



Quality Accuracy Assurance

Fenestration Testing Laboratory, Inc.

1677 West 31st Place Hialeah, FL 33012 Phone: 305/819-7877 Fax 305/819-7998

Lab. Number 2354
June 30, 1999
Report Number 6
File Number 99-102
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OFFICIAL TEST REPORT

MANUFACTURER:	Kinco Limited	DESIGNATION:	SGD-C50 (180 x 96)
ADDRESS:	P.O. Box 6398 Jacksonville, Florida 32236	SPECIFICATIONS:	AAMA/NWWDA 101/I.S.2-97

DESCRIPTION OF UNIT

Model Designation: Mark 4/5 XHP; Aluminum Sliding Glass Door.

Overall Size: 15' 0" (180") by 8' 0" (96") high by 5.360" deep.

Configuration: XXX

No. & Size of Panels: Three extruded aluminum panels, size of each from the left, 5' 1 9/16" (61 9/16") by 7' 11" (95") high; 5' 2 1/4" (62 1/4") by 7' 11" (95") high; 5' 1 11/16" (61 11/16") by 7' 11" (95") high.

MATERIAL CHARACTERISTICS

Frame Construction: Test unit has an equal leg type frame, butt joints and a white coated finish. Aluminum alloy is 6063-T6. Frame corners were not fastened with screws. Frame sill has a mill finish and a 2 1/2" overall interior sill flange. Size of frame members are as follows: frame head 1.375" by 5.562"; frame sill 0.687" by 5.773" by 2.500"; frame jambs 1.000" by 5.360". Frame members are solid extrusions with a typical wall thickness of 0.062".

Panel Construction: Panels have butt joints and a white coated finish. Aluminum alloy is 6063-T6. Panel corners at top were fastened with one No. 10 by 5/8" pan head sheet metal screw. Panel corners at bottom were fastened with one 12-20 by 3/8" truss head machine screw. Size of stiles and rails are as follows: jamb/lock stile 1.750" by 1.000"; top rails 1.250" by 1.500" by 0.875"; bottom rails (solid extrusions) 0.875" by 2.500" by 0.078" wall thickness; interlock stiles 1.405" by 2.438" by 1.000"; right panel interlock (butt) stile 1.485" by 2.718" by 1.000". Panel members are hollow extrusions, except where indicated. Panel extrusions have a typical wall thickness of 0.062", except where noted.

Glazing:

Material: 3/16" tempered glass.

Method: Panels are channel glazed with 1/2" glazing penetration using a flexible vinyl glazing channel.

Daylight Opening: Clear opening of each panel from the left, 57 3/16" by 91 1/4" high; 57 5/16" by 91 1/4" high; 57 3/16" by 91 1/4" high.

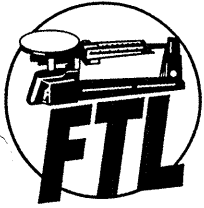
Weatherstripping:

Quantity	Description	Location
Double row	pile with integral plastic fin, Ultrafab	at each frame jamb, right panel interlock (butt) stile, top and bottom rails
Single row	pile with integral plastic fin, Ultrafab	at interlock stiles
Four	1 1/2" long strip of pile with integral plastic fin, Amesbury	at top of each interlock stile at the weatherstrip groove

Hardware:

Quantity	Description	Location
Two	flush mount metallic hook lock, Delta Ind.	one at each panel lock stiles, 42" from bottom
Two	metallic keeper	one at each frame jamb, 40 3/8" from bottom
Two	rubber bumper	one at each frame jamb, 37 1/4" from bottom

Handwritten signature and date: M. Alcott 5/16/99



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MATERIAL CHARACTERISTICS

Hardware:

Quantity	Description	Location
Six	adjustable steel wheels in steel housing	one at each end of each panel bottom rail
Six	3/4" by 1 3/4" long plastic guides	one at each panel top rail, 1 7/8" from each end, fastened with one No. 8 by 1/2" pan head sheet metal screw

Weepholes:

Quantity	Description	Location
Six	1 1/2" long weep notch	one at each end of each panel and screen track

Reinforcement: Two 3/8" by 1 1/4" by 91 1/4" long steel bars inside each interlock stile and one of same inside the right panel interlock (butt) stile.

Sealants: Frame corners, panel corner seams and installation screws in frame sill and frame jambs were sealed with a white colored sealant, Schnee Morehead 5504.

Pads: None

Screen: Water resistance test performed with and without fiberglass mesh screen installed. Size of screen, 48 3/4" by 95" high.

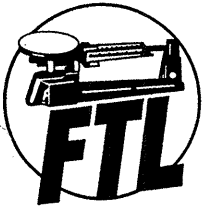
Unit Installation: Test unit installed in a 2 x 12 wood test buck using a 2 x 6 pressure treated buck strip in frame head, frame sill and frame jambs. Frame installed with a double row of No. 10 by 1" pan head sheet metal screws in frame head, frame sill and frame jambs. Location of installation screws are as follows: frame sill and frame head from the left, 6 1/4", 30 3/8", 55 1/8", 66 7/8", 90 1/8", 113 1/4", 125 5/8", 149 5/8" and 173 1/8"; frame jambs from the bottom, 5 1/2", 36 1/4" and 91 5/8".

Product markings: None

OFFICIAL TEST RESULTS

Paragraph Number	Title of Test	Measured	Allowed
2.1.2	Air Infiltration Test: (ASTM E283-96) at 1.57 psf	0.29 cfm/sq.ft. (1.62 cmh)	Passed 0.3 (1.67) maximum
<i>Note:</i>	The tested specimen meets or exceeds the performance levels specified in specification referenced.		
2.1.3	Water Resistance Test: (ASTM E547-96/E331-96) with and without screen, no leakage at	9.00 psf (431 pa)	Passed 4.50 (215) minimum
<i>Note:</i>	Water Resistance Test: (ASTM E547-96/E331-96) With a 3" high overall interior sill flange, with and without screen, no leakage at 12.00 psf (575 pa)		
2.1.4.2	Uniform Structural Load Test: (ASTM E330-96) Positive Load	75.0 psf (3591 pa)	Passed 45.0 (2155) minimum
		Deflection	Permanent Set
	Frame head	0.148" (3.76 mm)	0.026" (0.66 mm)
	Frame jamb	0.194" (4.93 mm)	0.029" (0.74 mm)
	Right set of interlock stiles	1.699" (43.21 mm)	0.087" (2.21 mm) 0.380 (9.66) maximum
	Left set of interlock stiles	1.367" (34.76 mm)	0.071" (1.81 mm) 0.380 (9.66) maximum

Handwritten signature and date:
 7/16/99



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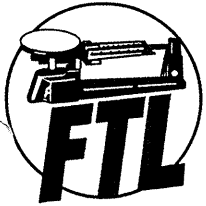
OFFICIAL TEST RESULTS

Paragraph Number	Title of Test	Measured	Allowed
2.1.4.2	Uniform Structural Load Test: (ASTM E330-96) Negative Load	75.0 psf (3591 pa)	Passed 45.0 (2155) minimum
		Deflection	Permanent Set
	Frame head	0.150" (3.81 mm)	0.036" (0.92 mm)
	Frame jamb	0.197" (5.01 mm)	0.030" (0.76 mm)
	Right set of interlock stiles	1.710" (43.49 mm)	0.090" (2.29 mm) 0.380 (9.66) maximum
	Left set of interlock stiles	1.380" (35.09 mm)	0.074" (1.88 mm) 0.380 (9.66) maximum
2.1.8	Forced Entry Resistance Test AAMA 1303.5-1976, Paragraph 3.1.1 Test A through 3.1.5 Test G	No entry	Passed None Allowed
2.2.19.5.1	Break Away Force: Opening Motion Force: Closing Motion Force:	20 pounds (89 n) 16 pounds (71 n) 14 pounds (62 n)	Passed 30 (133) maximum 20 (89) maximum 20 (89) maximum
2.2.19.5.2	Deglazing Test: (ASTM E987-88) No disengagement at: Vertical Stiles Horizontal Rails Percent Deglazement	70 pounds (311) 50 pounds (222) 5 percent	Passed 70 (311) minimum 50 (222) minimum 99 maximum

SECTION 4, OPTIONAL PERFORMANCE CLASS:

4.3	Water Resistance Test: (ASTM E547-96/E331-96) with and without screen, no leakage at	9.00 psf (431 pa)	Passed 5.25 (251) minimum
Note:	Water Resistance Test: (ASTM E547-96/E331-96) With a 3" high overall interior sill flange, with and without screen, no leakage at	12.00 psf (575 pa)	Passed
4.4.2.	Uniform Structural Load Test: (ASTM E330-96) Positive Load	75.0 psf (3591 pa)	Passed 52.5 (2514) minimum
	Frame head	0.148" (3.76 mm)	0.026" (0.66 mm)
	Frame jamb	0.194" (4.93 mm)	0.029" (0.74 mm)
	Right set of interlock stiles	1.699" (43.21 mm)	0.087" (2.21 mm) 0.380 (9.66) maximum
	Left set of interlock stiles	1.367" (34.76 mm)	0.071" (1.81 mm) 0.380 (9.66) maximum
4.4.2.	Uniform Structural Load Test: (ASTM E330-96) Negative Load	75.0 psf (3591 pa)	Passed 52.5 (2514) minimum
	Frame head	0.150" (3.81 mm)	0.036" (0.92 mm)
	Frame jamb	0.197" (5.01 mm)	0.030" (0.76 mm)
	Right set of interlock stiles	1.710" (43.49 mm)	0.090" (2.29 mm) 0.380 (9.66) maximum
	Left set of interlock stiles	1.380" (35.09 mm)	0.074" (1.88 mm) 0.380 (9.66) maximum

John A. [Signature]
 7/16/99



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continued:

Note: At conclusion of above tests, there was no apparent damage to unit, glass or fasteners.

Test Began - June 11, 1999
Test Completed - June 28, 1999
Test Expires - June 28, 2003

Remarks: This test report does not constitute certification of this product, but only that the above test results were obtained using the designated test methods and they indicate compliance with the performance requirements (paragraph as listed) of the above referenced specifications. As per manufacturer, unit complies with section 3, material and component requirements.

Detailed assembly drawings showing wall thickness of all members, corner construction and hardware application are on file and have been compared to the sample submitted. A test sample will be retained at the test laboratory. A copy of this report has been forwarded to the validator.

Note: Test specimens were covered with a 1.5 mil plastic sheeting to seal from air leakage when load tests were performed, however this had no effect on the above tests results.

Witnessed by:
Mr. Gilbert Diamond, P. E.
Mr. Jay Wyrick
Mr. Dan Duet

FENESTRATION TESTING LABORATORY, INC.

Manny Sanchez
President

Laboratory Technicians:
Larry Zavala
Gilbert Gonzalez

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Handwritten signature: Sergio Alvarez
7/6/99

ASSOCIATED LABORATORIES, INC.

Consultants and Technologists / Quality Control Engineers / Consumer Certification Programs
1323 Wall Street, P.O. Box 152837, Dallas, Texas 75315 • (214) 565-0593

May 18, 2001

Kinco, Ltd.
P.O. Box 6429
Jacksonville, FL 32236-6429

Attn: Jay Wyrick

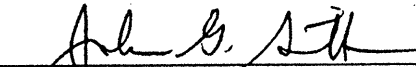
Dear Jay:

Per your written request dated 4-9-01, you are hereby granted a waiver of retest for your Series Mark V XHP dual glazed sliding glass door.

This waiver of retest approval is based on the certification performance testing of your Series Mark IV XHP single glazed sliding glass door (Fenestration Testing Laboratory, Inc. report number 2354) and the calculations to support the request submitted by Dr. Humayoun Farooq, P.E.

Sincerely,

ASSOCIATED LABORATORIES, INC.



John G. Smith, President

JGS:td

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