

16 # 30580

## FIELD DENSITY WORKSHEET

CLIENT CASON Builders DATE 12-6-12

PROJECT NAME Payne Res. 255 SW Marine Glen PROJECT NO. \_\_\_\_\_

EARTH CONTRACTOR Ft. White PERMIT NO. \_\_\_\_\_

TESTED BY S.L.

COMPACTION REQUIREMENT (%) 95  Standard Proctor

Modified Proctor

TOTAL ON-SITE TIME \_\_\_\_\_ FIELD CONTACT \_\_\_\_\_

MILES FROM OFFICE \_\_\_\_\_

Limerock  Subgrade  Pipe Backfill  Building Pad  Building Footing  Other \_\_\_\_\_

TEST LOCATION	LAB PROCTOR		TEST DEPTH	PROBE DEPTH	% MOIST.	WET DENSITY (PCF)	DRY DENSITY (PCF)	% COMP.
	DENS.	OMC						
	106.1	110.0	F/G	12"				
5' NE of SW corner of Pad					5.8	110.5	104.4	98.4
5' SW of NE corner of Pad					6.3	111.6	105.0	99.0
5' NW of SE corner of Pad					6.0	111.0	104.7	98.7
5' SE of NW corner of Pad					5.9	110.7	104.5	98.5

REMARKS \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

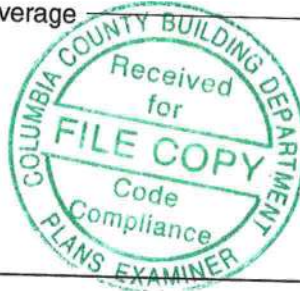
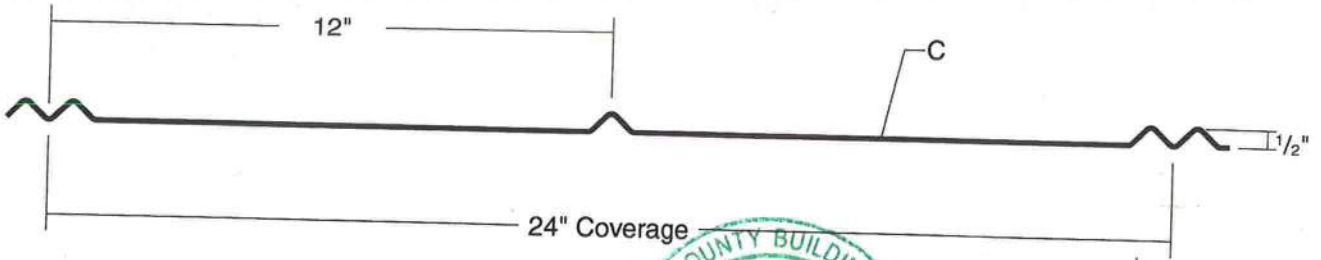
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\_\_\_\_\_

- \* Density failed to meet minimum project requirement
- \*\* Retest indicates minimum density requirement was obtained.
- ( ) Client is aware of unsatisfactory test results.



PANEL PROFILE



SLOPE

The minimum recommended slope for any 5V-Crimp roofing panel is 3:12.

SUBSTRATE

The recommended substrate is 5/8" plywood with a 30 pound felt moisture barrier. To avoid panel distortion, use a properly aligned and uniform substructure. **Please note that 5V-Crimp panels are not recommended for use over open framing.**

COVERAGE

5V-Crimp is available in 24" width with a 1/2" rib height.

LENGTH

Lengths under 5'-0" are available with some cutting restrictions. Maximum recommended panel length is 45'-0". Longer panels require additional consideration in packaging, shipping, and erection. Please consult your Metal Sales branch for recommendations (see PGI-2 and 3 for locations).

AVAILABILITY

26 Gauge

APPLICATION

Architectural and Residential panel.

PERFORMANCE TEST

UL 580, UL 790, UL 263, UL 2218, Miami-Dade County

FASTENING SYSTEM

Direct fastened (exposed).

FASTENERS

The fastener selection guide should be consulted for choosing proper fasteners for specific applications. Quantity and type of fastener must meet necessary loading and code requirements (see PGI-12-14).

MATERIALS

Steel grade 50, per ASTM A-792

FINISH

- ▶ \*Acrylic Coated Galvalume® (ACG) / ASTM A-792 - AZ55
- ▶ Prepainted Galvalume / ASTM A-792 - AZ50
- ▶ \*\*Fluorocarbon (PVDF)

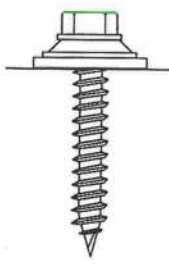
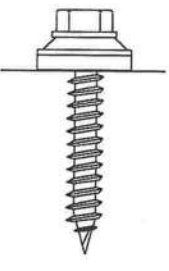
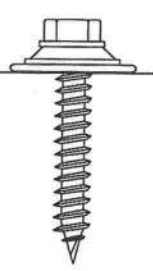
\* Differential appearance of Acrylic Coated Galvalume roofing materials is not a cause for rejection.  
 \*\* Meets both Kynar 500 and Hylar 5000 specifications.

# 5V-CRIMP DESIGN / INSTALLATION CONSIDERATIONS

## FASTENER INSTALLATION TECHNIQUE

**Recommended Tool Type** - Use depth locating nose or adjustable clutch on screw gun to prevent overdrilling and strip out. **Do not use impact tools or runners.**

**Seating the washer** - Apply sufficient torque to seat the washer - do not overdrive the fastener.

	<b>CORRECT</b> Sealing material slightly visible at edge of metal washer. Assembly is watertight.	<b>TOO LOOSE</b> Sealing material is not visible; not enough compression to seal properly.	<b>TOO TIGHT</b> Metal washer deformed; sealing material pressed beyond washer edge.
WOODSCREW			

**To prevent wobbling** - Make sure fastener head is completely engaged in the socket. If the head does not go all the way in the socket - tap the magnet deeper into the socket to allow full head engagement. Metal chips will build up from drilling and should be removed from time to time.

**Protect drill point** - Push only hard enough on the screw gun to engage clutch. This prevents excess friction and burn out of the drill point. Correct pressure will allow screw to drill and tap without binding.

**Drilling through sheet and insulation** - Ease up on pressure when drilling through insulation to avoid striking the purlin or girt with the point - apply more pressure after drill point contacts purlin or girt.

**Drilling through purlin overlaps** - Drilling through lapped purlins requires extra care. Excessive voids between purlins sometimes damages drill points and two self-drillers might be necessary to complete the operation. It is sometimes advantageous to predrill.

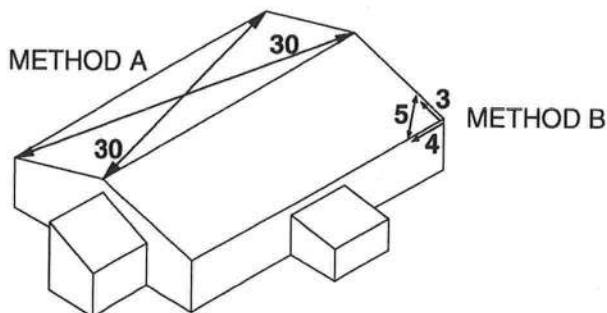
## CONDITION OF SUBSTRUCTURE

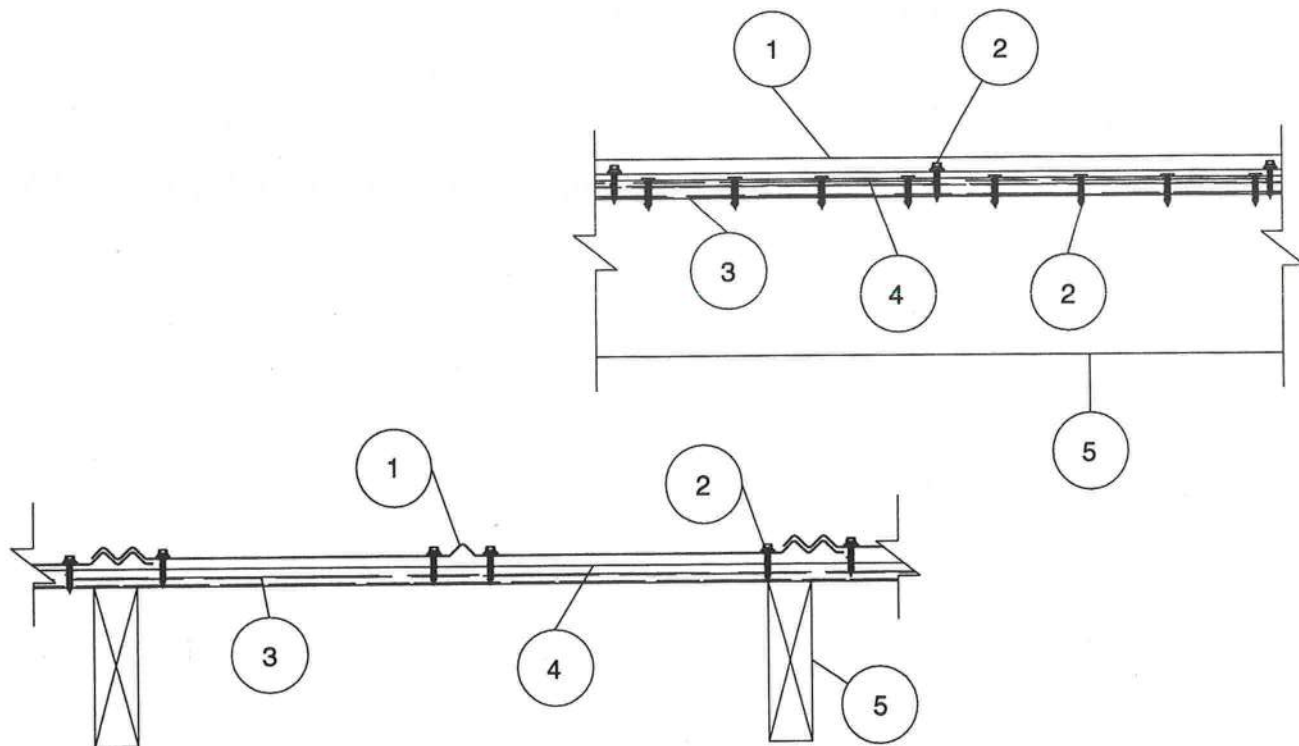
Whether over solid substrate or open structural framing, panel distortion may occur if not applied over properly aligned and uniform substructure.

The installer should check the roof deck for squareness before installing 5V-Crimp panels. Several methods can be used to verify squareness of the structure for proper installation of the panels.

**METHOD "A"** - One method for checking the roof for squareness is to measure diagonally across one slope of the roof from similar points at the ridge and eave and obtain the same dimension.

**METHOD "B"** - The 3-4-5 triangle system may also be used. To use this system measure a point from the corner along the edge of the roof at a module of three (3). Measure a point from the same corner along another edge at a module of four (4). Then by measuring diagonally between the two points established, the dimension should be exactly a module of five (5) to have a square corner. Multiple uses of this system may be required to determine building squareness. If the endwall cannot be made square, the roof system cannot be installed as shown in these instructions.





## 5V-CRIMP

Construction No. 453

March 13, 2001

Uplift - Class 90

Fire Not Investigated

1. **Metal Roof Deck Panels\*** No. 26 MSG minimum coated steel. Maximum panel width 24 in. Rib height maximum 1/2 in. Panels continuous over two or more spans. A bead of sealant may be used at panel sidelaps.  
METAL SALES MFG CORP - "5V Crimp"
2. **Fasteners - (Screws)** For panel attachment to wood deck (Item 3), fasteners to be #14-10 x 1-1/2 in. Type A, Hex-head with separate 5/8 in. OD steel washer and a bonded neoprene washer. Fastener spacing is as follows: a line of fasteners is to be installed, beginning from the center of the double V at the sidlap in 2-9-2-9 in. pattern for a total of four fasteners across the width of the panel. This fastener spacing to be 3 feet on center along the length of the panel is 3 feet on center.  
For attachment of plywood deck (Item 3) to joists (Item 5), fasteners to be minimum No. 6x1-7/8 in. bugle head screw or annular ring-shank nails. Spacing to be 6 in. OC at plywood edges and 12 in. OC at intermediate supports.  
When light gauge structural steel joists are used, fasteners to be No. 12x1-5/8 in. long with a Phillips head.
3. **Substructure - (Plywood)** Plywood decking to be a nom 5/8 in. thick, exposure sheathing span C-D, 40/20 plywood. All butt joints to be sealed against leakage by using tape and/or caulk or with one-part urethane sealant.
4. **Moisture Barrier (Optional)** Any suitable membrane to protect substructure (Item 3).
5. **Joists** Joists spaced at 2 ft, 0 in. OC; may be one of the following:
  - A. Nom 2 by 6 in. wood joists No. 2 or better.
  - B. Nom 2 by 4 in. wood when used on a top cord of a wood truss, No. 2 or better.
  - C. Light gauge structural steel framing with the member against the plywood to be a minimum No. 22 MSG coated steel.

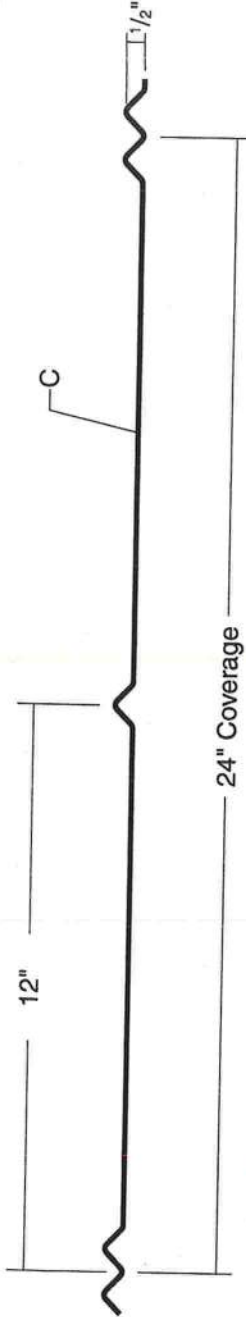
Refer to General Information, Roof Deck Construction, (Roofing Materials and Systems Directory) for Items Not Evaluated.

\*Bearing the UL Classification Mark



Underwriters Laboratories Inc. ®

LISTED



5V-CRIMP SECTION PROPERTIES

GAUGE	WIDTH (in)	YEILD KSI	WEIGHT PSF	TOP IN COMPRESSION <sup>1</sup> :			BOTTOM IN COMPRESSION <sup>1</sup> :		
				Ixx in <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft	Ma (k-in)	Ixx in <sup>4</sup> /ft	Sxx in <sup>3</sup> /ft	Ma (k-in)
26	24	50	0.85	0.0025	0.0069	0.2066	0.0015	0.0054	0.162

5V-CRIMP ALLOWABLE UNIFORM LIVE LOADS PSF<sup>1,2,3,4</sup>

1-Span		Inward (Gravity / Deflection) Load <sup>2,4</sup>				Outward Uplift (Stress) Load <sup>3</sup>							
GA. Width	Ksi	0.75'	1'	1.5'	1.75'	2'	2.5'	0.75'	1'	1.5'	1.75'	2'	2.5'
26	24"	50	243	137	61	41	27	14	253	142	63	46	23

2-Equal Spans		Inward (Gravity / Deflection) Load <sup>2,4</sup>				Outward Uplift (Stress) Load <sup>3</sup>							
GA. Width	Ksi	0.75'	1'	1.5'	1.75'	2'	2.5'	0.75'	1'	1.5'	1.75'	2'	2.5'
26	24"	50	181	104	47	35	27	17	302	175	79	59	29

3 or more-Equal Spans		Inward (Gravity / Deflection) Load <sup>2,4</sup>				Outward Uplift (Stress) Load <sup>3</sup>							
GA. Width	Ksi	0.75'	1'	1.5'	1.75'	2'	2.5'	0.75'	1'	1.5'	1.75'	2'	2.5'
26	24"	50	209	121	55	40	31	20	345	202	92	68	34

- Theoretical section properties have been calculated per AISI 1996. "Specifications for the design of cold formed steel members." Ixx and Sxx are effective section properties for deflection and bending.
- Tabulated loads are allowable loads calculated in accordance with good engineering practices and with AISI 1996 specifications for bending stresses. Panel weight has not been subtracted from allowable gravity loads. Allowable load does not address web crippling requirement, or fasteners/support connection.
- Allowable loads are calculated in accordance with AISI 1996 specifications, and have been increased by 33<sup>1</sup>/<sub>3</sub>% for wind uplift. Contact Metal Sales Technical Services Department for more information.
- Deflection consideration is limited by a maximum deflection ratio of L/180 of span.
- Note: 5V-Crimp is not recommended for open frame construction.**

**NOTES:**

1. REGAL, CELEBRITY, AMERICAN 100, CS, OR CSL SERIES MAY BE SUBSTITUTED.
2. REFERENCE DRAWING ROWLJ-1607 SHEET 2 OF 2 FOR HARDWARE REQUIREMENTS.
3. STRUTS ATTACHED WITH 2 SELF DRILLING SCREWS 1/4"-20 X 3/4" AT EACH STILE LOCATION.
4. SECTION HIGH DOOR SHOWN ( 7FT). TALLER DOOR CONFIGURATIONS MAY BE CONSTRUCTED UP TO A MAXIMUM OF 14FT HIGH USING SAME SECTION CONSTRUCTION AS SHOWN (MAXIMUM SECTION HEIGHT OF 21'). 8 SECTION HIGH DOORS REQUIRE HALF-INCLINED VERTICAL TRACK.
5. MINIMUM STEEL THICKNESS FOR SECTION IS 25 GA. (.0185").
6. SECTIONS EMBOSSED 1450°-90 375° 18 X20 375° 14X44; OR SECTIONS WITHOUT EMBOSSEMENT MAY ALSO BE USED (LOCATION AND QUANTITY OF CENTER STILES MUST BE THE SAME).
7. TORSION SPRINGS OR EXTENSION SPRINGS AVAILABLE.
8. LOCK MUST BE ATTACHED AT EACH SIDE OF THE DOOR. CAM & BAR LOCKS OR AN OPERNER MAY BE SUBSTITUTED.
9. WOOD MOUNT SHOWN, STEEL AND MASONRY ANGLE AND REVERSE LOCKS ARE AVAILABLE. NUMBER OF JAMB BRACKET ANCHOR LOCATIONS MUST BE THE SAME.
10. JAMB DETAIL IN ACCORDANCE WITH DWG. # ROWL-0001
11. STRUT PLACEMENT SHOWN IS TYPICAL. (TOP STRUTS ARE OVER THE HINGES AS SHOWN USING THE HOLES PROVIDED IN THE HINGE. BOTTOM STRUTS ARE JUST ABOVE THE TOP OF THE HINGES). SEE DETAIL E.
12. THIS DOOR HAS NOT BEEN TESTED FOR WINDBORNE DEBRIS.
13. USE THIS DRAWING IN CONJUNCTION WITH INSTALLATION INSTRUCTIONS. INSTRUCTIONS MUST BE USED IN CONJUNCTION WITH OTHER INSTALLATION INSTRUCTIONS. THIS DRAWING GOVERNS.

**Strut Requirements**

# sections	# Struts
4	2-1/4" 3"
5	1 5
6	1 7
7	1 8
8	1 10
*8	1 11

\*SEE NOTE 4

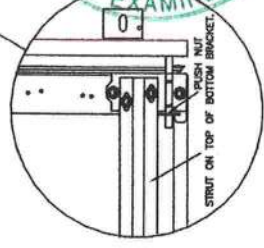
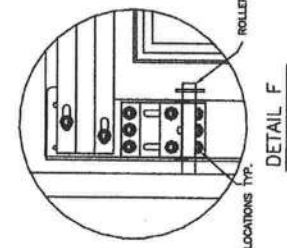
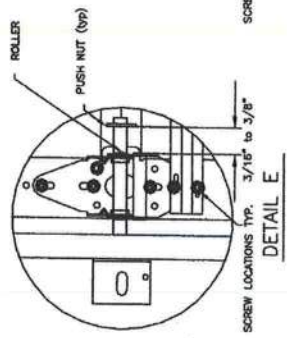
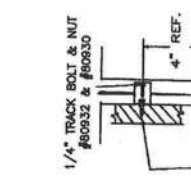
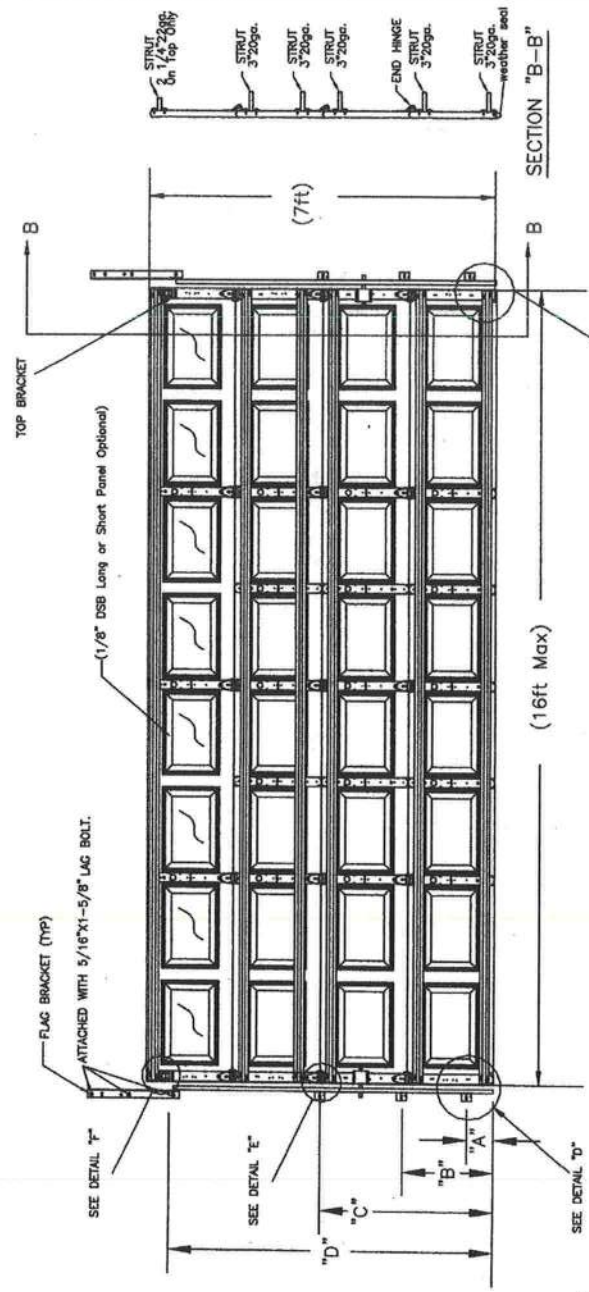
**Track Bracket Locations**

DOOR HEIGHT	"A"	"B"	"C"	"D"
6'-6" thru 7'-0"	4"	21"	42"	X
7'-6" thru 8'-9"	4"	21"	42"	60"

For Doors over 9' high one jamb bracket per section must be added and positioned within 3' of the roller.

PER 2007 IBC TABLE 1609.6(1) THIS DOOR MEETS OR EXCEEDS A BASIC WINDSPEED OF: 110 MPH EXPOSURE "B" MEAN ROOF HEIGHT OF 30' OR LESS. 93 MPH EXPOSURE "C" MEAN ROOF HEIGHT OF 30' OR LESS.

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John Edwards  
1/14/08  
PROFESSIONAL ENGINEER  
SPECIAL LICENSE FOR  
DESIGNING AND SEALING  
CONSTRUCTION DETAILS  
MID-AMERICA DOOR COMPANY  
3101 FRONT ST. W.  
FARMERSVILLE, TX 77727

Rev.	By	Date	Description	Scale	N.T.S.	Date
1	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
2	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
3	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
4	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
5	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
6	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
7	ED	11/14/07	ISSUE FOR PERMITS			11-14-07

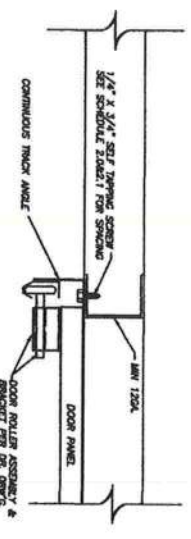
DESIGN LOAD +18.5/-20.7  
TEST LOAD +27.75/-31.05

Mid-America Door Company  
REGAL / CELEBRITY WINDLOAD SERIES  
WINDLOAD CONSTRUCTION DETAILS  
RCWLJ-1607

Rev.	By	Date	Description	Scale	N.T.S.	Date
1	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
2	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
3	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
4	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
5	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
6	ED	11/14/07	ISSUE FOR PERMITS			11-14-07
7	ED	11/14/07	ISSUE FOR PERMITS			11-14-07

**Notes:**

- There are two approved methods for attachment of the door to the building:
  - Attaching a 2x6 to the building structure using schedule 1.0, 1.1, 1.2 or 1.3 (see part 2). The 2x6 is cleary southern pine or this drawing.
  - Mount the track directly to the building structure using schedule 2.0, 2.1, 2.2, 2.3 or Welding (see part 2). Mounting directly to building structure is for commercial doors only, since 1 inch of door overlap with the building is required.
- Determine the positive design windload for a particular door, rounded down to the nearest 5 pounds per square foot. This design load is used on the bottom right corner of the applicable drawing.
- Anchors to be spaced evenly between the header and the floor.
- First Anchor (bottom) starting at no more than half of the maximum on-center distance.
- Top Anchor installed at least as high as the door opening.
- Door must overlap a minimum of 7/16" per jamb, if the door does not overlap the jamb, then stop molding must be used and nailed on using #6d nails spaced no greater than 9 inches apart. Handless finish nails may not be used.
- Building engineer/architect is responsible for ensuring that the building structure is sufficient for the loads applied. More fasteners than shown on the door drawings may be required. The quantities shown on the drawing prevail.



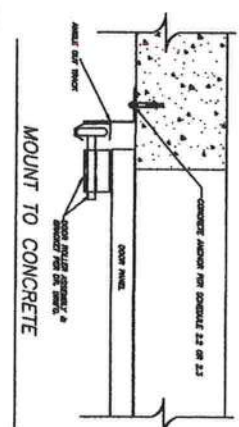
**STEEL JAMB 1/4"x3/4" SELF TAPPING SCREW DETAIL**

**1/4"x3/4" SELF TAPPING SCREW CONNECTION SCHEDULE 2.0**

**12GA STEEL CONSTRUCTION**

Design Load (PSF)	Opening Width (ft)							
	9'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	24'-0"
10	24	24	24	24	24	24	24	24
15	24	24	24	24	21	19	17	15
20	24	24	24	21	18	16	14	12
25	22	20	17	14	12	10	9	8
30	19	17	14	12	10	9	8	7
35	16	14	12	10	9	8	7	6
40	14	12	10	9	8	7	6	5
45	12	11	9	8	7	6	5	4
50	11	10	8	7	6	5	4	3

Table values referenced from DASHA TDS 161



**DOOR FRAME PLATE CONNECTION SCHEDULE 2.2**

**Concrete Construction**

Min 2000 PSI Concrete

Design Load (PSF)	Opening Width (ft)							
	9'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	24'-0"
10	24	24	24	24	24	24	24	24
15	24	24	24	24	24	24	24	24
20	24	24	24	24	24	24	24	24
25	24	24	24	24	24	24	24	24
30	24	24	24	24	24	24	24	24
35	24	24	24	24	24	24	24	24
40	24	24	24	24	24	24	24	24
45	24	24	24	24	24	24	24	24
50	24	24	24	24	24	24	24	24

Member with a minimum of 5/8" OD or greater required on all fasteners.

**DOOR FRAME PLATE CONNECTION SCHEDULE 2.3**

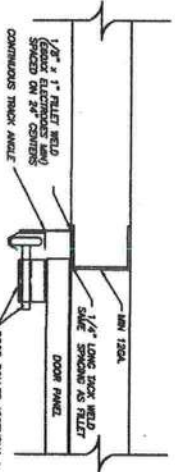
**Concrete Construction**

Min 3000 PSI Concrete

Load Table Based on: Topcon 1/4"x3/4" with 1-3/4" min embed  
 TW Romset/Red Head Topcon 5/16"x3" with 1-3/4" min embed  
 Minimum edge spacing of 2-1/2" for all.

Design Load (PSF)	Door Width (ft)							
	9'-2"	10'-2"	12'-2"	14'-2"	16'-2"	18'-2"	20'-2"	24'-2"
10	24	24	24	24	24	24	24	24
15	24	24	24	24	24	24	24	24
20	24	24	24	24	24	24	24	24
25	24	24	24	24	24	24	24	24
30	24	24	24	24	24	24	24	24
35	24	24	24	24	24	24	24	24
40	24	24	24	24	24	24	24	24
45	24	24	24	24	24	24	24	24
50	24	24	24	24	24	24	24	24

Member with a minimum of 5/8" OD or greater required on all fasteners.



**STEEL JAMB FILLET WELD DETAIL**

**1/4"x3/4" SELF TAPPING SCREW CONNECTION SCHEDULE 2.1**

**3/16" STEEL CONSTRUCTION**

Design Load (PSF)	Opening Width (ft)							
	9'-0"	10'-0"	12'-0"	14'-0"	16'-0"	18'-0"	20'-0"	24'-0"
10	24	24	24	24	24	24	24	24
15	24	24	24	24	24	24	24	24
20	24	24	24	24	24	24	24	24
25	24	24	24	24	24	24	24	24
30	24	24	24	24	24	24	24	24
35	24	24	24	24	24	24	24	24
40	24	24	24	24	24	24	24	24
45	24	24	24	24	24	24	24	24
50	24	24	24	24	24	24	24	24

Table values referenced from DASHA TDS 161

- Use all necessary precautions when welding galvanized steel.
  - Welds to be evenly spaced between header and floor.
  - First (bottom) weld starting at no more than half of the maximum on center distance. Highest weld at least as high as the door opening.
  - All welds should be performed by a certified welder or inspected by a certified welding inspector to verify the integrity of the weld.
  - Fillet welds should have a straight or convex face surface.
  - Topk weld top of the angle of the same spacing to prevent rotation of the track angle.
  - Copls and plymates shall be ground to a smooth contour and checked for soundness.
- SOURCE: DASHA TDS 161

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Rev. No.	Description	Date	By
1	Issue		
2	Revised		
3	Revised		
4	Revised		
5	Revised		
6	Revised		
7	Revised		
8	Revised		
9	Revised		
10	Revised		
11	Revised		
12	Revised		
13	Revised		
14	Revised		
15	Revised		

SCALE: N.T.S. DATE: 01-15-14

DESIGNER: JRM/CMK  
 CHECKER: JRM/CMK  
 APPROVER: JRM/CMK

PROJECT: Mid-America Door Company  
 TITLE: Jamb Plate Fastener Schedule  
 DWG. NO.: RCM-0001  
 SHEET: 2 OF 4

PROFESSIONAL PRODUCTS  
 JOHN E. SCHEIDT, P.E.  
 1111 HENRIE ST.  
 HENRIE, PA. 17033  
 (717) 233-1000

*John E. Scheidt*  
 4/25/10

**Notes:**

- There are two approved methods for attachment of the door to the building:
  - Attaching a 2x6 to the building structure using schedule 1.0, 1.1, 1.2 or 1.3 (see page 2). The 2x6 is always southern pine on this drawing.
  - Mount the track directly to the building structure using schedule 2.0, 2.1, 2.2, 2.3 or Welding (see page 2 of drawing).
- Determine the positive design windload for a particular door, rounded down to the nearest 5 pounds per square foot. This windload is shown on the bottom right corner of the applicable drawing.
- If the framing is made of wood, determine the type of lumber being used. The Specs include southern pine and spruce-pine-fir (Schedule 1.0).
- 2x6 wood jamb may be counter bored up to 1/2" deep to provide a flush mounting surface.
- Anchors to be spaced evenly between the header and the floor.
- First Anchor (bottom) starting at no more than half of the maximum door height.
- Top Anchor installed at least as high as the door opening.
- Wood jamb plate shall be minimum 2x6 no. 1 grade southern pine.
- Door must overlap a minimum of 7/16" per jamb, if the door does not overlap the jamb, then glap molding must be used and galled on jamb. Red nails are used every 6 to 9". Headless flash nails may not be used.
- Building engineer/architect is responsible for ensuring that the building structure is sufficient for the loads applied.

**DOOR FRAME PLATE CONNECTION SCHEDULE 1.0**

3/8" x 3" Log Bolt 1-1/2" Min Embed  
Min 1-1/8" O.D. Steel Washer per log  
Minimum edge spacing of 1-1/2" for all

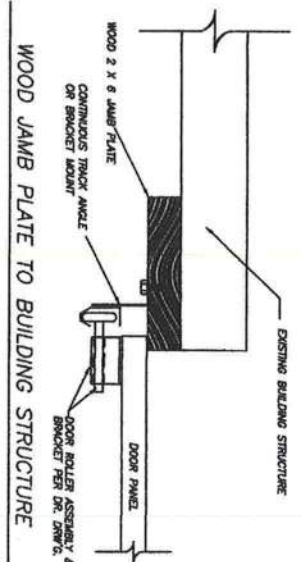
Design Load (PSF)	Door Width (ft)									
	9'-2"	10'-2"	12'-2"	14'-2"	16'-2"	18'-2"	20'-2"	22'-2"	24'-2"	26'-2"
10	24	24	24	24	24	24	24	24	24	24
15	24	24	24	24	24	24	24	24	24	24
20	24	24	24	24	24	24	24	24	24	24
25	24	24	24	24	24	24	24	24	24	24
30	24	24	24	24	24	24	24	24	24	24
35	24	24	24	24	24	24	24	24	24	24
40	24	24	24	24	24	24	24	24	24	24
45	24	24	24	24	24	24	24	24	24	24
50	24	24	24	24	24	24	24	24	24	24

Southern Pine S.G. = .55  
Maximum Spacing (inches)

**WOOD CONSTRUCTION**

Spruce-Pine-Fir S.G. = .42  
Maximum Spacing (inches)

Design Load (PSF)	Door Width (ft)									
	9'-2"	10'-2"	12'-2"	14'-2"	16'-2"	18'-2"	20'-2"	22'-2"	24'-2"	26'-2"
10	24	24	24	24	24	24	24	24	24	24
15	24	24	24	24	24	24	24	24	24	24
20	24	24	24	24	24	24	24	24	24	24
25	24	24	24	24	24	24	24	24	24	24
30	24	24	24	24	24	24	24	24	24	24
35	24	24	24	24	24	24	24	24	24	24
40	24	24	24	24	24	24	24	24	24	24
45	24	24	24	24	24	24	24	24	24	24
50	24	24	24	24	24	24	24	24	24	24



**DOOR FRAME PLATE CONNECTION SCHEDULE 1.1**

Load Table Based on:  
ANKR-TITE Wedge bolt 3/8"x3-1/2" with 1"-3/4" min embed.  
ANKR-TITE Stud bolt 3/8"x3-1/2" with 1"-3/4" min embed.  
POWER STUD anchor 3/8"x3-1/2" with 1"-5/8" min embed.  
POWER LOK/BOL/Anchor 3/8"x3-1/2" with 1"-5/8" min embed.  
Minimum edge spacing of 2-1/2" for all

Concrete Construction  
Minimum Spacing (inches)

Design Load (PSF)	Door Width (ft)									
	9'-2"	10'-2"	12'-2"	14'-2"	16'-2"	18'-2"	20'-2"	22'-2"	24'-2"	26'-2"
10	24	24	24	24	24	24	24	24	24	24
15	24	24	24	24	24	24	24	24	24	24
20	24	24	24	24	24	24	24	24	24	24
25	24	24	24	24	24	24	24	24	24	24
30	24	24	24	24	24	24	24	24	24	24
35	24	24	24	24	24	24	24	24	24	24
40	24	24	24	24	24	24	24	24	24	24
45	24	24	24	24	24	24	24	24	24	24
50	24	24	24	24	24	24	24	24	24	24

Member with a minimum of 1-1/8" O.D. or greater required on all fasteners.

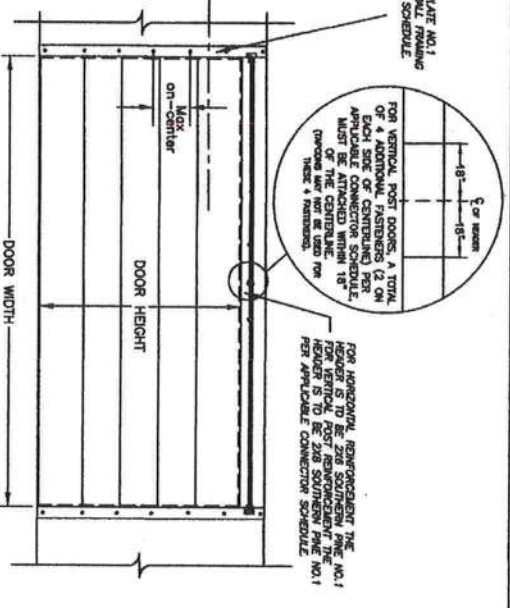
**DOOR FRAME PLATE CONNECTION SCHEDULE 1.2**

Load Table Based on:  
ITW Ramseil/Red Head Topcon 1/4"x3/4" with 1-3/4" min embed  
ITW Ramseil/Red Head Topcon 5/16"x3/4" with 1-3/4" min embed  
Minimum edge spacing of 2-1/2" for all

Concrete Construction  
Minimum Spacing (inches)

Design Load (PSF)	Door Width (ft)									
	9'-2"	10'-2"	12'-2"	14'-2"	16'-2"	18'-2"	20'-2"	22'-2"	24'-2"	26'-2"
10	24	24	24	24	24	24	24	24	24	24
15	24	24	24	24	24	24	24	24	24	24
20	24	24	24	24	24	24	24	24	24	24
25	24	24	24	24	24	24	24	24	24	24
30	24	24	24	24	24	24	24	24	24	24
35	24	24	24	24	24	24	24	24	24	24
40	24	24	24	24	24	24	24	24	24	24
45	24	24	24	24	24	24	24	24	24	24
50	24	24	24	24	24	24	24	24	24	24

Member with a minimum of 1" O.D. or greater required on all fasteners.



**DOOR FRAME PLATE CONNECTION SCHEDULE 1.3**

Load Table Based on ITW Ramseil/Red Head Topcon Self Tapping 1/4" x 3/4" Concrete Anchor With 1-1/2" Embed (min 5/8" O.D. Steel Washer per Anchor)  
Minimum edge spacing of 2-1/2"

Masonry/Concrete Construction

GROUT FILLED CMU BLOCK  
Maximum Spacing (inches)

Design Load (PSF)	Door Width (ft)									
	9'-2"	10'-2"	12'-2"	14'-2"	16'-2"	18'-2"	20'-2"	22'-2"	24'-2"	26'-2"
10	24	24	24	24	24	24	24	24	24	24
15	24	24	24	24	24	24	24	24	24	24
20	24	24	24	24	24	24	24	24	24	24
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35	24	24	24	24	24	24	24	24	24	24
40	24	24	24	24	24	24	24	24	24	24
45	24	24	24	24	24	24	24	24	24	24
50	24	24	24	24	24	24	24	24	24	24

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REV	BY	DATE	DESCRIPTION
1	...	...	...
2	...	...	...
3	...	...	...
4	...	...	...
5	...	...	...
6	...	...	...
7	...	...	...
8	...	...	...
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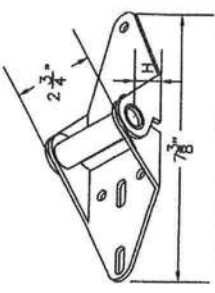
SCALE: 1/8" = 1'-0"  
DATE: 10-15-04  
DRAWN BY: [Name]  
CHECKED BY: [Name]  
DATE: [Date]  
APPROVED BY: [Name]

PROFESSIONAL ENGINEER'S EXAMINATION OF SEALING  
JAMES E. SCHULTZ, P.E.  
2311 W. HARRIS BLVD.  
FARMERSVILLE, TX 77834  
4/28/10

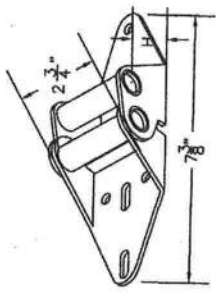
MID-AMERICA DOOR COMPANY  
Jamb Plate Fastener Schedule  
REV. NO. 0001  
SHEET NO. 4

NOTES:

1. STRUTS ARE NOT MORE THAN 1 1/2" SHORTER THAN SECTION. USE IN CONJUNCTION WITH INSTALLATION INSTRUCTIONS.
2. STRUTS MUST BE DRAWING COMPLIANT WITH OTHER INSTALLATION INSTRUCTIONS, THIS DRAWING GOVERNS.

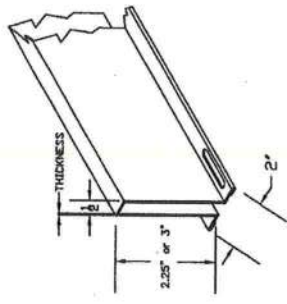


P/N 20604 (#1 HINGE)



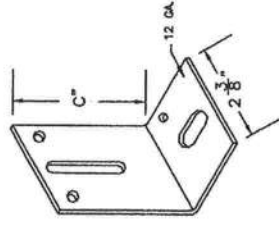
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HINGE #	GAGE #	"H"	PART NUMBER
1	14	3/4"	20602
2	14	1"	20606
3	14	1 1/4"	20810
4	14	1 1/2"	20614
5	14	1 3/4"	20616
6	13	2"	20618



STRUTS

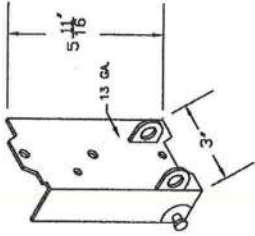
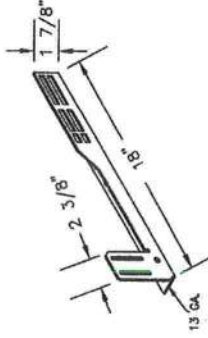
THICKNESS OF STRUTS ARE AS STATED BELOW	.050\"/>
2.25\"/>	
3\"/>	



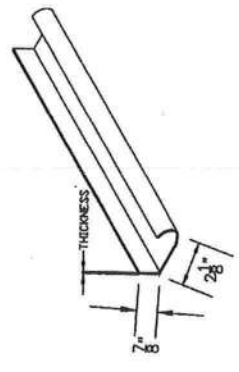
TRACK BRACKET

BRACKET #	"C"	PART NUMBER
4	3"	20368
5	3 1/4"	20370
6	3 1/2"	20372
7	3 3/4"	20374
8	4"	20376
9	4 3/4"	20378

20366 & 7 FLAG BRACKET



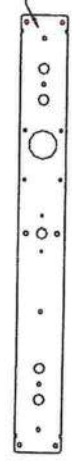
P/N 20334&5 BOTTOM BRKT.



WINDLOAD TRACK

THICKNESS OF TRACK IS AS STATED BELOW	.034\"/>
VERTICAL TRACK IS MIN. 16 GA. .050\"/>	
HORIZONTAL TRACK IS MIN. 16 GA. .050\"/>	

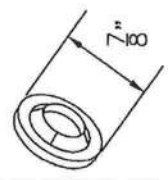
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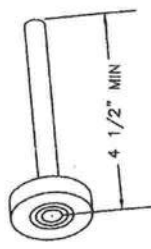
P/N 10455 & 10465 (21\"/>



P/N 10450 & 10460 (21\"/>



P/N 20239 PUSH NUT



P/N 20804 SHORT STEM 10 BALL ROLLER

PROFESSIONAL ENGINEER'S SEAL PROVIDED ONLY FOR USE IN CONSTRUCTION DETAILS

*John E. Scates*  
11/14/08

JOHN E. SCATES, P.E.  
3121 FAIRGATE,  
CARROLLTON, TX  
FLORIDA P.E. # 01377

REV.	DATE	DESCRIPTION	SCALE	N.T.S.	DATE
0	11-14-08	ISSUED FOR CONSTRUCTION	AS SHOWN	AS SHOWN	11-14-08
1					
2					
3					
4					
5					
6					
7					
8					
9					

Mid-America Door Company  
WINDLOAD SERIES HARDWARE  
WINDLOAD CONSTRUCTION DETAILS  
FORM NO. 1607

NOTES: THIS DRAWING AND / OR TECHNICAL INFORMATION ON THIS SHEET IS THE PROPERTY OF MID-AMERICA DOOR COMPANY AND IS LOANED IN CONFIDENCE FOR ENGINEERING AND MUTUAL ASSISTANCE PURPOSES ONLY, AND MAY NOT BE REPRODUCED OR USED TO MANUFACTURE ANYTHING DISCLOSED HEREON WITHOUT THE EXPRESSED PERMISSION OF MID-AMERICA DOOR COMPANY.



**NAN YA PLASTICS CORP.**  
**PLASTPRO INC.**  
 9 PEACH TREE HILL ROAD  
 LIVINGSTON, NEW JERSEY 07039

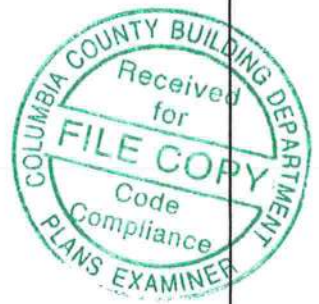
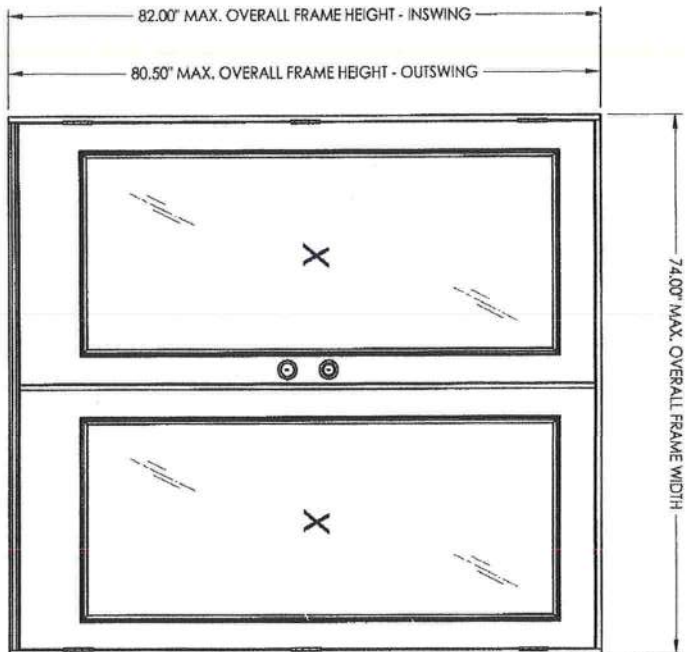
**DISTINCTION SERIES**  
**GLAZED FIBERGLASS DOORS**  
**LIP LITE SCREW FRAME**  
**INSWING / OUTSWING**  
**"NON-IMPACT"**

**GENERAL NOTES**

1. This product has been evaluated and is in compliance with the 2007 Florida Building Code (FBC) structural requirements excluding the "High Velocity Hurricane Zone" (HVHZ).
2. Product anchors shall be as listed and spaced as shown on details. Anchor embedment to base material shall be beyond wall creasing or stucco.
3. When used in areas requiring wind borne debris protection this product is required to be protected with an impact resistant covering that complies with Section 1609.1.2 of the 2007 FBC.
4. For 2x stud framing construction, anchoring of these units shall be the same as that shown for 2x buck masonry construction.
5. Site conditions that deviate from the details of this drawing require further engineering analysis by a licensed engineer or registered architect.

**TABLE OF CONTENTS**

SHEET #	DESCRIPTION
1	Typical elevation, design pressures, & general notes
2	Door panel details
3	Horizontal cross sections
4	Vertical cross sections
5	Buck and frame anchoring - 2x buck masonry construction
6	Frame anchoring - 1x buck masonry construction
7	Endura astragal details
8	Bill of materials glazing detail & components



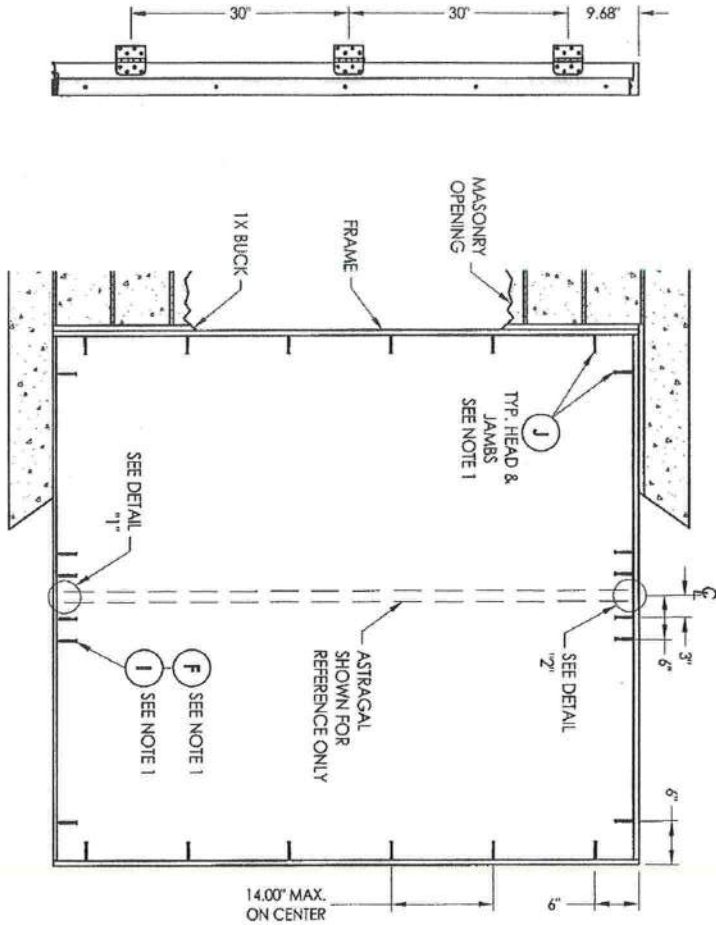
SWING	OVERALL FRAME DIMENSION	DOOR D.L.O. DIMENSION	GLASS TYPE	DESIGN PRESSURE (PSF)	
				POSITIVE	NEGATIVE
INSWING	74.00" x 82.00"	21.00" x 83.00"	G1	+47.0	-47.0
OUTSWING	74.00" x 80.50"	21.00" x 83.00"		+50.0	-50.0

DATE: 09/05/08 SCALE: N.T.S. DRG. BY: JK CHK. BY: LJS DRAWING NO.: FL-6142.9 SHEET 1 OF 8	PRODUCT: NAN YA PLASTICS CORP. PLASTPRO INC. FIBERGLASS DOOR	Documents Prepared By: <i>RW</i> BUILDING CONSULTANTS, INC. P.O. Box 230 Vairoca FL 33595 Phone No.: 813.659.9197 Florida Board of Professional Engineers Certificate Of Authorization No. 9813 <i>CSM</i> 10-1-08 Lyndon F. Schmidt, P.E. No. 43409
	PART OR ASSEMBLY: TYPICAL ELEVATION, DESIGN PRESSURES & GENERAL NOTES	

1. 1/4" ITW concrete screws anchoring frame and/or sill require a minimum 2-1/2" clearance to masonry edges, a 1-1/4" minimum embedment and a minimum 3" clearance to adjacent concrete screws. Substitution of equal concrete screws from a different supplier may have different edge distance and center distance requirements. Concrete screw locations at the corners and at astragal location may be adjusted to maintain the minimum edge distance to mortar joints. If concrete screw locations noted as "MAX. ON CENTER" must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.
2. 3/16" ITW concrete screws anchoring frame and/or sill require a minimum 2-5/8" clearance to masonry edges, a 1-1/4" minimum embedment and a minimum 2-1/4" clearance to adjacent concrete screws unless otherwise noted by concrete screw manufacturer.

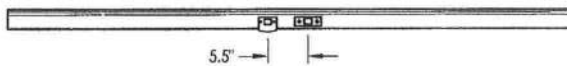
**NOTES:**

**HINGE JAMB**

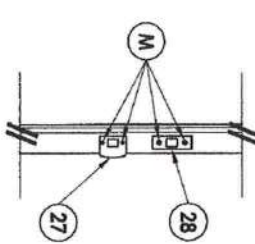


**FRAME ANCHORING**  
Masonry: 1x buck construction

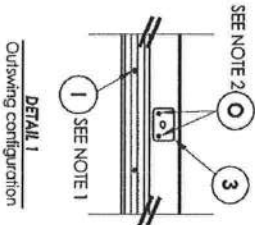
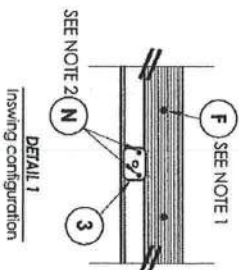
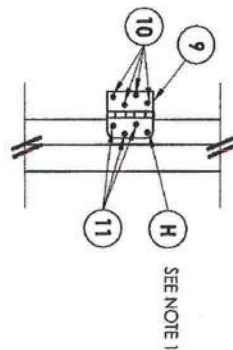
**ASTRAGAL STRIKE JAMB**



**LATCH & DEADBOLT DETAIL**



**HINGE DETAIL**

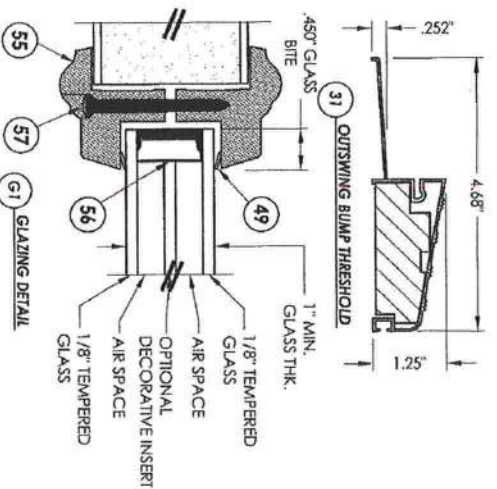
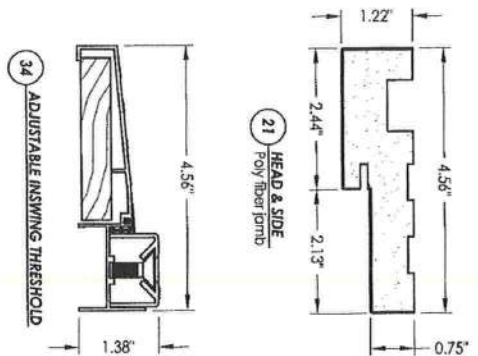
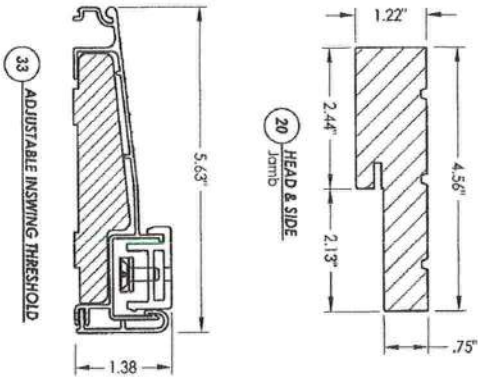


NO.	DATE	REVISIONS	BY

<b>PRODUCT:</b>	NAN YA PLASTICS CORP. PLASTPRO INC. FIBERGLASS DOOR
<b>PART OR ASSEMBLY:</b>	FRAME ANCHORING 1X BUCK MASONRY CONSTRUCTION

Documents Prepared By:  
**RW** BUILDING CONSULTANTS, INC.  
 P.O. Box 230 Valrico FL 33595  
 Phone No.: 813.659.9197  
 Florida Board of Professional Engineers  
 Certificate Of Authorization No. 9813  
*Lyndon F. Schmidt* 10/14/08  
 Lyndon F. Schmidt, P.E. No. 43409

BILL OF MATERIALS				
ITEM	DESCRIPTION	MATERIAL	ITEM DESCRIPTION	MATERIAL
A	1X BUCK SG >= 0.55	WOOD	20 FINGER JOINED PINE FRAME, HEAD & HINGE JAMBS	WOOD
B	2X BUCK SG >= 0.55	WOOD	21 POLYMER JAMB	COMP. / VINYL
C	1/4" MAX. SHIM SPACE		27 LATCH STRIKE PLATE	STEEL
D	1/4" X 2-3/4" PH ELCO CONCRETE SCREW	STEEL	28 DEADBOLT PLATE	STEEL
E	MASONRY - 3.192 PSI MIN. CONCRETE CONFORMING TO ACI 301 OR HOLLOW BLOCK CONFORMING TO ASTM C90	CONCRETE	30 WEATHER STOP 3647 HOLM INDUSTRIES	VINYL
F	1/4" X 2-3/4" PH ITW CONCRETE SCREW	STEEL	31 OUTSWING BUMPS	ALUM. / WOOD
G	3/16" X 3-1/4" PH ITW CONCRETE SCREW	STEEL	32 VINYL DOOR BOTTOM SWEEP #3628 BY HOLM IND.	PVC
H	1/4" X 3-1/4" PH ITW CONCRETE SCREW	STEEL	33 INSWING ADJUSTABLE THRESHOLD BY ENDURA	ALUM. / WOOD
I	1/4" X 2-1/4" PH ITW CONCRETE SCREW	STEEL	34 INSWING ADJUSTABLE ALUMINUM THRESHOLD BY DUP	ALUM. / WOOD
J	1/4" X 3-3/4" PH ITW CONCRETE SCREW	STEEL	40 DOOR PANEL - SEE DOOR PANEL DETAIL SHEET FOR CONSTRUCTION DETAILS	FIBERGLASS
K	#9X 2-1/2" PH WOOD SCREW	STEEL	41 DOOR SKIN (MIN. 0.075" THICK)	CELLULAR PVC
L	#10 X 2-1/2" PH WOOD SCREW	STEEL	42 TOP RAIL	CELLULAR PVC
M	#9 X 2-1/4" PH WOOD SCREW	STEEL	43 LATCH & HINGE STILE	WOOD
N	3/16" X 3-1/2" PH ITW CONCRETE SCREW	STEEL	44 LOCK REINFORCEMENT	CELLULAR PVC
O	3/16" X 1-1/2" PH ITW CONCRETE SCREW	STEEL	45 BOTTOM RAIL	CELLULAR PVC
1	#10 X 2-1/2" PH SMS	STEEL	46 POLYURETHANE FOAM BY NAN YA	POLYURETHANE
2	#8 X 3" PSH SMS	STEEL	47 CONTINUOUS LATCH & HINGE STILE REINFORCEMENT	WOOD
3	FLUSH BOLT STRIKE PLATE	STEEL	49 GLAZING COMPOUND DOW 995	SILICONE
4	QLON 650 WEATHER STRIP SCHLEGEL	FOAM	55 LIP LITE ODL/WESTERN REFLECTIONS HP	POLYPROPYLENE
5	COMPRESSION WEATHER STRIP QLON 650 BY SCHLEGEL	FOAM	56 GLAZING SPACER	ALUM.
6	4" X 4" BUTT HINGE	STEEL	57 #8 X 1-1/2" PH LITE FRAME SCREW	STEEL
7	#9 X 1" PH WOOD SCREW	STEEL	61 4-3/4" LENGTH TOP BOLT RETAINER	HOPE
8	#9 X 3/4" PH WOOD SCREW	STEEL	62 9-8/4" LENGTH TOP BOLT RETAINER	ALUMINUM
9	#9 X 1" PH WOOD SCREW	STEEL	65 ASTRAGAL BY ENDURA PRODUCTS	ALUMINUM
10	#9 X 3/4" PH WOOD SCREW	STEEL	67 SLIDE BOLT ROD	STEEL
11	KWIKSET KEVED ENTRY GRADE 2	STEEL		
12				
13				
14				
15				
16				
17				
18	KWIKSET DEADBOLT GRADE 2	STEEL		



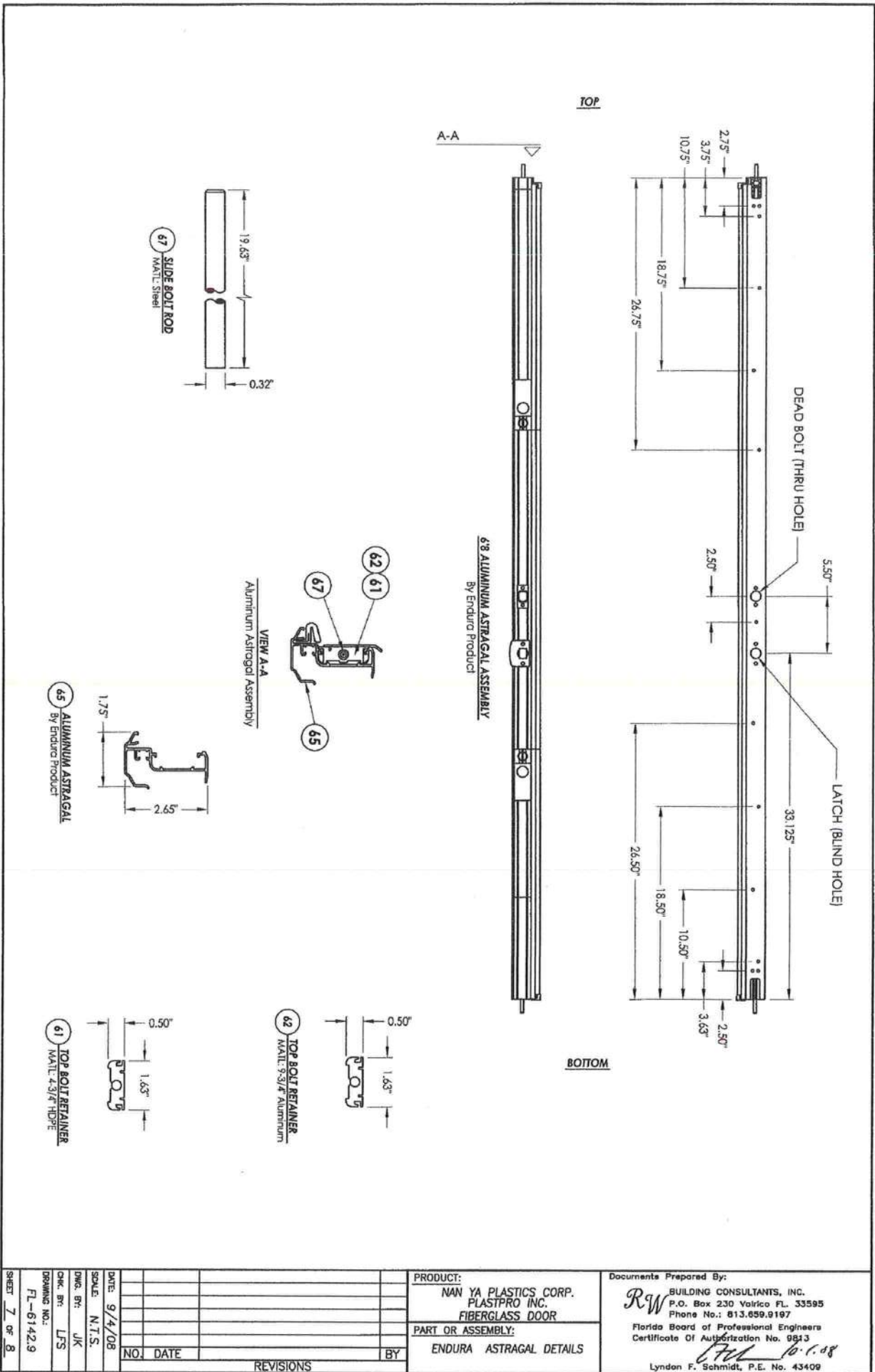
NO.	DATE	REVISIONS	BY

PRODUCT:  
 NAN YA PLASTICS CORP.  
 PLASTPRO INC.  
 FIBERGLASS DOOR

PART OR ASSEMBLY:  
 BILL OF MATERIALS, GLAZING  
 DETAIL & COMPONENTS

Documents Prepared By:  
 R.W. BUILDING CONSULTANTS, INC.  
 P.O. Box 230 Valrico FL 33595  
 Phone No.: 813.659.9197

Florida Board of Professional Engineers  
 Certificate of Authorization No. 9813  
 Lyndon F. Schmidt, P.E. No. 43409



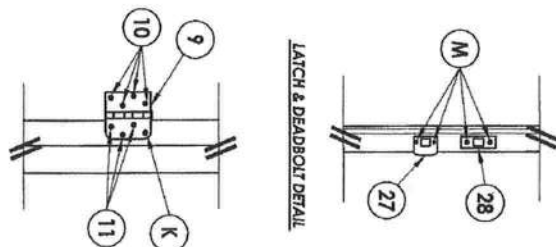
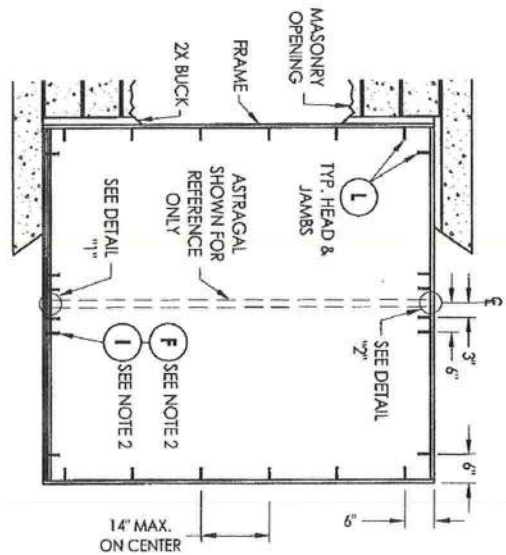
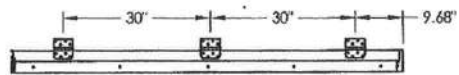
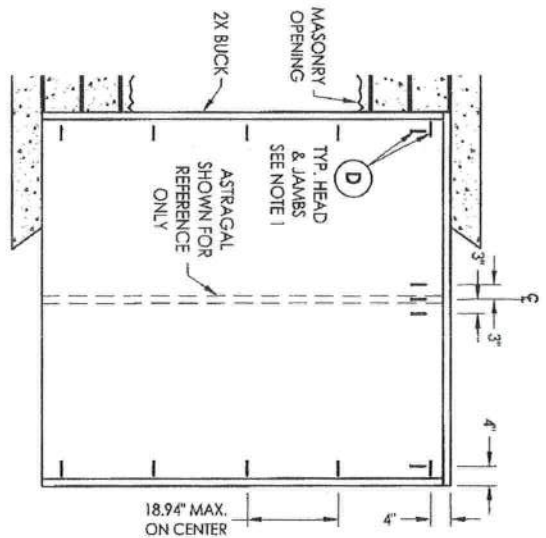
NO.	DATE	BY	REVISIONS

PRODUCT:  
 NAN YA PLASTICS CORP.  
 PLASTPRO INC.  
 FIBERGLASS DOOR

PART OR ASSEMBLY:  
 ENDURA ASTRAGAL DETAILS

Documents Prepared By:  
 RW BUILDING CONSULTANTS, INC.  
 P.O. Box 230 Vairico FL. 33595  
 Phone No.: 813.659.9197

Florida Board of Professional Engineers  
 Certificate of Authorization No. 9843  
 Lyndon F. Schmidt, P.E. No. 43409



**NOTES:**

1. 1/4" Elco concrete screws anchoring 2x buck require a minimum 1" clearance to masonry edges, a 1-1/4" minimum embedment and a minimum 4" clearance to adjacent concrete screws. Substitution of equal concrete screws from a different supplier may have different edge distance and center distance requirements. Concrete screw locations at the corners and at astragal location may be adjusted to maintain the minimum edge distance to mortar joints. If concrete screw locations noted as "MAX. ON CENTER" must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.
2. 1/4" TW concrete screws anchoring frame and/or sill require a minimum 2-1/2" clearance to masonry edges, a 1-1/4" minimum embedment and a minimum 3" clearance to adjacent concrete screws. Substitution of equal concrete screws from a different supplier may have different edge distance and center distance requirements. Concrete screw locations at the corners and at astragal location may be adjusted to maintain the minimum edge distance to mortar joints. If concrete screw locations noted as "MAX. ON CENTER" must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.
3. 3/16" TW concrete screws anchoring frame and/or sill require a minimum 2-5/8" clearance to masonry edges, a 1-1/4" minimum embedment and a minimum 2-1/4" clearance to adjacent concrete screws unless otherwise noted by concrete screw manufacturer.

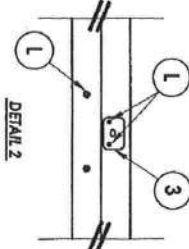
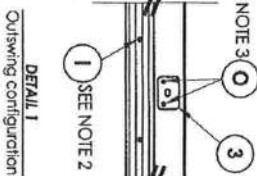
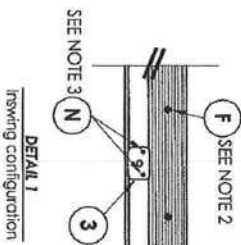
**BUCK ANCHORING**

**HINGE JAMB**

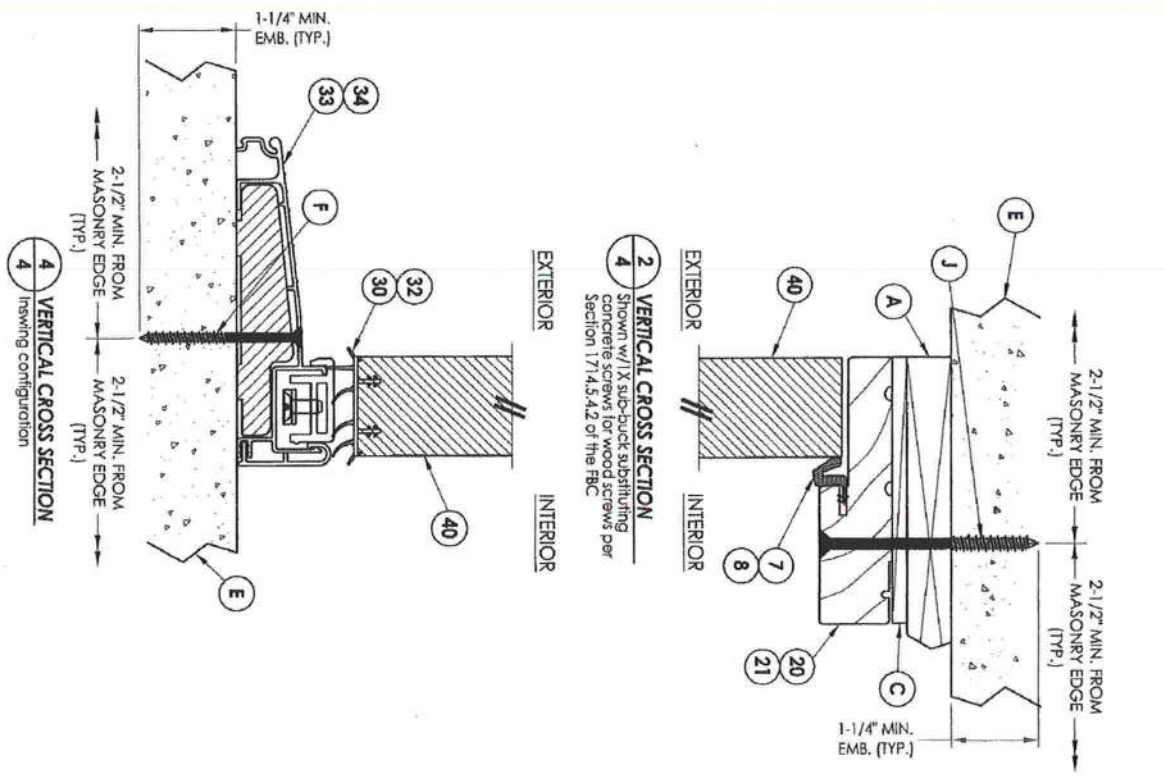
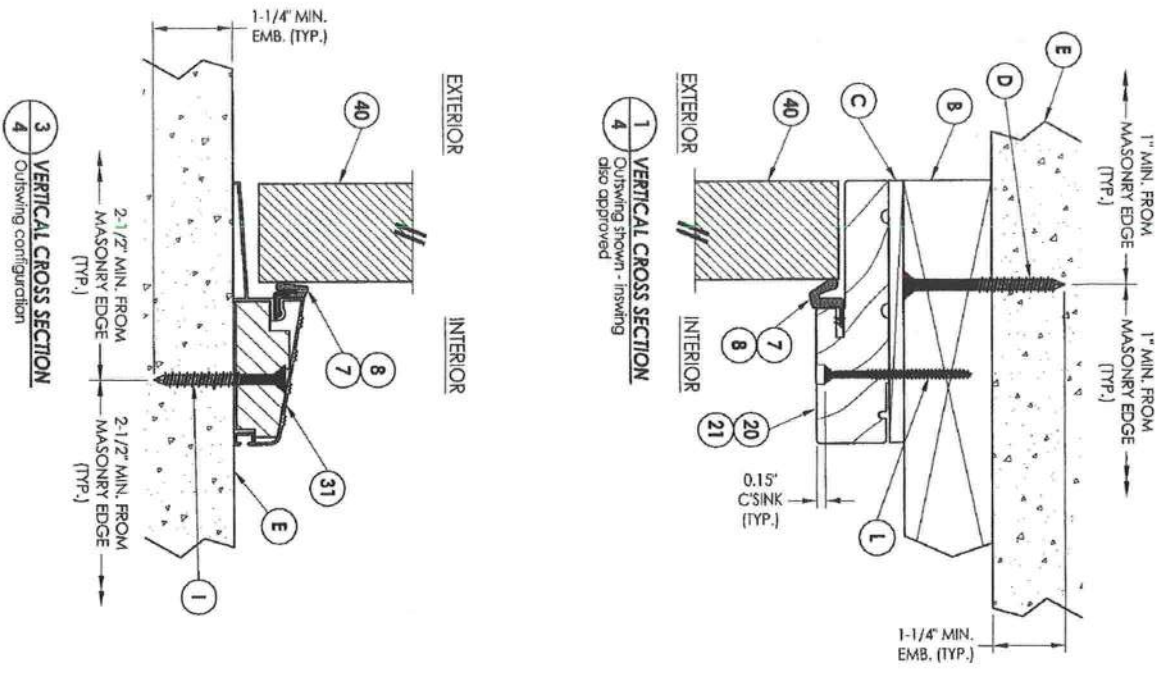
**FRAME ANCHORING**  
Masonry 2x buck construction

**ASTRAGAL STRIKE JAMB**

**HINGE DETAIL**



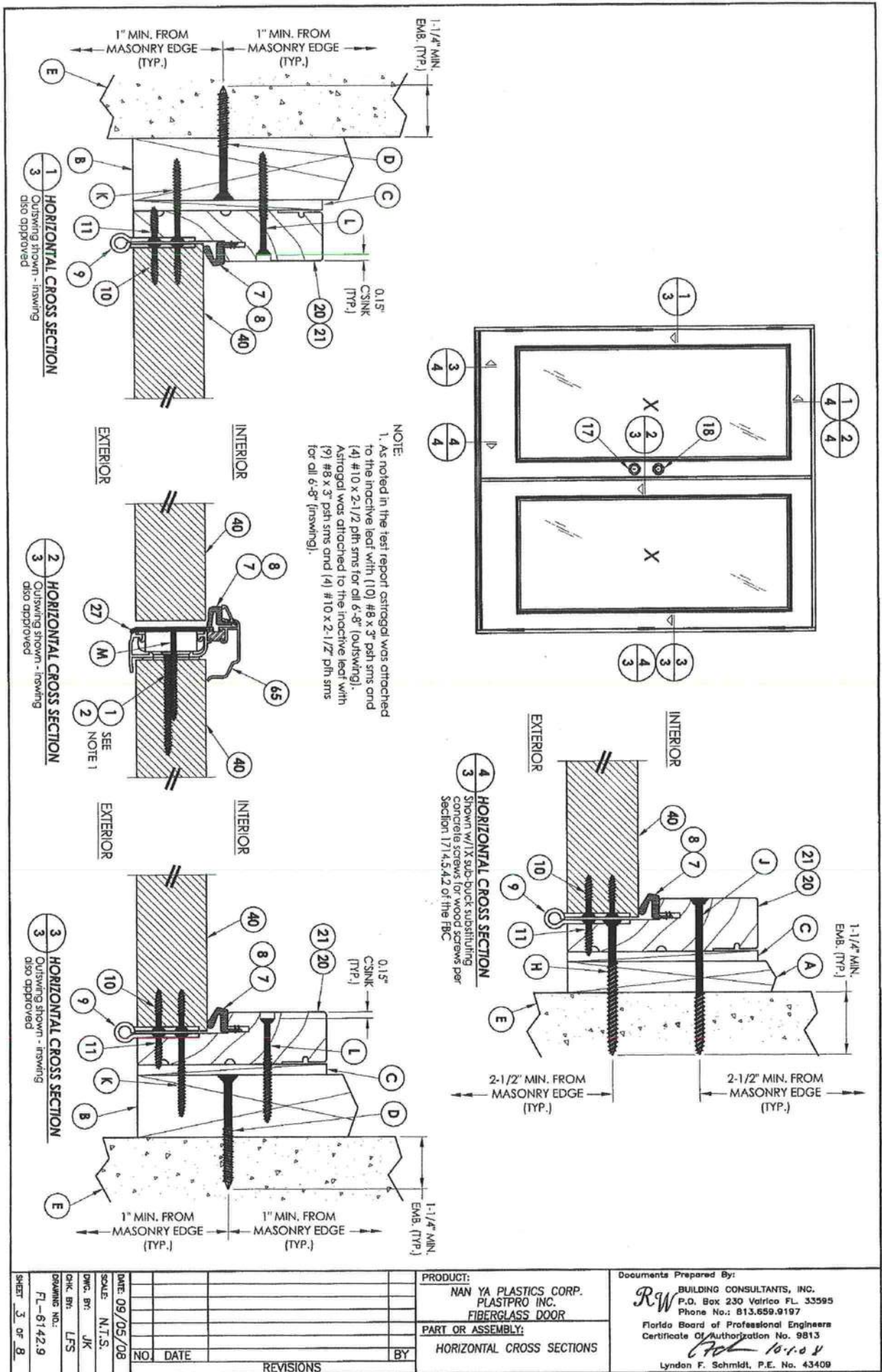
DATE: 9/4/08 SCALE: N.T.S. DWG. BY: JK CHK. BY: LFS DRAWING NO.: FL-6142.9 SHEET 5 OF 8		PRODUCT: NAN YA PLASTICS CORP. PLASTPRO INC. FIBERGLASS DOOR PART OR ASSEMBLY: BUCK & FRAME ANCHORING 2X BUCK MASONRY CONSTRUCTION	Documents Prepared By: RW BUILDING CONSULTANTS, INC. P.O. Box 230 Valrico FL 33595 Phone No.: 813.659.9197 Florida Board of Professional Engineers Certificate Of Authorization No. 9813 Lyndon F. Schmidt, P.E. No. 43408
NO.	DATE	BY	REVISIONS



**3 VERTICAL CROSS SECTION**  
 4 Outswing configuration

**4 VERTICAL CROSS SECTION**  
 4 Inswing configuration

DATE: 9/3/08 SCALE: N.T.S. DMC, BR: JK CHK, BR: LFS DRAWING NO.: FL-6142.9 SHEET 4 OF 8	NO. DATE REVISIONS	BY	PRODUCT: NAN YA PLASTICS CORP. PLASTPRO INC. FIBERGLASS DOOR PART OR ASSEMBLY: VERTICAL CROSS SECTIONS	Documents Prepared By: RW BUILDING CONSULTANTS, INC. P.O. Box 230 Valrico FL 33595 Phone No.: 813.659.9197 Florida Board of Professional Engineers Certificate Of Authorization No. 9813 Lyndon F. Schmidt, P.E. No. 43409
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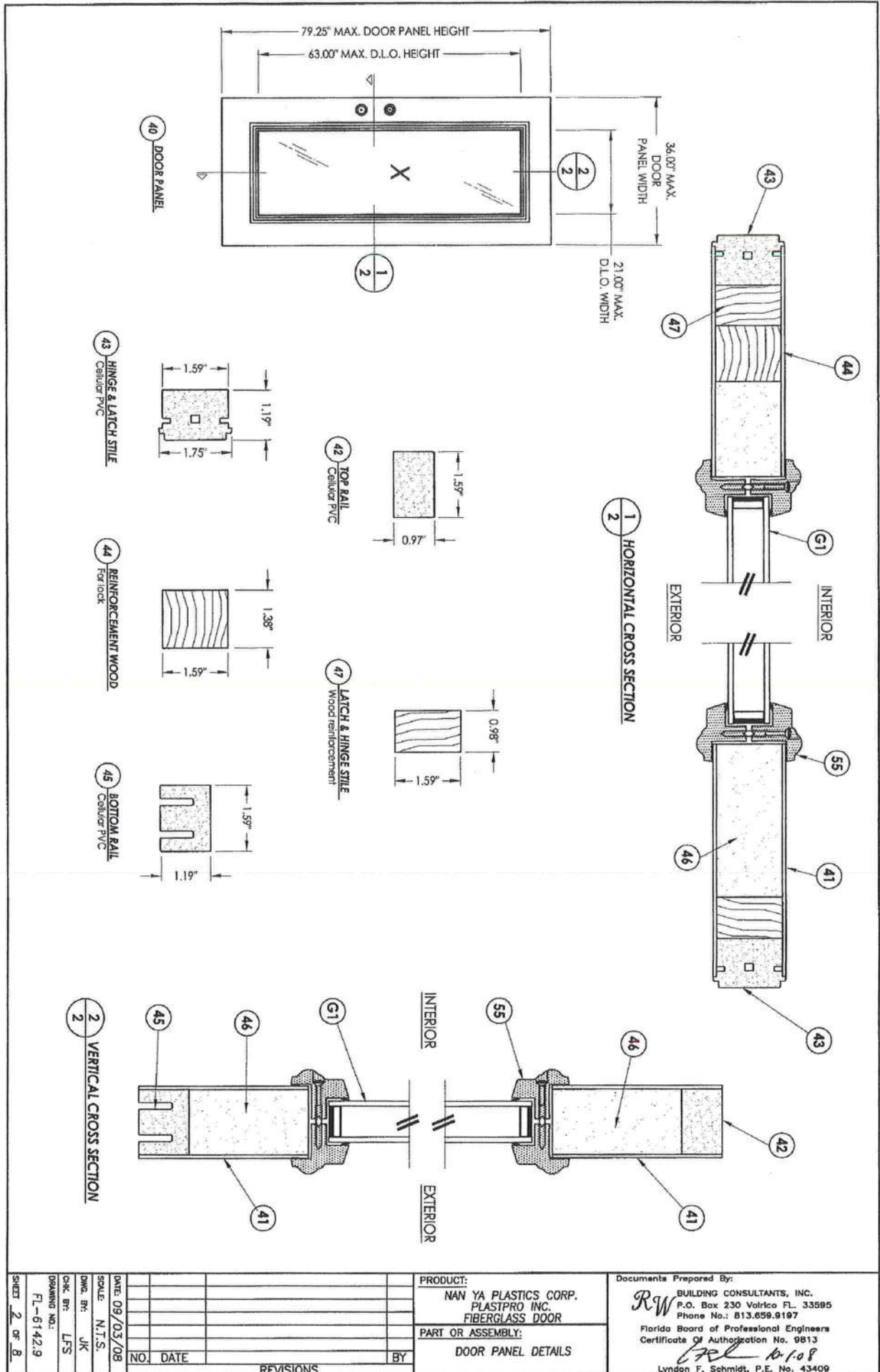
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PRODUCT:  
 NAN YA PLASTICS CORP.  
 PLASTPRO INC.  
 FIBERGLASS DOOR

PART OR ASSEMBLY:  
 HORIZONTAL CROSS SECTIONS

Documents Prepared By:  
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PRODUCT:  
 NAN YA PLASTICS CORP.  
 PLASTPRO INC.  
 FIBERGLASS DOOR

PART OR ASSEMBLY:  
 DOOR PANEL DETAILS

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