



Quality Accuracy Assurance

Fenestration Testing Laboratory, Inc.

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

Cert. No. 99-0630.01
Auth. No. FTL 99067
Lab. Number 2416
September 9, 1999
Report Number 1
File Number 99-231
Page 1 of 4
L-3461

OFFICIAL TEST REPORT

| | | | |
|----------------------|---|------------------------|----------------------------|
| MANUFACTURER: | Plastic Components, Inc. | SPECIFICATIONS: | Metro Dade County |
| ADDRESS: | 9051 N. W. 97 th Terrace Miami, Florida 33178 | | Protocol PA 201, 202 & 203 |

DESCRIPTION OF UNIT

Model Designation: Exterior Wall System.
Overall Size: 4' 0" (48") by 8' 0" (96") high by 4.878" deep overall.

MATERIAL CHARACTERISTICS

Wall and Framing Construction: Frames were constructed from 2 x 4 #2 Southern Yellow Pine wood. Each frame consists of four 2 x 4 x 92 7/8" long wood studs installed vertically on 15 1/2" centers and six 2 x 4 wood studs installed horizontally. Location of horizontal studs as viewed from the interior are as follows: at left side, 28 1/2" from bottom and 21 1/2" from top; center, 11 1/2" from bottom and 11" from top; right side, 28 1/2" from bottom and 21 1/2" from top. Wood frame corners were fastened with two 3" long drywall screws. Horizontal and center vertical studs were fastened to frame members with two of same. Each frame sheathed with one 48" x 96" x 5/8" sheet of CD plywood. The plywood substrate was fastened to frame with 1 3/4" roofing nails, location of nails are as follows: 2" from each end and on approximately 15" centers. Two layers of moisture barrier sheathing paper, Jumbo-Tex Approval Number 1025 ICBO, was applied onto the substrate and fastened with 0.420" by 0.365" staples. One 0.770" by 1.660" by 0.070" plastic L-shape casing bead, with no I. D. marks, was installed at perimeter of the substrate and fastened to wood framing with 1 3/4" roofing nails.

Plastic Lath Installation: Four 48" by 30" long by 0.095" thick sections of polyethylene plastic lath, manufactured with 1/4" by 1/4" diamond shaped openings and installed horizontally. The lath was over-lapped 3" and tied with 18 gauge galvanized wire as follows: from the left edge, 3", 13", 19", 29", 35" and 45". The plastic lath was tacked onto the sheathing paper with 0.420" by 0.365" staples and then fastened over the moisture barrier sheathing paper and onto the substrate with 1 3/4" roofing nails, 2" from each end and on 4" centers.

Exterior Stucco: The exterior finish consists of three layers of stucco cement. The first layer is a 1/4" thick Rinker stucco cement. On the seventh day, the second layer of 1/2" thick 3230 psi Rinker stucco cement was applied onto the first layer. On the fourteenth day, a 1/16" finishing layer of stucco was applied onto the second layer. The stucco cement was water cured twice a day for twenty-eight days.

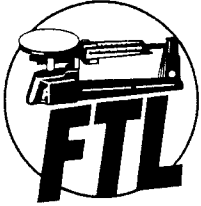
Unit Installation: Test units were installed in 2 x 12 wood test bucks.

Product Markings: None

OFFICIAL TEST RESULTS

| Title of Test | Measured | Remarks |
|---------------------------------------|----------|---------|
| Unit A - 3: | | |
| 1/2 Structural Load Test: | | |
| Positive Load | 67.5 psf | Passed |
| Deflection at vertical frame member | 0.058" | |
| Deflection at horizontal frame member | 0.075" | |
| Deflection at vertical stud | 0.252" | |

Auto P. 9/24/99



Cert. No. 99-0630.01
 Auth. No. FTL 99067
 Lab. Number 2416
 September 9, 1999
 Report Number 1
 File Number 99-231
 Page 2 of 4
 L-3461

OFFICIAL TEST RESULTS

| Title of Test | Measured | Remarks |
|---|-------------------------------|-----------|
| Unit A - 3: (continued) | | |
| ½ Structural Load Test: | | |
| Negative Load | 67.5 psf | Passed |
| Deflection at vertical frame member | 0.084" | |
| Deflection at horizontal frame member | 0.101" | |
| Deflection at vertical stud | 0.497" | |
| Uniform Design Load Test: (ASTM E330) | | |
| Positive Load | 90.0 psf | Passed |
| Deflection at vertical frame member | 0.115" | |
| Deflection at horizontal frame member | 0.150" | |
| Deflection at vertical stud | 0.325" | |
| Uniform Design Load Test: (ASTM E330) | | |
| Negative Load | 90.0 psf | Passed |
| Deflection at vertical frame member | 0.146" | |
| Deflection at horizontal frame member | 0.189" | |
| Deflection at vertical stud | 0.655" | |
| Uniform Structural Load Test: (ASTM E330) | | |
| Positive Load | 135.0 psf | Passed |
| Deflection at vertical frame member | 0.133" | |
| Deflection at horizontal frame member | 0.161" | |
| Deflection at vertical stud | 0.503" | |
| Uniform Structural Load Test: (ASTM E330) | | |
| Negative Load | 135.0 psf | Passed |
| Deflection at vertical frame member | 0.167" | |
| Deflection at horizontal frame member | 0.202" | |
| Deflection at vertical stud | 0.994" | |
| Unit A - 1: | | |
| Large Missile Impact Test: | | |
| Center of panel | 50.4 ft./sec | Passed |
| Lower corner of panel | 50.0 ft./sec | Passed |
| Cyclic Wind Load Test: | | |
| Positive Pressure | | |
| Range | Cycles | Duration |
| (Pmax=90.0 psf) | | (seconds) |
| 0.0 to 0.5 | 600 | 1.0 |
| 0.0 to 0.6 | 70 | 1.0 |
| 0.0 to 1.3 | 1 | 1.1 |
| | Deflection at center of panel | 0.426" |
| | Deflection at vertical member | 0.093" |

Alvin P. Jones
 9/24/99



Cert. No. 99-0630.01
 Auth. No. FTL 99067
 Lab. Number 2416
 September 9, 1999
 Report Number 1
 File Number 99-231
 Page 3 of 4
 L-3461

OFFICIAL TEST RESULTS

| Title of Test | Measured | Remarks |
|---------------------------------|-------------------------------|----------------|
| Unit A - 1: (continued) | | |
| Cyclic Wind Load Test: | | Passed |
| Negative Pressure | | |
| Range Cycles Duration | | |
| (Pmax=90.0 psf) (seconds) | | |
| 0.0 to 0.5 600 1.0 | | |
| 0.0 to 0.6 70 1.0 | Deflection at center of panel | 0.868" |
| 0.0 to 1.3 1 1.0 | Deflection at vertical member | 0.142" |
| Unit A - 2: | | |
| Large Missile Impact Test: | | |
| Center of panel | 50.0 ft./sec | Passed |
| Lower corner of panel | 50.7 ft./sec | Passed |
| Cyclic Wind Load Test: | | Passed |
| Positive Pressure | | |
| Range Cycles Duration | | |
| (Pmax=90.0 psf) (seconds) | | |
| 0.0 to 0.5 600 1.0 | | |
| 0.0 to 0.6 70 1.0 | Deflection at center of panel | 0.515" |
| 0.0 to 1.3 1 1.1 | Deflection at vertical member | 0.075" |
| Cyclic Wind Load Test: | | Passed |
| Negative Pressure | | |
| Range Cycles Duration | | |
| (Pmax=90.0 psf) (seconds) | | |
| 0.0 to 0.5 600 1.0 | | |
| 0.0 to 0.6 70 1.1 | Deflection at center of panel | 0.952" |
| 0.0 to 1.3 1 1.2 | Deflection at vertical member | 0.094" |
| Unit A - 4: | | |
| Large Missile Impact Test: | | |
| Center of panel | 50.2 ft./sec | Passed |
| Lower corner of panel | 50.4 ft./sec | Passed |
| Cyclic Wind Load Test: | | Passed |
| Positive Pressure | | |
| Range Cycles Duration | | |
| (Pmax=90.0 psf) (seconds) | | |
| 0.0 to 0.5 600 1.0 | | |
| 0.0 to 0.6 70 1.0 | Deflection at center of panel | 1.176" |
| 0.0 to 1.3 1 1.1 | Deflection at vertical member | 0.225" |

Alto P. Gonzalez
 9/24/99



Cert. No. 99-0630.01
 Auth. No. FTL 99067
 Lab. Number 2416
 September 9, 1999
 Report Number 1
 File Number 99-231
 Page 4 of 4
 L-3461

OFFICIAL TEST RESULTS

| Title of Test | | | Measured | Remarks |
|-------------------------|--------|-----------|-------------------------------|---------|
| Unit A - 4: (continued) | | | | |
| Cyclic Wind Load Test: | | | | Passed |
| Negative Pressure | | | | |
| Range | Cycles | Duration | | |
| (Pmax=90.0 psf) | | (seconds) | | |
| 0.0 to 0.5 | 600 | 1.0 | | |
| 0.0 to 0.6 | 70 | 1.0 | Deflection at center of panel | 1.619" |
| 0.0 to 1.3 | 1 | 1.2 | Deflection at vertical member | 0.315" |

Note: At conclusion of above tests, there was no apparent damage to the systems.

Test Completed - August 18, 1999

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 tested in accordance with Metro Dade County Protocol PA 201, 202 (loads only) and 203. Testing was conducted as per instructions from Metro Dade County proposal file No. 96-0071-Ultra-Lath, dated February 18, 1999.

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.

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. Large missile impact test was performed with a 72" long 2 x 4 (# 2 SP) lumber, weight of missile was 9 1/2 pounds.

Witnessed by:
 Mr. Aldo P. Gonzalez, P. E.
 Mr. Jeff Sterner
 Mr. John Larson

FENESTRATION TESTING LABORATORY, INC.

Manny Sanchez
 President

Laboratory Technicians:
 Roberto Robleto
 Gilbert Gonzalez

- ✓ 4 - Plastic Components, Inc.
- 1 - Plastic Components (Metro Dade County)

Aldo P. Gonzalez
9/29/99