



**BUILDING AND NEIGHBORHOOD COMPLIANCE DEPARTMENT (BNC)  
BOARD AND CODE ADMINISTRATION DIVISION**

**MIAMI-DADE COUNTY  
PRODUCT CONTROL SECTION**  
11805 SW 26 Street, Room 208  
Miami, Florida 33175-2474  
T (786) 315-2590 F (786) 315-2599

**NOTICE OF ACCEPTANCE (NOA)**

[www.miamidade.gov/building/](http://www.miamidade.gov/building/)

**Ultimate Door of Palm Beach, Inc.  
2800 2<sup>nd</sup> Avenue North  
Lake Worth, FL 33461**

**SCOPE:**

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Section and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami-Dade County) and/or the AHJ (in areas other than Miami-Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

**DESCRIPTION: Series "Ultimate Door" Structural Unclipped Wood Mullion – L.M.I.**

**APPROVAL DOCUMENT:** Drawing No. 529C, titled "Unclipped Mullions", sheets 1 through 4 of 4, dated 10/02/97, with revision B, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren Schaefer, P.E., bearing the Miami-Dade County Product Control Revision Stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

**MISSILE IMPACT RATING: Large and Small Missile Impact Resistant**

**LABELING:** Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

**RENEWAL** of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

**TERMINATION** of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

**ADVERTISEMENT:** The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

**INSPECTION:** A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official. This NOA **revises and renews** NOA # 05-0829.05 and consists of this page 1 and evidence pages E-1 and E-2, as well as approval document mentioned above.

The submitted documentation was reviewed by **Manuel Perez, P.E.**



**NOA No. 11-0310.02**  
**Expiration Date: April 23, 2012**  
**Approval Date: April 07, 2011**  
**Page 1**

**Ultimate Door of Palm Beach, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. Manufacturer's die drawings and sections.
2. Drawing No **529C**, titled "Unclipped Mullions", Sheets 1 through 4 of 4, dated - 10/02/97 with revision B, prepared by W.W. Schaefer Engineering & Consulting, P.A., signed and sealed by Warren Schaefer, P.E.

**B. TESTS**

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94  
2) Uniform Load Static Air Pressure Test, per FBC, TAS 202-94  
3) Water Resistance Test, per FBC, TAS 202-94  
4) Large Missile Impact Test, FBC, TAS 201-94  
5) Cyclic Loading Test, per FBC, TAS 203-94

along with installation diagram of a pair of outswing wood door and a fixed lite (OOX configuration) mullled together, prepared by Hurricane Test Laboratory, Inc., Test Report No. **HTL-0026-0320-97**, dated 03/26/97, signed and sealed by Timothy Marshall, P.E.

*(Submitted under NOA # 01-0124.13)*

**C. CALCULATIONS**

1. Anchor verification calculations and structural analysis, complying with FBC-2007, prepared by W.W. Schaefer Engineering and Consulting P.A., dated 08/09/05 and revised on 03/15/11, signed and sealed by Warren W. Schaefer, P.E.
2. Glazing complies with ASTM E1300-04.

**D. QUALITY ASSURANCE**

1. Miami-Dade Building and Neighborhood Compliance Department (BNC).

**E. MATERIAL CERTIFICATIONS**

1. None.

**F. STATEMENTS**

1. Statement letter of conformance dated 03/15/11, signed and sealed by Warren W. Schaefer, P.E.
2. Statement letter of no financial interest, dated 03/15/11, signed and sealed by Warren W. Schaefer, P.E.
3. Testing agreement letter, dated 03/03/11 between Hurricane Test Laboratory, LLC (HTL) and Ultimate Door of Palm Beach, Inc., issued by HTL and signed by Kristin A. Norville, E.I.T.

  
Manuel Perez, P.E.  
Product Control Examiner  
NOA No. 11-0310.02

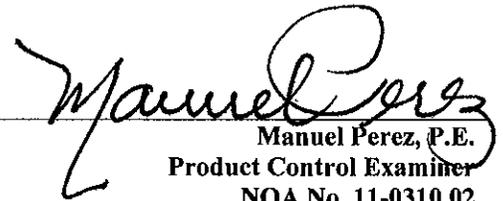
Expiration Date: April 23, 2012  
Approval Date: April 07, 2011

**Ultimate Door of Palm Beach, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**G. OTHERS**

1. Notice of Acceptance No. **05-0829.05**, issued to Ultimate Door of Palm Beach, Inc. for their Series "Ultimate Door" Structural Wood Unclipped Mullion – L.M.I., approved on 03/30/06 and expiring on 04/23/11.
2. One year approval, subjected to successful verification test, the final approval will be issued for the balance of a total of 5 years.

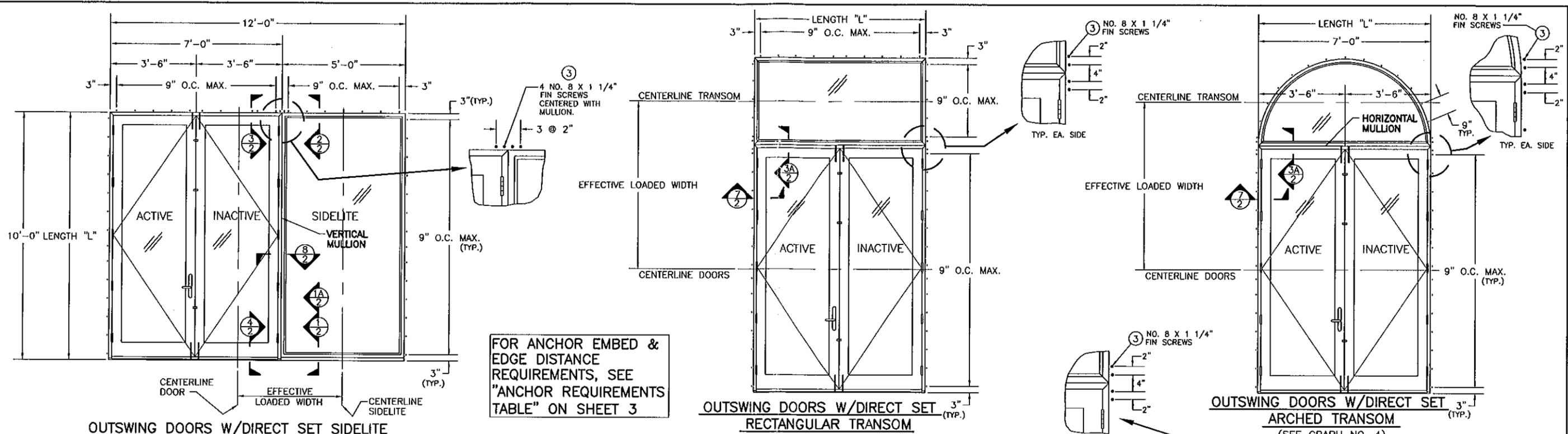


Manuel Perez, P.E.  
Product Control Examiner

NOA No. 11-0310.02

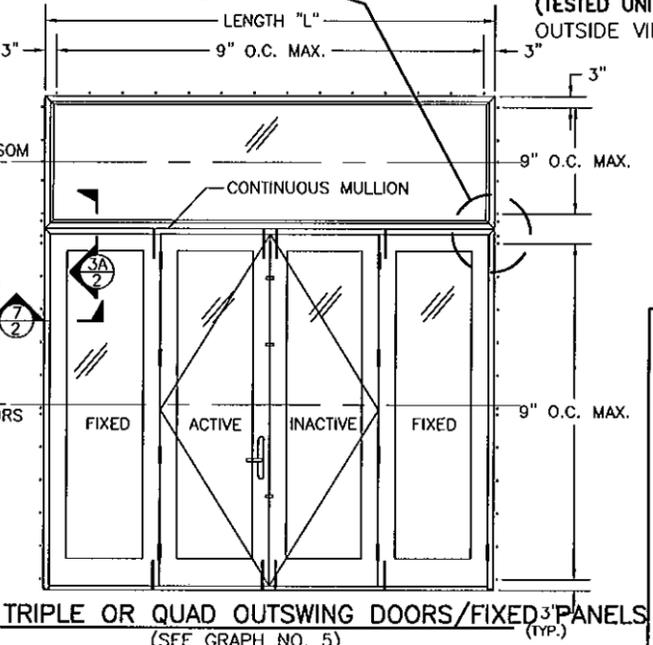
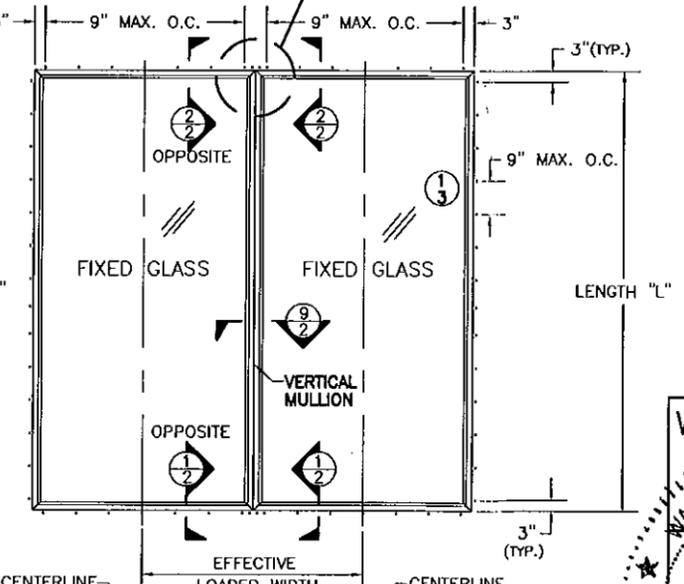
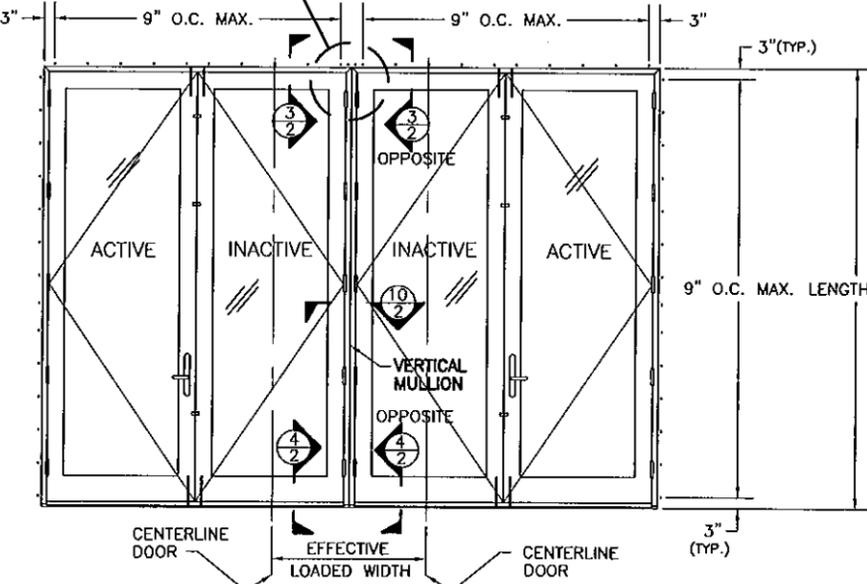
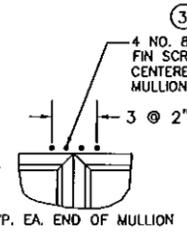
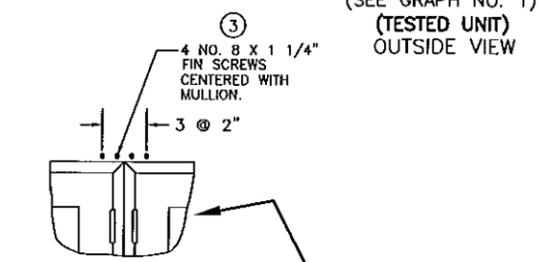
Expiration Date: April 23, 2012

Approval Date: April 07, 2011



FOR ANCHOR EMBED & EDGE DISTANCE REQUIREMENTS, SEE "ANCHOR REQUIREMENTS TABLE" ON SHEET 3

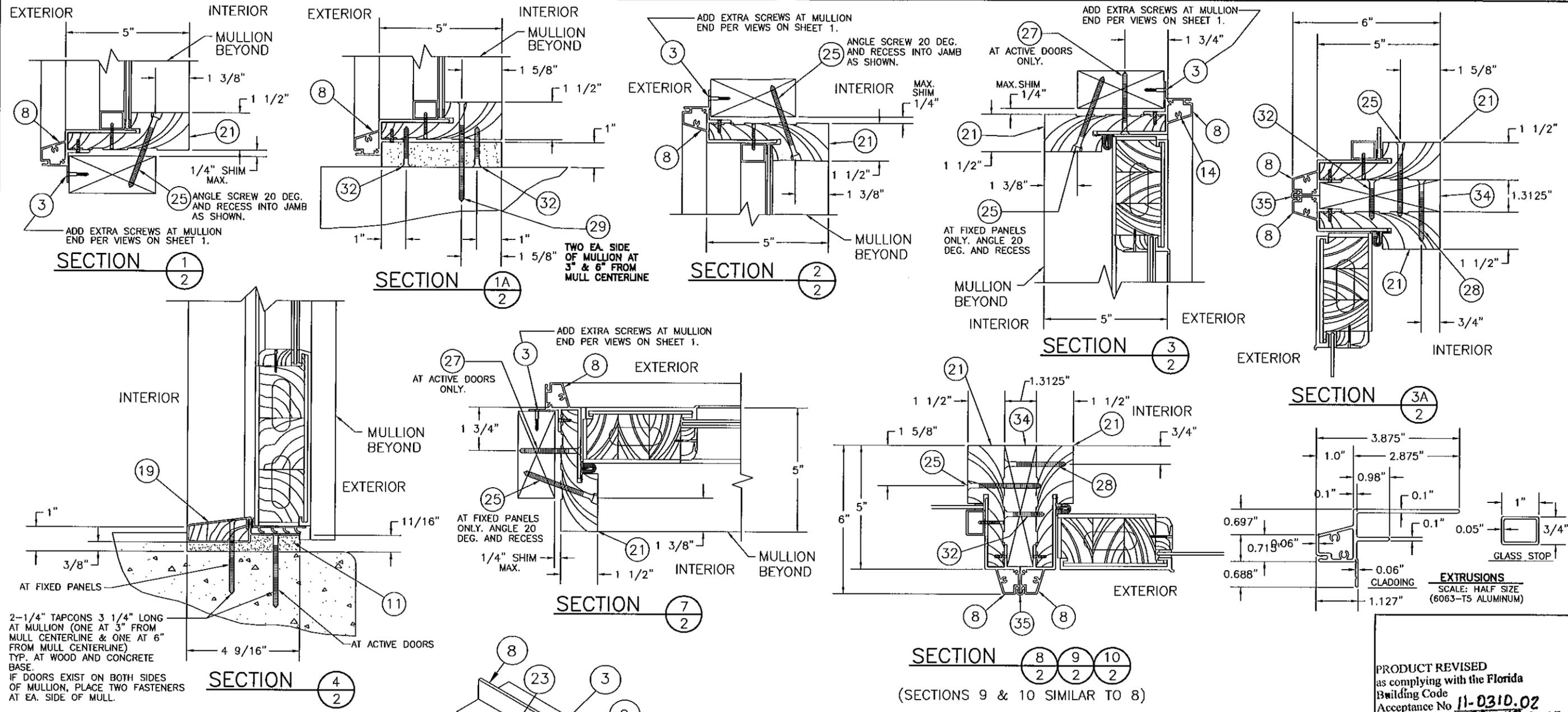
NOTE: FOR ALLOWABLE DESIGN PRESSURE RATING OF DOORS AND DIRECT SETS, SEE THEIR OWN NOTICE OF ACCEPTANCE. FOR ALLOWABLE PRESSURE RATINGS OF MULLIONS, SEE CORRESPONDING GRAPHS ON SHEET 4 OF 4. BOTH SHALL MEET OR EXCEED THE PRESSURE REQUIREMENT OF THE OPENING IN WHICH IT IS BEING INSTALLED.



PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 11-0310.02 Expiration Date APRIL 23, 2012  
By *Manuel Perez*  
Miami/Dade Product Control

W. W. SCHAEFER ENGINEERING CONSULTING, P.A.  
150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-744-3424  
No. 44135  
MAR 15 2011  
STATE OF FLORIDA  
WARREN W. SCHAEFER, P.E.  
LICENSED PROFESSIONAL ENGINEER, P.E. NO. 44135

**ULTIMATE-DOOR**  
OF PALM BEACH, INC. (DADE)  
2800 2ND AVENUE NORTH  
LAKE WORTH, FL 33461  
PHONE: 561-642-2828; FAX: 561-642-9882  
SCALE: 1/4" = 1'-0"  
DRAWN BY: W.W.S.  
DATE: 10/02/97  
TITLE: UNCLIPPED MULLIONS  
REV. NO. DESCRIPTION DATE  
529C B  
DRAWING NO. REV.  
SHEET 1 OF 4

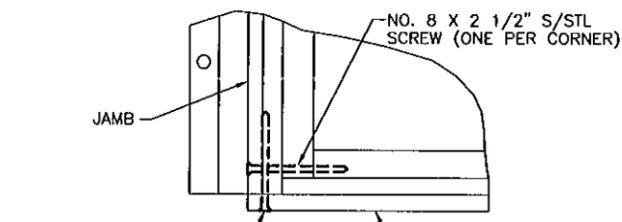


2-1/4" TAPCONS 3 1/4" LONG AT MULLION (ONE AT 3" FROM MULL CENTERLINE & ONE AT 6" FROM MULL CENTERLINE) TYP. AT WOOD AND CONCRETE BASE. IF DOORS EXIST ON BOTH SIDES OF MULLION, PLACE TWO FASTENERS AT EA. SIDE OF MULL.

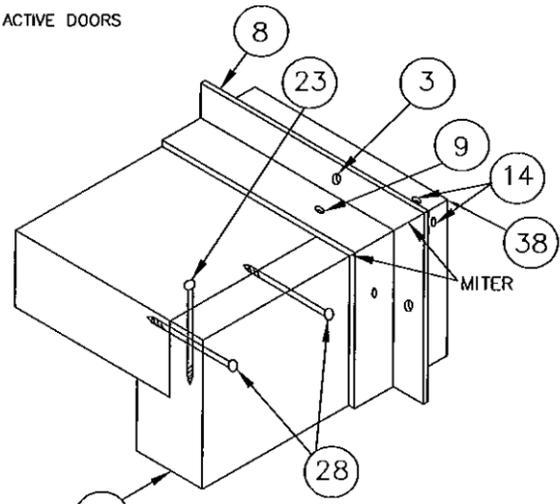
EXTRUSIONS SCALE: HALF SIZE (6063-T5 ALUMINUM)

PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 11-0310.02 Expiration Date APRIL 23, 2012 By *Marcus J. ...* Miami Dade Product Control

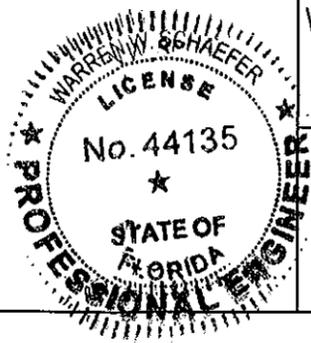
FOR ANCHOR EMBED & EDGE DISTANCE REQUIREMENTS, SEE "ANCHOR REQUIREMENTS TABLE" ON SHEET 3



JAMB TO THRESHOLD CORNER CORNER IS GLUED



JAMB-JAMB CORNER CORNER IS GLUED



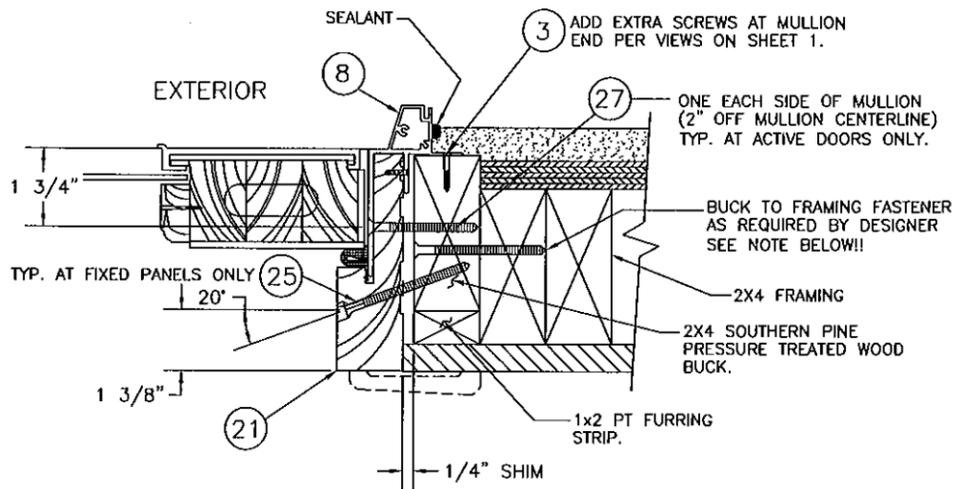
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A. 7480 150TH COURT NORTH PALM BEACH GARDENS, FL 33418 PHONE: 561-744-3424

MAR 15 2011

ULTIMATE DOOR OF PALM BEACH, INC. (DADE) 2800 2ND AVENUE NORTH LAKE WORTH, FL 33461 PHONE: 561-642-2828; FAX: 561-642-9882

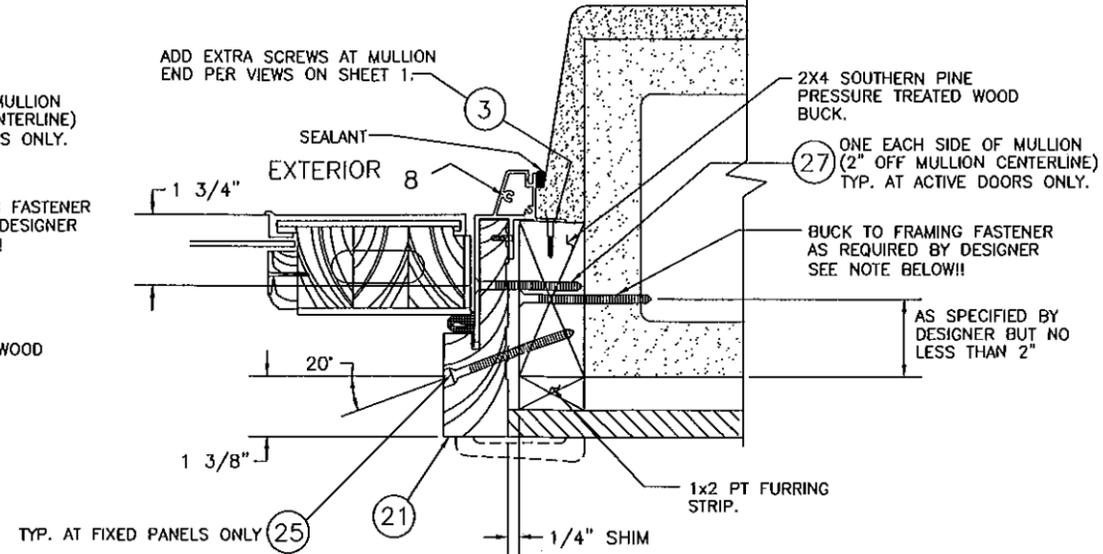
|                           |                  |
|---------------------------|------------------|
| SCALE: 3"=1'-0"           | DRAWN BY: W.W.S. |
| TITLE UNCLIPPED MULLIONS  | DATE: 10/02/97   |
| REV. NO. DESCRIPTION DATE | 529C B           |
|                           | DRAWING NO. REV. |
|                           | SHEET 2 OF 4     |

WARREN W. SCHAEFER, P.E. STRUCTURAL ENGINEER; P.E. NO. 44135



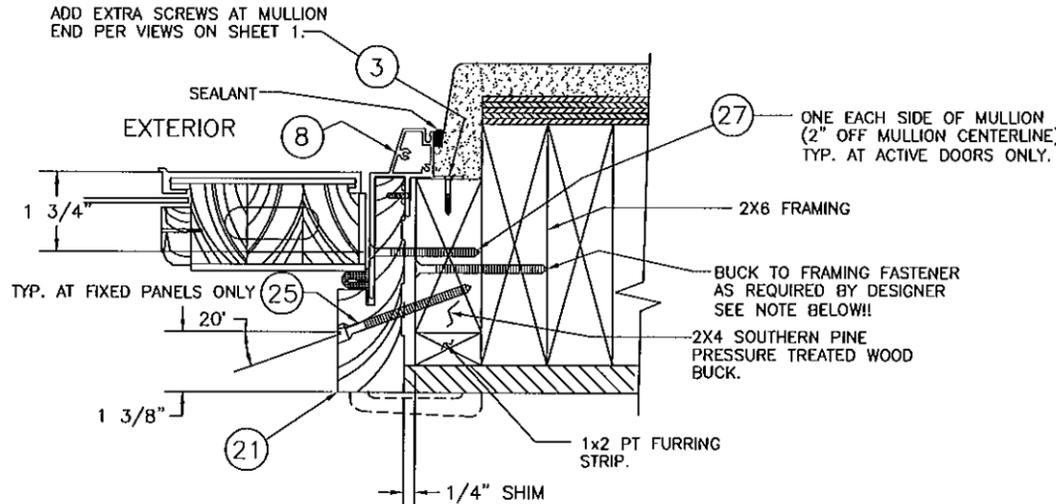
**BUCKING DETAIL  
2X4 FRAMED OPENING**

NOTE: POINT LOADS EXIST AT MULLION ENDS AND AT DOOR LATCH POINTS AND VARY WITH THE SIZE OF THE SYSTEM. THE BUCK FASTENING DESIGNER SHALL CONSIDER THESE LOADS WHEN SPECIFYING BUCK TO OPENING FASTENERS AND THEIR SPACINGS (FASTENER SPACING SHALL NOT EXCEED 16" O.C. REGARDLESS OF SITUATION).



**BUCKING DETAIL  
BLOCK OR CONCRETE FRAMED OPENING**

NOTE: POINT LOADS EXIST AT MULLION ENDS AND AT DOOR LATCH POINTS AND VARY WITH THE SIZE OF THE SYSTEM. THE BUCK FASTENING DESIGNER SHALL CONSIDER THESE LOADS WHEN SPECIFYING BUCK TO OPENING FASTENERS AND THEIR SPACINGS (FASTENER SPACING SHALL NOT EXCEED 16" O.C. REGARDLESS OF SITUATION).



**BUCKING DETAIL  
2X6 FRAMED OPENING**

NOTE: POINT LOADS EXIST AT MULLION ENDS AND AT DOOR LATCH POINTS AND VARY WITH THE SIZE OF THE SYSTEM. THE BUCK FASTENING DESIGNER SHALL CONSIDER THESE LOADS WHEN SPECIFYING BUCK TO OPENING FASTENERS AND THEIR SPACINGS (FASTENER SPACING SHALL NOT EXCEED 16" O.C. REGARDLESS OF SITUATION).

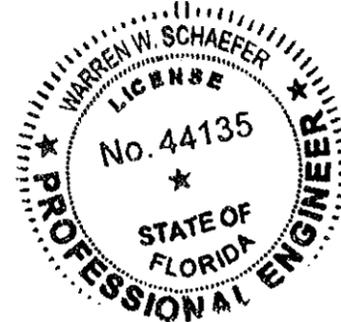
**GENERAL NOTES**

1. THESE MULLION SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH AND MEET THE REQUIREMENTS OF THE FLORIDA BUILDING CODE (FBC) INCLUDING HIGH VELOCITY HURRICANE ZONES (HVHZ).
2. MINIMUM MECHANICAL PROPERTIES SHALL BE IN ACCORDANCE WITH THE ALUMINUM ASSOCIATION HANDBOOK AND NATIONAL WOOD WINDOW AND DOOR MANUFACTURERS ASSOCIATION.
3. DESIGN POSITIVE AND NEGATIVE WIND LOADS FOR OPENINGS MAY NOT EXCEED THOSE LISTED ON THESE DRAWINGS FOR EACH PARTICULAR SYSTEM.
4. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2500 PSI AT 28 DAYS.
5. THE DETAILS AND SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS PROPOSED FOR IMPACT, CYCLIC AND UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH FBC PROTOCOLS TAS 201, 202 AND 203 WITH DESIGN LOADS AS SHOWN IN THE LEGEND AND/OR IN GRAPHS.
6. ALL FASTENERS FOR BUCK TO OPENING CONNECTIONS SHALL BE AS SPECIFIED BY THE DESIGNER OF RECORD BUT MUST CONFORM WITH THE MINIMUM REQUIREMENTS OF THESE DRAWINGS.
6. REFER TO MATERIAL LIST "MTL-1" FOR ALL MATERIAL DESCRIPTIONS.
7. FOR DOOR AND WINDOW REQUIREMENTS, SEE THEIR RESPECTIVE APPROVALS.

**ANCHOR REQUIREMENTS TABLE**

| FRAME SHEAR SCREWS        |                                       |               |                    |
|---------------------------|---------------------------------------|---------------|--------------------|
| OPENING TYPE (SUBSTRATE)  | JAMB & HINGE TO OPENING FASTENER TYPE | MINIMUM EMBED | MINIMUM EDGE DIST. |
| 2X_ WOOD FRAME OR BUCK    | NO. 8 SMS SCREW                       | 1 1/4"        | 3/4"               |
| 2X_ WOOD FRAME OR BUCK    | NO. 12 SMS SCREW                      | 1 1/4"        | 3/4"               |
| MIN. 2500 P.S.I. CONCRETE | 1/4" CONCRETE SCREW                   | 1 3/4"        | 2 1/2"             |
| NAIL FIN SCREWS           |                                       |               |                    |
| 2X_ WOOD FRAME OR BUCK    | NO. 8 S.S. SMS SCREW                  | 1 1/8"        | 1/2"               |

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By *Manuel Perez*  
Miami/Dade Product Control



W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.  
7480 150TH COURT NORTH  
PALM BEACH GARDENS, FL 33418  
PHONE: 561-774-3424

**ULTIMATE-DOOR**  
OF PALM BEACH, INC. (DADE)  
2800 2ND AVENUE NORTH  
LAKE WORTH, FL 33461  
PHONE: 561-642-2828; FAX: 561-642-9882

MAR 15 2011

WARREN W. SCHAEFER, P.E.  
STRUCTURAL ENGINEER; P.E. NO. 44135

SCALE: 3"=1'-0"

TITLE: UNCLIPPED MULLIONS

DRAWN BY: W.W.S.

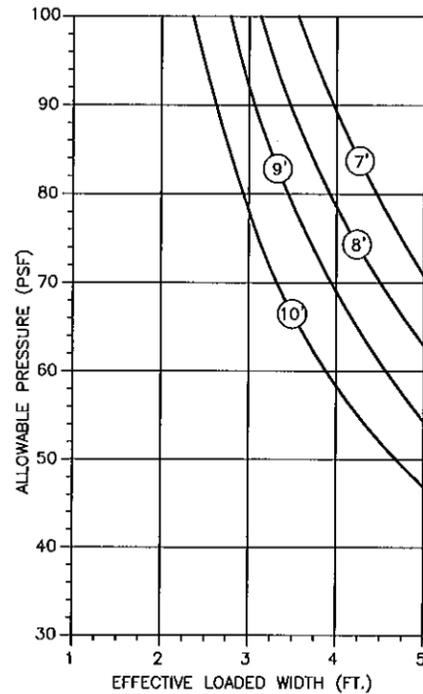
DATE: 10/02/97

| REV. NO. | DESCRIPTION                  | DATE     |
|----------|------------------------------|----------|
| A1       | UPDATE GENERAL NOTES TO 2004 | 08/09/05 |
| B1       | UPDATE TO CURRENT STANDARDS  | 03/15/11 |

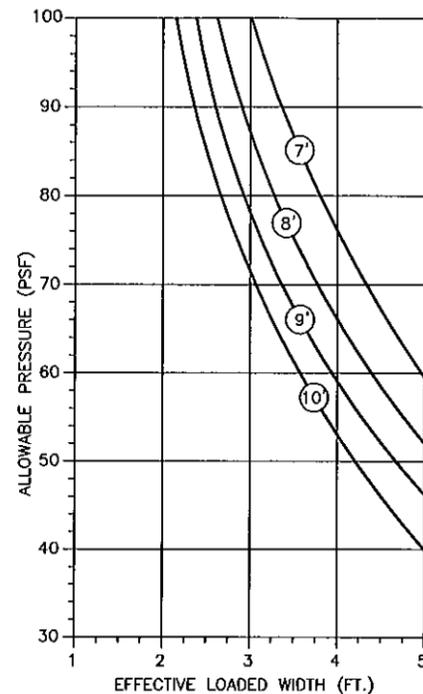
529C B

DRAWING NO. REV.

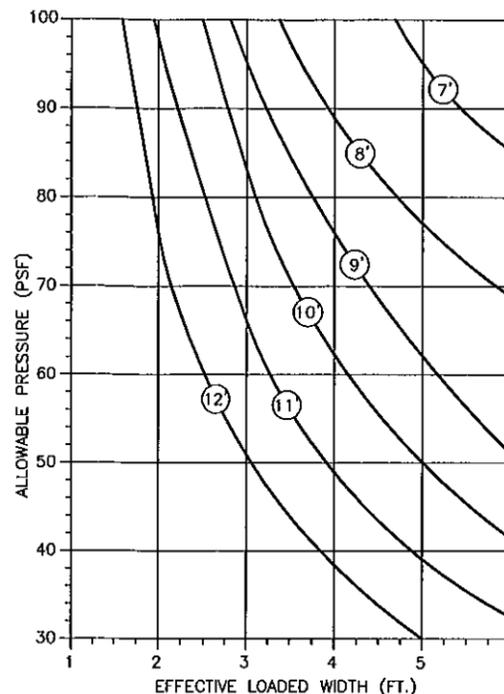
SHEET 3 OF 4



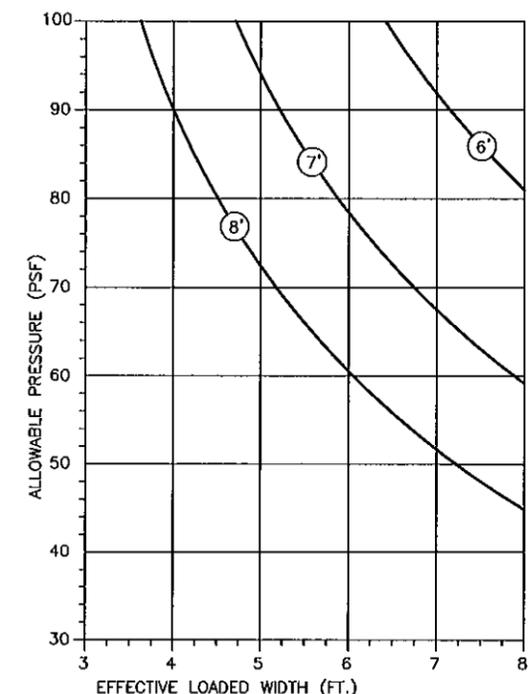
**GRAPH NO. 1**  
**VERTICAL MULLION LENGTH GRAPH**  
 (DOOR-FIXED PANEL OR  
 (DOOR-SIDELITE COMBINATION))



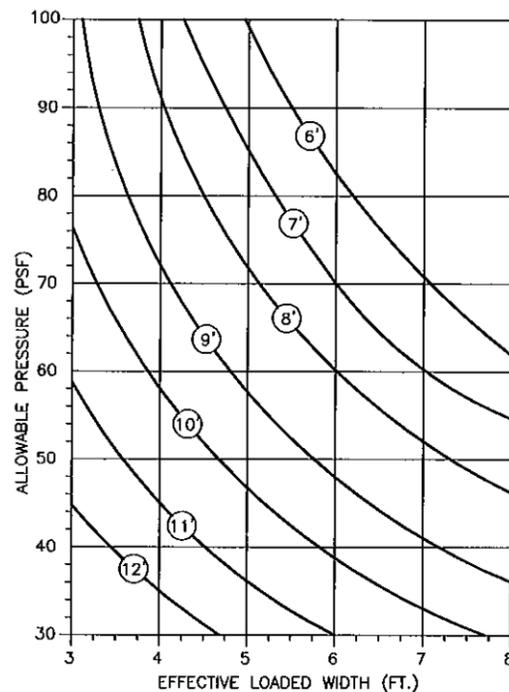
**GRAPH NO. 2**  
**VERTICAL MULLION LENGTH GRAPH**  
 (DOOR-DOOR COMBINATION)



**GRAPH NO. 3**  
**VERTICAL MULLION LENGTH GRAPH**  
 (FIXED PANEL OR SIDELITE EACH SIDE)



**GRAPH NO. 4**  
**HORIZONTAL MULLION LENGTH GRAPH**  
 (SINGLE DOORS, DOUBLE DOORS, OR  
 SINGLE DIRECT SET WITH TRANSOM)



**GRAPH NO. 5**  
**HORIZONTAL MULLION LENGTH GRAPH**  
 (TRIPLE OR QUAD DOORS/FIXED PANELS  
 WITH TRANSOM)

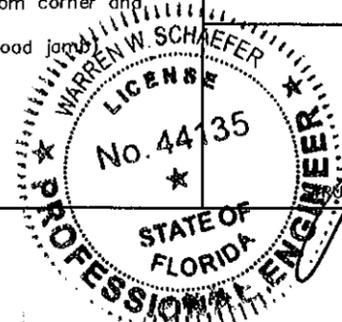
**Material List MTL-1**

1. 4" x 4 1/2" Hager nickel cad plated brass hinge with stainless steel ball bearings, pin and cap (part no. RCBB 1191)
2. #10 x 1 1/2" stainless steel screws (hinge to panel).
3. #8 x 1 1/4" s/stl SMS or wood screw (screw nail fin to bucking) @ 3" from corners and 9" o.c.
4. #6 x 1 1/2" trim screw at glass stop (2" from ends- spaced 9 1/2" apart).
5. 458-B26D-12" Hager flush bolt w/custom 3/8" stainless steel thru bolt.
6. SCHLEGEL multi point lock, manufactured by Fulex Co. (3-point).
7. 4 1/2" aluminum stiles & 7 1/2" bottom rail .090 extrusion, 6063 alloy, T5 Tempered.
8. Clad Frame aluminum .10 extrusion, 6063 alloy, T5 Tempered.
9. #8 x 5/8" hex tek screws secures clad frame to wood (spaced 12" apart).
10. #8 x 2 1/2" SMS or wood screw (frame to panel attachment for fixed panel placed within 4" of corners and spaced 9" apart)
11. Sub-threshold (seals end grain of frame).
12. Pak-Lite Glazing Tape 1/16" x 9/16" (2) sided adhesive (closed cell urethane).
13. SCHLEGEL Q-Lon 605 door seals #A-6F16A.
14. #6 x 2" zinc plated Phillips flat head screws (fastens clad jamb corners).
15. #48-28-3770-1 KoroSeal sweeps.
16. Hardwood 3/4" x 2" x 5" tenons.
17. #12 x 1" stainless steel screws (hinge to frame).
18. Nebula Safety-Plus Laminated Glass (overall thickness 3/8")  
 Clear 1/8" annealed  
 Adhesive innerliner /1/16"  
 PET /010  
 Adhesive innerliner /1/16"  
 Clear 1/8" annealed
19. 4 9/16" aluminum bumper threshold with a continuous polymeric bulb gasket.
20. Stile and rail material, stage block core with 1/8" face veneers (clear pine).
21. Finger jointed pine, rabbeted jambs.
22. Concrete screw CR-10 (1/4" x 3 1/4") Code No. TF3132C @ 6" from corner and not to exceed 24" o.c. (option to use 1/4" x 3 1/4" tapcons).
23. #10 x 3 1/2" part #C312D coarse thread (fastens wood head to wood jamb).
24. 3/8" x 6" galvanized lag bolt with 1/4" washer.  
 A - through head into panel.  
 B - through threshold into panel.
25. #8 square slot finish screw @ 3" from each end not to exceed 12" c/c around. Angle 20 deg. when attaching to 2x4 buck.
26. #10 TEK, 9" o.c.
27. #12 Stainless steel screw used for the following:  
 a) One placed on each side of mullion end 2" off mullion centerline.
28. #8 Galvanized deck screw, phillips head, coarse thread (fastens wood to jamb to wood head and 2" x 6" wood mull to wood jamb or wood head). Place within 6" of ends and space at 12" o.c.
29. 1/4" Long Tapcon (non corrosive) placed 3" from each corner and 12" o.c.
30. 3/4" x 1" Glass stop tubular aluminum .050 extrusion 6063 alloy T-5 Tempered.
31. 3/4" x 1 1/8" +/- wood glass stop.
32. #8 x 1 5/8" galv. deck screw (fastens wood mull to wood jamb or wood head & sub-threshold to sill jamb).
33. 4 9/16" - 5" x 1" sub-threshold fastened to sill.
34. 4 9/16" x 1 1/4" pine mull.
35. Aluminum mull clip.
36. #7 X 2 1/4" Square drive trim screw @ 11" o.c. and 1 1/2" from ends.
37. Wood astragal 1 1/2" x 1 1/8". Place within 6" of ends and space at 12" o.c.
38. Dow Corning 795 Silicon Sealant.
39. 1" x 2 1/4" x 1/16" s/stl strike plate attached to door panel top & bottom rails with two No. 6 x 1 1/2" s/stl SMS screws.

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 as complying with the Florida  
 Building Code  
 Acceptance No. 11-0310.02  
 Expiration Date APRIL 23, 2012  
 By *Manuel Perez*  
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WARREN W. SCHAEFER, P.E.  
 STRUCTURAL ENGINEER; P.E. NO. 44135

|                          |             |                  |                  |
|--------------------------|-------------|------------------|------------------|
| SCALE: 3"=1'-0"          |             | DRAWN BY: W.W.S. |                  |
| TITLE UNCLIPPED MULLIONS |             | DATE: 10/02/97   |                  |
| REV. NO.                 | DESCRIPTION | DATE             |                  |
|                          |             |                  | 529C B           |
|                          |             |                  | DRAWING NO. REV. |
|                          |             |                  | SHEET 4 OF 4     |