	# #	2 #2	#	#E
T-		Pressure)	150Pa: ≤8.0	7 F	= =	7	F
7	PPI	Shutter Class	75Pa:	# #		12	
14		(Positive Pressure)	≤20.0	第一章	2 12	11	部
4	Water Tightness (Pa)	See Appendix	1 1	# F20	00	NA	8
8	# 3	The The	7	Positive	2200	NA	0
1	Breaking	PPP		Pressure	2300	N4	9
5	Strength(Pa)	See Appendix	1	震 雪	0 570	和	\$770
Sylven		By By	()	Negative	-2300	N4	9
ACT		000		Pressure	2500	77	A

SECTION 2 MATERIALS

Method 1, Deflection test

Reference:

AS 2047-1999 Windows in buildings-Selection and installation

AS 4420.2 -1996 Windows - Methods of test

Method 2: Deflection test

Test procedure: According to AS 4420.2-1996, the specimen should be installed behind the testing chamber, and the displacement sensor should be installed in accordance with Figure 1. Making it preloaded first, and then increasing (or decreasing) the pressure gradually, until it is up to \pm 3000Pa, or until the deflection is up to L/250, or until the windows is eventually damaged.

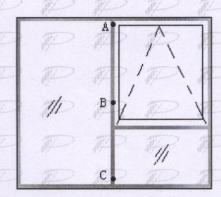


Figure 1 the installation position of displacement sensor (inside view)

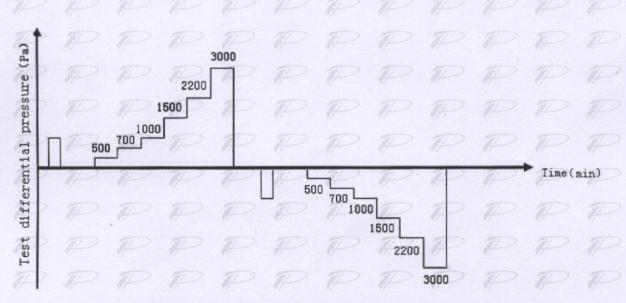


Figure 2 the increasing pressure sequence of deflection test

Deflection Test Results:

The length of the deformation bar: L=2060mm

Pressure(Pa)		And the same of th	on amount point(mm		Deflection (mm)	The ratio between span and deflection	
		A	В	C	B-(A+C)/2	L/[B-(A+C)/2]	
	500	0.56	2.96	0.62	2.37	869.19	
	700	0.90	4.33	0.97	3.39	607.66	
Positive Pressure	1000	1.54	6.83	1.50	5.31	387.94	
Pressure	1500	2.46	10.48	2.38	8.06	255.58	
	2200	3.83	16.54	3.77	12.74	161.69	
	3000		2	\$2_\$Z			
	500	0.54	3.09	0.53	2.55	871.25	
	700	0.89	4.55	0.89	3.66	562.84	
Negative Pressure	1000	1.40	7.20	1.42	5.79	355.78	
Plessure	1500	2.35	10.49	2.25	8.19	251.52	
	2200	3.49	16.49	3.43	13.03	158.09	
	3000	0_10	<i>P</i>	772 <u>7</u> 7			

Method 2. Operating force test

Reference:

AS 2047-1999 Windows in buildings-Selection and installation

AS 4420.3 -1996 Windows - Methods of test

Method 3: Operating force test

Test procedure: According to AS 4420.3-1996, the specimen should be put into the test chamber. The window lock should be released without opening the window. A static force should be exerted without impact on the handle or control device in the opening direction and it is measured by dynamometer, which is initial operating force. Another force to keep the window moving is sustaining force. The operating force test should see Figure3

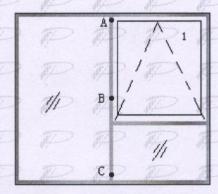


Figure 3 the force application figure of operating force test (inside view)

Operating force test results:

	7	3	P	2		Opera	ting Forc	e(N)		
	No.	Sas	h area(m	-)	Initial ope		75	Sustaini		-
7	1	#- #2	1.67	W W	62		10	14		
	į.	Max	#	灰	62	7	P	714	10	

Method 3, Air infiltration test

Reference:

AS 2047-1999 Windows in buildings-Selection and installation

AS 4420.4 -1996 Windows - Methods of test

Method 4: Air infiltration test

Test procedure: According to AS 4420.4-1996, the specimen should be put into the test chamber, increasing (decreasing) the pressure gradually in accordance with Figure 4. The air infiltration capacity at every differential pressure should be measured and carried out a regression calculation. The air infiltration capacities under pressure 75 Pa and 150 Pa are obtained, which are divided by the window area to get the air infiltration capacities per unit area under all differential pressure.

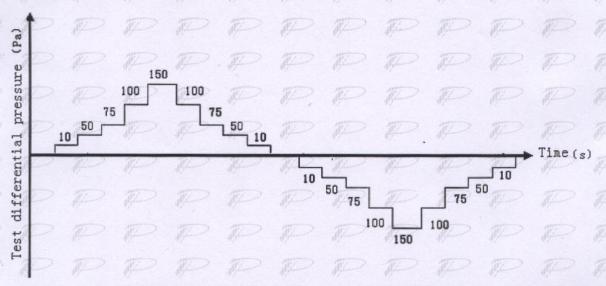


Figure 4 the increasing pressure sequence of air tightness test

	Air tig	htness test resu	ılts	477		
7 7 7	199°1 49°	17 17	75Pa	47	150Pa	97
Air infiltration capacities per	Positive pressure	L/(m ² ·s)	<0.1		<0.1	87
unit area under all differential pressure	Negative pressure	L/(m ² ·s)	0.07		0.19	87

Method 4, Water penetration resistance test

Reference:

AS 2047—1999 Windows in buildings-Selection and installation AS 4420.5—1996 Windows — Methods of test

Method 5: Water penetration resistance test

Test procedure: According to AS 4420.5-1996, the specimen should be put into the test chamber. Spray water on the chamber's surface, and the working water jet capacity is maintained about 0.05L/m²·s. Firstly, spraying water for 5 minutes of zero differential pressure, and then spray water e for 15 minutes when the test pressure application until a serious leakage on the inner surface.

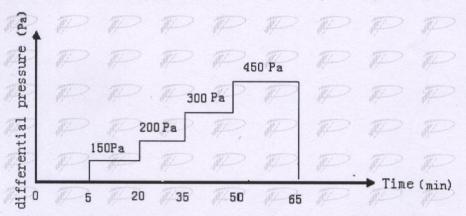
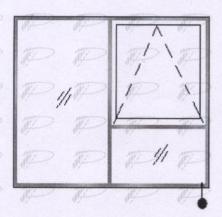


Figure 5 the increasing pressure sequence of water tightness test

2	和和和	Water tightness test results	10 m	A A	2-
).	Test differential pressure(Pa)	200	P	7 300 TO	灰
2	Leakage	No leakage	67	ater overflows the indow interface.	T



Water overflows the window interface.

Figure 6 Leakage location

Method 5, Ultimate strength test

Reference:

AS 2047—1999 Windows in buildings-Selection and installation AS 4420.6—1996 Windows—Methods of test

Method 6: Ultimate strength test

Test procedure: According to AS 4420.6-1996, the specimen should be put into the test chamber. First a preload is used and then the pressure is increased (decreased) gradually and keep various pressure for 10s until the window is damaged or seriously deformed.

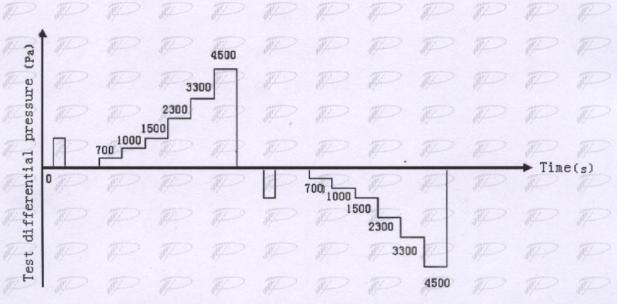


Figure 7 the increasing pressure sequence of breaking strength test

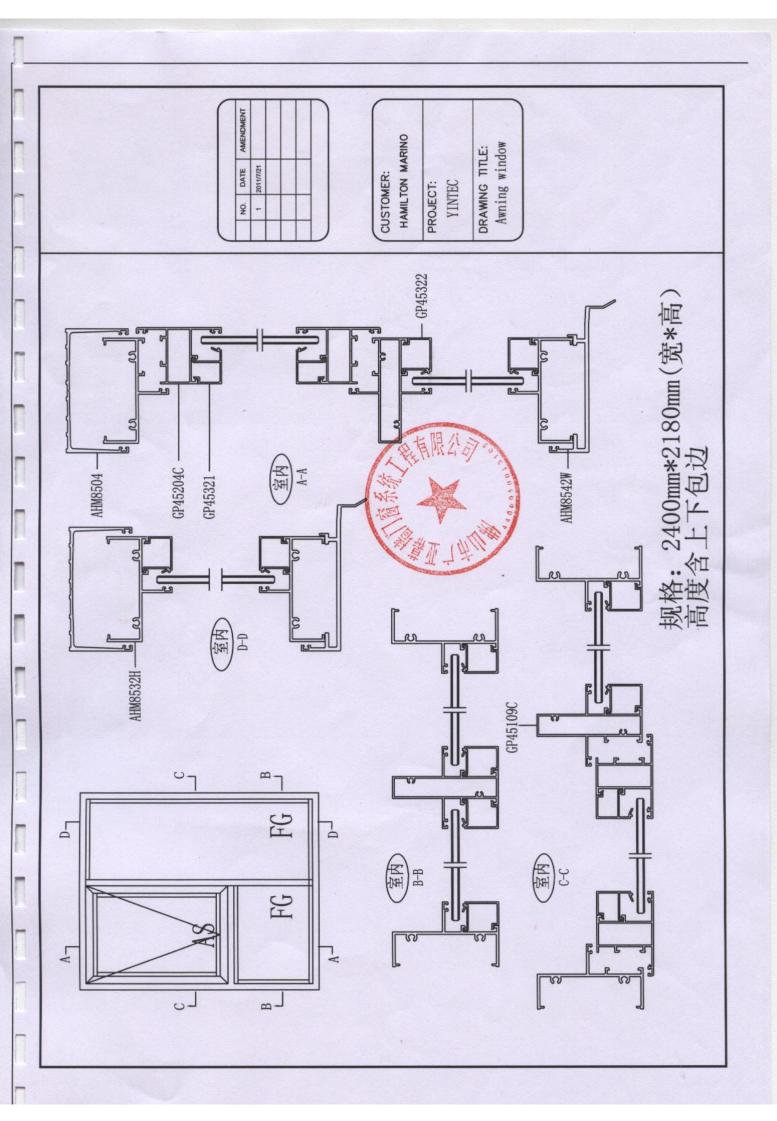
Breaking strength test results:

S James James	Breaking strength test resu	its
Pr	essure	Sample
Positive pressure	2300 Pa	No damage
Negative pressure	-2300 Pa	No damage

6. Appendix 1:

AP

	Windows class	影影		oplied de	The same of the sa	d	tightne ifferentia essure(P	al	streng	th test rential ure(Pa)
	N1	352		500			150		7	00
	N2	77	>	700	P	W	150	1	10	000
9	N3	72	>	1000	P	彩	150	<i>#</i>	7 15	500
7	N4	8/4 207	7	1500			200	# 5D	23	300
	N5	172		2200	<i>i</i>		300	1	33	800
7	N6	77	>	3000	P	(E)	450	P	45	500
7	· 100	JE .	2	(P/-)	W.	B/-	P/	W	2	THE STATE OF THE S





Report No. GTDM1109008

Tests to Parts of

AS 2047-1999 Windows in buildings- Selection

and installation And AS 4420.0-6-1996

Windows-Methods of test

Sliding aluminum Door AHM85

Client: Yintec

Guangya Curtain Wall & Window Door System Engineering CO.,LTD

October 18, 2011

National Building Material Industry Hardware And Plumbing Equipment Quality Supervision And Test Center

Dahongmen 4 West Road, Fengtai District, Beijing

THE EVALUATION TO AS 2047-1999 WINDOWS IN BUILDINGS-SELECTION AND INSTALLATION AND AS 4420.0-6-1996 WINDOWS-METHODS OF TEST.

REPORT No. GTDM1109008

Client:

Yintec

Guangya Curtain Wall & Window Door System Engineering CO.,LTD

AD. Nanhai District of Foshan City, Guangdong Province, Ma Gang Industrial Zone, Guan Yaozhen

SPECIMEN:

Sliding aluminum Door AHM85 manufactured by (Yintec) Guangya Curtain Wall &Window Door System Engineering CO.,LTD

NOTE: The HPT accepts no responsibility for selection of specimens. The results in this report apply to the specimen tested and may be not applicable to other specimens of the same product.

TESTS:

Specimen was selected for testing by client and evaluation in accordance with AS2047-1999 Windows in buildings - Selection and installation And AS4420.0-6-1996 Windows - Methods of test.

RESULTS

The results for compliance with the specification are shown in the following pages under the relevant clause numbers.

CNAS L1449

China National Accreditation Service for Conformity Assessment, accredits this Laboratory. The tests reported herein have been performed in accordance with its scope of accreditation Accreditation No.L1449

Compile: Quanty an

Verification:

Approval:

roval:

NATIONAL BUILDING MATERIAL INDUSTRY HARDWARE AND PLUMBING EQUIPMENT QUALITY SUPERVISION AND TEST CENTER TEST REPORT OF WINDOOR PHYSICAL PERFORMANCE

Client	Yintec Guangya Curtain Wall &Window Door System Engineering CO.,LTD	Test Category	Commissioning test
Manufacturer	Yintec Guangya Curtain Wall &Window Door System Engineering CO.,LTD	Sample Arrived Date	September 28, 2011
Type / Model	Sliding aluminum Door AHM85	Sample State	Undamaged
Size	2028×2120×85 (mm)	Test Date	October 12, 2011
Tests	Five Items in total: Deflection, Operating force, Air Tightness, Water Tightness And Breaking Strength Test	Test Equipment	Physical properties test equipment of doors and windows 3YS-301-1
Reference Documents	AS2047 —1999 Windows in buildings-Selection AS4420.0-6 —1996 Windows —Methods of tes		
Windows or Doors area	Width: 2.028 (m) ×heigh	nt: 2.12 (m) = 4	1.30 m ²
Glass Varieties	Flat Glass Sealan	t Type	Wet
Glass Inlaid Materials	Silicon Seal between	en sections	Sealing Strip
The Maximum Size of Glass	Width: 920 mm Length: 1910 mm Th	ickness: 6 (mm)	
Test Conclusions	According to AS 2047-1999, the samp grade N3 of water tightness, grade N4 performance meets the requirements and grade.	of breaking s	strength). The operating
	U7 47 47		

1

The same

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No. Test items Standard Description Test results Decision In the application of the actual wind pressure, the maximum ratio of span and deflection is not more than 1/250 (Classification values see appendix 1) Initial Operating Force: ≤180 Sustained Operating Force: ≤110 Air Conditioning Class (Positive Pressure) Air Tightness (L/m²·s) Air Tightness (L/m²·s) Non-air-conditioning Class (Positive Pressure) Non-air-conditioning Class (Positive Pressure) Non-air-conditioning Class (Positive Pressure) 150Pa: ≤8.0 1.7 Pass
In the application of the actual wind pressure, the maximum ratio of span and deflection is not more than 1/250 (Classification values see appendix 1) Deflection Initial Operating Force: ≤180 Sustained Operating Force: ≤110 Air Conditioning Class (Positive Pressure) Pass Class (Positive Pressure) 150Pa: ≤1.0 Class (Positive Pressure) 150Pa: ≤5.0 Class (Positive Pressure)
actual wind pressure, the maximum ratio of span and deflection is not more than 1/250 (Classification values see appendix 1) Deflection Deflec
deflection is not more than 1/250 (Classification values see appendix 1) Initial Operating Force: ≤180 Sustained Operating Force: ≤110 Air Conditioning Class (Positive Pressure) Air Tightness (L/m²-s) Negative Pressure -1500 Pa: 1/332 N6 4 Pass Pass Pass 1/332 Air Tightness (L/m²-s) Non-air-conditioni ng Class (Positive Pressure) 150Pa: ≤5.0 1.1 Pass Pass Pass Pass 150Pa: 150Pa: 17 Pass Pass
See appendix 1) Initial Operating Force: ≤180 Sustained Operating Force: ≤110 Air Conditioning Class (Positive Pressure, Negative Pressure) Air Tightness (L/m²·s) Non-air-conditioni ng Class (Positive Pressure) ToPa: 110 Pass 124 Pass 14 Pass 150Pa: 150Pa: 110 Pass 150Pa: 111 Pass 150Pa:
Operating Force: ≤180 Sustained Operating Force: ≤110 Air Conditioning Class (Positive Pressure) Air Tightness (L/m²·s) Non-air-conditioning Class (Positive Pressure) Force: ≤180 Air Conditioning Class (Positive Pressure)
Pressure P
Sustained Operating Force: ≤110 Air Conditioning Class (Positive Pressure, Negative Pressure) Air Tightness (L/m²·s) Non-air-conditioni ng Class (Positive Pressure) 14 Pass
Air Conditioning Class (Positive Pressure, Negative Pressure) 150Pa: ≤1.0 Air Tightness (L/m²·s) Non-air-conditioni ng Class (Positive Pressure) 150Pa: ≤5.0 1.1 Pass 17 Pass
Air Conditioning Class (Positive Pressure, Negative Pressure) Air Tightness (L/m²·s) Non-air-conditioni ng Class (Positive Pressure) 150Pa: ≤1.0 75Pa: ≤5.0 1.1 Pass Pass
Pressure) Air Tightness (L/m²·s) Non-air-conditioni ng Class (Positive Pressure) Pressure) Pressure 150Pa: ≤ 1.0 Pass 1.1 Pass
Air Tightness (L/m²·s) Non-air-conditioni ng Class (Positive Pressure) Air Tightness (L/m²·s) Non-air-conditioni ng Class (Positive Pressure) 1.1 Pass 1.7 Pass
Non-air-conditioni ng Class (Positive Pressure) Non-air-conditioni ≤ 5.0 1.1 Pass 150Pa:
ng Class (Positive Pressure) 150Pa: 1.7 Pass
Pass Pass
Shutter Class 75Pa:
Pressure) \$\leq 20.0
Water Tightness (Pa) See Appendix 1 150 N3
Positive 2300 N4

SECTION 2 MATERIALS

Method 1, Deflection test

Reference:

AS 2047-1999 Windows in buildings-Selection and installation

AS 4420.2 -1996 Windows - Methods of test

Method 2: Deflection test

Test procedure: According to AS 4420.2-1996, the specimen should be installed behind the testing chamber, and the displacement sensor should be installed in accordance with Figure 1. Making it preloaded first, and then increasing (or decreasing) the pressure gradually, until it is up to \pm 3000Pa, or until the deflection is up to L/250, or until the windows is eventually damaged.

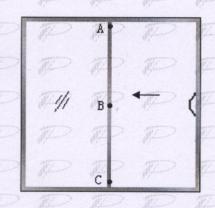


Figure 1 the installation position of displacement sensor (inside view)

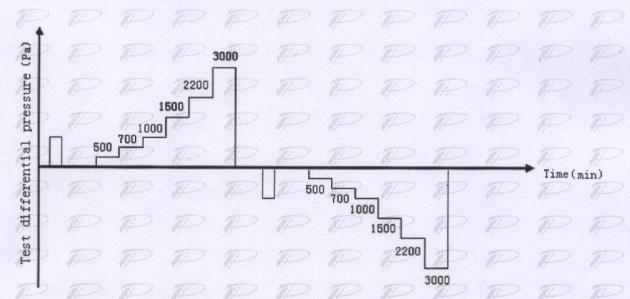


Figure 2 the increasing pressure sequence of deflection test

第二

Deflection Test Results:

The length of the deformation bar: L=1950mm

Pressu	re(Pa)	The state of the s	The second secon		Deflection (mm)	The ratio between span and deflection	
		A	В	C	B-(A+C)/2	L/[B-(A+C)/2]	
	500	0.95	3.45	1.86	2.05	951,21	
	700 %	1.45	4.76	2.51	2.78	701.43	
Positive Pressure	1000	2.22	6.67	3.39	3.87	503.87	
riessure	1500	3.40	9.71	4.73	5.65	345.13	
	2200	4.74	13.65	6.56	8.00	243.75	
	3000		<u>E</u>	F2. F	中心		
P	500	1.09	3.59	2.06	2.02	965.34	
	700	1.39	4.96	3.05	2.74	711.67	
Negative Pressure	1000	1.85	7.17	4.66	3.92	497.44	
Tressure	1500	2.55	10.55	6.81	5.87	332.19	
	2200	3.44	15.01	9.40	8.59	227.00	
	3000	0_10	#	#2_#			
70/	27 2 2	0 00	70	10/2 10/	200	80 80 3	

Method 2. Operating force test

Reference:

AS 2047-1999 Windows in buildings-Selection and installation

AS 4420.3 -1996 Windows - Methods of test

Method 3: Operating force test

Test procedure: According to AS 4420.3-1996, the specimen should be put into the test chamber. The window lock should be released without opening the window. A static force should be exerted without impact on the handle or control device in the opening direction and it is measured by dynamometer, which is initial operating force. Another force to keep the window moving is sustaining force. The operating force test should see Figure 3

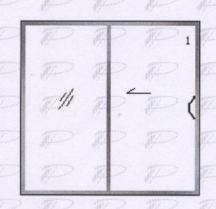


Figure 3 the force application figure of operating force test (inside view)

Operating force test results:

	No.	Sash area(m ²)		<i>3</i> /2	Operating Force(N)							
				1) 37	Initial operating force			Sustaining operating force			THE SE	
2	D		2.10	T.	>	24			14			
0		Max		72		7 24	#Z	P	7/14	<i>#</i>	3	

Method 3, Air infiltration test

Reference:

AS 2047-1999 Windows in buildings-Selection and installation

AS 4420.4 -1996 Windows - Methods of test

Method 4: Air infiltration test

Test procedure: According to AS 4420.4-1996, the specimen should be put into the test chamber, increasing (decreasing) the pressure gradually in accordance with Figure 4. The air infiltration capacity at every differential pressure should be measured and carried out a regression calculation. The air infiltration capacities under pressure 75 Pa and 150 Pa are obtained, which are divided by the window area to get the air infiltration capacities per unit area under all differential pressure.

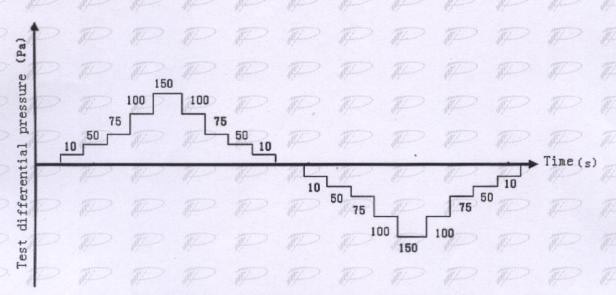


Figure 4 the increasing pressure sequence of air tightness test

	Air tig	thtness test resul	ts	270 270 ET
77 17 17	100 mm		75Pa	150Pa
Air infiltration capacities per	Positive pressure	L/(m ² ·s)	1.10	1.68
unit area under all differential pressure	Negative pressure	L/(m²·s)	2.66	74.48

Method 4, Water penetration resistance test Reference:

AS 2047—1999 Windows in buildings-Selection and installation AS 4420.5—1996 Windows —Methods of test

Method 5: Water penetration resistance test

Test procedure: According to AS 4420.5-1996, the specimen should be put into the test chamber. Spray water on the chamber's surface, and the working water jet capacity is maintained about 0.05L/m²·s. Firstly, spraying water for 5 minutes of zero differential pressure, and then spray water e for 15 minutes when the test pressure application until a serious leakage on the inner surface.

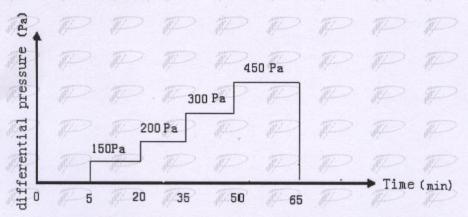


Figure 5 the increasing pressure sequence of water tightness test

	Water tightness test results	#	1	11 m	17/
Test differential pressure(Pa)	150	P	200	P	#Z
Leakage	No leakage		iter overfl indow int		#

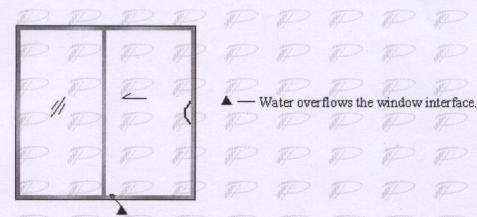


Figure 6 Leakage location

Method 5, Ultimate strength test

Reference:

AS 2047-1999 Windows in buildings-Selection and installation

AS 4420.6-1996 Windows - Methods of test

Method 6: Ultimate strength test

Test procedure: According to AS 4420.6-1996, the specimen should be put into the test chamber. First a preload is used and then the pressure is increased (decreased) gradually and keep various pressure for 10s until the window is damaged or seriously deformed.

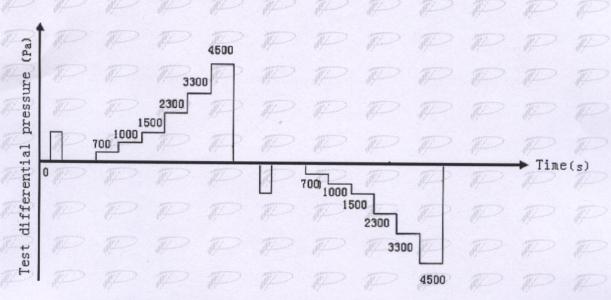


Figure 7 the increasing pressure sequence of breaking strength test

Breaking strength test results:

	Breaking strength test resu	ılts	
Pres	Sample		
Positive pressure	2300 Pa	No damage	
Negative pressure	-2300 Pa	No damage	

6. Appendix 1:

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	ndows Applied designed wind pressure(Pa)			Water tightness test differential pressure(Pa)			Breaking strength test differential pressure(Pa)		
N			500			150	12	70	00
	12		700	#		150	12	7 10	00
N	13 /		1000	海 >	#P	150	<i>i</i>	17 15	00
N	14		1500		#Z	200	7	23	00
	15		2200			300		33	00
	16		3000		#2	450	W.	45	00
- 1	- 1		F	ge-	81/-	R.	P/	H-	1
						20	#		
			P				1		

