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**Product Approval**  
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- ▶ COMMUNITY PLANNING
- ▶ HOUSING & COMMUNITY DEVELOPMENT
- ▶ EMERGENCY MANAGEMENT
- ▶ OFFICE OF THE SECRETARY

<p>FL #</p> <p>Application Type</p> <p>Code Version</p> <p>Application Status</p> <p>Comments</p> <p>Archived</p> <p>Product Manufacturer</p> <p>Address/Phone/Email</p> <p>Authorized Signature</p> <p>Technical Representative</p> <p>Address/Phone/Email</p> <p>Quality Assurance Representative</p> <p>Address/Phone/Email</p> <p>Category</p> <p>Subcategory</p> <p>Compliance Method</p> <p>Florida Engineer or Architect Name who developed the Evaluation Report</p> <p>Florida License</p> <p>Quality Assurance Entity</p> <p>Quality Assurance Contract Expiration Date</p> <p>Validated By</p> <p>Certificate of Independence</p> <p>Referenced Standard and Year (of Standard)</p> <p>Equivalence of Product Standards</p> <p>Certified By</p> <p>Sections from the Code</p>	<p>FL2681-R2</p> <p>Revision</p> <p>2007</p> <p>Approved</p> <p><input type="checkbox"/></p> <p>American Shutter Systems Association, Inc.</p> <p>4268 Westroads Drive</p> <p>West Palm Beach, FL 33407</p> <p>(561) 209-8263</p> <p>bfeeley@easternmetal.com</p> <p>Bill Feeley</p> <p>lrodriguez@easternmetal.com</p>   <p>Shutters</p> <p>Colonial</p> <p>Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer</p> <p><input checked="" type="checkbox"/> Evaluation Report - Hardcopy Received</p> <p>Walter A. Tillit Jr.</p> <p>PE-44167</p> <p>National Accreditation and Management Institute</p> <p>12/31/2013</p> <p>John Henry Kampmann Jr.</p> <p><input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received</p> <p><a href="#">FL2681_R2_COI_Certification of Independence 08-0908.03.PDF</a></p> <table border="0"> <thead> <tr> <th style="text-decoration: underline;">Standard</th> <th style="text-decoration: underline;">Year</th> </tr> </thead> <tbody> <tr> <td>SSTD 12-99</td> <td>1999</td> </tr> <tr> <td>TAS 201, 202, 203</td> <td>1994</td> </tr> </tbody> </table>	Standard	Year	SSTD 12-99	1999	TAS 201, 202, 203	1994
Standard	Year						
SSTD 12-99	1999						
TAS 201, 202, 203	1994						





WALTER A. TILLIT, JR., P.E.

tilteco@aol.com  
FL P.E. License No. 44167  
FL E.B. License No. 0006719

**CERTIFICATION OF INDEPENDENCE**  
(Rule #9B-72.110)

**Evaluation Report #:** 08-0930.03

**Date:** September 30, 2008

**Product Category:** Hurricane Shutters

**Product Subcategory:** Colonial Shutters

**Product Name:** ASSA/Bertha Colonial Shutter (with clips or storm bars)

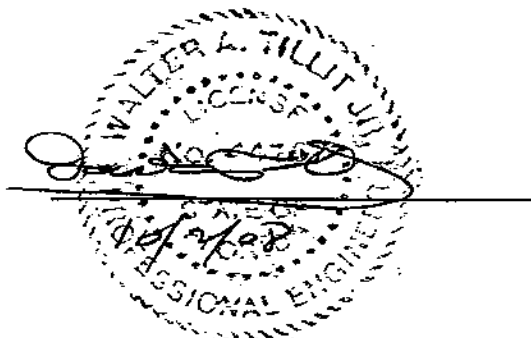
**Submitted By:** A.S.S.A./American Shutter Systems Association, Inc.

**Dear Sir (Madam):**

This is to certify that this Florida Professional Engineer, performing this evaluation does not have nor will acquire, a financial interest in any company manufacturing or distributing products for which the reports are being issued.

This is also to certify that this Florida Professional Engineer performing this evaluation does not have, nor will acquire, a financial interest in any other entity involved in the approval process of the product.

Certificate of Independence prepared by Walter A. Tillit, Jr., P.E. (Florida License No. 44167), President of Tilteco, Inc. (Florida EB-0006719).





WALTER A. TILLIT, JR., P.E.

tilteco@aol.com  
FL P.E. License No. 44167  
FL R.B. License No. 0006719

## PRODUCT EVALUATION REPORT

**REPORT NO.:** 08-0930.01  
**DATE:** September 30, 2008  
**PRODUCT CATEGORY:** Hurricane Shutters  
**PRODUCT SUB-CATEGORY:** Colonial Shutters  
**PRODUCT NAME:** ASSA/Bertha Colonial Shutter (with storm bars)  
**SUBMITTED BY:** A.S.S.A./American Shutter Systems Association, Inc.  
4268 Westroads Drive  
West Palm Beach, Florida 33407

### 1. PURPOSE OF EVALUATION:

This is a Product Evaluation Report issued by **Walter A. Tillit, Jr., P.E.** (System ID # 1906) to the **American Shutter Systems Association, Inc. (A.S.S.A.)**, based on Rule Chapter No. 9B-72.070, Method 1d of the State of Florida Product Approval, Department of Community Affairs-Florida Building Commission.

This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2007 edition of the Florida Building Code, and to verify that the product is for the purpose intended at least equivalent to that required by the Code.

This Product Evaluation Report shall be subject to review and revision in case of a Building Code Change that may affect its limitations and conditions.

### 2. EVIDENCE SUBMITTED:

#### 2.1. PRODUCT EVALUATION DOCUMENT (P.E.D.):

Drawing No. 08-230, titled "ASSA/BERTHA COLONIAL SHUTTER (WITH STORM BARS)", sheets 1 thru 14 of 14, prepared by Tilteco, Inc.; signed and sealed by Walter A. Tillit, Jr., P.E.; dated 09/17/08. This drawing is an integral part of this Evaluation Report.



**PRODUCT EVALUATION REPORT NO. 08-0930.01****2.2. TEST REPORTS:**

Large missile impact and fatigue loading under Protocols TAS 201 & 203, as per section 1626 of the Florida Building Code. Uniform Static loads in accordance with section 1626, per TAS 202 Protocol. Test reports prepared by American Testing Lab of South Florida, Report No. 0926.01-07, dated October 10, 2007 signed and sealed by William Mehner, P.E.

**2.3. STRUCTURAL ENGINEERING CALCULATIONS:**

On ASSA/Bertha Colonial Shutter (with Storm Bars) for anchor verification vs. design wind load and shutter span based on rational and comparative analysis, in accordance with sections 1612 of the Florida Building Code. Calculations prepared by Tilteco, Inc., dated 09/17/08, signed and sealed by Walter A. Tillit, Jr., P.E.

**3. MISSILE IMPACT RESISTANCE:**

Large missile impact under section 1626 of the Florida Building Code, per TAS 201 Protocol.

**4. WIND LOADS RESISTANCE:**

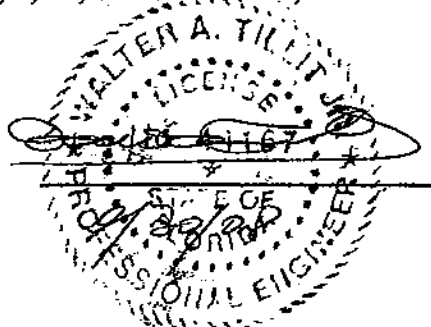
ASSA/Bertha Colonial Shutter (with Storm Bars) has been verified to sustain wind pressures. Maximum Shutter Span shall be as indicated on sheets 3 and 10 of 14, of Product Evaluation Document (P.E.D.), drawing No. 08-230. Anchor Details shall be as indicated on sheets 4, 5, 6, 11, 12 and 13 of 14, of Product Evaluation Document (P.E.D.), drawing No. 08-230.

**5. INSTALLATION:**

Shall be performed strictly in accordance with details indicated on sheets 3 thru 14 of 14, of Product Evaluation Document (P.E.D.), drawing No. 08-230. Minimum separation to glass shall be as indicated on sheets 7 and 13 of 14, of Product Evaluation Document (P.E.D.), drawing No. 08-230.

**6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:**

Shall be strictly in accordance with General Notes and Components indicated on sheets 1 and 2 of 14 of Product Evaluation Document (P.E.D.), drawing No. 08-230. Anchor specifications shall be as indicated on sheets 1, 4, 5, 6, 10, 11 and 12, of 14, of Product Evaluation Document (P.E.D.), drawing No. 08-230.



PRODUCT EVALUATION REPORT NO. 08-0930.01

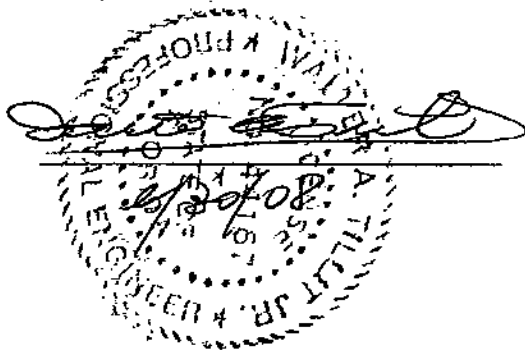
**7. LIMITATIONS AND CONDITIONS OF USE:**

7.1. Shall be strictly in compliance with General Notes No. 1, 2, 8, 9, 10, 11, 12 and 13, indicated on sheet 1 of 14, of Product Evaluation Document (P.E.D.), drawing No. 08-230 prepared by Tilteco, Inc. and signed and sealed by Walter A. Tillit, Jr., P.E.

7.2. Product **may** be installed within HIGH VELOCITY HURRICANE ZONES as defined on section 1620.2 of the Florida Building Code.

7.3. Product shall only be installed into wood frame, poured concrete or concrete block structures.

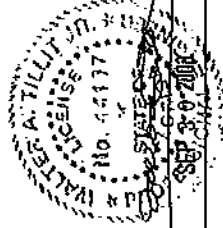
Product Evaluation Report prepared by Walter A. Tillit, Jr., P.E. (Florida License No. 44167), President of Tilteco, Inc. (Florida EB-0006719).



**GENERAL NOTES:**

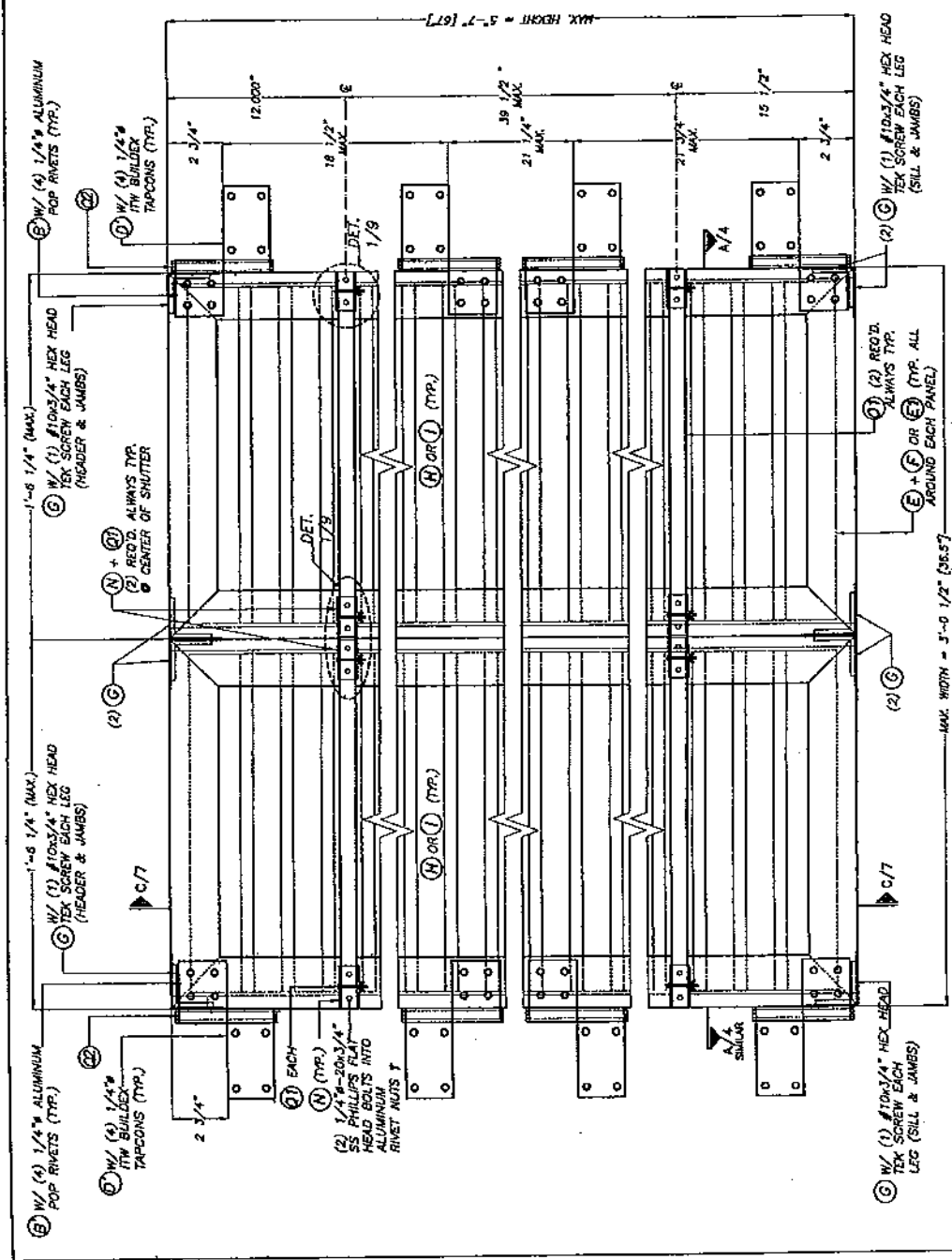
1. BERTHA COLONIAL SHUTTER SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2007 EDITION OF THE FLORIDA BUILDING CODE. THIS COLONIAL SHUTTER MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1620 OF THE ABOVE MENTIONED CODE. IN ORDER TO VERIFY THAT ANCHORS ON THIS P.E.D. AS TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS; HOWEVER, FOR CONNECTIONS INTO WOOD, A 1.60 WIND LOAD DURATION FACTOR WAS USED TO CALCULATE SCREWS SPACINGS. BERTHA COLONIAL SHUTTER'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1626 OF THE ABOVE MENTIONED CODE AS PER AMERICAN TESTING LABORATORY OF SOUTH FLORIDA REPORT # 0926.01-07 AND PER PROTOCOLS TAS 201, 202 & 203.
2. SEE ELEVATIONS ON SHEETS 3 & 10 FOR MAX. DESIGN PRESSURE RATING & MAX. SHUTTER DIMENSIONS.
3. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY AND TEMPER, WITH  $F_y = 28.0$  ksi MINIMUM (UNLESS OTHERWISE NOTED).
4. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES WITH 60 ksi YIELD POINT AND 90 ksi TENSILE STRENGTH.
5. BOLTS TO BE AISI 304 SERIES STAINLESS STEEL WITH 35 ksi MINIMUM YIELD STRENGTH.
6. ALL ALUMINUM POP RIVETS TO BE 5052 ALUMINUM ALLOY WITH ALUMINUM MANDREL.
7. ANCHORS TO WALL SHALL BE AS FOLLOWS: (UNLESS OTHERWISE NOTED)
  - (A) TO EXISTING WOOD FRAME WALL: SOUTHERN PINE No.2, G=0.55.  
- 1/4" TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BUILDEX, INC.
  - NOTES:
    - A.1) MINIMUM THREADED PENETRATION OF TAPCON ANCHORS INTO WOOD SHALL BE 1 1/2".
    - A.2) IN CASE THAT PRECAST STONE, PLYWOOD OR PRECAST CONCRETE PANELS BE FOUND ON THE EXISTING WALL, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS. ANCHORAGE SHALL BE AS INDICATED ON NOTES A.1).
  - (B) TO EXISTING POURED CONCRETE MIN. ( $f'_c = 3192$  p.s.i.) OR ASTM C-90 CONCRETE BLOCK  
- 1/4" TAPCON ANCHORS AS MANUFACTURED BY I.T.W./BUILDEX.
- (C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.

8. EACH SHUTTER SHALL HAVE A LEGIBLE AND READILY VISIBLE MARKING INSTRUCTING OWNER OR TENANT TO SECURE SHUTTER WITH STORM BARS & SAFETY BOLTS DURING PERIODS OF HURRICANE WARNINGS.
9. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE WHERE SHUTTER IS TO BE ATTACHED TO INSURE PROPER ANCHORAGE. CONTRACTOR TO SEAL/CAULK ALL SHUTTER COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION.
10. OWNER TO BE RESPONSIBLE FOR PROVIDING A SUITABLE PLATFORM OR BALCONY WHEN SECURING UNIT DURING HURRICANE WARNINGS.
11. BERTHA COLONIAL SHUTTER'S INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
12. SHUTTER MANUFACTURER'S LABEL SHALL BE LOCATED ON A READILY VISIBLE LOCATION AT COLONIAL SHUTTER IN ACCORDANCE WITH SECTION 1714.8.3 OF FLORIDA BUILDING CODE. ONE LABEL SHALL BE PLACED FOR EVERY OPENING, LABELING TO COMPLY WITH SECTION 1714.8.2 OF THE FLORIDA BUILDING CODE.
13. (a) THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT, I. e. WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.
- (b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT, BASED ON THIS PRODUCT EVALUATION DOCUMENT, PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
- (c) THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.
- (d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE ENGINEER OF RECORD (E.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.E.D. ENGINEER OF RECORD, ACTING AS A DELEGATED ENGINEER TO THE P.E.D. ENGINEER, SHALL SUBMIT TO THIS LATTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.
- (e) THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



<b>TILECO INC.</b>		<b>ASSA / BERTHA COLONIAL SHUTTER (WITH STORM BARS)</b>	
TILECO TESTING & ENGINEERING COMPANY 1000 W. PALM BEACH BLVD. SUITE 100 PALM BEACH, FL 33407 TEL: (561) 833-2200 FAX: (561) 833-2200		<b>AMERICAN SHUTTER SYSTEMS ASSOC., INC.</b>	
4301 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (561) 833-2200 FAX: (561) 833-2200		DATE: 09/12/09	
PROJECT: 09-000719		DRAWING NO: 08-230	
FLORIDA Lic. # 44167		SHEET 1 OF 18	



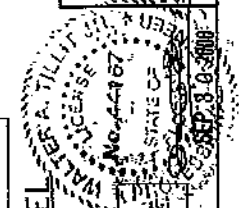


**TYPICAL EXTERIOR ELEV. DOUBLE PANEL  
(HURRICANE POSITION)**

SCALE: 3/16"=1"

1 1/2" x 2-20x3/4"  
AS DISTRIBUTED BY ALL POINTS  
SCREW, BOLT & SPECIALTY CO.  
(PART # 250RFFMA)

MAXIMUM DESIGN PRESSURE RATING = +60.0, -81.0 p.s.f. FOR  
INSTALLATION INTO CONCRETE OR CONCRETE BLOCK WALL SUBSTRATE



F.B.C. (High Velocity Hurricane Zone)

ASSA / BERTHA COLONIAL SHUTTER  
(WITH STORM BARS)

AMERICAN SHUTTER SYSTEMS ASSOC., INC.

4500 WEST ROADS DRIVE  
WEST PALM BEACH, FL 33407  
PHONE: (800) 431-2504 FAX: (561) 908-0300

DATE: 09/12/00  
DRAWING NO: 08-230

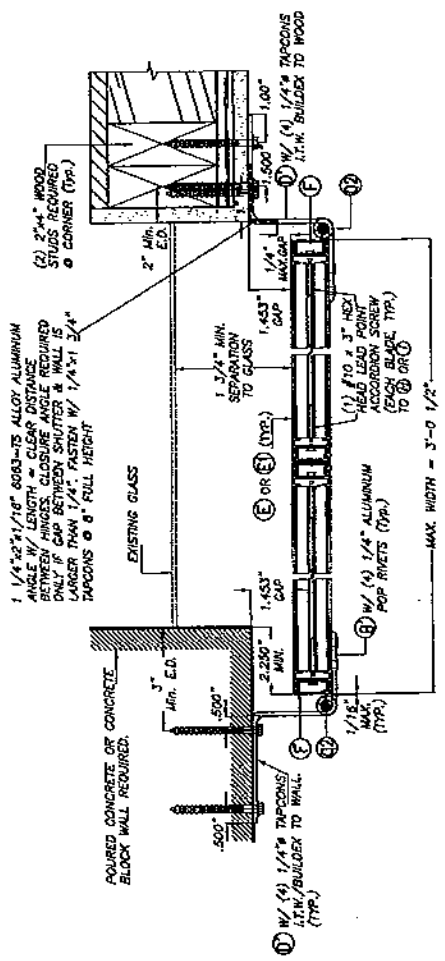
DATE: 09/12/00  
DRAWING NO: 08-230

SHEET 3 OF 14

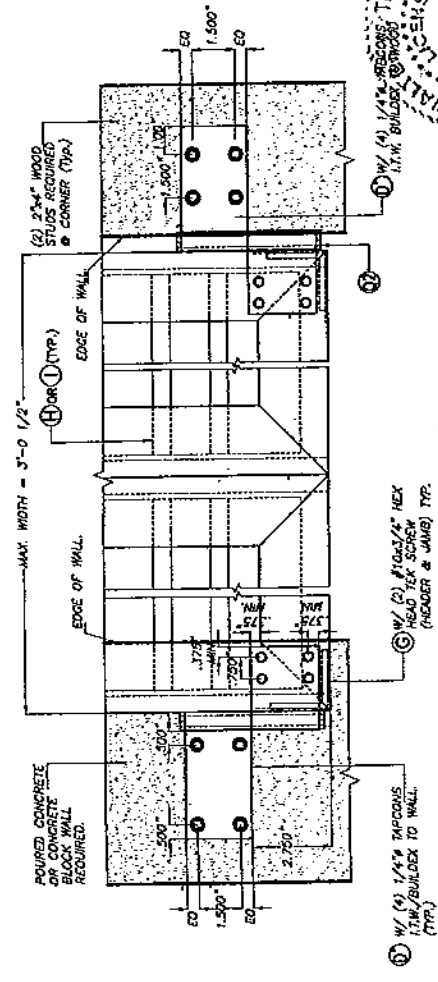
TILECO INC.

FLUOR TESTING & ENGINEERING COMPANY  
1001 W. STATE ROAD 111, SUITE 100  
MELBOURNE, FL 32901  
TEL: 321-255-1111  
FLORIDA Lic. # 14427

© 2000 TILECO, INC.



**SECTION A-A**  
SCALE 1/4"=1"



**VIEW A**  
**(PARTIAL ELEVATION)**  
SCALE 1/4"=1"

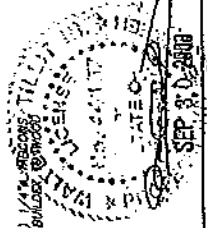
**TILECO INC.**  
 FULLY TESTING & ENGINEERING COMPANY  
 400 W. 1st St., Suite 100, Tampa, Florida 33602  
 Phone: (813) 251-1111

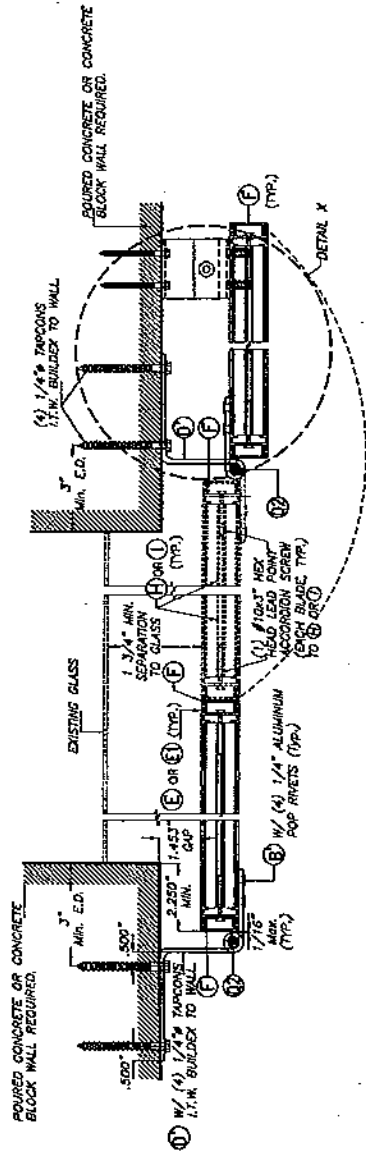
**F.B.C. (High Velocity Hurricane Zone)**

ASSA / BERTHA COLONIAL SHUTTER  
(WITH STORM BARS)

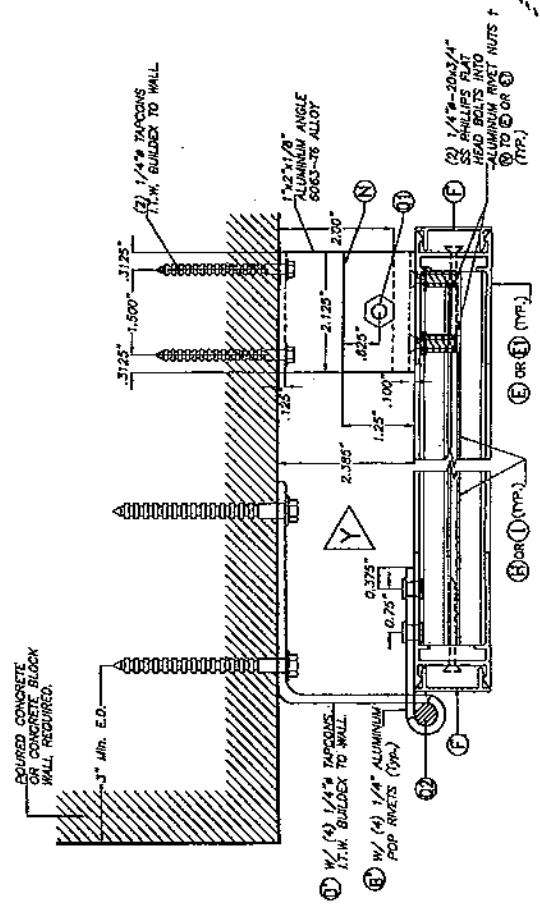
AMERICAN SHUTTER SYSTEMS ASSOC., INC.  
 208 W. 1st St., Suite 100  
 Tampa, Florida 33602  
 Phone: (813) 251-1111, Fax: (813) 251-1111

DATE	DRAWN BY	CHECKED BY	SCALE	SHEET
08-230				4 OF 14



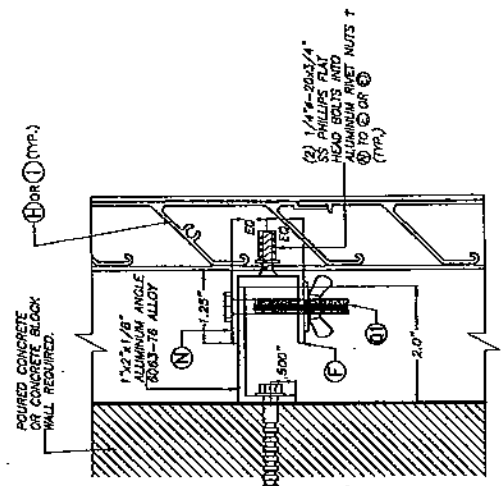


**TYPICAL PLAN (NON HURRICANE POSITION)**  
SCALE 1/4"=1"

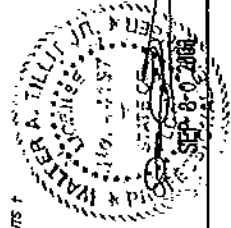


**DETAIL X (NON HURRICANE POSITION)**  
SCALE 1/8"=1"

1/4" - 20x3/4" AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY CO. (PART # 25CRFMA).



**ELEVATION Y-Y**  
SCALE 1/8"=1"



F.B.C. (High Velocity Hurricane Zone)	
LA	09/12/08
DESIGN BY:	ASSA / BERTHA COLONIAL SHUTTER (WITH STORM BARS)
DATE:	08-230
PROJECT NO:	4218 WEST ROAD DRIVE, WEST PALM BEACH, FL 33407
OWNER:	PHONE: (561) 838-4300 FAX: (561) 838-4300
DATE:	
SCALE:	
SHEET # OF 14	

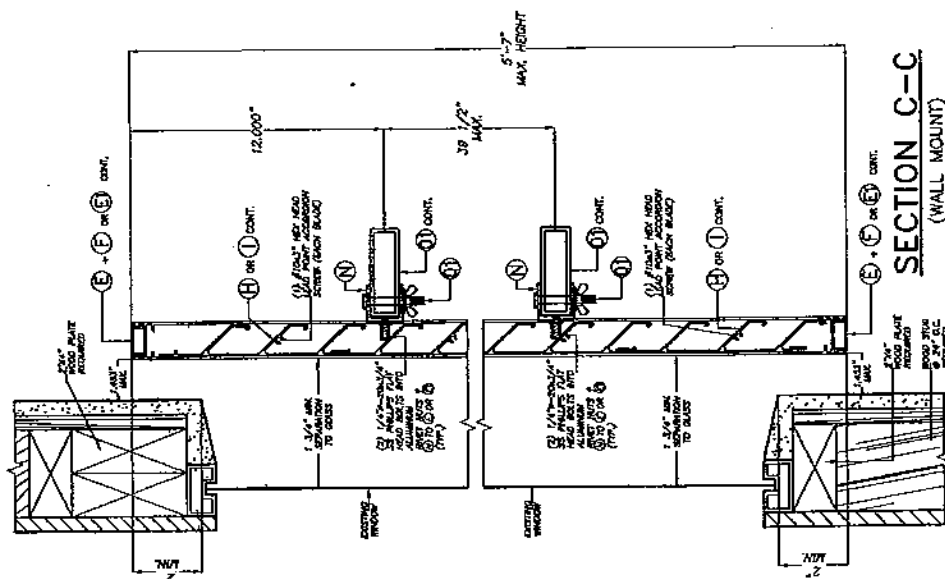
02008 RELEAS. INC.

**TILECO INC.**

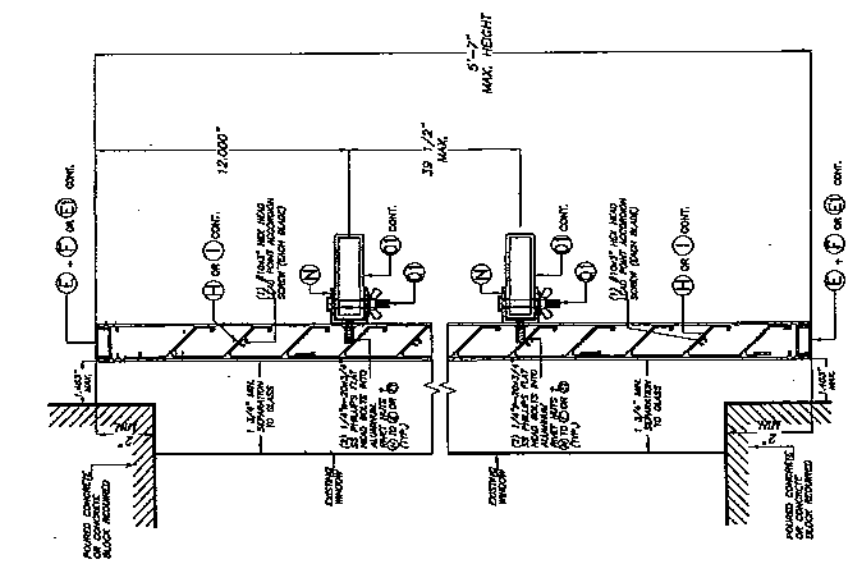
TILEIT TESTING & ENGINEERING COMPANY  
100 W. 11th St., Suite 100, Ft. Lauderdale, FL 33304  
TEL: 754-447-1111 FAX: 754-447-1112

EST. 1987  
FLORIDA Lic # 44107



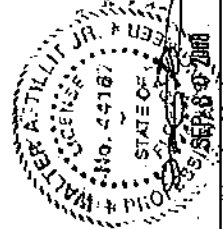


**SECTION C-C**  
(WALL MOUNT)  
HURRICANE POSITION  
SCALE 1/4"=1"



**SECTION C-C**  
(WALL MOUNT)  
HURRICANE POSITION  
SCALE 1/4"=1"

† 1/4" - 20x3/4"  
AS DISTRIBUTED BY ALL POINTS SCREW,  
BOLT & SPECIALTY CO. (PART #25CRFNA).



F.B.C. (High Velocity Hurricane Zone)

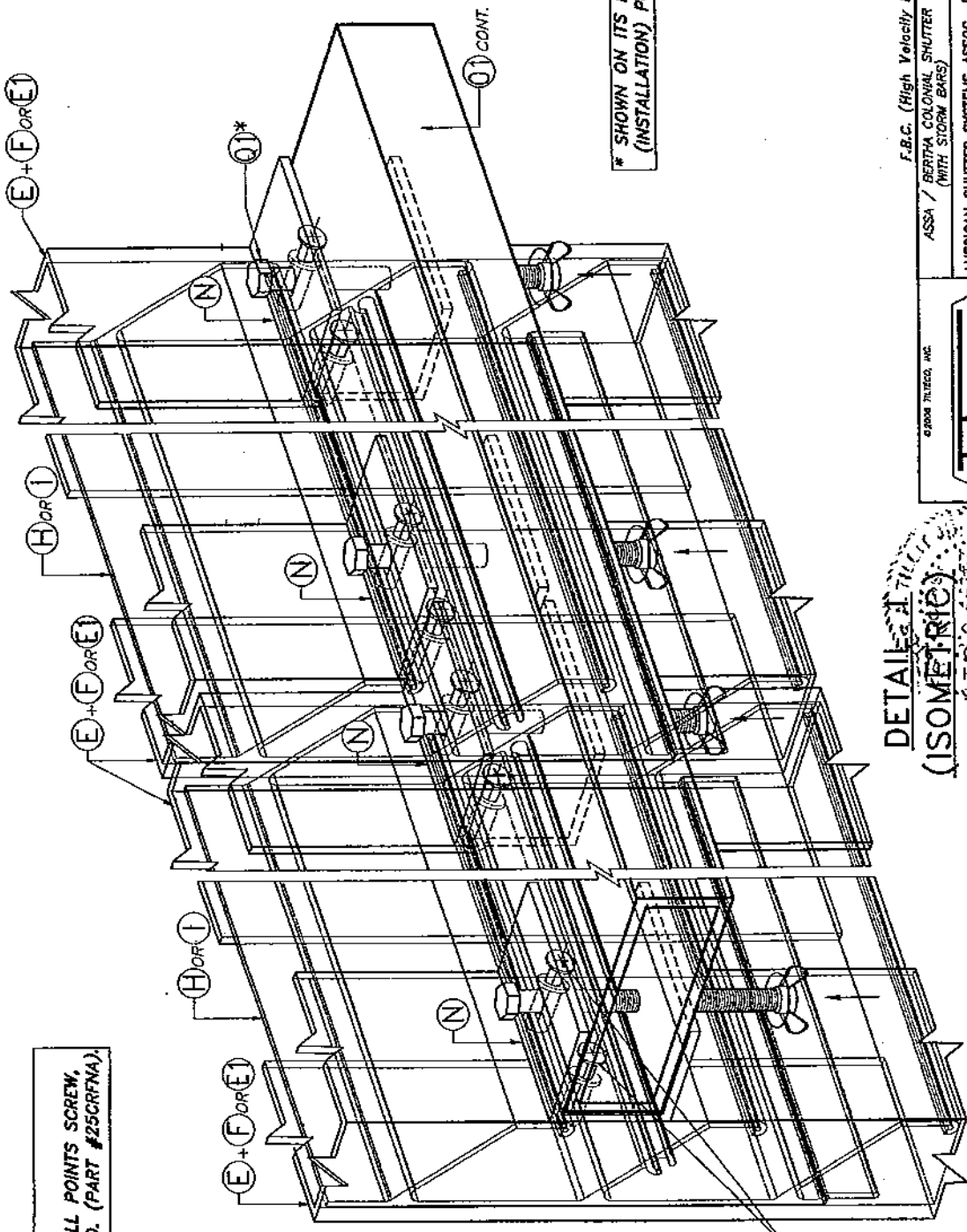
ASSA / BERTHA COLONIAL SHUTTER (WITH STORM BARS)	DATE: 08/17/08
AMERICAN SHUTTER SYSTEMS ASSOC., INC.	DATE: 08-230
4508 WEST ROADS DRIVE WEST PALM BEACH, FL 33407 PHONE: (888)432-3504 FAX: (561)206-0300	REVISION NO.
WALTER A. TILLER, JR. FLORIDA No. 49181	DATE
	BY
	CHECKED
	DATE
	SCALE
	PROJECT
	SHEET 7 OF 14

92008 TILECO, INC.

**TILECO INC.**

TILE TESTING & ENGINEERING COMPANY  
1000 S.W. 15th Ave., Suite 100, Ft. Lauderdale, FL 33304  
Phone: (954) 531-1111 Fax: (954) 531-1112  
E-Mail: info@tileco.com Website: www.tileco.com

† 1/4"Ø-20x3/4"  
AS DISTRIBUTED BY ALL POINTS SCREW,  
BOLT & SPECIALTY CO. (PART #25CRFNA).



\* SHOWN ON ITS DRIVING  
(INSTALLATION) POSITION

(2) 1/4"Ø-20x3/4"  
SS PHILLIPS FLAT  
HEAD BOLTS INTO  
ALUMINUM  
RIVET NUTS †  
TO (E OR E1)  
(TYP.)

DETAILS AT TILT  
(ISOMETRIC)  
SALES  
SEP 8 1960

F.B.C. (High Velocity Hurricane Zone)

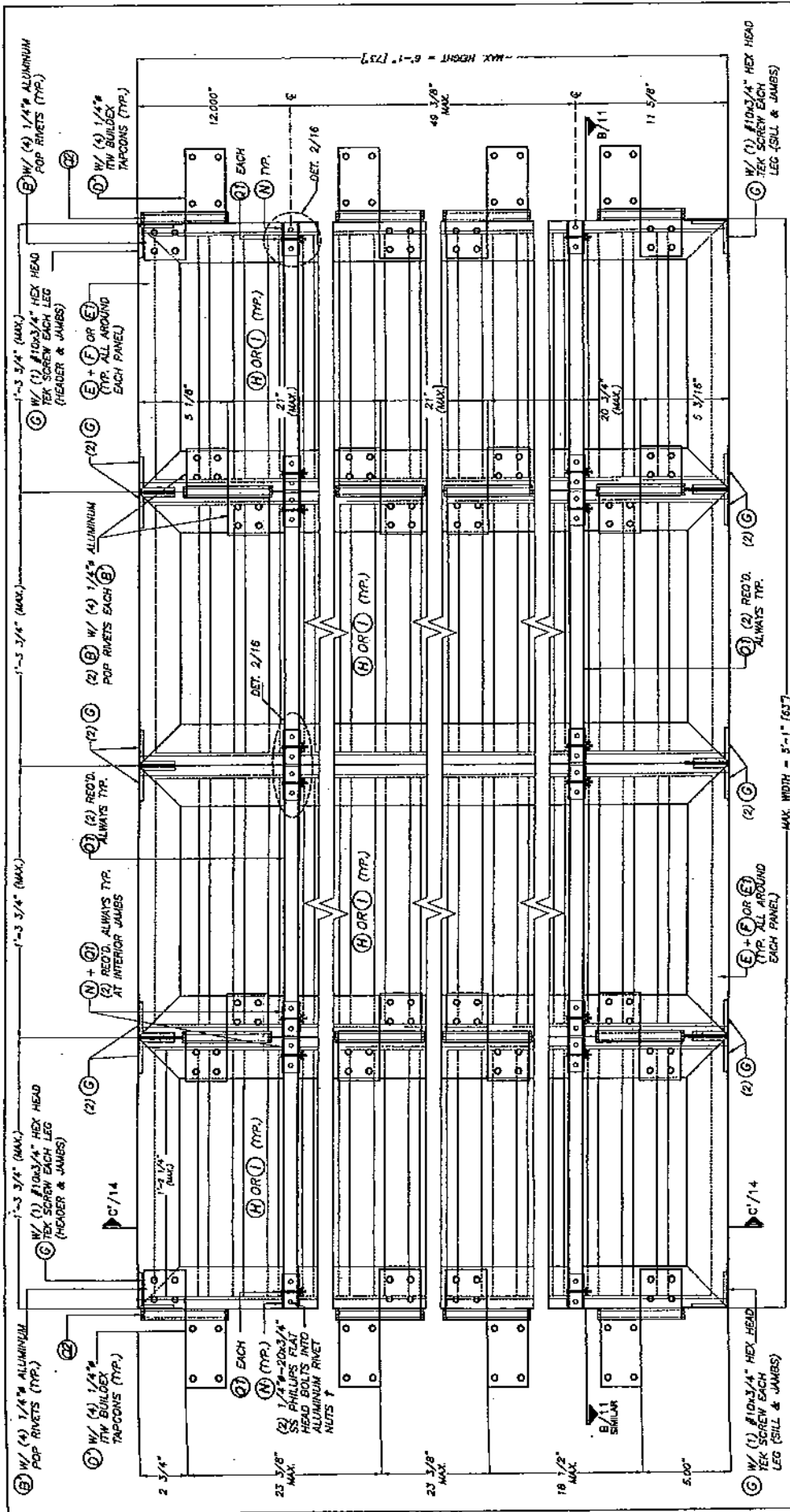
ASSA / BERITRA COLONIAL SHUTTER  
(WITH STORM BARS)

AMERICAN SHUTTER SYSTEMS ASSOC., INC.  
4108 WEST ROAD DRIVE  
WEST PALM BEACH, FL. 33407  
PHONE: (800) 322-2200, (407) 831-1000-4100

TILECO INC.  
TILT TIGHTENING & ENGINEERING COMPANY  
1000 W. W. W. ROAD, SUITE 100, WEST PALM BEACH, FL. 33411  
TEL: (407) 831-1000  
FLORIDA INC. / 42107

REV. NO.	1	DATE	08/17/60
REV. NO.	2	DATE	
REV. NO.	3	DATE	
REV. NO.	4	DATE	
REV. NO.	5	DATE	
REV. NO.	6	DATE	
REV. NO.	7	DATE	
REV. NO.	8	DATE	
REV. NO.	9	DATE	
REV. NO.	10	DATE	

DRAWING NO. 08-230  
SHEET 8 OF 14



**TYPICAL EXTERIOR ELEV. QUADRUPLE PANEL FOR (HURRICANE POSITION)**

SCALE: 3/16"=1"

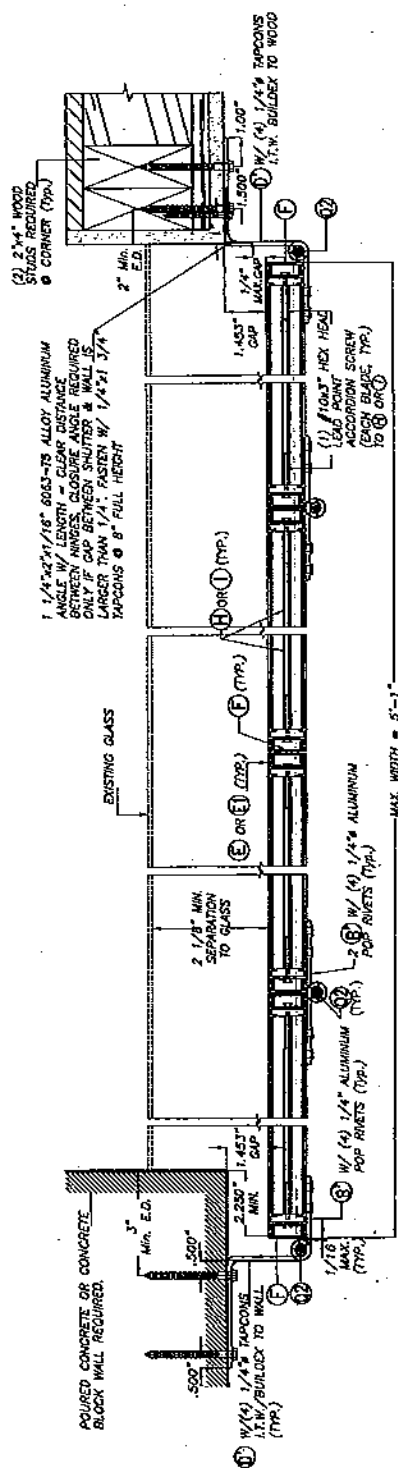
1/4" - 20x3/4" AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY CO. (PART # 25CRFN4).

MAXIMUM DESIGN PRESSURE RATING = +51.0, -70.0 p.s.f. FOR INSTALLATION INTO CONCRETE OR CONCRETE BLOCK WALL SUBSTRATE.

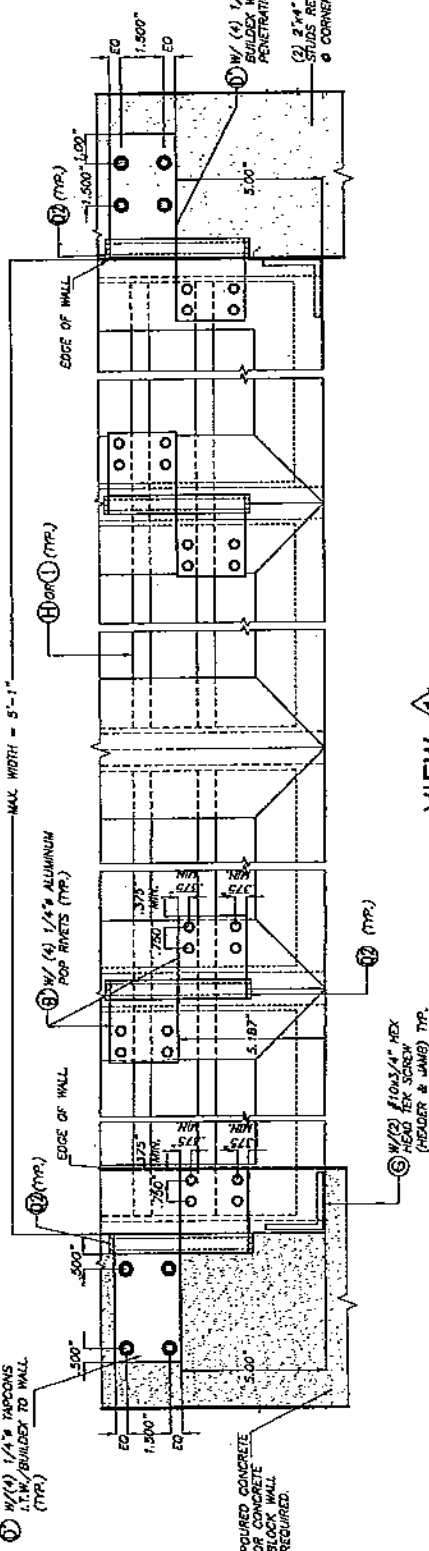
6208 WILCOX, INC.  
**TILECO INC.**  
 TILTY TESTING & ENGINEERING COMPANY  
 100 W. 11th St., Suite 100  
 Fort Lauderdale, FL 33304  
 PHONE (800) 438-2534, FAX (813) 566-0366  
 TITL 00000119  
 WALTER APPELL, JR. P.E.  
 FLORIDA No. 42117

F.B.C. (High Velocity Hurricane Zone)  
 ASSA / BERTRAM COLONIAL SHUTTER (WITH STORM BARS)  
 AMERICAN SHUTTER SYSTEMS ASSOC., INC.  
 4108 WEST ROADS DRIVE  
 WEST PALM BEACH, FL 33407  
 PHONE (800) 438-2534, FAX (813) 566-0366

DATE	REV.	BY	CHK.
08-230	1	WALTER APPELL, JR.	WALTER APPELL, JR.
09/17/04	2	WALTER APPELL, JR.	WALTER APPELL, JR.
08-230	3	WALTER APPELL, JR.	WALTER APPELL, JR.
08-230	4	WALTER APPELL, JR.	WALTER APPELL, JR.
08-230	5	WALTER APPELL, JR.	WALTER APPELL, JR.
08-230	6	WALTER APPELL, JR.	WALTER APPELL, JR.
08-230	7	WALTER APPELL, JR.	WALTER APPELL, JR.
08-230	8	WALTER APPELL, JR.	WALTER APPELL, JR.
08-230	9	WALTER APPELL, JR.	WALTER APPELL, JR.
08-230	10	WALTER APPELL, JR.	WALTER APPELL, JR.



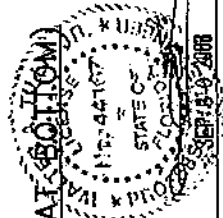
**SECTION B-B**  
SCALE 1/4" = 1"



**VIEW A**  
**(PARTIAL ELEVATION AT BOTTOM)**  
SCALE 1/4" = 1"

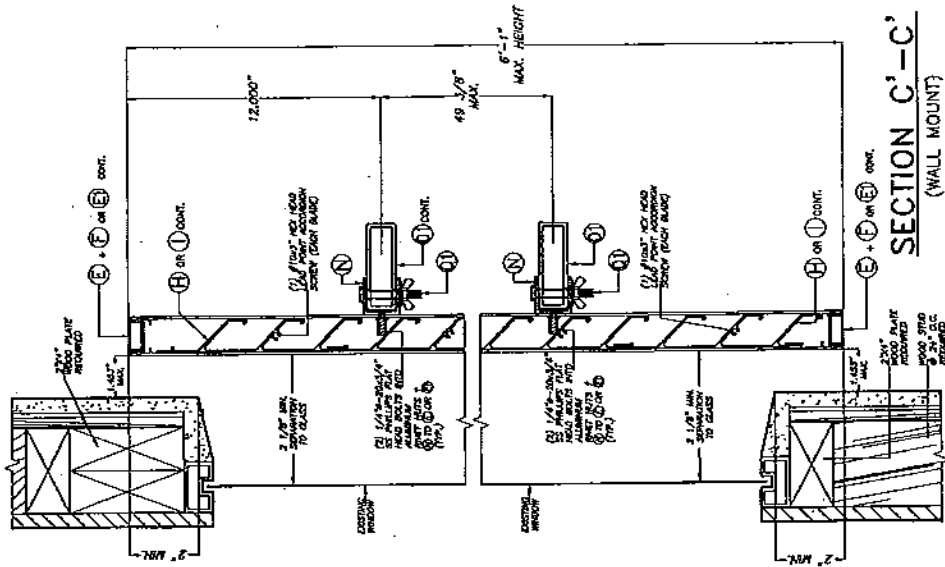
F.B.C. (High Velocity Hurricane Zone)  
ASSA / BERTHA COLONIAL SHUTTER  
(WITH STORM BARS)  
AMERICAN SHUTTER SYSTEMS ASSOC., INC.  
1090 WEST PALMS DRIVE, SUITE 107  
P.O. BOX 107  
PHONE: (808) 432-2504, FAX: (841) 250-9330  
DRAWING NO. 08-230  
DATE: 09/17/08  
DRAWN BY: [ ]  
CHECKED BY: [ ]  
SCALE: [ ]  
SHEET NO. OF 14

TILECO INC.  
BUILT TESTING & ENGINEERING COMPANY  
1100 S.W. 10TH AVENUE, SUITE 1000  
MIAMI, FL 33135  
PHONE: (305) 441-6777  
FAX: (305) 441-6777  
WALTER A. TULLY, P.E.  
FLORIDA Lic # 24167

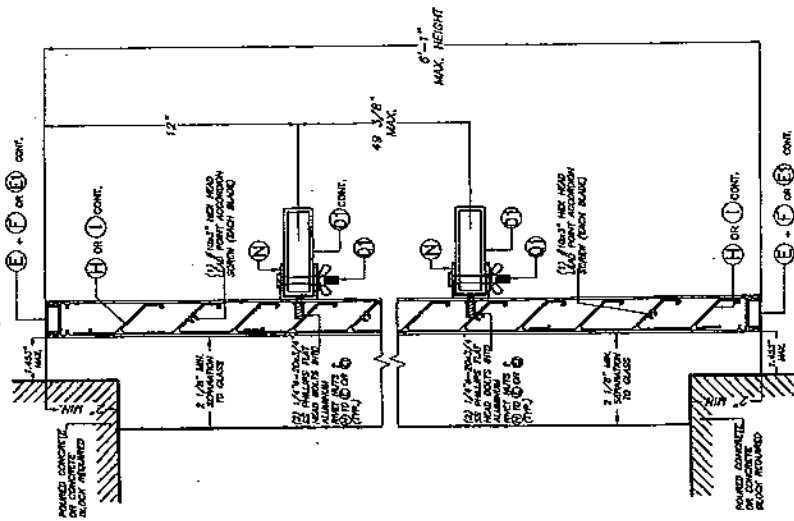






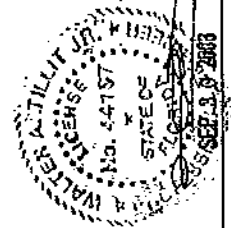


**SECTION C'-C'**  
(WALL MOUNT)  
HURRICANE POSITION  
SCALE 1/4"=1"



**SECTION C'-C'**  
(WALL MOUNT)  
HURRICANE POSITION  
SCALE 1/4"=1"

† 1/4" - 20x3/4"  
AS DISTRIBUTED BY ALL POINTS SCREW,  
BOLT & SPECIALTY CO. (PART #25CRFNA)

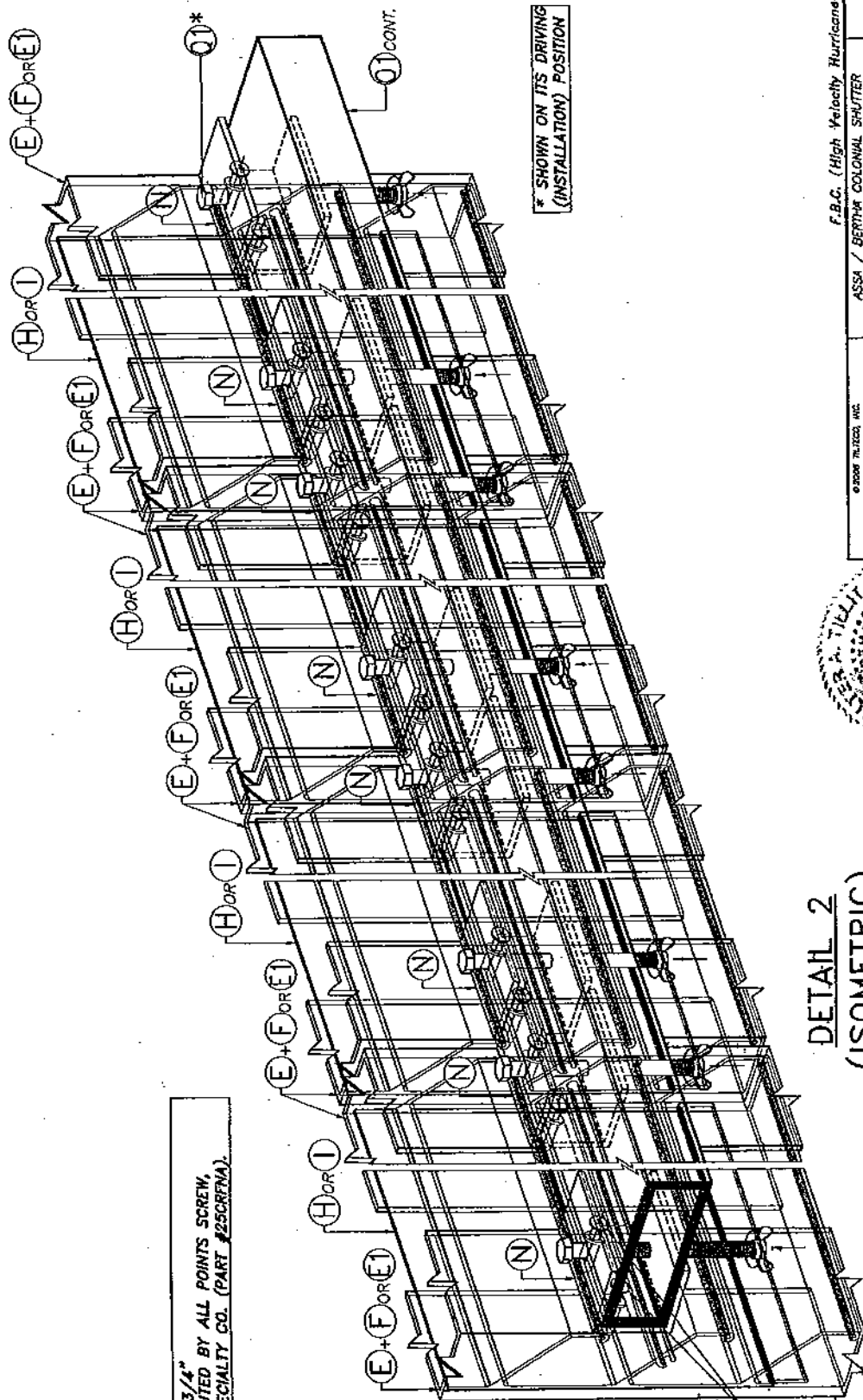


F.B.C. (High Velocity Hurricane Zone)	
ASSA / BERTHA COLONIAL SHUTTER (WITH STORM BARS)	DATE: 02/17/78
AMERICAN SHUTTER SYSTEMS ASSOC., INC.	PROJECT NO: 08-230
448 WEST MOORE AVE. WEST PALM BEACH, FL. 33407 PHONE: (800)432-2804 FAX: (561)208-4300	DRAWING NO: 08-230
AMERICAN SHUTTER SYSTEMS ASSOC., INC.	SHEET NO: 1
1000 STEELES AVE. S.W. ALBUQUERQUE, NM 87105	SCALE: 1/4"=1"
1000 STEELES AVE. S.W. ALBUQUERQUE, NM 87105	DATE: 02/17/78
1000 STEELES AVE. S.W. ALBUQUERQUE, NM 87105	BY: [Signature]
1000 STEELES AVE. S.W. ALBUQUERQUE, NM 87105	CHECKED BY: [Signature]
1000 STEELES AVE. S.W. ALBUQUERQUE, NM 87105	APPROVED BY: [Signature]
1000 STEELES AVE. S.W. ALBUQUERQUE, NM 87105	DATE: 02/17/78

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**TILICO INC.**

TILICO TESTING & ENGINEERING COMPANY  
1411 W. 1st St., Suite 200, Ft. Lauderdale, FL 33304  
TEL: (954) 571-1100 FAX: (954) 571-1101

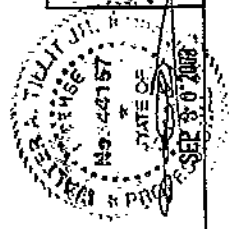


† 1/4" - 20x3/4" AS DISTRIBUTED BY ALL POINTS SCREW BOLT & SPECIALTY CO. (PART #25CRFMA).

(2) 1/4" - 20x3/4" SS PHILLIPS FLAT HEAD BOLTS INTO ALUMINUM RIVET NUTS † TO (E OR N) (TYP.)

\* SHOWN ON ITS DRIVING (INSTALLATION) POSITION

**DETAIL 2**  
**(ISOMETRIC)**  
N.T.S



**TILECO INC.**  
TILT TESTING & ENGINEERING COMPANY  
4000 W. 14th Street, Suite 200, Ft. Lauderdale, FL 33304  
TEL: 954-333-7119 FAX: 954-333-7118  
WALTER A. TILLET, P.E.  
FLORIDA Lic. # 44757

F.B.C. (High Velocity Hurricane Zone)  
ASSA / BERTHA COLONIAL SHUTTER (WITH STORM BARS)  
AMERICAN SHUTTER SYSTEMS ASSOC., INC.  
4500 WEST BOULEVARD  
WEST PALM BEACH, FL 33407  
PHONE (561) 838-2804 FAX (561) 838-8320

DATE	BY	APPROVED

LA DRAWN BY: PRJ/2/08  
DATE: 08-23-08  
DRAWING NO. 08-230  
SHEET 14 OF 14