MIAMI-DADE COUNTY

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
www.buildingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

TRACO Security Windows & Doors, Inc.
71 Progress Avenue
Cranberry Township, PA 16166

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 Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "TR-8910" Outswing Aluminum Terrace Door System –L.M.I.

APPROVAL DOCUMENT: Drawing No. **03-0041-103a**, titled "HGD 8910 Terrace Door System", prepared by Frank L. Bennardo, P.E., Inc. Consulting Engineers, sheets 1 through 3 of 3, dated 08/27/07, signed and sealed by Frank L.Bennardo, 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 Division.

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 NOA # 05-0727.01** and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

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

PRODUCT CONTROL ACCEPTED

5/4/7

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS (transferred from file # **05-0727.01**)

1. Manufacturer's die drawings and sections.
2. Drawing No. **03-0041-103a**, titled "HGD 8910 Terrace Door System", prepared by Frank L. Bennardo, P.E., Inc. Consulting Engineers, sheets 1 through 3 of 3, dated 08/27/07, signed and sealed by Frank L.Bennardo, P.E.

B. TESTS (transferred from file # **05-0727.01**)

1. Test reports on
   1) Large Missile Impact Test per FBC, TAS 201-94
   2) Cyclic Wind Pressure Loading per FBC, TAS 203-94

   along with marked-up drawings and installation diagram of a terrace door, prepared by Farabaugh Engineering & Testing, Inc., Test Report No. T208-06, dated 08/26/06, signed and sealed by Daneil G. Farabaugh, P.E.
   (Note: the test report has been revised by an addendum letter dated 08/07/07, issued by Farabaugh Engineering & Testing, Inc)
2. Test reports (transferred from file # 05-0727.010)
   1) Air Infiltration Test, per FBC, TAS 202-94
   2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
   3) Water Resistance Test, per FBC, TAS 202-94
   4) Large Missile Impact Test per FBC, TAS 201-94
   5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
   6) Forced Entry Test, per FBC 2411 3.2.1 and TAS 202-94

   along with marked-up drawings and installation diagram of a terrace door, prepared by Hurricane Test Laboratory, Inc., Test Report No. HTL 0021-0925-02 dated 9/26-27/02, signed and sealed by Vinu Abraham, P.E.

C. CALCULATIONS

1. Anchor Calculations and structural analysis prepared by Frank L. Bennardo, P.E., Consulting Engineer, dated 06/29/07, signed and sealed by Frank Bennardo, P.E.
2. Glazing compliew w/ ASTME-1300-02

D. QUALITY ASSURANCE

1. Miami-Dade County Building Code Compliance Office.

E. MATERIAL CERTIFICATIONS

1. Notice of Acceptance No. 06-0216.06 issued to Solutia, Inc. for "Saflex III interlayer" expiring on 5/21/11.

F. STATEMENTS

1. Statement letter of conformance and no financial interest, dated 11/13/06, signed and sealed by Frank Bennardo, P.E.
2. Laboratory compliance letters as part of above referenced test reports.

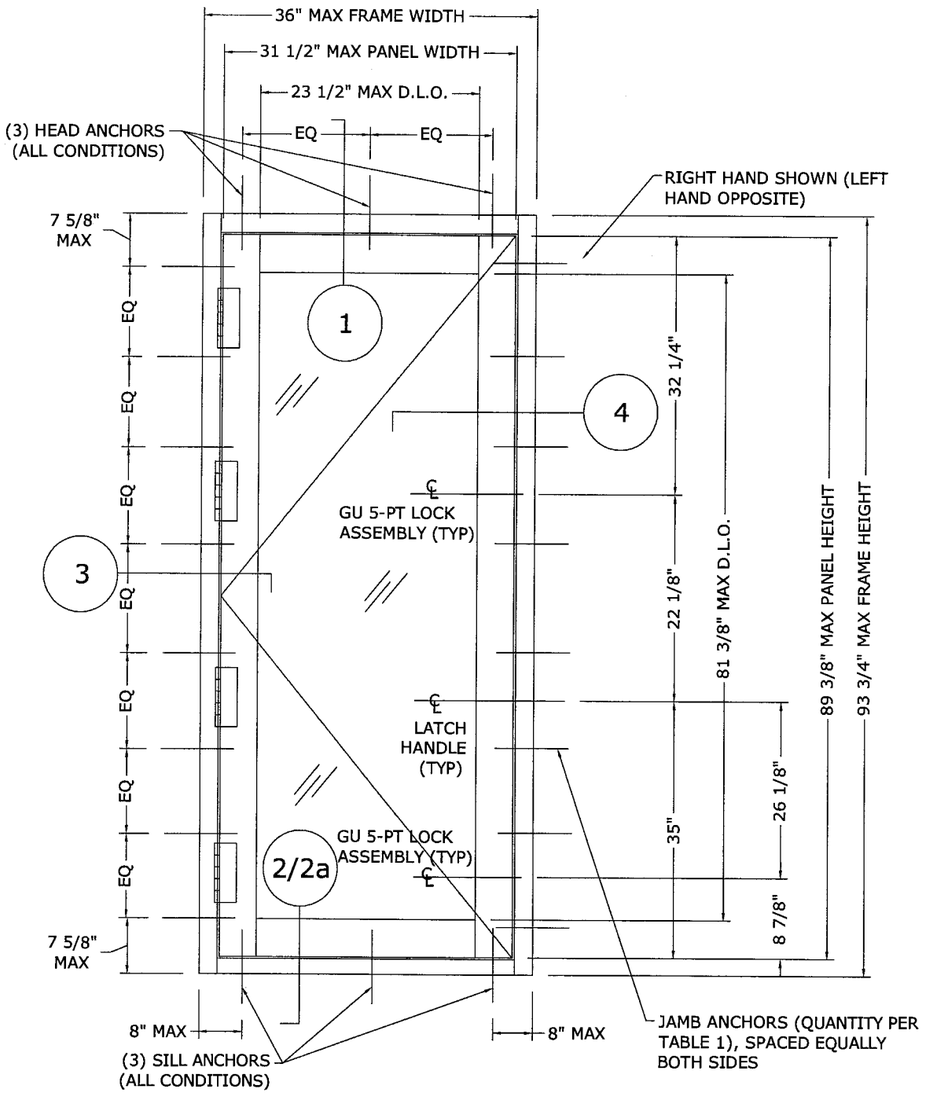
G. OTHER

1. This NOA **revises** NOA # **05-0727.01 (03-0422.04)**, expiring 10/16/08.

Ishaq I. Chanda

Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No 06-1121.10
Expiration Date: October 16, 2008
Approval Date: September 23, 2007

SERIES HGD 8910 TERRACE DOOR
(LARGE MISSILE IMPACT RESISTANT)



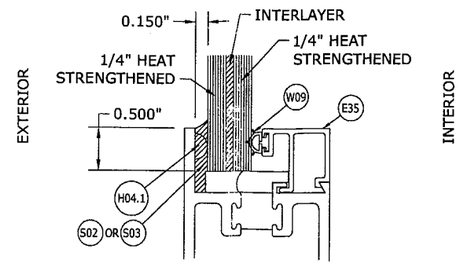
A EXTERIOR ELEVATION

ANCHOR LOCATIONS & SPACING:

HEAD & SILL: (3) ANCHORS EACH, PLACED AS SHOWN ABOVE.

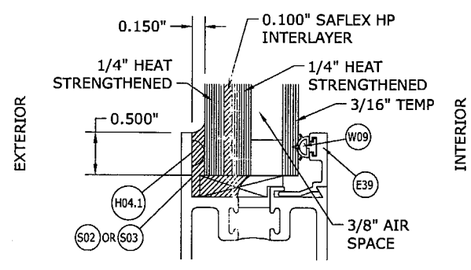
JAMBS: (1) ANCHOR @ 7 5/8" FROM EACH CORNER.
REMAINING ANCHORS PER TABLE 1, SPACED EQUALLY.

NOTE: NUMBER OF ANCHORS INDICATED IN TABLE 1 (SHEET 2) INCLUDES FIRST ANCHOR FROM EACH CORNER.



INTERLAYER OPTIONS:
- **OPTION 1:** 1/4" HS / .090" DUPONT SENTRYGLASS PLUS / 1/4" HS
- **OPTION 2:** 1/4" HS / .100" SOLUTIA SAFLEX HP / 1/4" HS

B 9/16" GLAZING DETAIL
(LARGE MISSILE)



- **OPTION 3:** 1/4" H/S / .100" SOLUTIA SAFLEX HP / 1/4" HS (EXT) + 3/8" AIR SPACE + 3/16" TEMPERED (INT)

C 9/16" S.I.G. GLAZING DETAIL
(LARGE MISSILE)

GLAZING NOTES:

SEALANTS:
ALL INSTALLATION SCREWS, FRAME & PANEL CORNER SEAMS SEALED WITH ALUM- OR CLEAR-COLORED SEALANT (ALL GLAZING OPTIONS).

GENERAL NOTES:

1. THE TERRACE DOOR SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN COMPLIANCE WITH THE 2004 FLORIDA BUILDING CODE AND 2006 SUPPLEMENT, HIGH VELOCITY HURRICANE ZONES, AND MIAMI-DADE COUNTY PROTOCOLS TAS 201, 202 & 203.

2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.

3. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS DOOR SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE AND BE REVIEWED BY BUILDING OFFICIAL.

4. THE DOOR SYSTEM DETAILED HEREIN HAS BEEN TESTED PER MIAMI-DADE COUNTY PROTOCOLS TAS-201, TAS-202, & TAS-203 AS REFERENCED IN TEST REPORTS #0021-0925-02 BY HURRICANE TEST LABORATORY (HTL) AND #T208-06 BY FARABAUGH ENGINEERING AND TESTING, INC (FET). MULTIPLE DOORS MUST BE INSTALLED USING MIAMI-DADE COUNTY BCCO-APPROVED STRUCTURAL MULLIONS [PER CURRENT NOA(S)].

5. THE DOOR SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.

6. ENGINEER OF RECORD SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS. WOOD BUCKS (NOT BY TRACO SECURITY) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.

7. DOOR PANELS GLAZED WITH OPTION 1 AND 2 (9/16" LAMINATED GLASS) OR OPTION 3 (9/16" S.I.G. GLASS) ARE LARGE MISSILE IMPACT RESISTANT AND DO NOT REQUIRE IMPACT RESISTANT SHUTTERS.

8. ALL STEEL IN CONTACT WITH ALUMINUM SHALL BE PAINTED OR PLATED.

PRODUCT REVISED
as complying with the Florida
Buiding Code
Acceptance No 06-1121.10
Expiration Date Oct 16, 2008
By Ishaq I. Chanda
Miami Dade Product Control
Division

FRANK L. BENNARDO, P.E.
PE0046549
08/27/2007
LICENSED AFFILIATE OF
ENGINEERING EXPRESS®
160 SW 12th AVENUE, #106
DEERFIELD BEACH, FL 33442
PH: (954) 354-0660 FAX: (954) 354-0443
WWW.ENGEXP.COM
CERT OF AUTH #9885

TRACO
Windows & Doors Inc.
71 Progress Avenue
Cranberry Township, PA 16166

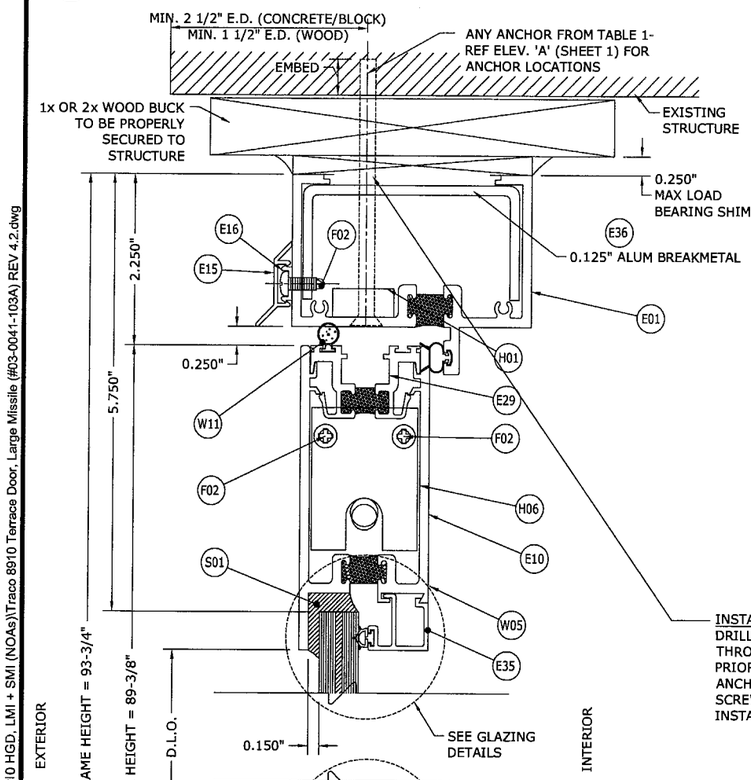
HGD 8910 TERRACE DOOR SYSTEM
LARGE MISSILE IMPACT RESISTANT
MIAMI-DADE PRODUCT APPROVAL

REMARKS	DRWN	CHKD	DATE
COUNTY COMMENTS	RKB	CL	05/04/07
COUNTY COMMENTS	CTS	CL	07/31/07
2004 FBC	CL	FLB	07/18/05
COUNTY COMMENTS	AML	FLB	09/01/05
GE SILICONE OPTION	KL	CL	10/23/06

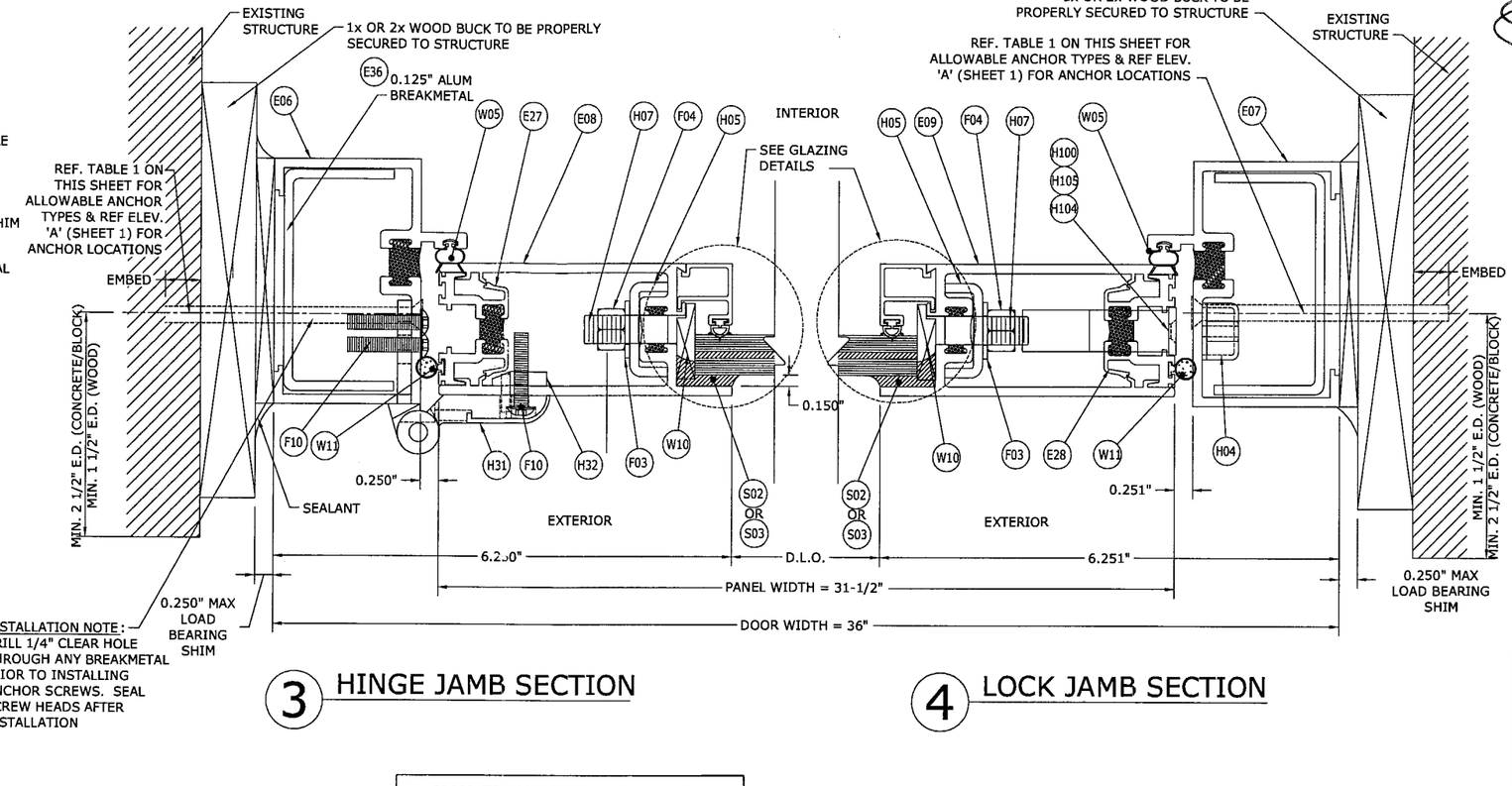
03-0041-113a
PAGE SCALE: -
DESCRIPTION:
-
-

08/27/2007 - 11:18am clangley F:\01 Project Files\Traco (TRA)\2003 Jobs\03-0041-113a + 03-0041-113b Traco 8910 HGD, LMI + SMI (NOAs)\Traco 8910 Terrace Door, Large Missile (#03-0041-103A) REV 4.2.dwg

1 HEADER SECTION DETAIL



2 SILL SECTION



3 HINGE JAMB SECTION

4 LOCK JAMB SECTION

FRAME INSTALLATION NOTE:

PANELS FOR ANY FRAMING CONDITION SHOWN HEREIN MAY BE SUPPLIED WITH EITHER GLAZING OPTION SHOWN IN GLAZING DETAILS ON SHEET 1.

MAX. FRAME SIZE: 36" x 93-3/4"

	TABLE 1		DESIGN LOAD CAPACITY (PSF) LARGE MISSILE	
	Jamb Anchor	Num of Anchors	EXT (+)	INT (-)
ALL GLASS TYPES (OPTIONS 1, 2, AND 3)	#12 SMS OR WOOD SCREW[2] OR 3/16" TAPCON[3]	8	56.66	56.66
		9	63.74	63.74
		10	70.83	70.83
		11	77.91	77.91
		12	84.99	84.99
		13	92.07	92.07
		14	95.00	99.16
		15	95.00	106.24
		16	95.00	110.00
	#14 SMS OR WOOD SCREW[2] OR 1/4" TAPCON[3]	8	80.62	80.62
		9	90.69	90.69
		10	95.00	100.77
		11	95.00	110.00

TABLE 1 NOTES:

1. ENTER TABLE 1 BASED ON JAMB ANCHOR TYPE, CHOOSE NUMBER OF ANCHORS THAT PROVIDES DESIGN LOAD CAPACITY (+ & -) GREATER THAN OR EQUAL TO REQUIRED WINDLOAD FOR OPENING.
2. #12 OR #14 WOOD SCREWS (Fy = 120KSI, GRADE 5) FOR USE INTO GRADE 2 SOUTHERN YELLOW PINE (G=0.55). #12 OR #14 SMS (Fy = 120KSI, GRADE 5) FOR USE INTO MIN 1/8" THICK STEEL OR ALUMINUM.
3. TAPCONS (BOTH 3/16" & 1/4") MAY BE BY ELCO OR ITW BUILDEX, FOR USE IN CONCRETE, GROUT-FILLED BLOCK, OR WOOD. WOOD SHALL BE "SOUTHERN PINE" GRADE 2 (G=0.55 MIN).
4. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
5. ANCHOR EMBEDMENT SHALL BE INTO BASE MATERIAL, EXCLUDING STUCCO OR OTHER WALL FINISH.
6. FOR ANCHOR LOCATIONS AND SPACING, SEE ELEVATION 'A' ON SHEET 1.
7. PROVIDE 1 1/2" EMBEDMENT THRU WOOD BUCKS INTO GROUT-FILLED BLOCK (2ksi MIN) OR CONCRETE (3ksi MIN). PROVIDE 1 1/2" PENETRATION INTO WOOD STRUCTURE. ENSURE MINIMUM OF 2 1/2" EDGE DISTANCE FOR ALL ANCHORS TO CONCRETE/BLOCK AND 1 1/2" EDGE DISTANCE FOR ANCHORS TO WOOD.

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 06-1121.10
Expiration Date OCT 16, 2008
By Shaq I. Chanda
Miami Dade Product Control Division

SILL ANCHORING NOTE:

1. UNSCREW AND REMOVE THRESHOLD
2. INSTALL SILL ANCHOR SCREWS
3. SEAL ANCHOR SCREW HEADS
4. REMOVE BACKING FROM TAPE ON THRESHOLD.
5. INSTALL THRESHOLD AND THRESHOLD SCREWS.

FRANK L. BENNARDO, P.E.
PE0046549
08/27/2007

LICENSED AFFILIATE OF
ENGINEERING EXPRESS®
160 SW 12th AVENUE, #106
DEERFIELD BEACH, FL 33442
Ph: (954) 354-0660 Fax: (954) 354-0443
WWW.ENGEXP.COM
CERT OF AUTH #9885

TRACO
Windows & Doors Inc.
71 Progress Avenue
Cranberry Township, PA 16166

HGD 8910 TERRACE DOOR SYSTEM
LARGE MISSILE IMPACT RESISTANT
MIAMI-DADE PRODUCT APPROVAL

REMARKS	DRWN	CHKD	DATE
COUNTY COMMENTS	RKB	CL	05/04/07
COUNTY COMMENTS	CTS	CL	07/31/07
2004 FBC	CL	FLB	07/18/05
COUNTY COMMENTS	AML	FLB	09/01/05
GE SILICONE OPTION	KL	CL	10/23/06

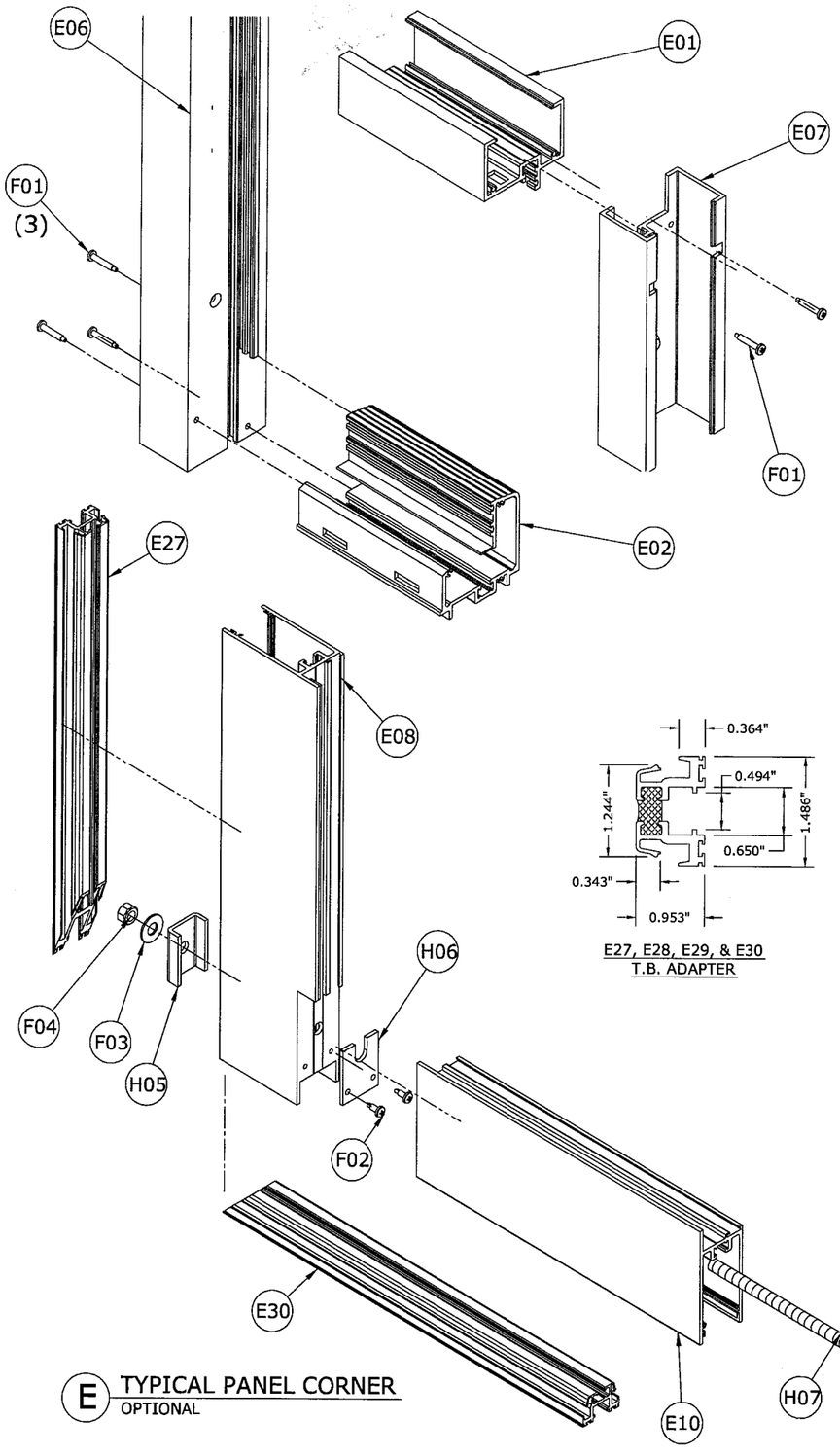
03-0041-113a

PAGE SCALE: -
DESCRIPTION:
-
-

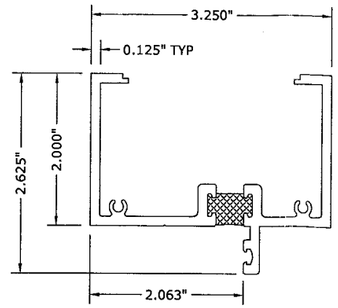
3

2

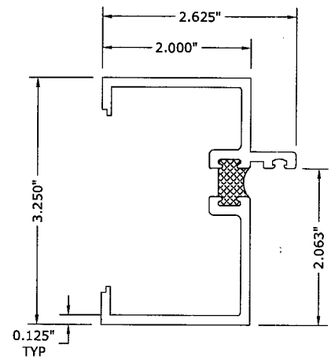
08/27/2007 - 11:10am clangley F:\01 Project Files\Traco (TRA)\2003 Jobs\03-0041-113a + 03-0041-113b Traco 8910 HGD, LMI + SMI (NOAs)\Traco 8910 Terrace Door, Large Missile (#03-0041-103A) REV 4.2.dwg



E TYPICAL PANEL CORNER
OPTIONAL

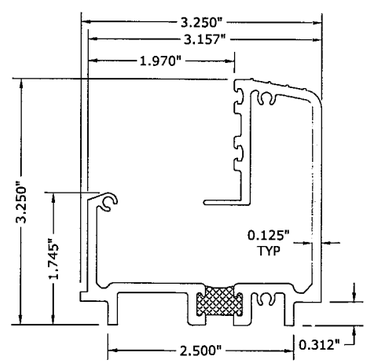


E01 MAIN FRAME HEAD



E06 & E07 FRAME JAMB

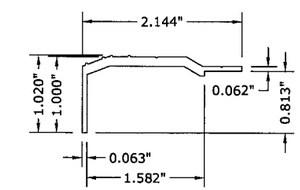
E27, E28, E29, & E30
T.B. ADAPTER



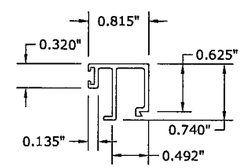
E02 FRAME SILL

BILL OF MATERIALS

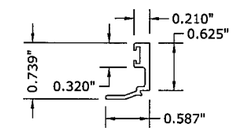
ITEM	PART NO.	DESCRIPTION	MATERIAL	VENDOR	VENDOR PART NO.
E01	S-2437	MAIN FRAME HEAD	6063-T5	TRACO	
E02	S-3189	FRAME SILL	6063-T5	TRACO	
E03	S-2441	THRESHOLD, STANDARD	6063-T5	TRACO	
E06	S-2471	FRAME JAMB, HINGE SIDE	6063-T5	TRACO	
E07	S-2471	FRAME JAMB, LOCK SIDE	6063-T5	TRACO	
E08	S-2472	DOOR RAIL, HINGE SIDE	6063-T5	TRACO	
E09	S-2472	DOOR RAIL, LOCK SIDE	6063-T5	TRACO	
E10	S-2472	DOOR RAIL, TOP & BOTTOM	6063-T5	TRACO	
E15	S-2581	DRIP CAP	6063-T5	TRACO	
E16	S-2582	DRIP CAP BRACKET	6063-T5	TRACO	
E27	S-2859	T.B. ADAPTER, VERTICAL, HINGE	6063-T5	TRACO	
E28	S-2859	T.B. ADAPTER, VERTICAL, LOCK	6063-T5	TRACO	
E29	S-2859	T.B. ADAPTER, HORIZONTAL, TOP	6063-T5	TRACO	
E30	S-2859	T.B. ADAPTER, HORIZONTAL, BOTTOM	6063-T5	TRACO	
E35	S-3116	9/16" GLAZING BEAD	6063-T5	TRACO	
E36		BREAKMETAL	6063-T5		
E39	S-3223	1 1/8" INSULATED GLAZING BEAD	6063-T5	TRACO	
S02	05-0038	DOW 995 SILICONE (Large Missile)		DOW	995
S03	05-0127-10 05-0128-16	TWO-PART GE STRUCTURAL SILICONE		GE	GE RGS7700
F01	15-0006	#8-18 X 1" PPH 3/16" LP 410 SS		ALLSTAR FASTENER	
F02	15-0056	#8-18 X 1/2" PPH TEK			
F03	15-0089	WASHER, 3/8", SS SS			
F04	15-0139	NUT, 3/8" SS			
F06	15-0231	#6 X .375 PPH TEK 2 SS			
F10	15-0498	#10-32 X 1" TMPR. TORX BH MS	SS	TAMPERPROOF SCREW CO	
W03	20-0367	1/16" X 7/16" GLAZING TAPE		TOM BROWN	V992
W05	20-4081	BULB FRAME WEATHERSTRIP		AMESBURY	
H01	30-2208	BLISTER PACK PAPER PRODUCTS			
H02	30-2338	WEEP COVER & HOUSING, WHITE		GAER	870300-BW
H03	30-2339	WEEP COVER & HOUSING, BROWN		GAER	870300-BN
H04	30-2547	LATCH CUP		PRODUCT DESIGN & DEV	
H04.1	30-3086	Bumpon		3M	SJ-5306
H05	30-2548	TIE ROD BRACKET STEEL		ADVANTAGE	268
H06	30-2549	GUIDE PLATE	6063-T5	ADVANTAGE	269
H07	30-2551	TIE ROD, 3/8" -16, THREADED STEEL		STD-MACHINIST SUPPLY	
H31	30-2797	4 1/2" BUTT HINGE, MILL FINISH	6063-T5	ADVANTAGE	398 MILL
H32	30-2798	HINGE BACKER PLATE	6063-T5	ADVANTAGE	402
H100	30-2917	CREMONA EXTENSION 500 S.S.	SS	G-U HARDWARE	
H104	30-2919	RHINO HOOKBOLT STAINLESS STEEL	SS	G-U HARDWARE	
H105	30-3096	HEAVY-DUTY REVERSING GEAR S.S.	SS	G-U HARDWARE	G-20416-00-0-8



E03 THRESHOLD

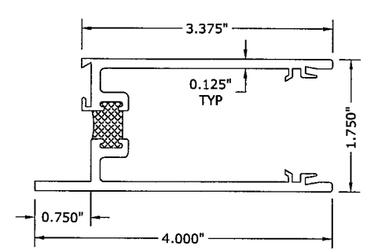


E35 9/16" GLAZING BEAD

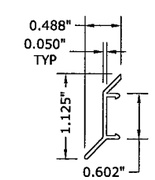


E39 1-1/8" S.I.G.
GLAZING BEAD

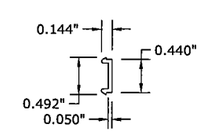
PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. 06-1121.10
Expiration Date OCT 16, 2008
By Ishag I. Chanda
Miami Dade Product Central Division



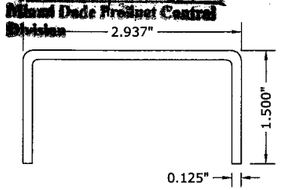
E08, E09, & E10 DOOR RAIL



E15 DRIP CAP



E16 DRIP CAP BRACKET



E36 BREAKMETAL

FRANK L. BENNARDO, P.E.
PE0046549
08/27/2007

LICENSED AFFILIATE OF
ENGINEERING EXPRESS®
160 SW 12th AVENUE, #106
DEERFIELD BEACH, FL 33442
Ph: (954) 354-0660 Fax: (954) 354-0443
WWW.ENGEXP.COM
CERT OF AUTH #9885

TRACO
Windows & Doors Inc.
71 Progress Avenue
Cranberry Township, PA 16166

HGD 8910 TERRACE DOOR SYSTEM
LARGE MISSILE IMPACT RESISTANT
MIAMI-DADE PRODUCT APPROVAL

REMARKS	DRWN	CHKD	DATE
COUNTY COMMENTS	RKB	CL	05/04/07
COUNTY COMMENTS	CTS	CL	07/31/07
2004 FBC	CL	FLB	07/18/05
COUNTY COMMENTS	AML	FLB	09/01/05
GE SILICONE OPTION	KL	CL	10/23/06

03-0041-113a
PAGE SCALE: -
DESCRIPTION:
-
-

3

08/27/2007 - 11:10am clangley F:\01 Project Files\Traco (TRA)\2003 Jobs\03-0041-113a + 03-0041-113b Traco 8910 HGD, LMI + SMI (NOAs)\Traco 8910 Terrace Door, Large Missile (#03-0041-103A) REV 4.2.dwg