



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/home/asp

Master Security Doors Inc.,
2179 N. Powerline Road, Suite #2
Pompano Beach, FL 33069

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County BNC -Product Control Section 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. BNC 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 "EX3" Single Outswing Steel Door -L.M.I.

APPROVAL DOCUMENT: Drawing No. **11-037**, titled "EX3 USA Outswing Door Large Missile Impact Resistant", sheets 1 through 11 of 11, dated 09/15/05 and last revised on 04-18-11, prepared by Tilteco Inc., signed and sealed by Walter A. Tillit Jr., 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

Limitation:

1. Refer to sheet 3 of the Dwgs for Design Pressure Vs anchor type and anchor spacing "S"
2. Min (5) retention clip per side jamb required (Max 28.74" OC), See detail X/11 in sheets 3 and 11.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and Series/Model 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 & renews** NOA # **05-1121.03** and consists of this page 1 and evidence pages E-1, as well as approval document mentioned above.

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



NOA No 11-0420.01
Expiration Date: April 20, 2016
Approval Date: June 02, 2011
Page 1

6/25/11

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS (transferred from file # 05-1121.03)

1. Manufacturer's die drawings and sections.
2. Drawing No. 11-037, titled "EX3 USA Outswing Door Large Missile Impact Resistant", sheets 1 through 11 of 11, dated 09/15/05 and last revised on 04-18-11, prepared by Tilteco Inc., signed and sealed by Walter A. Tillit Jr., P.E.

B. TESTS (transferred from file # 05-1121.03)

1. Test reports on:
 - 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, TAS 202-94

Along with marked-up drawings and installation diagram of outswing steel door, prepared by American Test Lab of South Florida, Test Report No. **ATL# 0531.01-05**, dated 11/09/05, signed and sealed by William R. Mehner, P.E. and Henry Hattem, P. E.

C. CALCULATIONS

1. Statement letter of compliance to FBC 2007, dated 04/14/11 issued by Tilteco Inc., signed and sealed by Walter A. Tillit Jr., P.E.
2. Anchor Calculation and Structural analysis complying w/ FBC 2004, prepared by Tilteco, Inc., dated 09/09/05, signed and sealed by Walter A. Tillit Jr., P.E. (transferred from file # 05-1121.03)

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

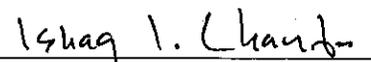
1. Tensile test report # 5GM-704 dated July 28, 2005 per ASTM E-8, issued by Metallurgical Inc, signed by Frank Grate.

F. STATEMENTS

1. Statement letter of compliance to FBC 2007, dated 04/14/11 issued by Tilteco Inc., signed and sealed by Walter A. Tillit Jr., P.E.
2. Statement letter of "No financial interest", dated 04/14/11 issued by Tilteco Inc., signed and sealed by Walter A. Tillit Jr., P.E.
3. Statement letter dated October 11, 2005, "No financial interest" and conformance to FBC 2004, signed and sealed by Walter A. Tillit, P.E. (transferred from file # 05-1121.03)
4. Statement of lab compliance, as part of the test report.

G. OTHER

1. This NOA revises & renews NOA # 05-1121.03, expired on April 20, 2011.



Ishaq I. Chanda, P.E.

Product Control Examiner

NOA No 11-0421.01

Expiration Date: April 20, 2016

Approval Date: June 02, 2011

GENERAL NOTES

1. EX-3 USA, Outswing single door, large missile impact resistant shown on this Product Approval Document (P.A.D.) has been verified for compliance in accordance with the 2007 edition of the Florida Building Code. Door may be installed at High Velocity Hurricane Zones (H.V.H.Z.). Design wind loads shall be determined as per section 1620 of the above mentioned code. In order to verify that anchors on this P.A.D., as tested, were not overstressed, a 33% increase in allowable stresses for wind loads was not used in their analysis. A duration factor $C_D = 1.60$ was used to verify fasteners in wood. This door's adequacy for impact and cyclic resistance has been verified in accordance with section 1626 of the above mentioned code, as per TAS 201, 202 and 203 protocols, per ATL Report #0531.01-05, and as per submitted calculations performed as per section 1612 of the Florida Building Code.

2. **Max Design Pressure Rating: + 150, -200 psf**
This pressure rating is only valid if door is assembled with required hardware indicated on sheet 2 of this drawing.

3. **This Door is approved for Air and Water Infiltration.**
This approval is only valid if door is sealed with required gasketing and weather stripping as indicated on Bill of Materials on sheet 3, and sealant specified on General Note 10 below.

4. **This Door will not require a Hurricane Protective Device.**

5. Wood bucks by others, and must be properly anchored to transfer loads to the existing structure. Wood bucks must be Southern Pine #2, with specific Gravity G equal or greater than 0.55.

6. Anchors for fastening door subframe to existing structure must be as indicated on sheet 3.

7. All welding to conform to the 2007 American welding Society AWS D1.3 and AWS D1.9. Regulations. Use certified welders.

8. All screws used for assembly connections (metal to metal) to be stainless steel 304 or 316 series or corrosion resistant coated carbon steel as per DIN 50018 with 50 ksi minimum yield strength and 90 ksi tensile strength and shall comply with F.B.C. section 2411.3.3.4

9. Remaining components for this door system shall be as indicated on Bill of Materials on sheet 2 of this drawing.

10. Sealing of door components shall be as follows:

Sealant:
Frame: The interior and exterior perimeter joints and all frame connections shall be sealed with silicone sealant. The two sheet metal 45° angle shaped sections at the corner key shall be sealed to each other and to the sheet metal fabricated corner section with silicone sealant. The two steel sections at the sill shall be sealed with silicone sealant. Hinges shall be also sealed to hinge jamb with silicone sealant.

Sub-frame: The interior and exterior perimeter joints and all sub-frame connections shall be sealed with silicone sealant. Sub-frame shall be also sealed to the frame with silicone sealant around the exterior perimeter. Sub-frame shall be sealed to the wood buck using silicone sealant.

Door: The interior and exterior perimeter joints and all door connections to the main casing at the top rail, bottom rail and stiles shall be sealed with silicone sealant. Hinges shall also be sealed to hinge stile with silicone sealant. The plywood panel on exterior side of door shall be sealed around perimeter of the top rail, bottom rail and stiles with silicone sealant.

11. **Frame and Sub-frame Material:** Hot rolled steel DD12 Reference EN 10111 with Tensile Strength = 59,100 psi; Yield Strength at 0.2% = 52,300 psi; Ultimate Elongation 33%.

12. **Door Material:** Hot rolled zinc plated DX51 + Z100 (275 G/M² 0.6 Oz/Ft²) Reference EN 10142 + A1-97 with Tensile Strength = 54300 psi, Yield Strength at 49,600 psi; Ultimate Elongation = 23%.

13. **ASTM Designation for Steel:** Equivalent to ASTM A 653 CQ Grade 50 at frame and ASTM A 653 CQ Grade 50 at door.

14. **Galvanizing type:** G60 (initial shop coated), followed by a second coat of asphalt paint in accordance w/ 2007 F.B.C., section 2220.2

15. **Decorative Wood Clad Panels:** 0.250 (1/4") thick plywood (min. E=1300 ksi.), oak (min. E=1573 ksi.), pine (min. E=1417 ksi.), mahogany (min. E=1204 ksi.), Douglas fir (min. E=1390 ksi.) with 10-12% maximum moisture content, painted with minimum of two (2) coats of water based varnishes, protective impregnators and coatings for outdoor installations.

16. Door's manufacturer label shall be placed on the exposed surface of door's frame or sub-frame. One Label shall be placed for every door. Label shall read as follows:

Master Security Doors, Inc.
Deerfield Beach, FL
Miami Dade County Product Control Approved.

17.

- a. This P.A.D. prepared by this engineer is generic and does not provide information for a specific project; i.e., where the site conditions deviate from the P.A.D.
- b. Contractor to be responsible for the selection, purchase and installation, including life safety of this product, based on this P.A.D., provide he/she does not deviate from the conditions detailed on this document. Construction safety at site is the contractor's responsibility.
- c. This P.A.D. will be considered invalid if altered by any means.
- d. Original P.A.D. shall bear the date and original seal and signature of the professional engineer of record that prepared it.

18. Materials, included but not limited to steel / metal screws, that come in contact with other dissimilar materials shall meet the requirements of 2007 Florida Building Code section 2003.8.4.



MASTER SECURITY DOORS, INC.
2179 N POWER LINE ROAD
SUITE 2
POMPANO BEACH, FL 33069
TELEPHONE: 954-971-4747
FAX: 954-971-4925

MODEL: EX3 USA
OUTSWING DOOR
LARGE MISSILE
IMPACT RESISTANT

DRAWING: ELEVATION

SCALE: NONE

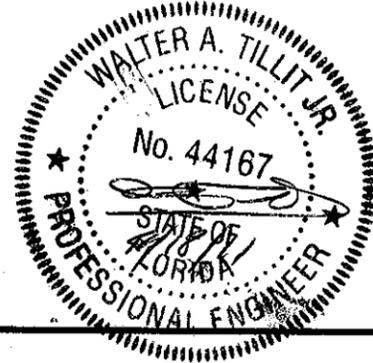
DRAWN BY: KP, RE

DATE DWN: 09/15/05, REV. 04/18/11

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 11-0420.01
Expiration Date 7/20/2016

Walter A. Tillit Jr.
Miami Dade Product Control

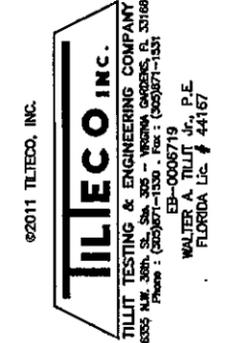
11-037
DRAWING N°
SHEET 1 OF 11



REV. 02/27/06 (GENERAL)

BILL OF MATERIALS

| ITEM # | DESCRIPTION | MATERIAL | QTY | COMMENTS |
|--------|----------------------------------|-------------------------------|-----|--|
| 1 | HANDLE SET W/DEAD BOLT | MISC. | 1 | NOT APPLICABLE |
| 2 | EXTERIOR PANEL (SEE NOTE 15) | 0.250 THK. WOOD $G \geq 0.55$ | 1 | ATTACHED TO ITEM 11 WITH LIQUID NAIL GLUE |
| 3 | INTERIOR PANEL (SEE NOTE 15) | 0.250 THK. WOOD $G \geq 0.55$ | 1 | ATTACHED TO ITEM 11 WITH LIQUID NAIL GLUE |
| 4 | FRAME JAMBS, HEAD | HR STL W/ A52 PVC FILM | 3 | NOT APPLICABLE |
| 5 | FRAME CORNER KEY | GALV. STEEL | 2 | REFER TO SHEET 8 |
| 6 | HINGE ASSEMBLY | STEEL | 3 | REFER TO SHEET 10 |
| 7 | ROCKWOOL INSULATION | FIBERGLASS | A/R | PANEL CAVITY |
| 8 | REINF (MULTI-POINT LOCK HOUSING) | STEEL | 1 | AT LOCK STILE |
| 9 | 9/16" X 1/8" THK OPEN CELL FOAM | EPS | A/R | W/ADHESIVE BACKING AND GLUED TO COMPRESSION GASKET |
| 10 | PANEL REINF (HINGE STILE) | STEEL | 1 | AT HINGE STILE |
| 11 | PANEL TOP, BOTTOM & STILE RAILS | HR STL W/ A52 PVC FILM | 4 | NOT APPLICABLE |
| 12 | #5 X 1/2" PPHSMS | STEEL | 19 | PANEL ASS'Y SCREW |
| 13 | CISA CYLINDER ASSEMBLY LOCK | STEEL | 1 | REFER TO SHEET 9 |
| 14 | BACKING TOBAR | GALV. STEEL | 2 | NOT APPLICABLE |
| 15 | ELEVATED FRAME SILL | HR STL W/ A52 PVC FILM | 1 | REFER TO SHEET 6 |
| 16 | FRONT PANEL PLATE | HOT ROLLED STEEL | 1 | 0.059" THK, WELDED TO THE STEEL FORMED SECTION AROUND THE ENTIRE PERIMETER ON INTERIOR AND EXTERIOR SIDE, (20) WELDS AT EACH STILE, LOCATED AT (1) AT 1/1/8" FROM TOP RAIL, THEN (19) WELDS AT 4 3/4" O-C. (8) WELDS AT TOP AND BOTTOM RAIL, EACH LOCATED (1) AT 1" FROM LOCK STILE, THEN (7) AT 5" O-C. |
| 17 | REAR PANEL FORMED PLATE | HOT ROLLED STEEL | 1 | 0.059" THK, SPOT WELDED TO ITEM 8 IN THE LOCK STILE WITH TWO ROWS OF SPOT WELDS, 4" APART, FIRST ROW AT 5/8" FROM LOCK STILE. EACH ROW WITH (8) WELDS, LOCATED (1) AT 1 1/2" FROM TOP RAIL, BALANCE AT 13 1/8", 17 1/4", 16", 3 3/4", 11", 10 3/4", 16" AND ALSO SPOT WELDED TO ITEM 10 IN THE HINGE STILE WITH ONE ROW OF (6) SPOT WELDS AT 2 1/2" FROM HINGE STILE, AND AT 2 1/2" FROM TOP RAIL, WITH BALANCE AT 14 1/2", 17", 17 7/8", 18" AND 19 1/2". |
| 18 | SUBFRAME HEAD | HOT ROLLED STEEL | 1 | REFER TO DETAIL 18, SHEET 7 |
| 19 | SUBFRAME JAMBS | HOT ROLLED STEEL | 2 | REFER TO DETAIL 19, SHEET 7 |
| 20 | LOWER FRAME SILL | HR STL W/ A52 PVC FILM | 1 | REFER TO DETAIL 20, SHEET 7 |
| 21 | SUBFRAME CORNER KEY | GALV. STEEL | 2 | REFER TO DETAIL 21, SHEET 7 AND DETAIL 5, SHEET 8 |
| 22 | FRAME GASKET | VINYL | A/R | REFER TO DETAIL 22, SHEET 11 |
| 23 | COMPRESSION GASKET | VINYL | A/R | REFER TO DETAIL 23, SHEET 11 |
| 24 | BLOT W/THREADED SLEEVE | STEEL | 5 | REF DET 24, SHEET 6 AND REF DET 28, SHEET 7. LOCATED AT 1 3/8" WIDE X 1 1/8" HIGH CUT OUTS COVERED WITH VINYL COVER (5) AT HINGE JAMB |
| 25 | RETENTION CLIP HOUSING | GALV STEEL | 10 | 5 PER JAMB. SEE LOCATIONS ON SHEET 3. REF. DET 25, SHEET 11 |
| 26 | RETENTION CLIP | GALV. STEEL | 10 | 5 PER JAMB. SEE LOCATIONS ON SHEET 3. REF. DET 26, SHEET 11 |
| 27 | M8 X 30MM ALLEN HEAD BOLT | STEEL | 5 | SEE SHEET 3 FOR LOCATIONS |
| 28 | BLOT KEEPER | PLASTIC | 5 | REF DET 28, SHEET 7. USE 5 AT HINGE JAMB AT ITEM 24. |



MASTER SECURITY DOORS, INC
 2179 N POWER LINE ROAD
 SUITE 2
 POMPANO BEACH, FL 33069
 TELEPHONE: 954-971-4747
 FAX: 954-971-4925

MODEL: EX3 USA
 OUTSWING DOOR
 LARGE MISSILE
 IMPACT RESISTANT

DRAWING: ELEVATION

SCALE: NONE

DRAWN BY: KP, RE

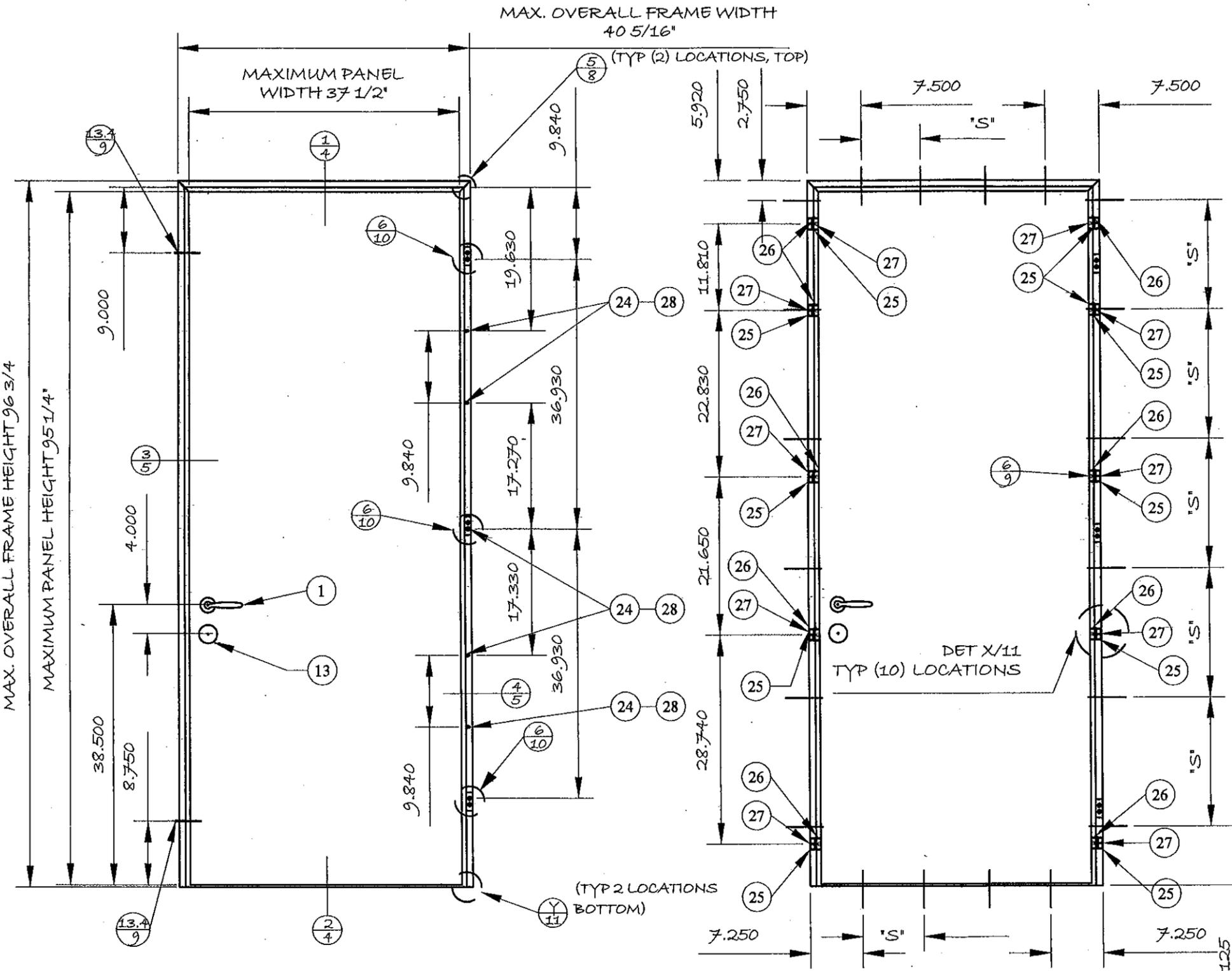
DATE DWN: 09/15/05, REV. 04/18/11

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 11-0420.01
 Expiration Date 04/20/2016

Walter A. Tillit Jr.
 License No. 44167
 State of Florida
 Professional Engineer

11-037
 DRAWING N°
 SHEET 2 OF 11

MAX. OVERALL FRAME HEIGHT 96 3/4"
 MAXIMUM PANEL HEIGHT 95 1/4"



DOOR ASSEMBLY/HARDWARE
 (EXTERIOR ELEVATION)

DOOR SUBFRAME CONNECTION
 TO DOOR FRAME & DOOR
 SUBFRAME CONNECTION TO EXISTING
 STRUCTURE (EXTERIOR ELEVATION)

MAXIMUM ANCHOR
 SPACING 'S' SCHEDULE
 FOR SUBFRAME ANCHORAGE
 TO EXISTING STRUCTURE

| DOOR FRAME | DESIGN LOAD | ANCHOR TYPE | |
|-------------|-----------------|--------------|--------------|
| | | 1 | 2 |
| JAMBS | UP TO 100 PSF | 10' O.C. | 17 3/4' O.C. |
| | >100 TO 200 PSF | 5' O.C. | 9' O.C. |
| HEAD & SILL | UP TO 100 PSF | 12 3/4' O.C. | 25' O.C. |
| | >100 TO 200 PSF | 6 3/8' O.C. | 8 3/8' O.C. |

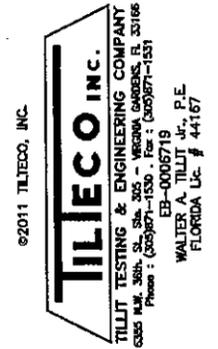
* VALID FOR EITHER POURED CONCRETE, CONCRETE BLOCK, OR WOOD SUBSTRATES (REFER TO ANCHOR LEGEND)

ANCHOR LEGEND:

- 1/4" TAPCON ANCHORS, BY ELCO TEXTRON W/ 1 1/4" MIN. EMBEDMENT TO F_c = 3.32 KSI CONCRETE, OR ASTM C-90 CONCRETE BLOCK AND WITH 3" MIN. EMBEDMENT TO WOOD SUBSTRATE W/ G ≥ 0.55 MIN. EDGE DISTANCE = 2 1/2" (MASONRY) AND MIN. EDGE DISTANCE 1" (WOOD).
- 3/8" TAPPERS BY POWER FASTENERS, INC; W/ 1 1/4" MIN. EMBEDMENT TO F_c = 3.0 KSI CONCRETE OR ASTM C-90 CONCRETE BLOCK WALL AND WITH 3" MIN. EMBED. TO WOOD SUBSTRATE W/ G ≥ 0.55 MIN. EDGE DIST. (MASONRY), MIN. EDGE DIST. 1" (WOOD).



— = PERIMETER ANCHOR LOCATIONS (SEE ANCHOR LEGEND, THIS SHEET)



MASTER SECURITY DOORS, INC
 2179 N POWER LINE ROAD
 POMPANO BEACH, FL 33069
 TELEPHONE: 954-971-4747
 FAX: 954-971-4925

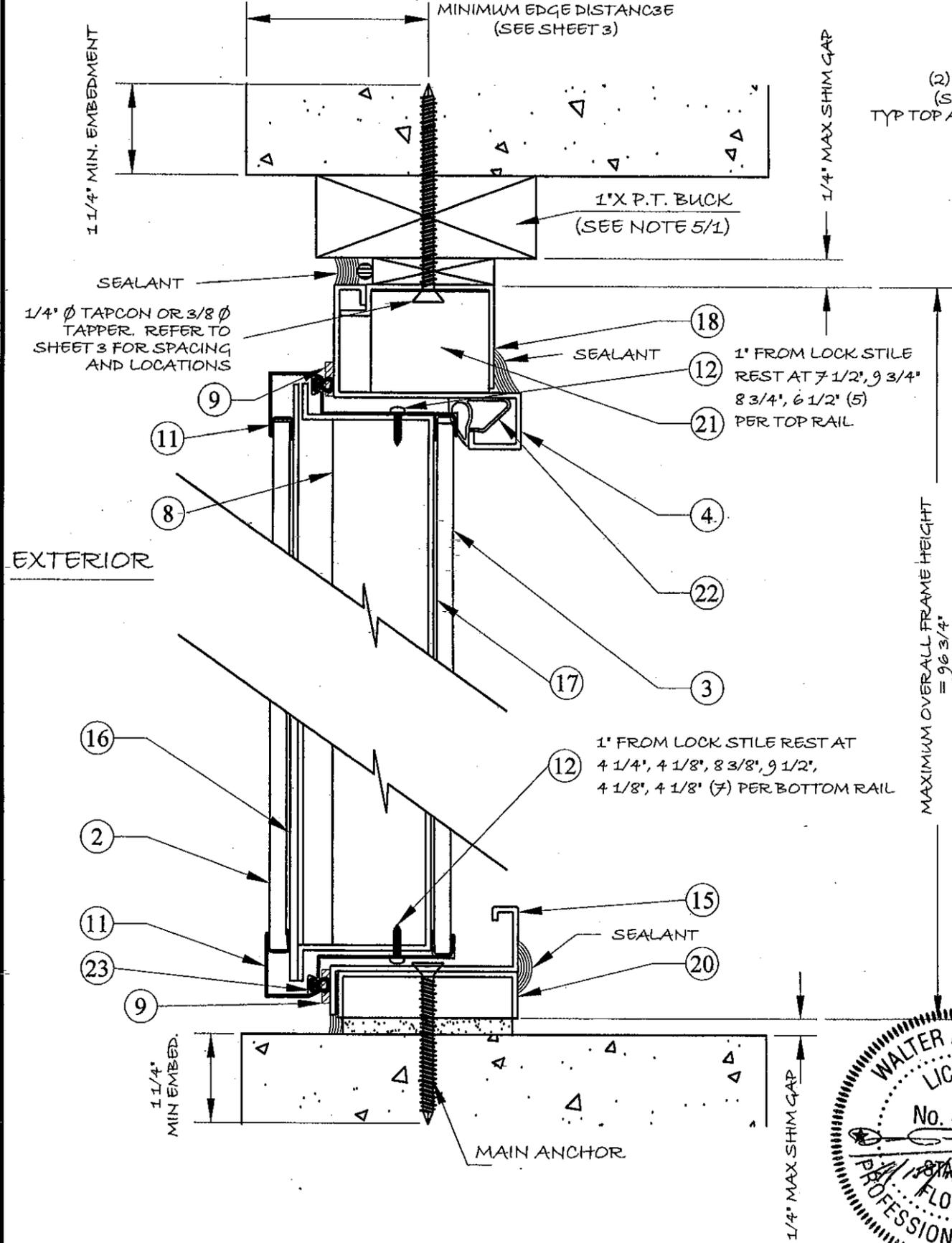
MODEL: EX3 USA
 OUTSWING DOOR
 LARGE MISSILE
 IMPACT RESISTANT
 DRAWING: ELEVATION
 SCALE: NONE
 DRAWN BY: KP, RE
 DATE DWN: 09/15/05, REV. 04/18/11

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 11-0420-01
 Expiration Date 04/20/2016
 Walter A. Tilt, Jr.
 Professional Engineer

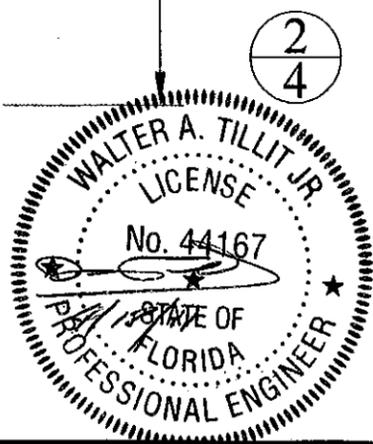
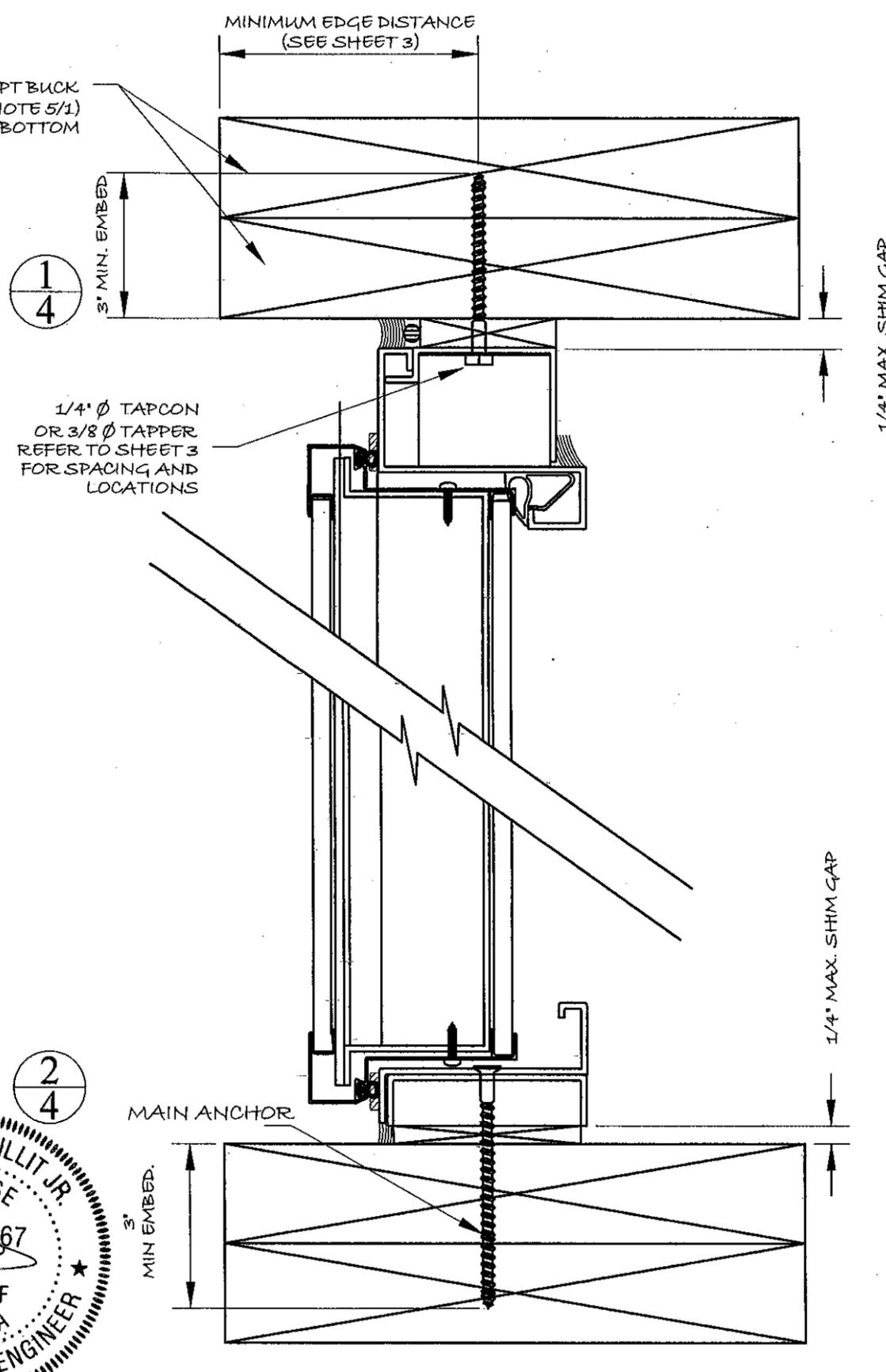
11-037
 DRAWING N°
 SHEET 3 OF 11

REV. 02/27/06 (GENERAL)

MASONRY INSTALLATION



WOOD INSTALLATION



92011 TILTEDO, INC.
TILECO INC.
TILIT TESTING & ENGINEERING COMPANY
6336 N.W. 35th St., Suite 205 - Miramar, FL 33181
Phone: (305) 871-1330 - Fax: (305) 871-1581
EB-0006719
WALTER A. TILLIT JR., P.E.
FLORIDA LIC. # 44167

MASTER SECURITY DOORS, INC
2179 N POWER LINE ROAD
SUITE 2
POMPANO BEACH, FL 33069
TELEPHONE: 954-971-4747
FAX: 954-971-4925

MODEL: EX3 USA
OUTSWING DOOR
LARGE MISSILE
IMPACT RESISTANT

DRAWING: VERT. CROSS SECT

SCALE: NONE

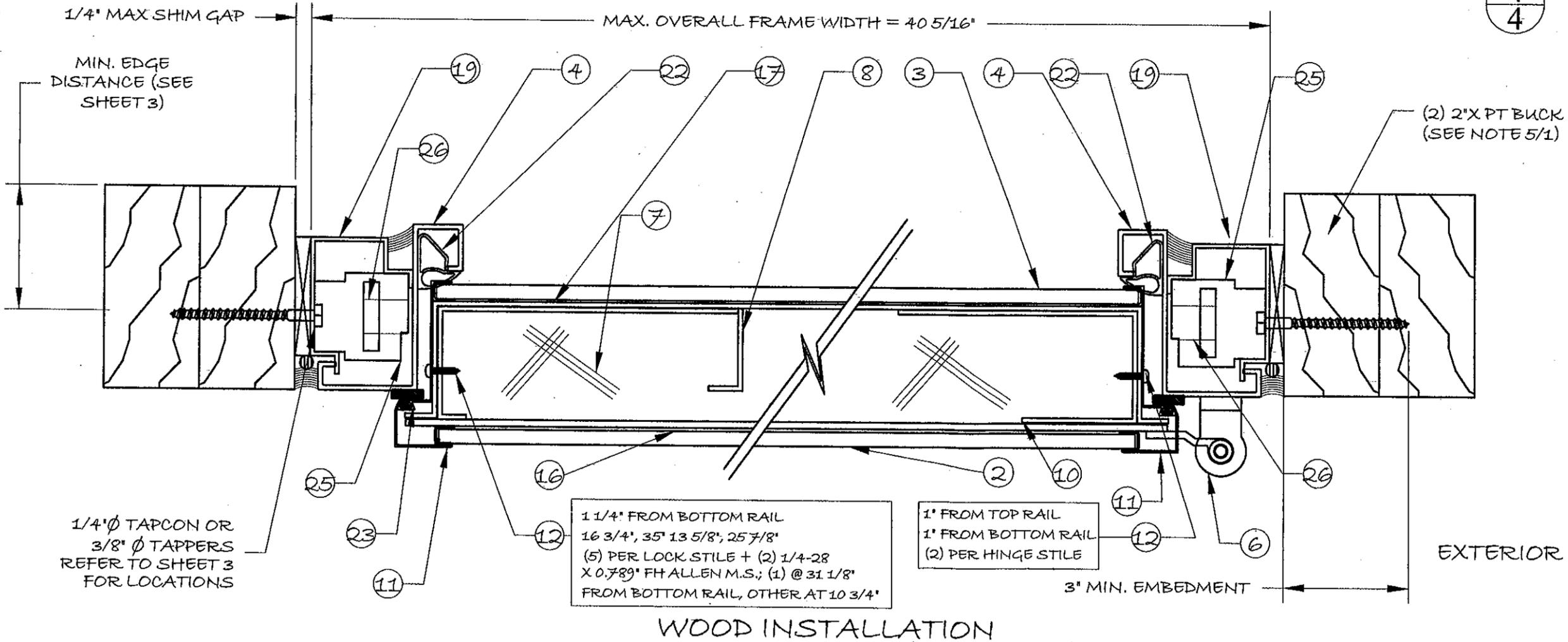
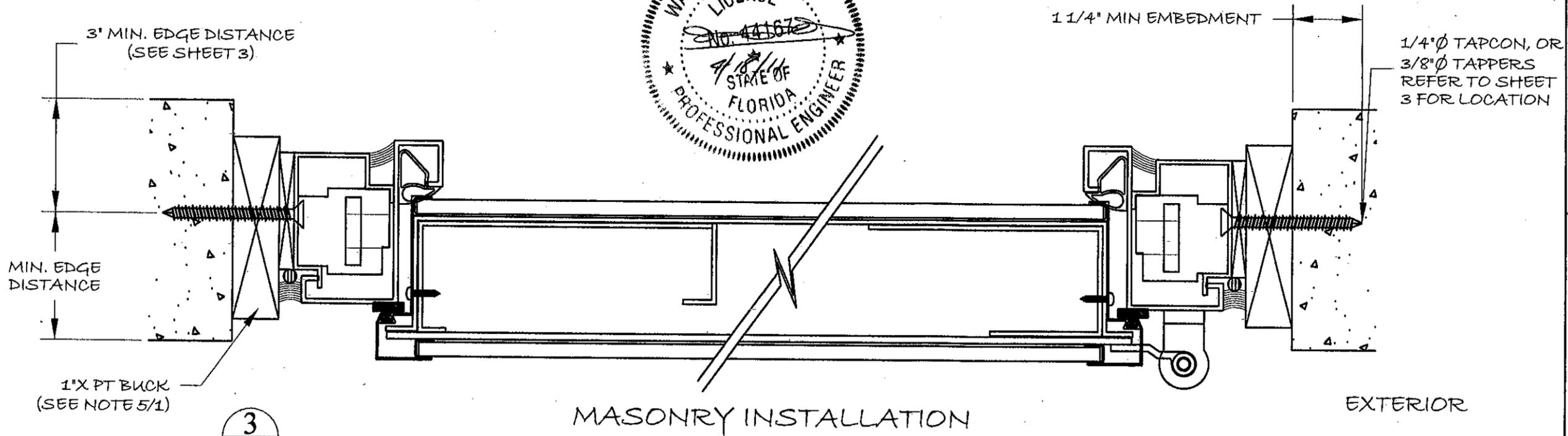
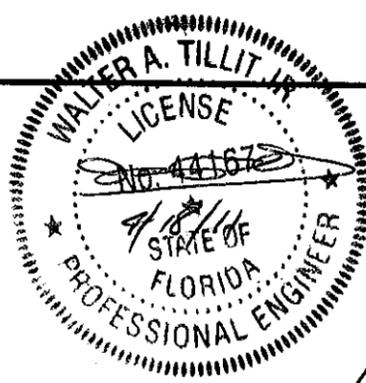
DRAWN BY: KP, RE

DATE DWN: 09/15/05, REV. 04/18/11

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 11-6420-01
Expiration Date 04/20/2011
By Isiah L. Chugh
Miami Dade Product Control

11-037
DRAWING N°
SHEET 4 OF 11

REV. 02/27/06 (GENERAL)

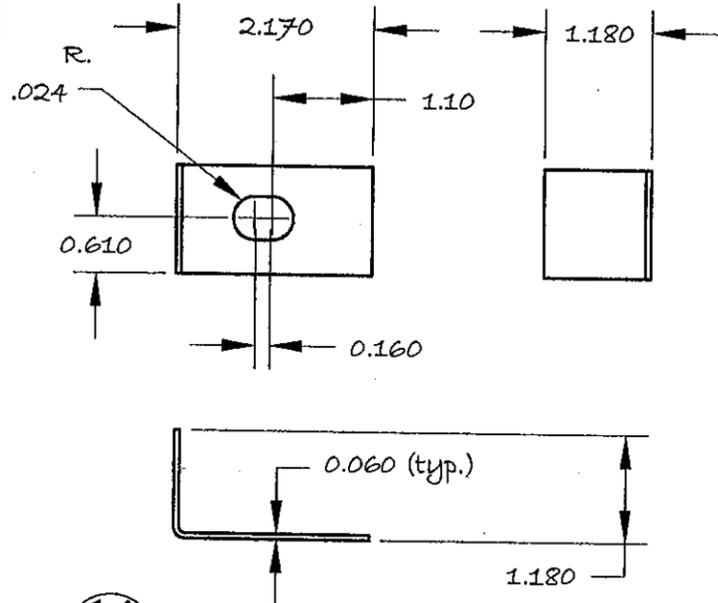


1 1/4" FROM BOTTOM RAIL
 16 3/4", 35" 13 5/8", 25 7/8"
 (5) PER LOCK STILE + (2) 1/4-28
 X 0.789" FH ALLEN M.S.; (1) @ 31 1/8"
 FROM BOTTOM RAIL, OTHER AT 10 3/4"

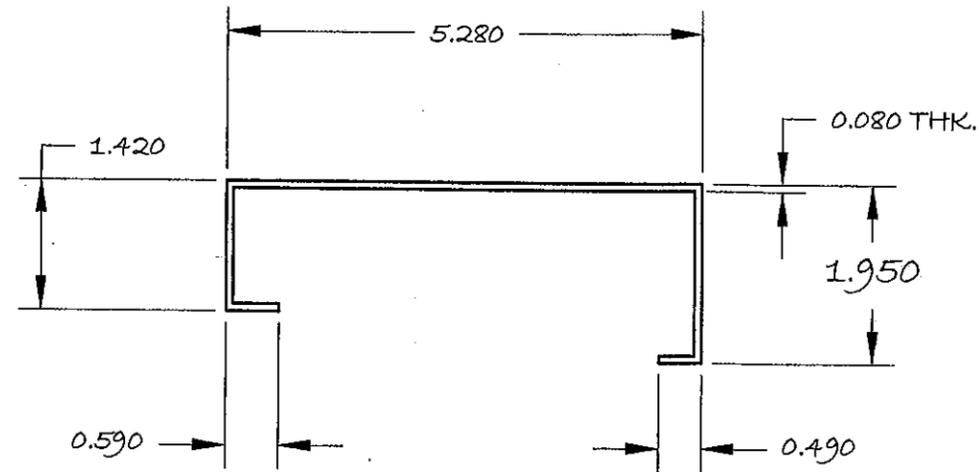
1" FROM TOP RAIL
 1" FROM BOTTOM RAIL
 (2) PER HINGE STILE

| | |
|---|-----------------------------------|
| <p>©2011 TILECO, INC. TILLET TESTING & ENGINEERING COMPANY 6355 N.W. 36th St., Suite 201 - Virginia Gardens, FL 33166 Phone: (305) 971-1550 Fax: (305) 971-1551 EB-0006719 WALTER A. TILLIT, Jr., P.E. FLORIDA Lic. # 44167</p> | |
| MASTER SECURITY DOORS, INC 2179 N POWER LINE ROAD SUITE 2 POMPANO BEACH, FL 33069 TELEPHONE: 954-971-4747 FAX: 954-971-4925 | |
| MODEL: EX3 USA OUTSWING DOOR LARGE MISSILE IMPACT RESISTANT | DRAWING: HORIZ. CROSS SECT |
| SCALE: NONE | DRAWN BY: KP, RE |
| DATE DWN: 09/15/05, REV. 04/18/11 | |
| PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 11-0420-01 Expiration Date 04/20/2016 | |
| 11-037 DRAWING N° SHEET 5 OF 11 | |

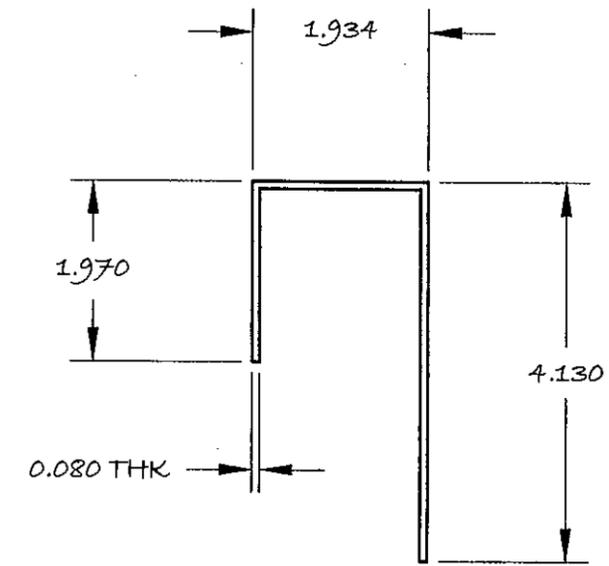
REV. 02/27/06 (GENERAL)



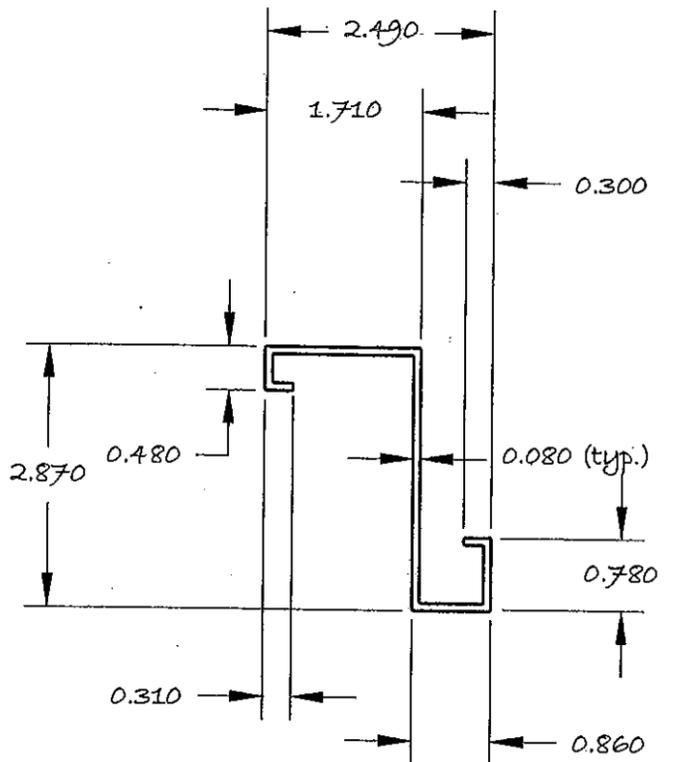
14/6 BACKING TOBAR



8/6 REINFORCEMENT LOCK STILE (FULL LENGTH)

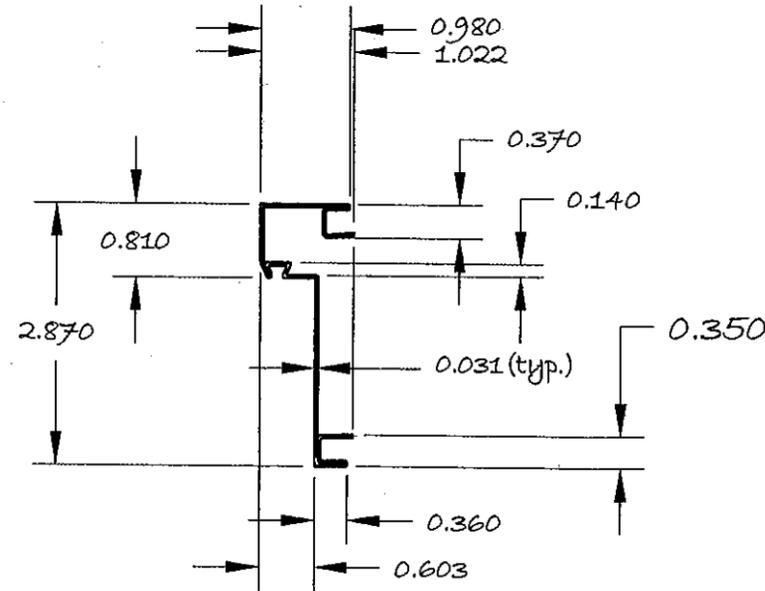


10/6 REINF HINGE STILE (FULL LENGTH)



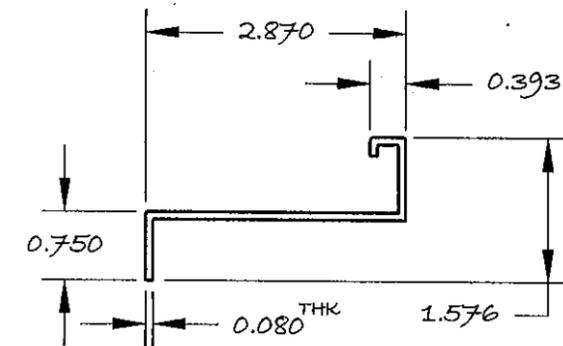
0.080" WALL THK. TYP

4/6 FRAME: JAMBS & HEAD

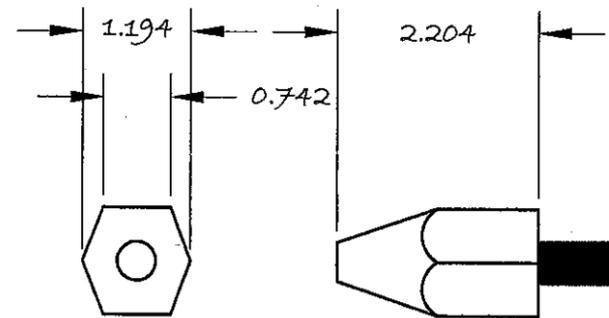


0.031" WALL THK. TYP

11/6 DOOR PANEL TOP RAIL BOTTOM RAIL AND VERTICAL STILES



15/6 ELEVATED FRAME SILL



24/6 BLOT

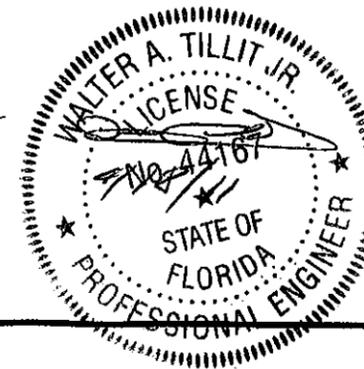
©2011 TILTECO, INC.
TILTECO INC.
 TILLIT TESTING & ENGINEERING COMPANY
 6325 N.W. 38th St., Ste. 305 - VIRGINIA GARDENS, FL 32768
 Phone: (904)971-1330 Fax: (904)971-1331
 EP-0006719
 WALTER A. TILLIT JR., P.E.
 FLORIDA LIC. # 44167

MASTER SECURITY DOORS, INC
 2179 N POWER LINE ROAD
 SUITE 2
 POMPANO BEACH, FL 33069
 TELEPHONE: 954-971-4747
 FAX: 954-971-4925

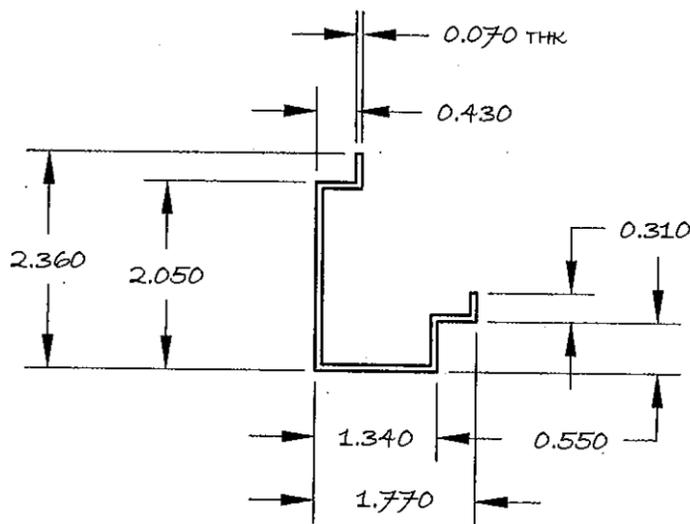
MODEL: EX3 USA
 OUTSWING DOOR
 LARGE MISSILE
 IMPACT RESISTANT
 DRAWING: DETAILS
 SCALE: NONE
 DRAWN BY: KP, RE
 DATE DWN: 09/15/05, REV. 04/18/11

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No. 11-0420.01
 Expiration Date 04/20/2016
 By: *Charles J. Chandler*
 Internal Data/Product Control

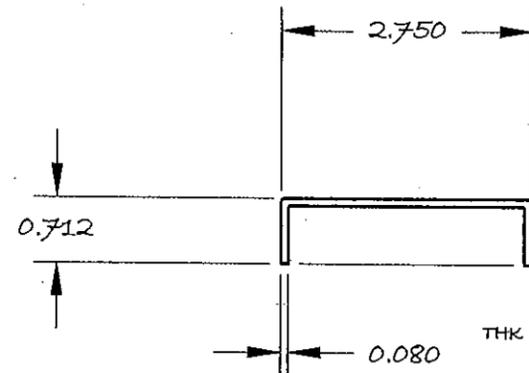
11-037
 DRAWING N°
 SHEET 6 OF 11



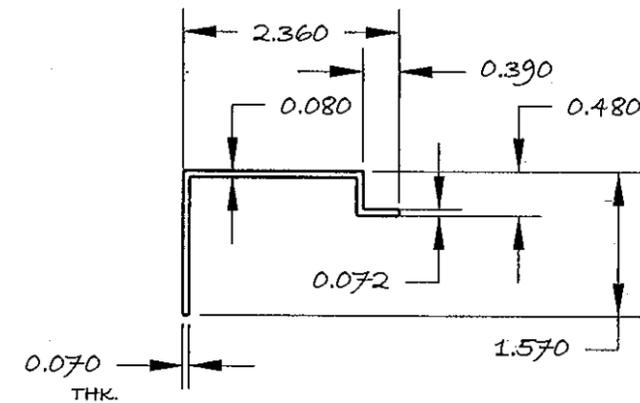
REV. 02/27/06 (GENERAL)



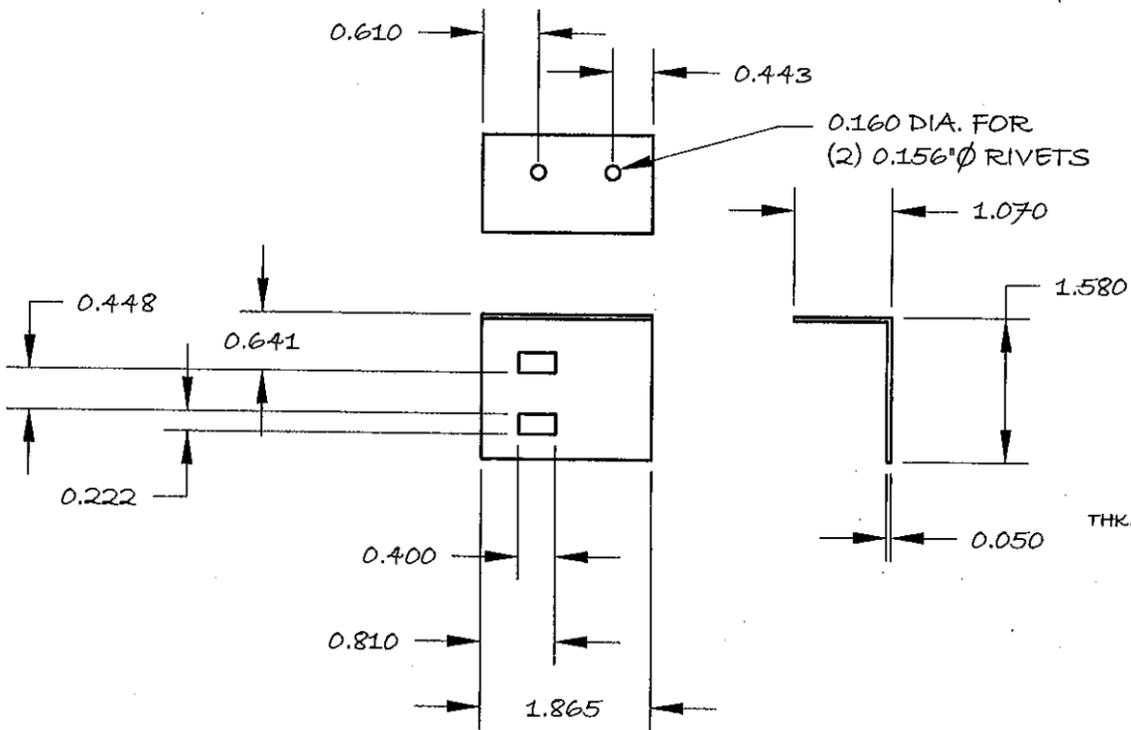
19/7 SUBFRAME JAMBS
SCALE: 1/2



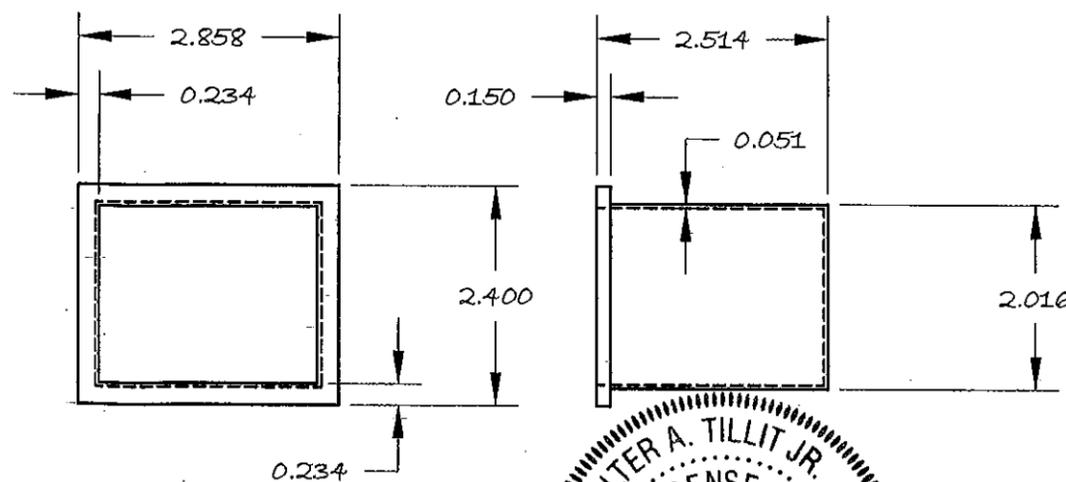
20/7 LOWER FRAME SILL
SCALE: 1/2



18/7 SUB FRAME HEAD
SCALE: 1/2



21/7 SUB FRAME CORNER KEY
SCALE: 1/2



28/7 BLOT KEEPER
SCALE: FULL

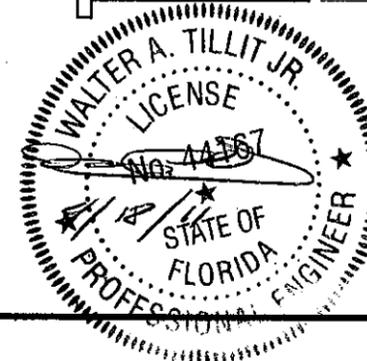
©2011 TILTEDO, INC.
TILTEDO INC.
TILIT TESTING & ENGINEERING COMPANY
6334 N.W. 39th St., Ste. 305 - VERONA GARDENS, FL 33466
Phone: (202)971-1530 Fax: (202)971-1531
WALTER A. TILLIT JR., P.E.
FLORIDA Lic. # 44167

MASTER SECURITY DOORS, INC
2179 N POWER LINE ROAD
SUITE 2
POMPANO BEACH, FL 33069
TELEPHONE: 954-971-4747
FAX: 954-971-4925

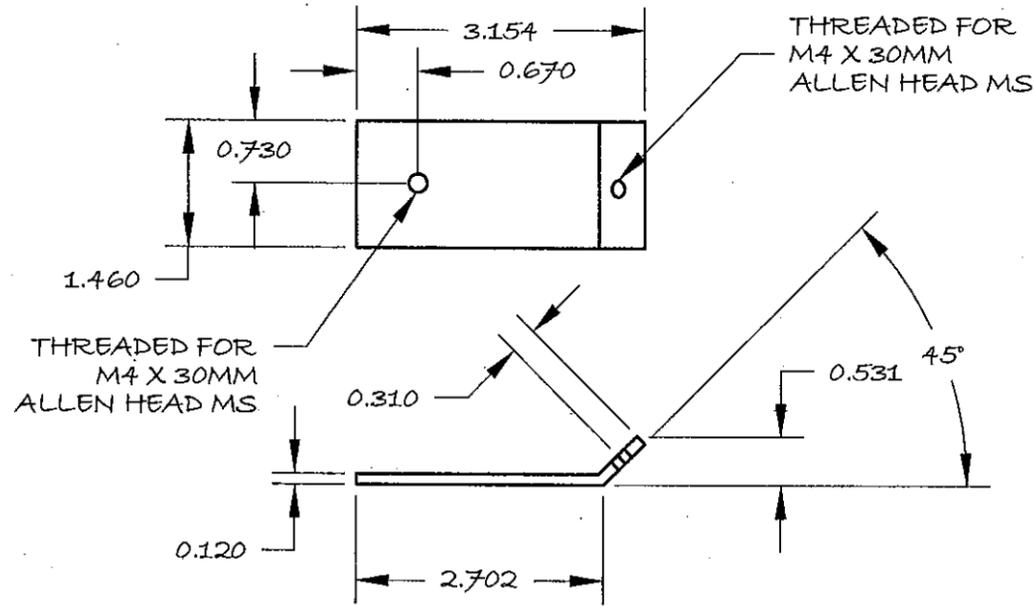
REV. 02/27/06 (GENERAL)

MODEL: EX3 USA
OUTSWING DOOR
LARGE MISSILE
IMPACT RESISTANT
DRAWING: SUBFRM DETAILS
SCALE: NONE
DRAWN BY: KP, RE
DATE DWN: 09/15/05, REV. 04/18/11

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 11-0420.01
Expiration Date 04/20/2016
Walter A. Tillit Jr.
Product Control



11-037
DRAWING N°
SHEET 7 OF 11



A
8 CORNER FRAME PLATE
SCALE: HALF

CORNER FRAME
PLATE (DETAIL A)
(2) PER CLIP

SILICONE GAP BETWEEN FRAME CORNER
KEY AND ALONG EDGES OF CORNER FRAME
PLATE.

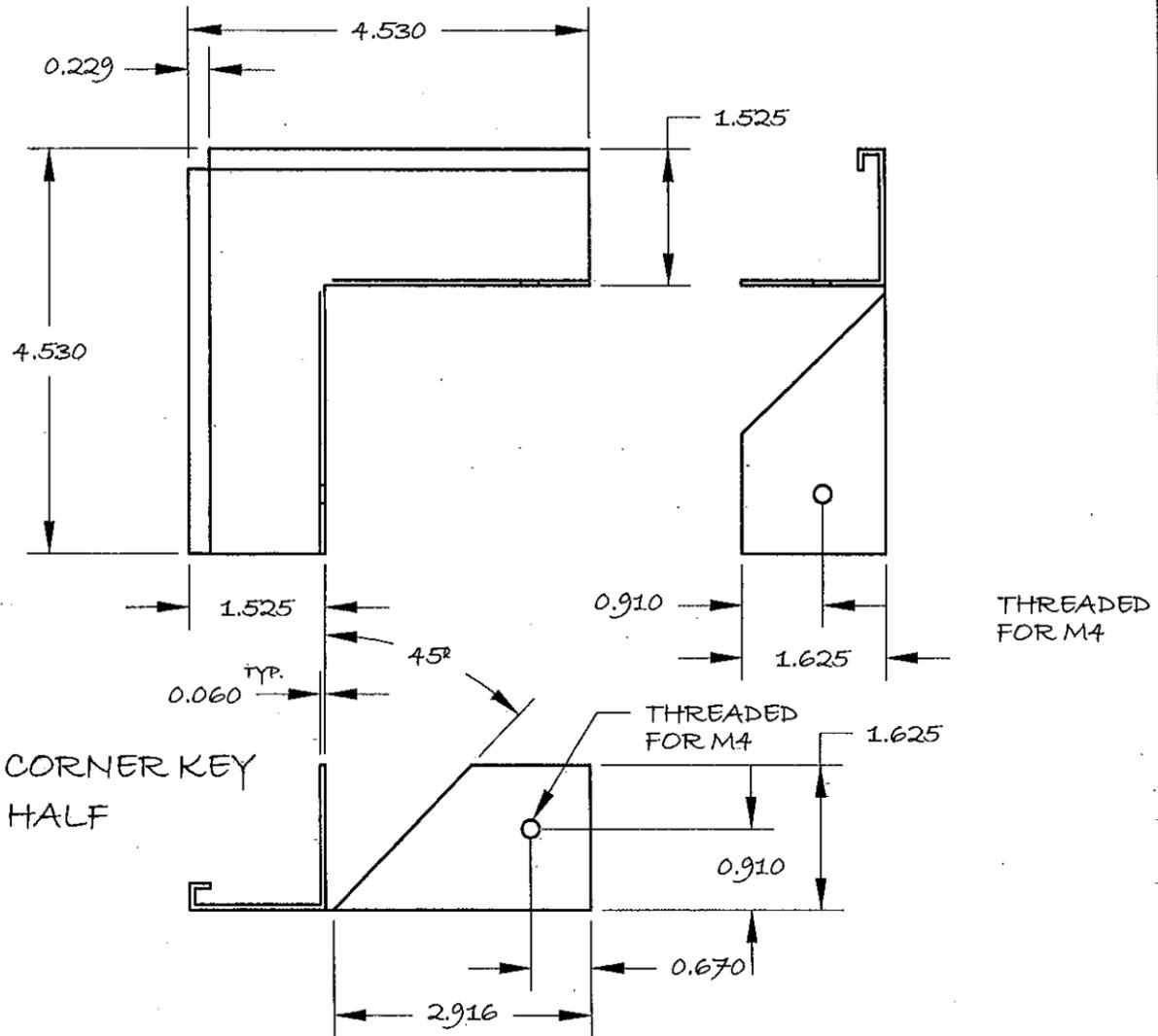
M4 X 10MM FH ALLEN SCREW
CORNER KEY TO FRAME
HEAD (2) PER CLIP

FRAME CORNER KEY (DETAIL B)

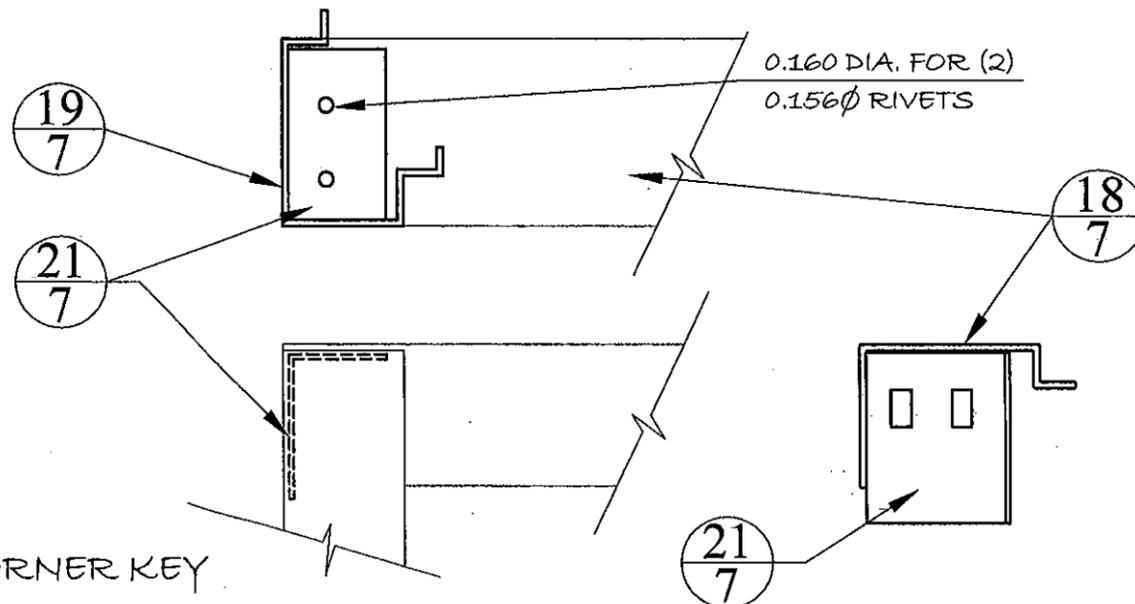
CORNER FRAME PLATE
PIN CRIMP TO CORNER
KEY (2) PER PLATE

M4 X 30MM ALLEN HEAD
FASTENER (1) PER CLIP

5
8 FRAME CORNER KEY ASS'Y



B
8 FRAME CORNER KEY
SCALE: HALF



SUBFRAME CORNER KEY

©2011 TILTECO, INC.
TILTECO INC.
TILIT TESTING & ENGINEERING COMPANY
6835 N.W. 35th St., Suite 305 - Miramar, Florida, U.S.A. 33166
Phone: (305)971-1500 Fax: (305)971-1501
WALTER A. TILLIT JR., P.E.
FLORIDA LIC. # 44187

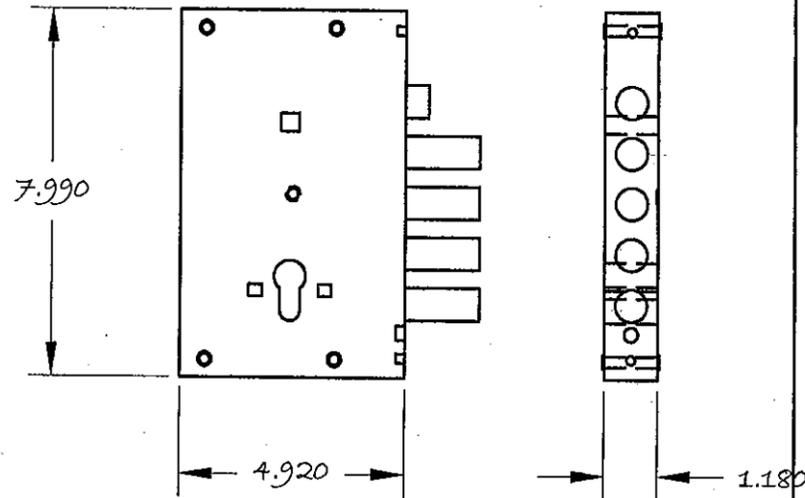
MASTER SECURITY DOORS, INC
2179 N POWER LINE ROAD
SUITE 2
POMPANO BEACH, FL 33069
TELEPHONE: 954-971-4747
FAX: 954-971-4925

MODEL: EX3 USA
OUTSWING DOOR
IMPACT RESISTANT
DRAWING: DETAILS
SCALE: NONE
DRAWN BY: KP, RE
DATE DWN: 09/15/05, REV. 04/18/11

PRODUCT REVISED
to comply with the Florida
Building Code
Acceptance No. 11-0420-01
Expiration Date 04/20/2016
Walter A. Tillit Jr.
Product Control

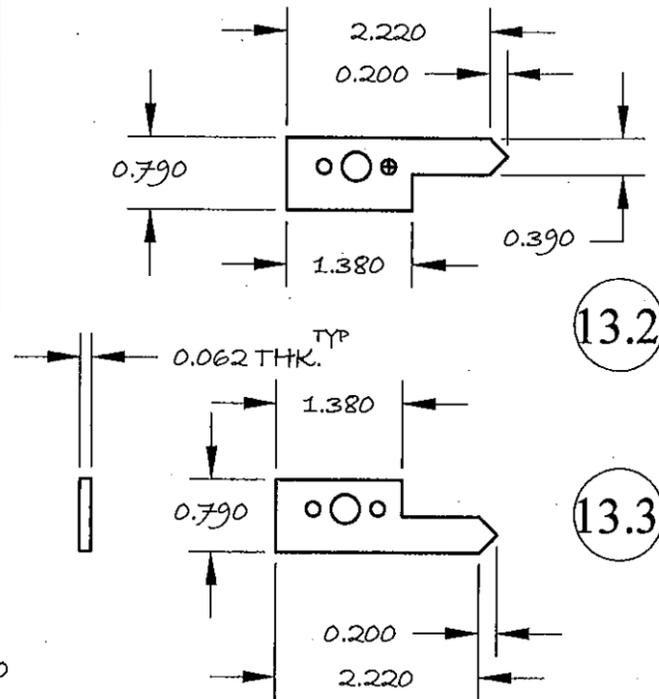
11-037
DRAWING N
SHEET 8 OF 11

REV. 02/27/06 (GENERAL)



13.1 LOCK
SCALE: 1/4

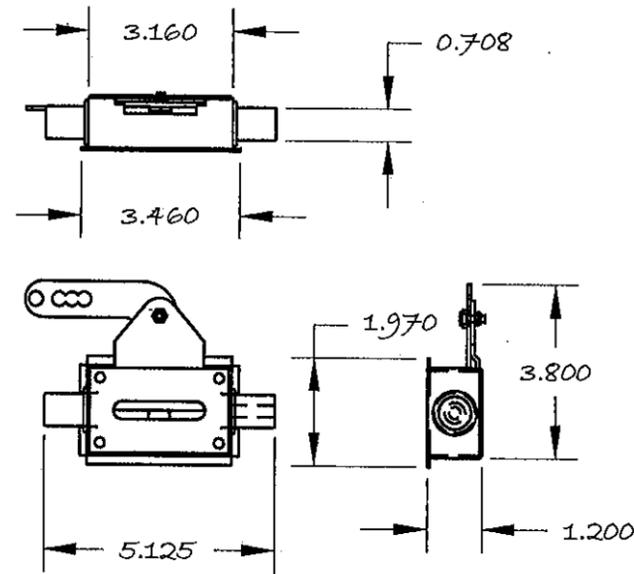
ATTACHED TO LOCK
STILE W/ (2) 1/4-28
X 1/2" FH ALLEN SCR.



13.2 TONGUE UPPER AND LOWER
SCALE: 1/2

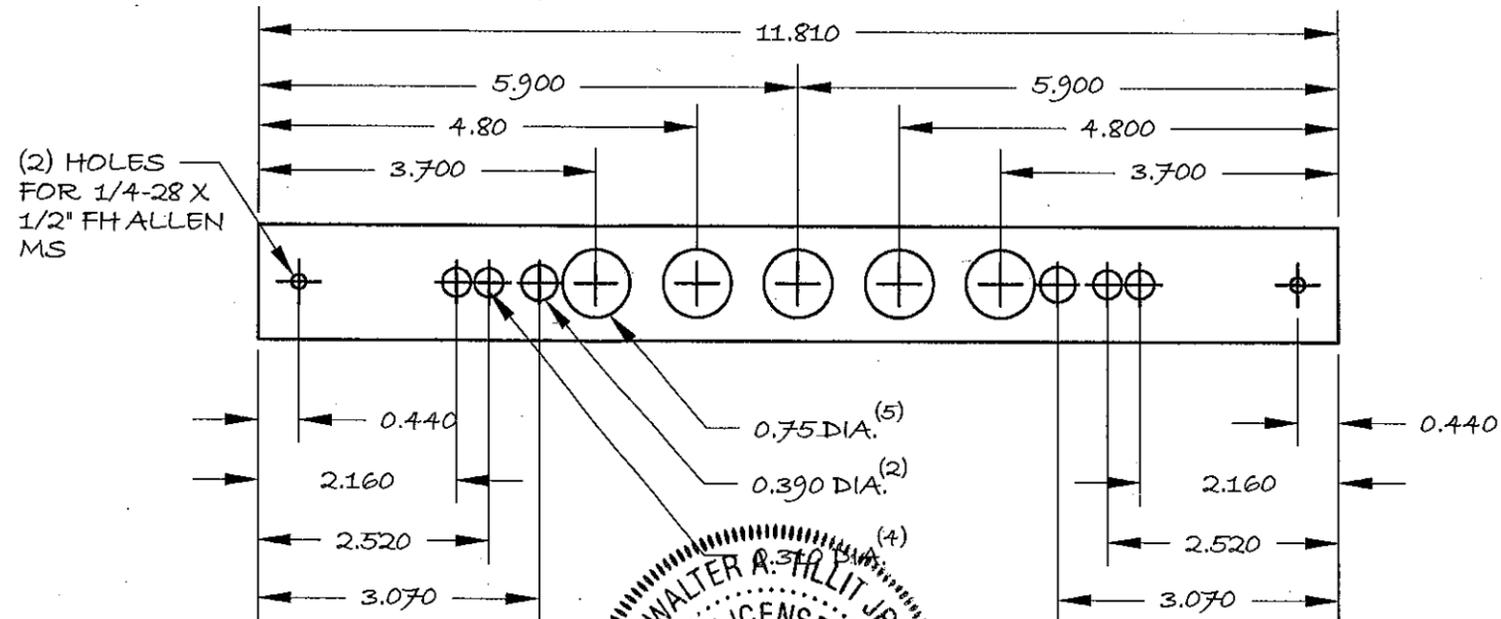
| ITEM # | DESCRIPTION | QUANTITY |
|--------|---------------------------|----------|
| 13.1 | LOCK | 1 |
| 13.2 | TONGUE UPPER | 1 |
| 13.3 | TONGUE LOWER | 1 |
| 13.4 | LOCK SLIDE BOLTS | 2 |
| 13.5 | CONNECTOR ROD (NOT SHOWN) | 2 |
| 13.6 | LOCK STRIKE PLATE | 1 |

13
9 MULTI-POINT LOCKING SYSTEM



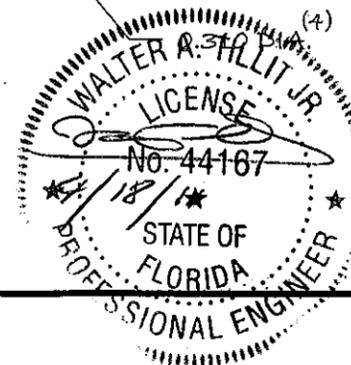
(2) REQUIRED AT
LOCK STILE

13.4 LOCK SLIDE BOLTS
SCALE: 1/4



(2) HOLES
FOR 1/4-28 X
1/2" FH ALLEN
MS

13.6 LOCK STRIKE PLATE
SCALE: 1/2



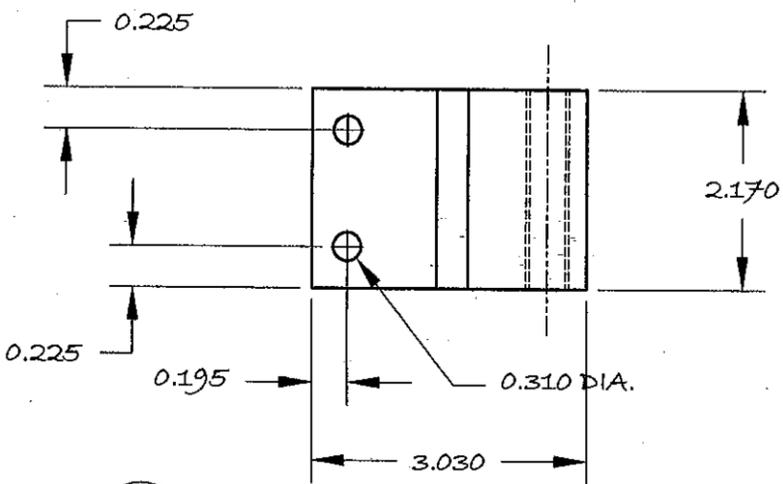
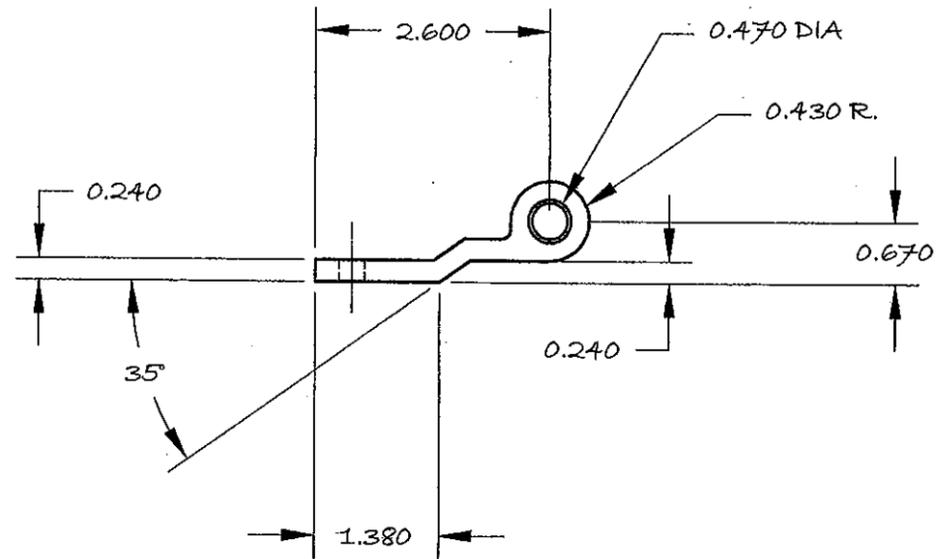
MASTER SECURITY DOORS, INC
2179 N POWER LINE ROAD
SUITE 2
POMPANO BEACH, FL 33069
TELEPHONE: 954-971-4747
FAX: 954-971-4925

REV. 02/27/06 (GENERAL)

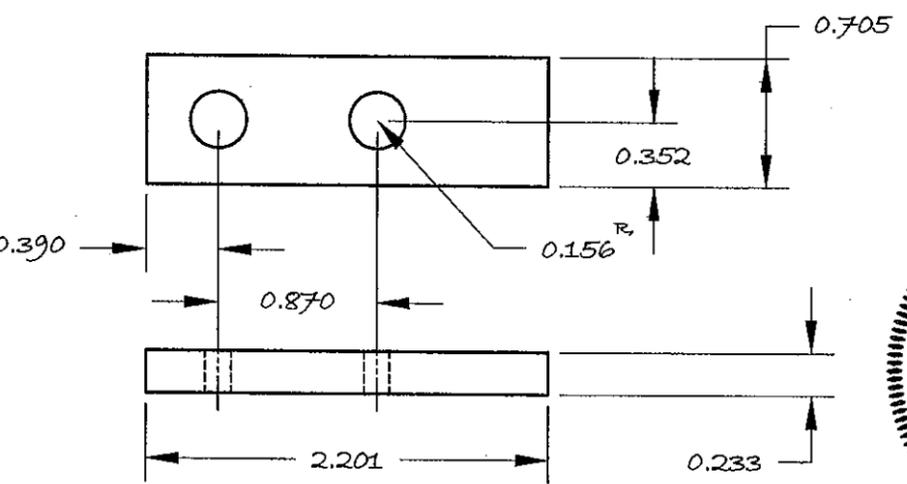
MODEL: EX3 USA
OUTSWING DOOR
LARGE MISSILE
IMPACT RESISTANT
DRAWING: LOCK SYSTEM
SCALE: NONE
DRAWN BY: KP, RE
DATE DWN: 09/15/05, REV. 04/18/11

PRODUCT REVISED
to comply with the Florida
Building Code
Acceptance No. 11-0620.01
Expiration Date 04/20/2016
Walter A. Tillit Jr.
Professional Engineer

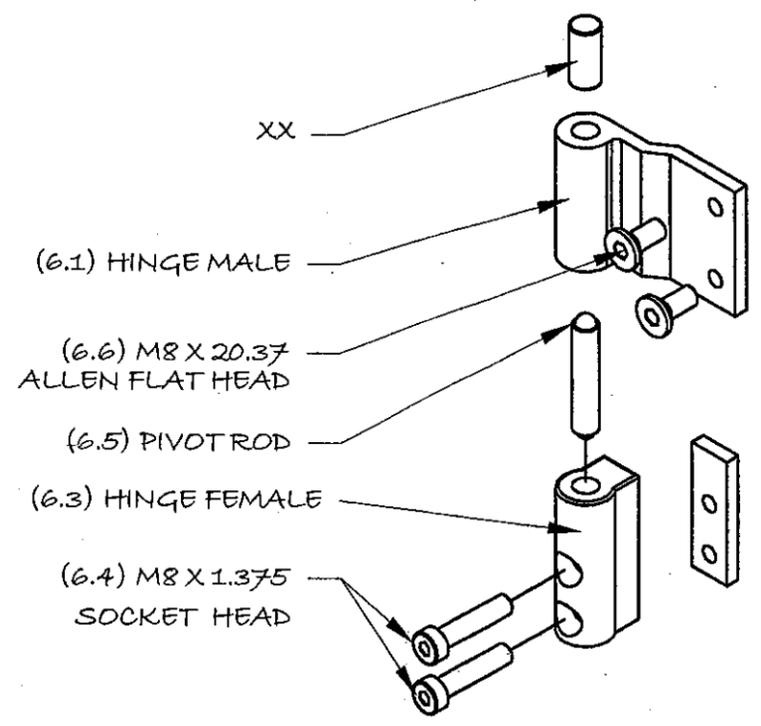
11-037
DRAWING N°
SHEET 9 OF 11



6.1 HINGE MALE
SCALE: HALF

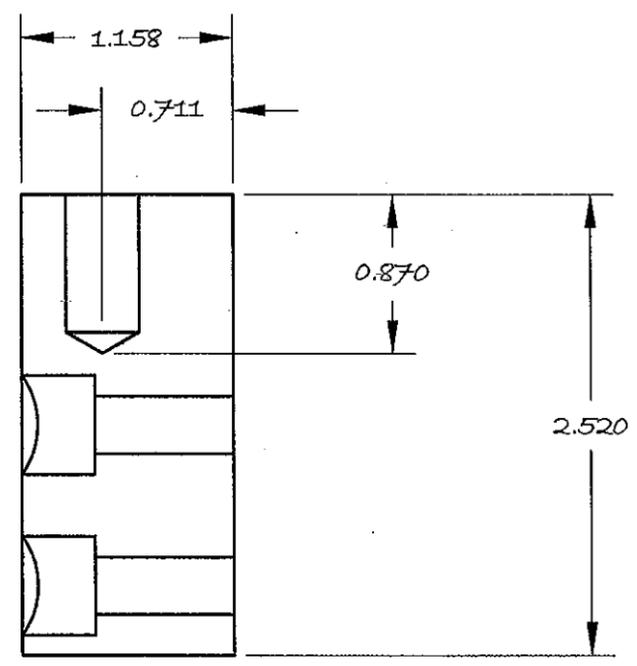
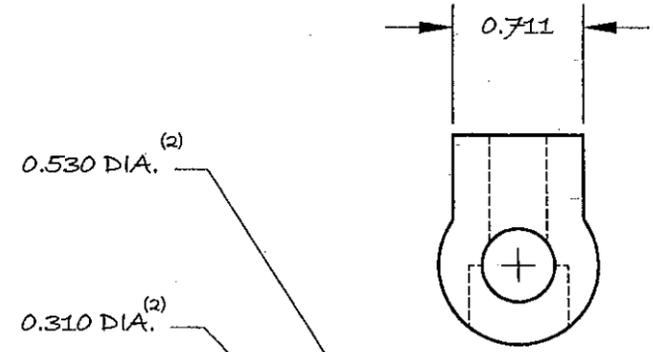


6.2 HINGE BACKER PLATE
SCALE: FULL



6/10 HINGE ASSEMBLY

| ITEM # | DESCRIPTION | QUANTITY |
|--------|------------------------|-----------|
| 6.1 | HINGE MALE | 1 / ASS'Y |
| 6.2 | HINGE BACKER PLATE | 1 / ASS'Y |
| 6.3 | HINGE FEMALE | 1 / ASS'Y |
| 6.4 | M8 X 1.375 SOCKET HEAD | 2 / ASS'Y |
| 6.5 | PIVOT ROD | 1 / ASS'Y |
| 6.6 | M8 X 20.37 ALLEN FH | 2 / ASS'Y |



6.3 HINGE FEMALE
SCALE: FULL



©2011 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 N.W. 39th St., Ste. 305 - Victoria Gardens, FL 33188
Phone: (305)971-1530 Fax: (305)971-1551
WALTER A. TILLIT JR., P.E.
EB-0006719
FLORIDA LIC. # 44167

MASTER SECURITY DOORS, INC
2179 N POWER LINE ROAD
SUITE 2
POMPANO BEACH, FL 33069
TELEPHONE: 954-971-4747
FAX: 954-971-4925

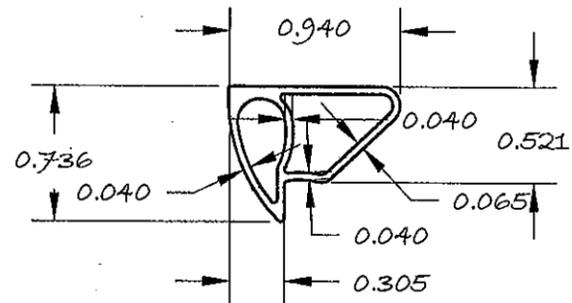
MODEL: EX3 USA
OUTSWING DOOR
LARGE MISSILE
IMPACT RESISTANT
DRAWING: HINGE ASSY
SCALE: NONE
DRAWN BY: KP, RE

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 11-0420.01
Expiration Date 04/20/2016
Walter A. Tillit Jr.
Internal Date Product Control

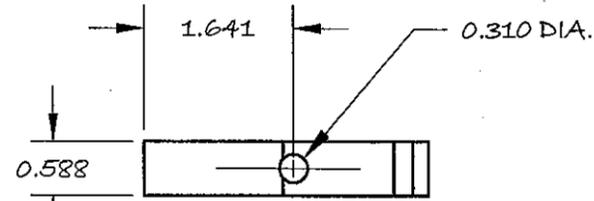
11-037
DRAWING N°
SHEET 10 OF 11

REV. 02/27/06 (GENERAL)

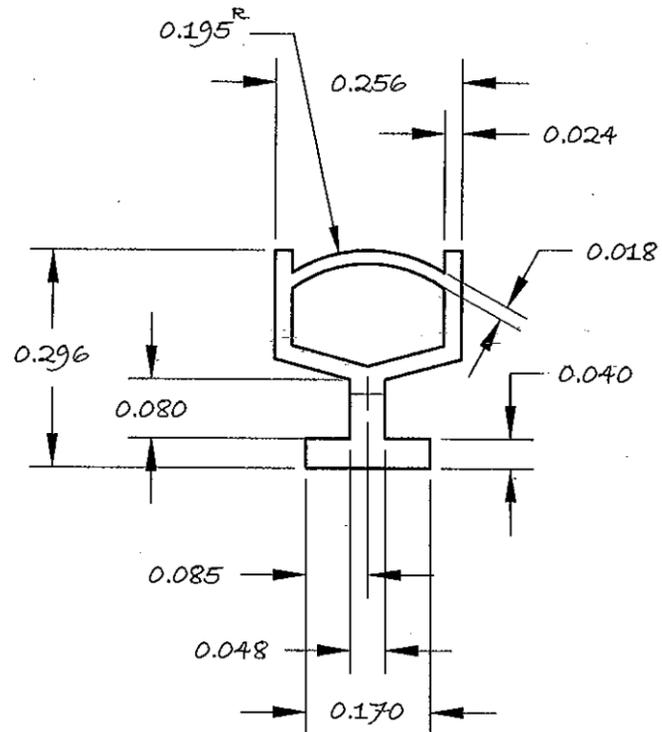
DATE DWN: 09/15/05, REV. 04/18/11



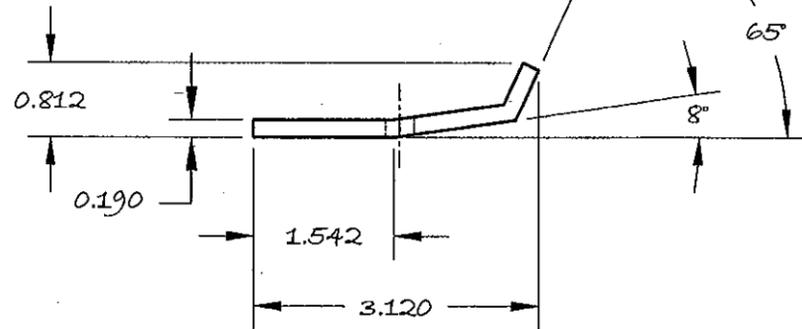
22/11 FRAME GASKET
SCALE: FULL



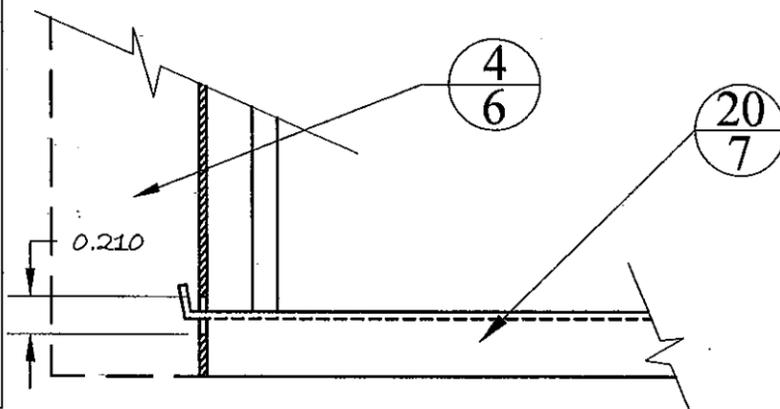
26/11 RETENTION CLIP
SCALE: HALF



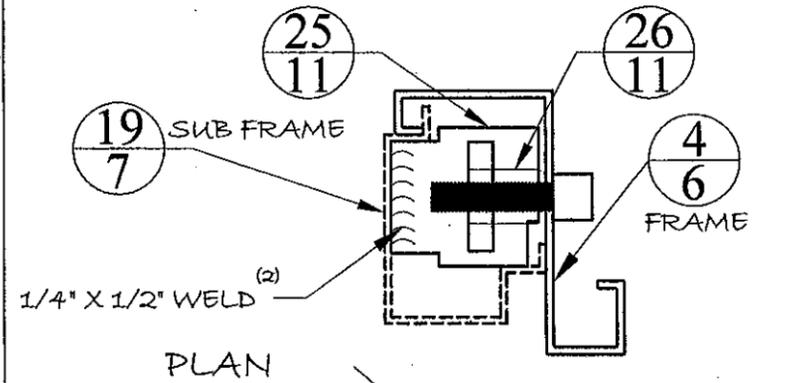
23/11 COMPRESSION GASKET
SCALE: 10X



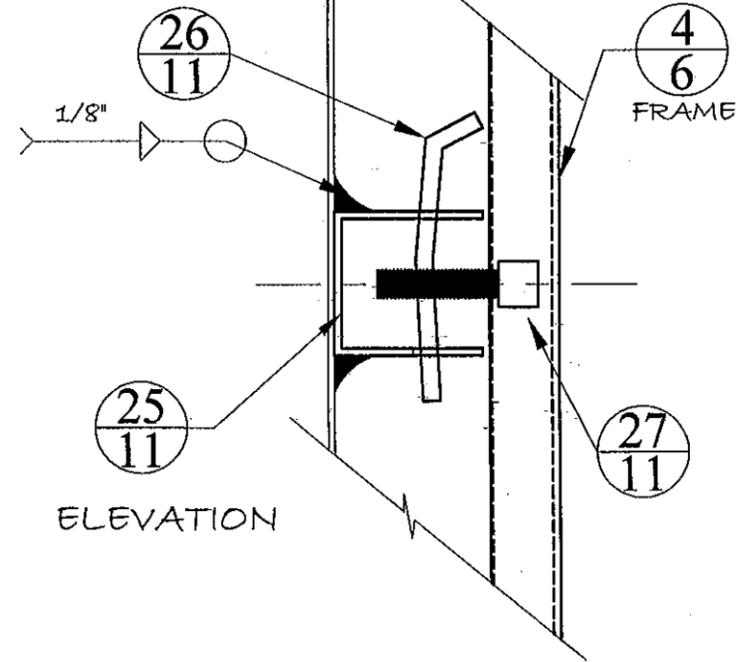
25/11 ADJ RETENTION CLIP HOUSING
SCALE: 1/2



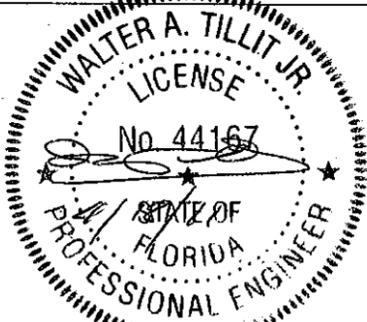
X/11 SUBFRAME CONNECTION TO FRAME



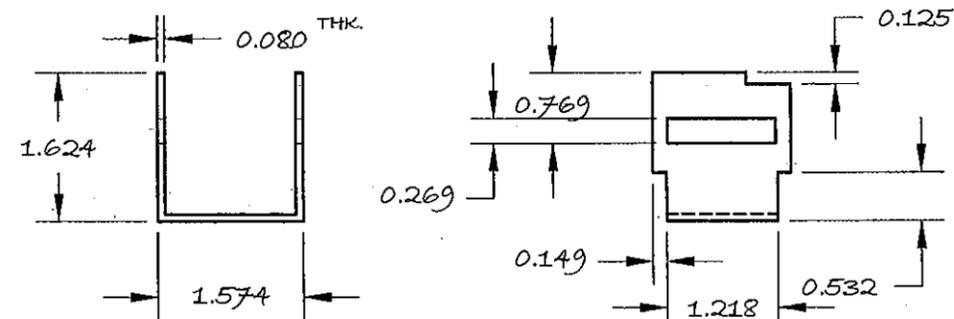
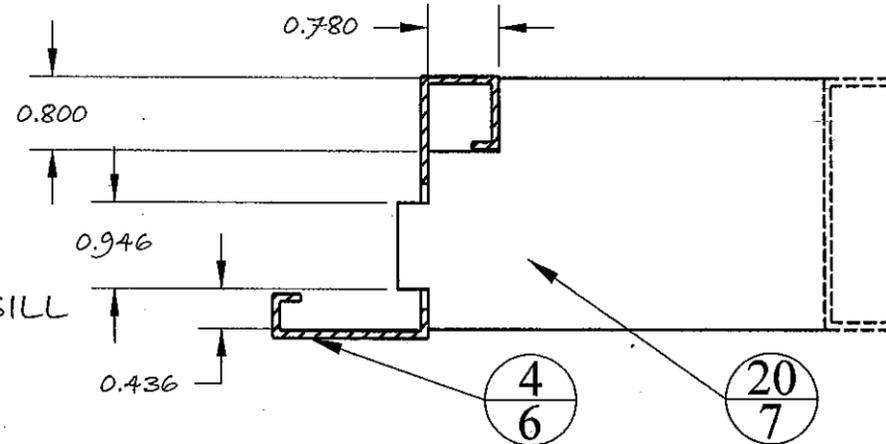
PLAN



ELEVATION



Y/11 LOWER FRAME SILL
TO FRAME JAMB
CONNECTION



©2011 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6355 W.A. 38th St., Suite 205 - Virginia Gardens, FL 32716
Phone: (407) 971-1530 Fax: (407) 971-1531
WALTER A. TILLIT JR., P.E.
EB-0006719
FLORIDA Lic. # 44167

MASTER SECURITY DOORS, INC
2179 N POWER LINE ROAD
SUITE 2
POMPANO BEACH, FL 33069
TELEPHONE: 954-971-4747
FAX: 954-971-4925

MODEL: EX3 USA
OUTSWING DOOR
LARGE MISSILE
IMPACT RESISTANT
DRAWING: DETAILS
SCALE: NONE
DRAWN BY: KP, RE
DATE DWN: 09/15/05, REV. 04/18/11

PRODUCT REVISED
to comply with the Florida
Building Code
Acceptance No. 11-0420.01
Expiration Date 04/20/2016
By: [Signature]
Special Date Product Control

11-037
DRAWING N°
SHEET 11 OF 11

REV. 02/27/06 (GENERAL)