



**BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION**

**MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING
140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908**

NOTICE OF ACCEPTANCE (NOA)

**Hollow Metal, Inc.
5275 Causeway Blvd. Ste #4
Tampa, Florida 33619**

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 Division 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 Division (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 Division 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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: Outswing Flush Commercial Steel Door-Impact

APPROVAL DOCUMENT: Drawing No. 1212, titled "Outswing Flush Commercial Impact Steel Doors", sheets 1 through 3 of 3, dated 03/05/03 and last revised on 7/28/2003, prepared by W. W. Schaefer Engineering & Consultant, P. A., signed and sealed by Warren W. Schaefer, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large 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 consists of this page 1 as well as approval document mentioned above.

The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**

8/11/03



**NOA No 03-0116.04
Expiration Date: September 04, 2008
Approval Date: September 04, 2003
Page 1**

Hollow Metal, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED
(For File ONLY. Not part of NOA)

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. 1212, titled "Outswing Flush Commercial Impact Steel Doors", sheets 1 through 3 of 3, dated 03/05/03 and last revised on 7/28/2003, prepared by W. W. Schaefer Engineering & Consultant, P. A., signed and sealed by Warren W. Schaefer, P.E.

B. TESTS

1. Test reports on 1) Air Infiltration Test, per PA 202-94
2) Uniform Static Air Pressure Test, Loading per PA 202-94
3) Water Resistance Test, per PA 202-94
4) Large Missile Impact Test per PA 201-94
5) Cyclic Wind Pressure Loading per PA 203-94
6) Forced Entry Resistant test per PA 202-94

Along with marked-up drawings and installation diagram of outswing flush commercial steel doors, issued by Certified Testing Laboratories for test reports **CTLA-887W** and **CTLA-887W1** both dated July 15, 2002 and revised under **CTLA887W Revised** and **CTLA-887W-1**, both dated April 02, 2003, signed and sealed by Ramesh Patel, P.E.

C. CALCULATIONS

1. Anchor verification calculations dated 05-27-03 and revised on 07-15-03, prepared by W. W. Schaefer Engineering & Consultant, P. A., signed and sealed by Warren W. Schaefer, P.E.

D. MATERIAL CERTIFICATIONS

1. Tensile Test prepared by Certified Testing Laboratories. test report No. **CTLA 887W-1 (0567H)**, dated 06 June 2002, for steel samples, tested per ASTM-E8, signed and sealed by Ramesh Patel, P.E.
2. Notice of Acceptance # 01-0718.02, issued to Carpenter Company for "Carpenter Expanded Polystyrene Insulation", expiring April 11, 2007.

E. STATEMENTS

1. Statement letter dated 05-23-03, issued by Hollow Metal Inc, delegating Mr. Warren Schaefer of W. W. Schaefer Engineering & Consultant, P. A., as contact person, signed by David Carter.
2. Statement letter dated March 20, 2003 for "No financial interest" and conformance to FBC, signed and sealed by Warren W. Schaefer, P.E.
3. Statement of compliance, as part of above referenced test reports

F. OTHER

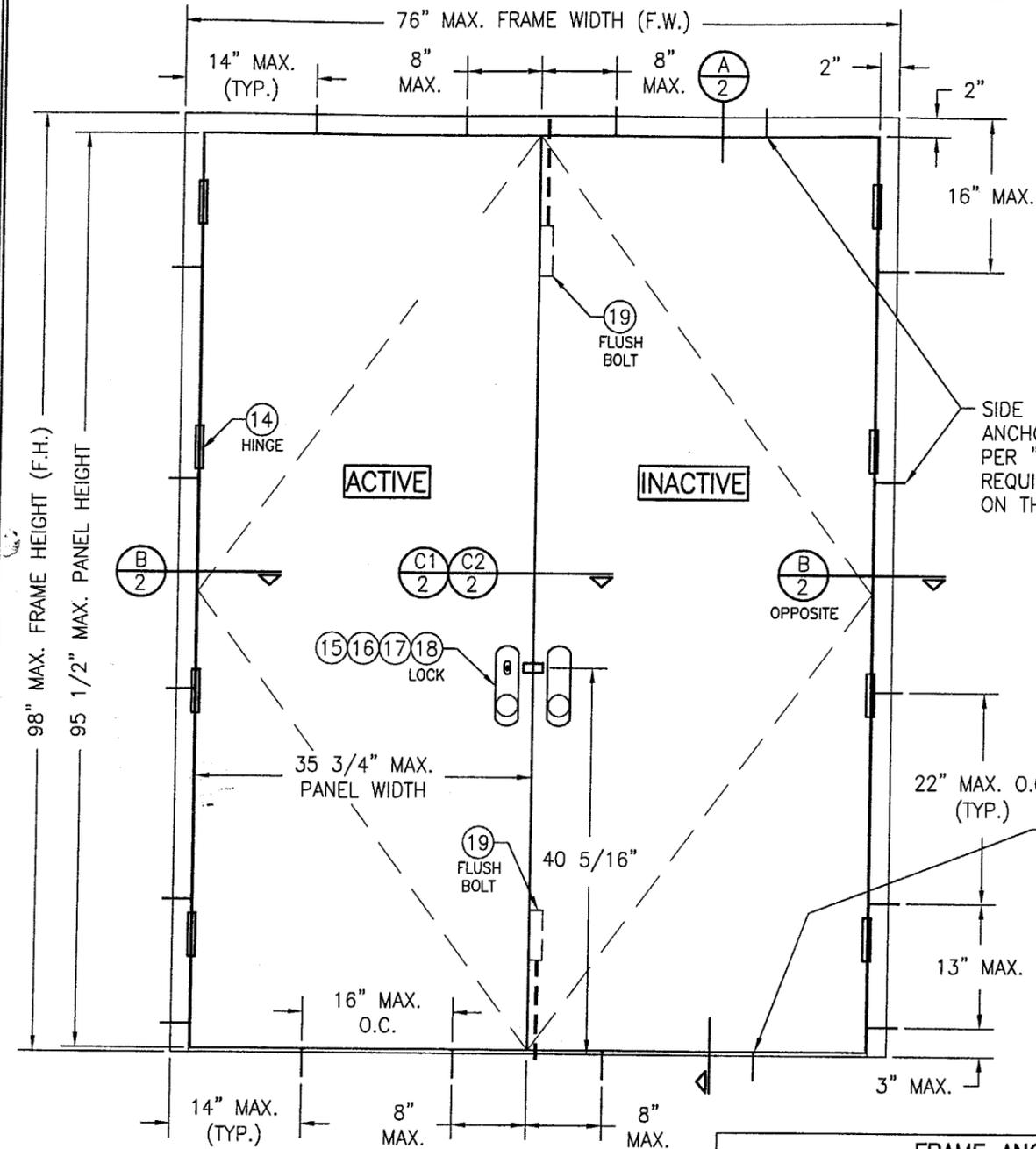
1. Acceptance of second copy of test video by BCCO.

Ishaq I. Chanda

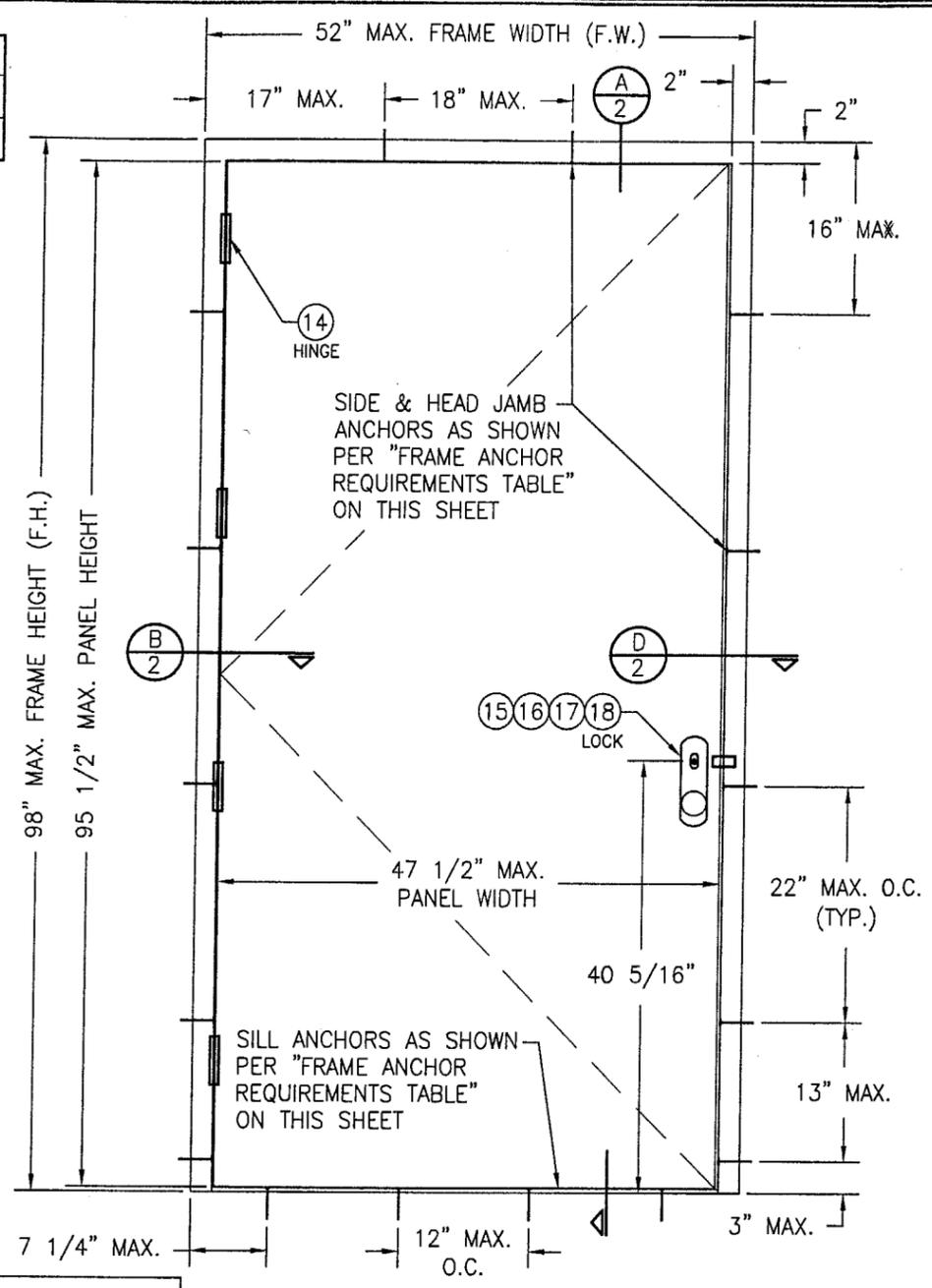
Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No 03-0116.04

Expiration Date: September 04, 2008
Approval Date: September 04, 2003

ALLOWABLE DESIGN PRESSURE	
POSITIVE	NEGATIVE
47 PSF	47 PSF



**EXTERIOR ELEVATION
DOUBLE OUTSWING DOOR**
SCALE: 3/4" = 1'-0"



**EXTERIOR ELEVATION
SINGLE OUTSWING DOOR**
SCALE: 3/4" = 1'-0"

FRAME ANCHOR REQUIREMENTS TABLE				
	OPENING TYPE (SUBSTRATE)	JAMB TO OPENING FASTENER TYPE	MINIMUM EMBEDMENT	MINIMUM EDGE DIST.
SIDE JAMBS & HEAD	(4) MIN. 12 GA. STEEL OR MIN. 14 GA. STUD	3/8" MIN. A307 BOLT WITH NUT & FLAT WASHER	FULL	1"
		(1) 3/8" SLEEVE/WEDGE ANCHOR (FLATHEAD) (3) 3/8" CONCRETE SCREW	2 1/2"	2 1/2"
SILL	(4) MIN. 12 GA. STEEL OR MIN. 14 GA. STUD	#12-14 KWIK-PRO SELF DRILLING SCREWS BY HILTI	FULL	3/4"
		MIN. 2500 PSI CONCRETE (2) 1/4" CONCRETE SCREW (Fy = 92,000 PSI)	1 1/4"	2"

(1) SLEEVE/WEDGE ANCHOR MAY BE A RAMSET/RED HEAD DYNABOLT, POWERS RAWL POWER BOLT OR HILTI SLEEVE ANCHOR.
(2) 1/4" CONCRETE SCREWS SHALL BE ELCO OR ITW RAMSET/RED HEAD TAPCONS, HILTI KWIK-CON II OR POWERS RAWL TAPPER (HARDENED STEEL OR S.S.).
(3) 3/8" CONCRETE SCREWS SHALL BE POWERS RAWL TAPPER (CARBON STEEL).
(4) STEEL SHALL BE MIN. Fy = 36 KSI; STUDS SHALL BE MIN. Fy = 33 KSI

GENERAL NOTES

1. THESE DOOR SYSTEMS HAVE BEEN TESTED, ANALYZED AND APPROVED FOR DESIGN PRESSURES NOT TO EXCEED THOSE SHOWN IN THE "ALLOWABLE DESIGN LOADS" TABLE.
2. BUCKING, OPENINGS & BUCKING FASTENERS MUST BE PROPERLY DESIGNED & INSTALLED TO TRANSFER WIND LOADS TO THE STRUCTURE.
3. ALL HARDWARE & FASTENERS SHALL BE IN ACCORDANCE WITH THESE DRAWINGS & MAY NOT VARY UNLESS SPECIFICALLY MENTIONED ON THE DRAWINGS.
4. THE DETAILS & SPECIFICATIONS SHOWN HEREIN REPRESENT THE PRODUCTS TESTED & PROPOSED FOR WATER, AIR, IMPACT, CYCLIC & UNIFORM STATIC AIR PRESSURE TESTING IN CONFORMANCE WITH FLORIDA BUILDING CODE PROTOCOLS TAS-201, 202 & 203 FOR LARGE MISSILE IMPACT DOORS.
5. THESE DOOR SYSTEMS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE (F.B.C.).
6. IMPACT SHUTTERS ARE NOT REQUIRED WITH THESE DOORS.
7. ALL ANCHORS SHALL BE INSTALLED AS SPECIFIED ON THESE DRAWINGS. SPECIFIED EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL FINISH OR STUCCO.

Approved as complying with the Florida Building Code
Date: SEPTEMBER 04, 2003
NOA# 03-0116-04
Miami Dade Product Control
Division
By: Shaq J. Chaudh

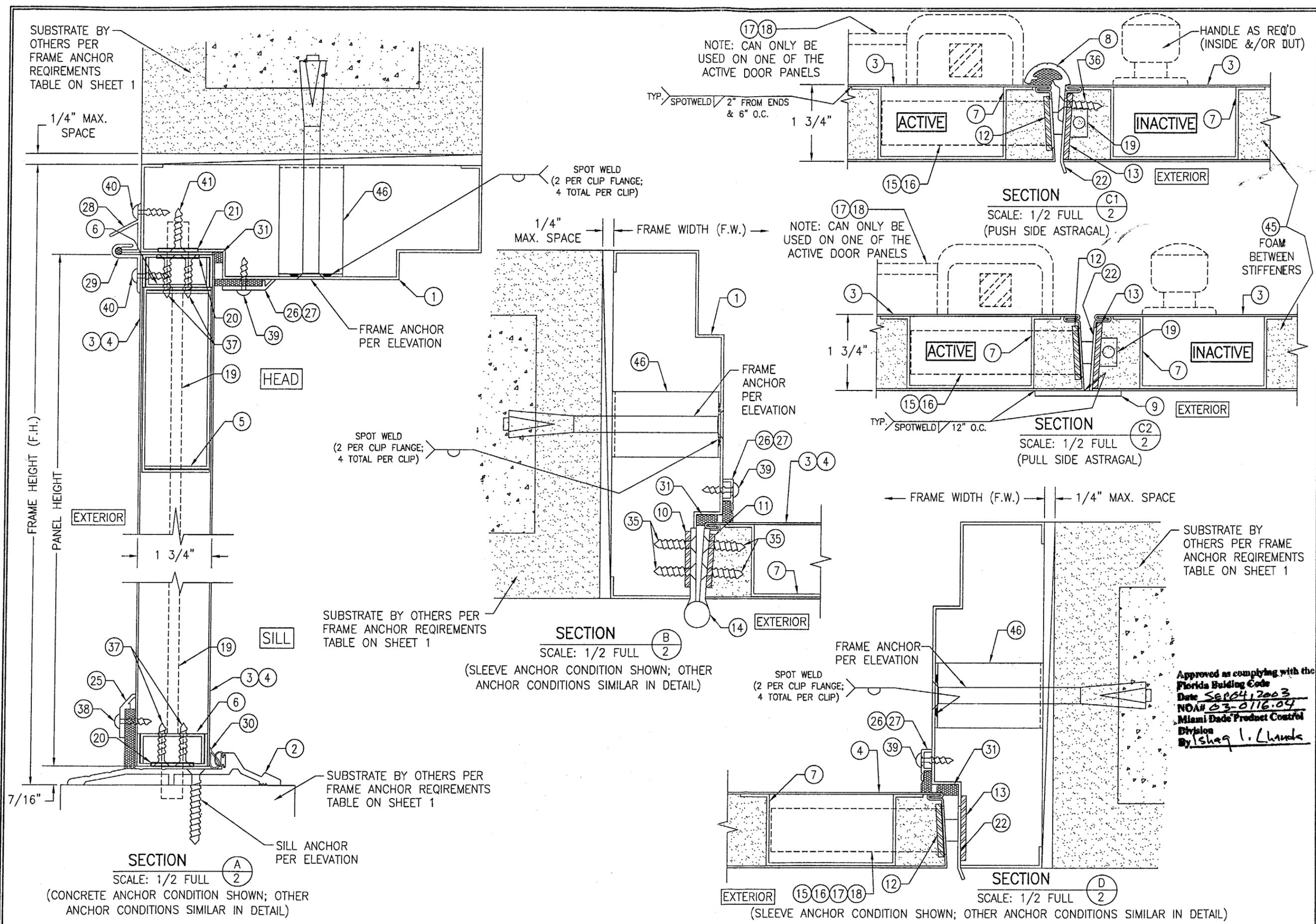
DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=16	DATE: 03/05/03
DATE	
BY	
REVISION DESCRIPTION	
NO.	

DRAWING TITLE: **OUTSWING FLUSH COMMERCIAL IMPACT STEEL DOORS**

CONSULTANTS: **W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.**
8885 N. MILITARY TRAIL, SUITE C-204
PALM BEACH GARDENS, FL 33410
PHONE: 561-775-4902 FAX: 561-775-4903

MANUFACTURER: **HOLLOW METAL, INC.**
5275 CAUSEWAY BLVD., SUITE #4
TAMPA, FLORIDA 33619
813-246-4112

CERTIFICATION	
JUL 28 2003	
DRAWING NO.	REV.
1212	
SHEET NO.	
1 OF 3	



NOTE: CAN ONLY BE USED ON ONE OF THE ACTIVE DOOR PANELS

NOTE: CAN ONLY BE USED ON ONE OF THE ACTIVE DOOR PANELS

SUBSTRATE BY OTHERS PER FRAME ANCHOR REQUIREMENTS TABLE ON SHEET 1

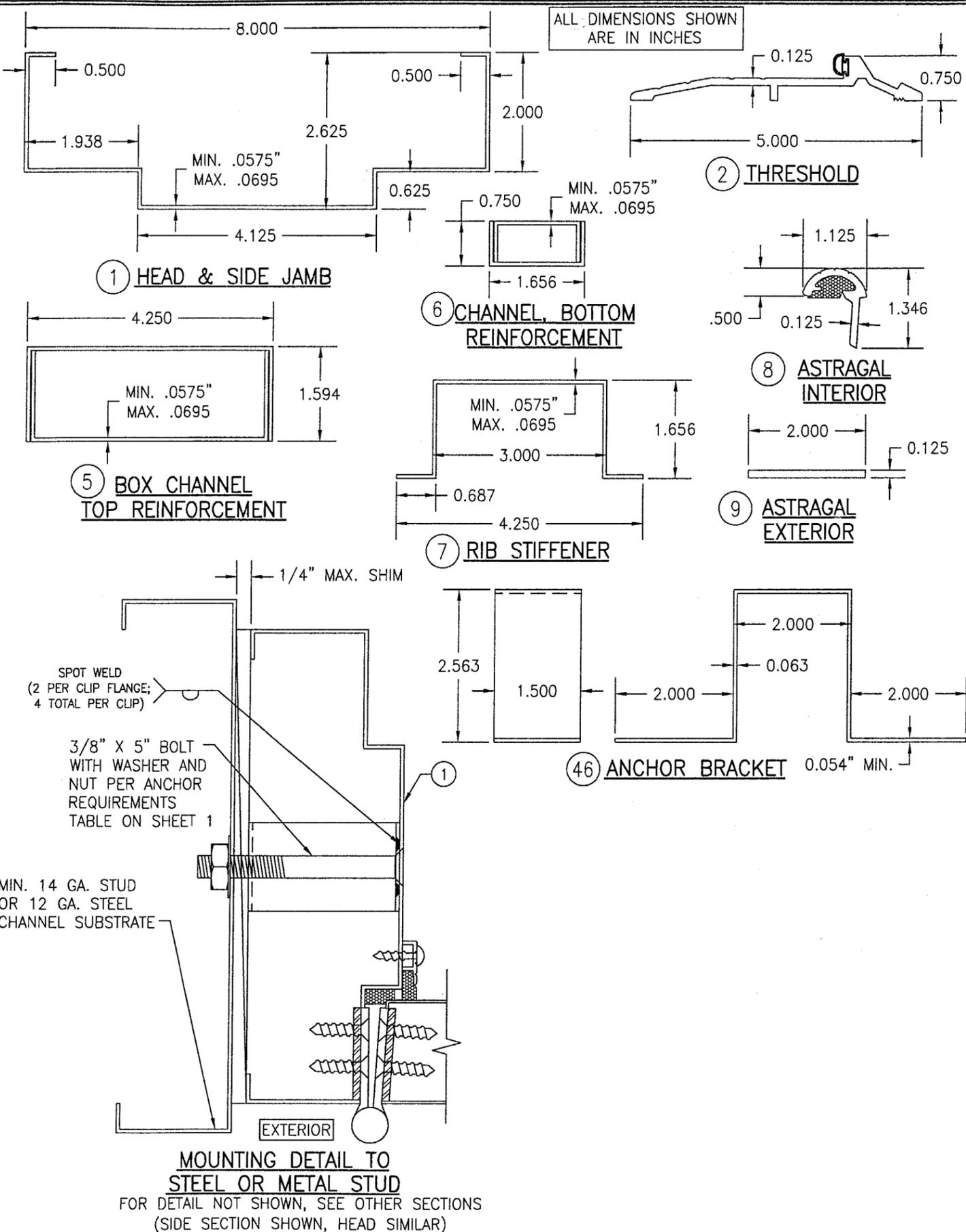
SUBSTRATE BY OTHERS PER FRAME ANCHOR REQUIREMENTS TABLE ON SHEET 1

(SLEEVE ANCHOR CONDITION SHOWN; OTHER ANCHOR CONDITIONS SIMILAR IN DETAIL)

(CONCRETE ANCHOR CONDITION SHOWN; OTHER ANCHOR CONDITIONS SIMILAR IN DETAIL)

(SLEEVE ANCHOR CONDITION SHOWN; OTHER ANCHOR CONDITIONS SIMILAR IN DETAIL)

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
PLOT: 1=2	DATE: 03/05/03
DATE	
BY	
REVISION DESCRIPTION	
NO.	
DRAWING TITLE	
OUTSWING FLUSH COMMERCIAL IMPACT STEEL DOORS	
CONSULTANTS	MANUFACTURER
W. W. SCHAEFER ENGINEERING & CONSULTING, P.A.	HOLLOW METAL, INC.
8895 N. MILITARY TRAIL, SUITE C-204 PALM BEACH GARDENS, FL 33410 PHONE: 561-775-4902 FAX: 561-775-4903	5275 CAUSEWAY BLVD., SUITE #4 TAMPA, FLORIDA 33619 813-246-4112
DRAWING TITLE	
OUTSWING FLUSH COMMERCIAL IMPACT STEEL DOORS	
Approved as complying with the Florida Building Code Date <u>SEP 04, 2003</u> NOAH <u>03-0116.04</u> Miami Dade Product Control Division By <u>Ishaq I. Lhank</u>	
CERTIFICATION	
WARREN W. SCHAEFER, P.E. P.E. NO. 44135	
DRAWING NO.	REV.
1212	
SHEET NO.	
2 OF 3	



ITEM #	PART #	ITEM DESCRIPTION	MANUFACTURER/NOTES
PARTS			
1	-	HEAD & SIDE JAMB	16 GA. A60 GALVANIZED STEEL
2	179AV	THRESHOLD	PEMCO - MILL FINISH ALUMINUM
3	-	DOUBLE DOOR PANEL FACE SHEET (Fy=36,800 PSI MIN.)	18 GA. A60 GALVANIZED STEEL
4	-	SINGLE DOOR PANEL FACE SHEET (Fy=36,800 PSI MIN.)	18 GA. A60 GALVANIZED STEEL
5	-	BOX CHANNEL, TOP REINFORCEMENT FULL LENGTH	16 GA. A60 GALVANIZED STEEL
6	-	CHANNEL, BOTTOM REINFORCEMENT FULL LENGTH	16 GA. A60 GALVANIZED STEEL
7	-	PANEL VERTICAL RIB STIFFENER FULL LENGTH	16 GA. A60 GALVANIZED STEEL
8	352CR	ASTRAGAL - INTERIOR	PEMCO - ANODIZED ALUMINUM
9	357SC	ASTRAGAL - EXTERIOR	PEMCO - ANODIZED ALUMINUM
10	-	HINGE REINF. BAR .179" X 1.28" X 9.5"	STEEL; AT FRAME
11	-	HINGE REINF. BAR .179" X 1.23" X 9.5"	STEEL; AT STILE
12	-	LOCK REINF. BOX AS REQ'D FOR LOCK	STEEL; AT ACTIVE DOOR STILE
13	-	LOCK REINF. BOX AS REQ'D FOR LOCK	STEEL; AT INACTIVE DOOR STILE & LOCK JAMB
HARDWARE			
14	BB1279	STEEL HINGE (4.5" X 4.5" X .134" THICK)	HAGER BB1279 OR BB1191
15	096 X 14-02-42 X 10-025	LOCK SET (D SERIES CYLINDRICAL LOCK)	SCHLAGE
16	L9457 X 05B	LOCK SET (MORTISE W/DEAD BOLT)	SCHLAGE MORTISE
17	9975NLX990NL-MX575-2	PANIC EXIT W/MORTISE LOCK & 575 STRIKE PLATE	VON DUPRIN (MAY BE USED AT ONLY ONE ACTIVE PANEL OF A DOUBLE DOOR)
18	98NL X 990NL-R	PANIC EXIT DEVICE W/299F STRIKE PLATE	VON DUPRIN (MAY BE USED AT ONLY ONE ACTIVE PANEL OF A DOUBLE DOOR)
19	555 X 12"	FLUSH BOLT	ROCKWOOD
20	-	FLUSH BOLT GUIDE PLATE 1" X 2"	5/64" THK. S.S OR PLATED STEEL
21	-	FLUSH BOLT STRIKE PLATE 2 1/4" X 15/16"	5/64" THK. S.S OR PLATED STEEL
22	-	LOCK STRIKE PLATE (SUPPLIED W/LOCK SET)	S.S OR PLATED STEEL
SEALS & SEALANTS			
25	368CN	DOOR SWEEP	PEMCO - ANODIZED ALUMINUM
26	312CR	GASKET	PEMCO - ANODIZED ALUMINUM
27	315CR	GASKET	PEMCO - ANODIZED ALUMINUM
28	347A	DOOR TOP MALE WEATHERSTRIP	PEMCO - MILL FINISH ALUMINUM
29	68AR	DOOR TOP FEMALE WEATHERSTRIP	PEMCO - MILL FINISH ALUMINUM
30	S88	SILICONSEAL WEATHERSTRIPPING	PEMCO
31	P497	WEATHERSTRIPPING TAPE	PEMCO - NEOPRENE
FASTENERS			
35	-	.210" DIA. X .525" SELF TAP FH SCREW	8 AT EACH HINGE
36	-	FH SCREW	12" O.C. AT ASTRAGAL
37	-	PH SCREW	2 AT EACH GUIDE PLATE
38	-	PH SCREW	AS REQ'D TO SECURE SWEEP
39	-	PH SCREW	AS REQ'D TO SECURE GASKET
40	-	PH SCREW	AS REQ'D TO SECURE SEAL
41	-	PH SCREW	2 AT EACH STRIKE PLATE
MISCELLANEOUS ITEMS			
45	-	EXPANDED POLYSTYRENE INSULATION FOAM	CARPENTER CO. (HOLDING CURRENT NOA)
46	-	ANCHOR BRACKET	A60 GALVANIZED STEEL 16 GA.

DRAWN BY: K.P.S.	CHECKED BY: W.W.S.
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BY	DATE
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CERTIFICATION	
JUL 28 2003 WARRREN W. SCHAEFER, P.E. P.E. No. 44135	
DRAWING NO. 1212	REV.
SHEET NO. 3 OF 3	

Approved as complying with the Florida Building Code
 Date SEP 04 2003
 NOA# 03-0116-04
 Miami Dept. Product Control
 Division
 By Isaac I. Lhand