

GENERAL NOTES:

1. BERTHA H.V. BAHAMA SHUTTER SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE WITH THE 2005, 2006 AND 2007 SUPPLEMENTS. THIS BAHAMA SHUTTER SHALL NOT BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES. (MIAMI DADE / BROWARD COUNTY) DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE ABOVE MENTIONED CODE. FOR A BASIC WIND SPEED NOT TO EXCEED 140 m.p.h., AND AS REQUIRED BY THE JURISDICTION WHERE SHUTTER WILL BE INSTALLED IN ACCORDANCE WITH ASCE 7-02 STANDARD. 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.
2. SEE MAXIMUM PRESSURE RATINGS & MAXIMUM SHUTTER DIMENSIONS ON SCHEDULE ON SHEET 7.
3. ALL ALUMINUM EXTRUSIONS SHALL BE ALUMINUM ASSOCIATION 6063-T6 ALLOY AND TEMPER, WITH $F_y = 25.0$ KSI MINIMUM (UNLESS OTHERWISE NOTED).
4. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES WITH 50 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 UNITS: SOUTHERN PINE No.2, $G=0.55$.
 - 1/4" ϕ TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BULDEX, INC.
- NOTES:
 - A.1) MINIMUM THREADED PENETRATION OF TAPCON ANCHORS INTO WOOD SHALL BE 1 1/2".
 - A.2) IN CASE THAT PRECAST STONE 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 MIN. $f'c=3192$ PSI. CONCRETE OR CONCRETE ASTM C-90 BLOCK UNITS:
 - 1/4" ϕ TAPCON ANCHORS AS MANUFACTURED BY I.T.W. BULDEX, INC.
 - 1/4" ϕ \times 3/4" ALL POINTS SOLD-SET ANCHORS AS DISTRIBUTED BY ALL POINTS SCREW, BOLT & SPECIALTY COMPANY.
 - B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO POURED CONCRETE SHALL BE 1 3/4" OR CONCRETE HOLLOW BLOCK SHALL BE 1 1/4".
 - B.2) MINIMUM EMBEDMENT OF 1/4" ϕ \times 3/4" ALL POINTS SOLD-SET ANCHORS INTO POURED CONCRETE SHALL BE 7/8" OR INTO CONCRETE HOLLOW BLOCK SHALL BE ENTIRELY EMBEDDED. NO EMBEDMENT INTO STUCCO SHALL BE PERMITTED. 1/4" ϕ - 20 S.S. MACHINE SCREW USED SHALL BE 1 1/2" LONG MINIMUM SHOULD STUCCO EXIST, AND 1" MINIMUM FOR WALLS WITH NO STUCCO.
 - B.3) IN CASE THAT PRECAST STONE 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 B.1).
 - (C) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHORS MANUFACTURER.

8. EACH SHUTTER SHALL HAVE A LEGIBLE AND READILY VISIBLE MARKING INSTRUCTING OWNER OR TENANT TO SECURE SHUTTER WITH SILL BRACKETS 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. BERTHA H.V. BAHAMA 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.

11. SHUTTER'S MANUFACTURER LABEL SHALL BE PLACED ON THE EXPOSED SURFACE OF THE BAHAMA FRAME (C, D) OR (E). ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:
AMERICAN SHUTTER SYSTEMS ASSOC., INC.
 WEST PALM BEACH, FL.
 FLORIDA STATEWIDE PRODUCT APPROVED.

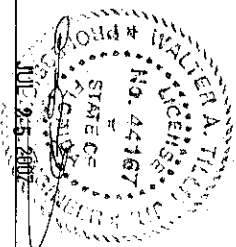
12. (a) THIS PRODUCT EVALUATION DOCUMENT (P.E.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT. I, e, WHERE THE SITE CONDITIONS DEVIATE FROM THE P.E.D.

(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.

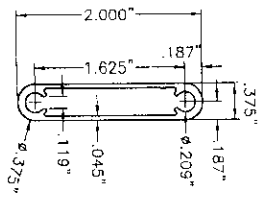
(c) THIS PRODUCT EVALUATION DOCUMENT WILL BE CONSIDERED INVALID IF ALTERED BY ANY MEANS.

(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.

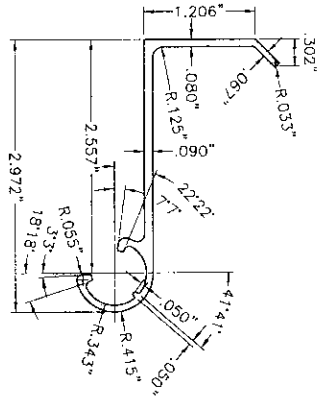
(e) THIS P.E.D. SHALL BEAR THE DATE AND ORIGINAL SEAL AND SIGNATURE OF THE PROFESSIONAL ENGINEER OF RECORD THAT PREPARED IT.



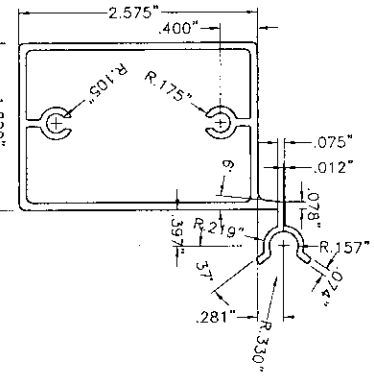
		TILECO INC. TULLIT TESTING & ENGINEERING COMPANY 4288 WESTBROOKS DRIVE WEST PALM BEACH, FLORIDA 33407 Phone: (561) 835-1100 Fax: (561) 835-1101 Email: info@tileco.com Website: www.tileco.com EB-008719 Florida Lic. # 44167 © 2009 TILECO INC.	
ASSA / BERTHA H.V. BAHAMA SHUTTER		AMERICAN SHUTTER SYSTEMS ASSOC., INC. 4288 WESTBROOKS DRIVE WEST PALM BEACH, FLORIDA 33407	
REV. NO.	DATE	REV. NO.	DATE
1	7/23/07	1	
2		2	
LULU DRAWN BY DATE 05-215 DRAWING NO. SHEET 1 OF 7		F.B.C. (Mon High Velocity Hurricane Zone)	



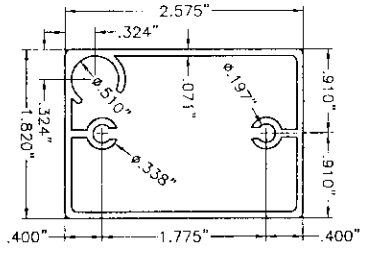
A LOUVER BLADE



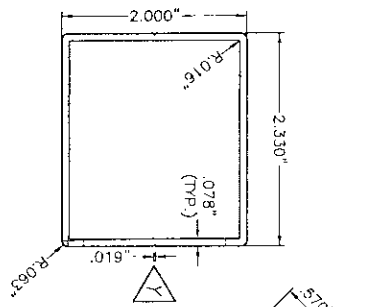
B 1/4" B.O. FEMALE HINGE



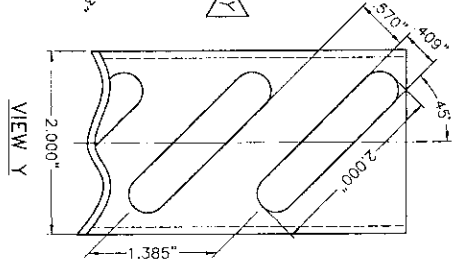
C TOP RAIL/MALE HINGE



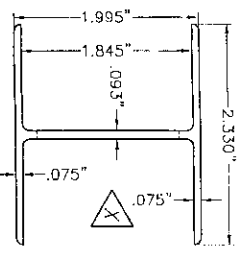
D BOTTOM RAIL



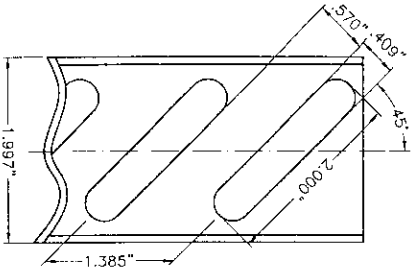
E JAMB



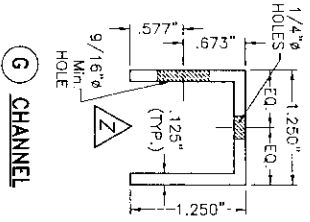
VIEW Y



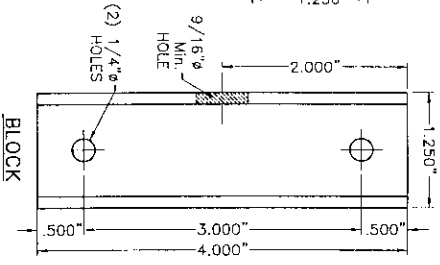
F PRE-PUNCHED CENTER MULLION



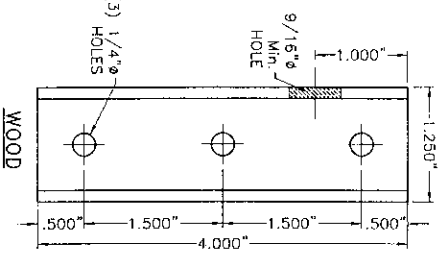
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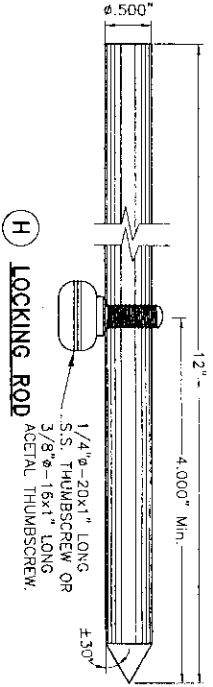
G CHANNEL



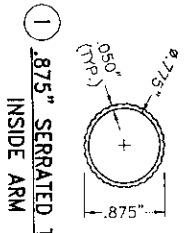
BLOCK



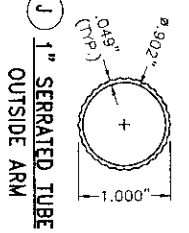
WOOD



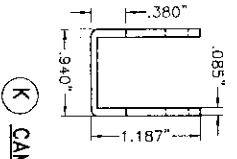
H LOCKING ROD



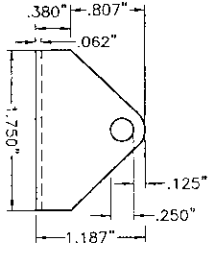
I .875" SERATED TUBE INSIDE ARM



J 1" SERATED TUBE OUTSIDE ARM



K CAMEL BACK HINGE

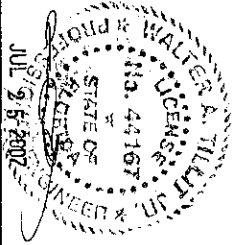


K CAMEL BACK HINGE

VIEWS Z

COMPONENTS

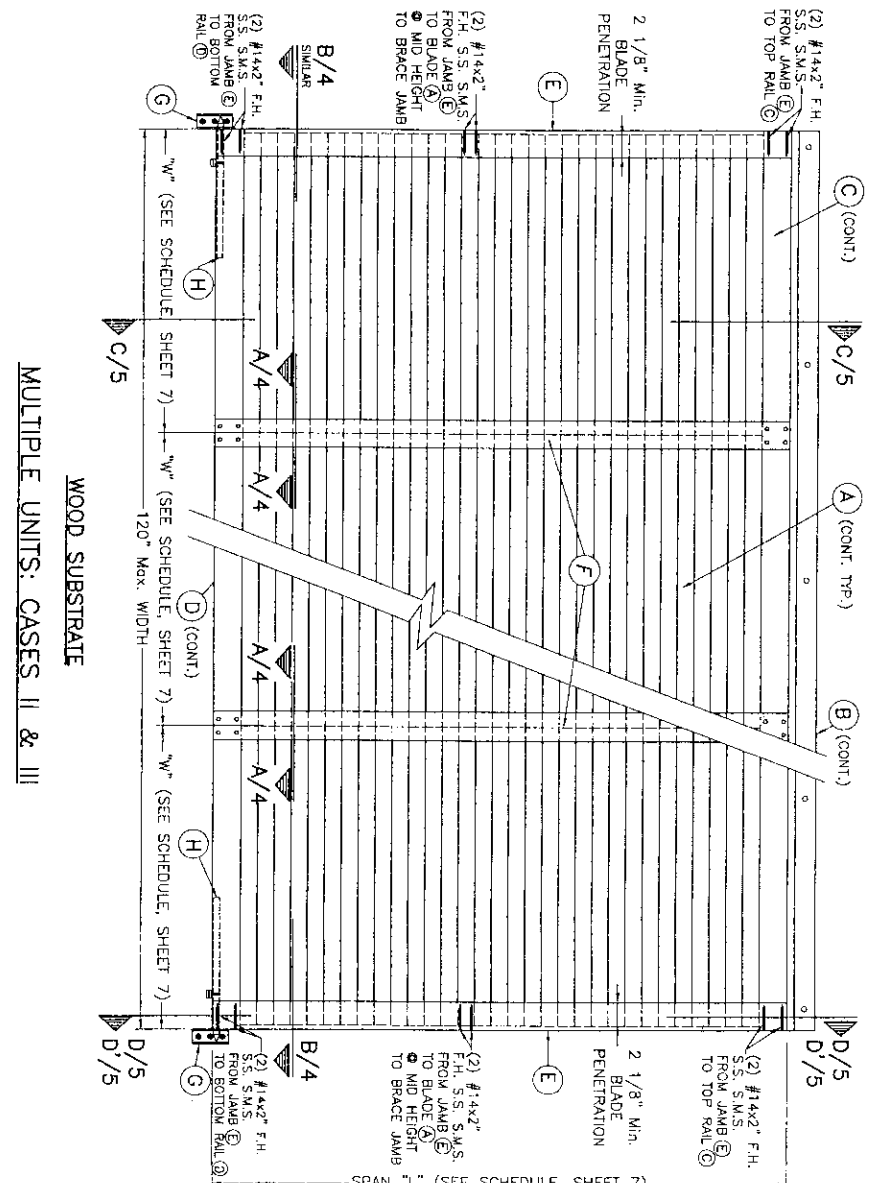
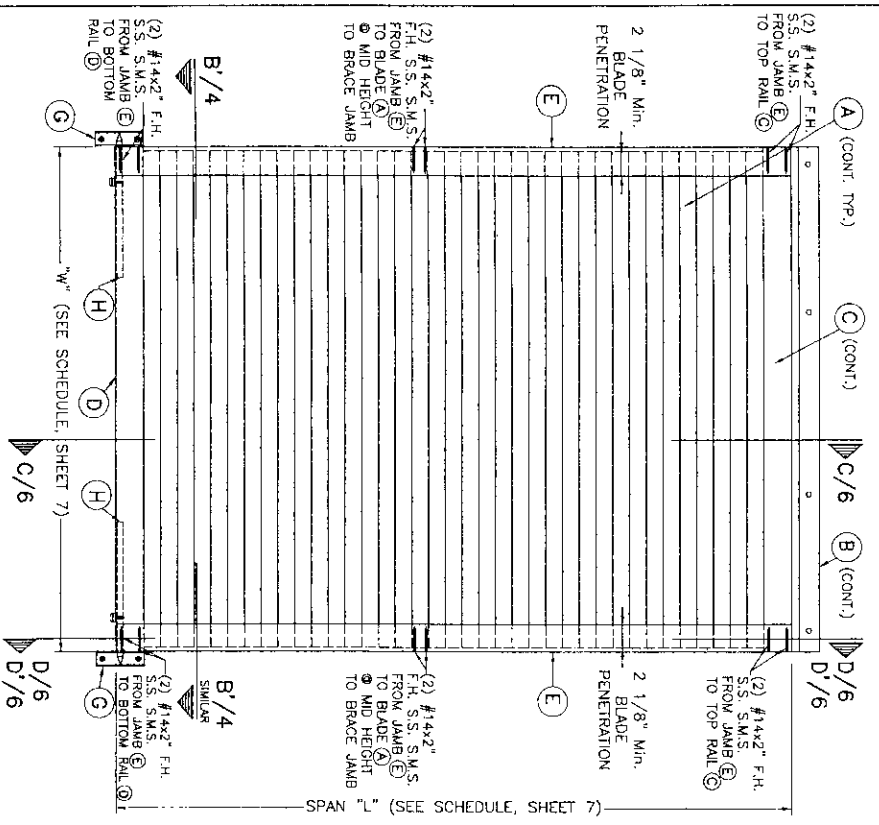
SCALE: 3/4" = 1"



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 President
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ASSA / BERTHA H.V. BAHAMA SHUTTER		L/S	
AMERICAN SHUTTER SYSTEMS ASSOC., INC.		DRAWN BY	
4266 WESTROADS DRIVE		6/29/06	
WEST PALM BEACH, FLORIDA 33407		DATE	
REV. NO.	DESCRIPTION	DATE	BY
1	ASSEMBLY	6/29/06	
2	REVISED		
DRAWING NO. 06-215		SHEET 2 OF 7	

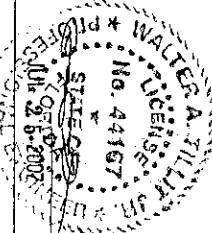
F.B.C. (Non High Velocity Hurricane Zone)



ELEVATIONS

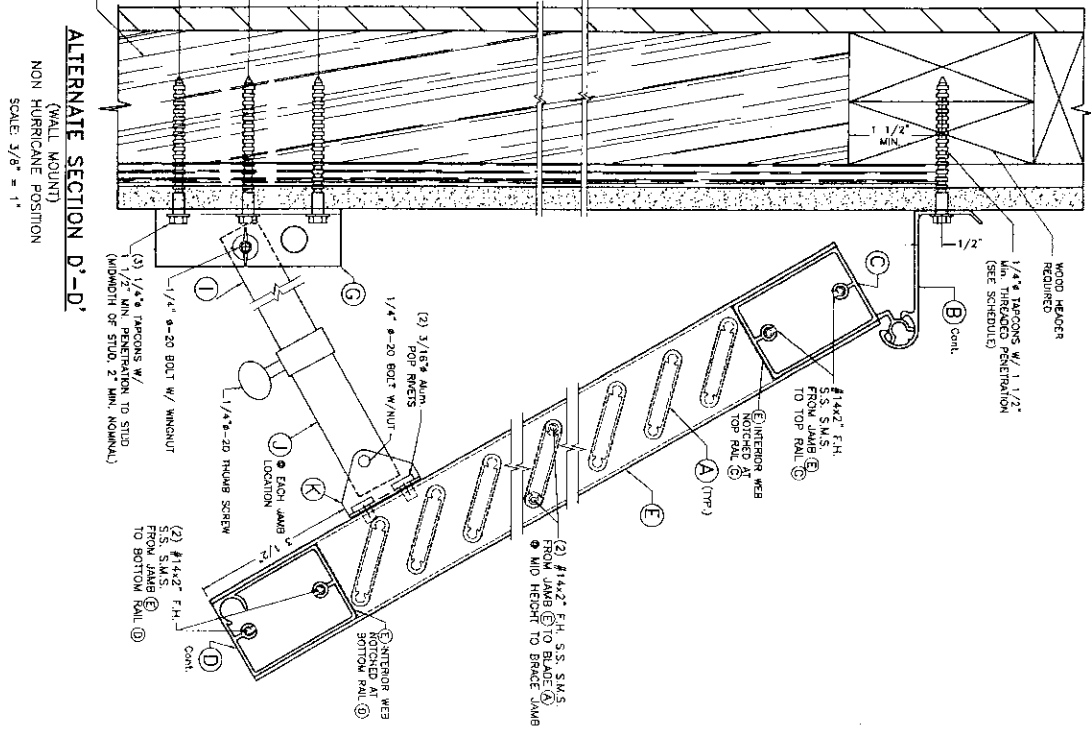
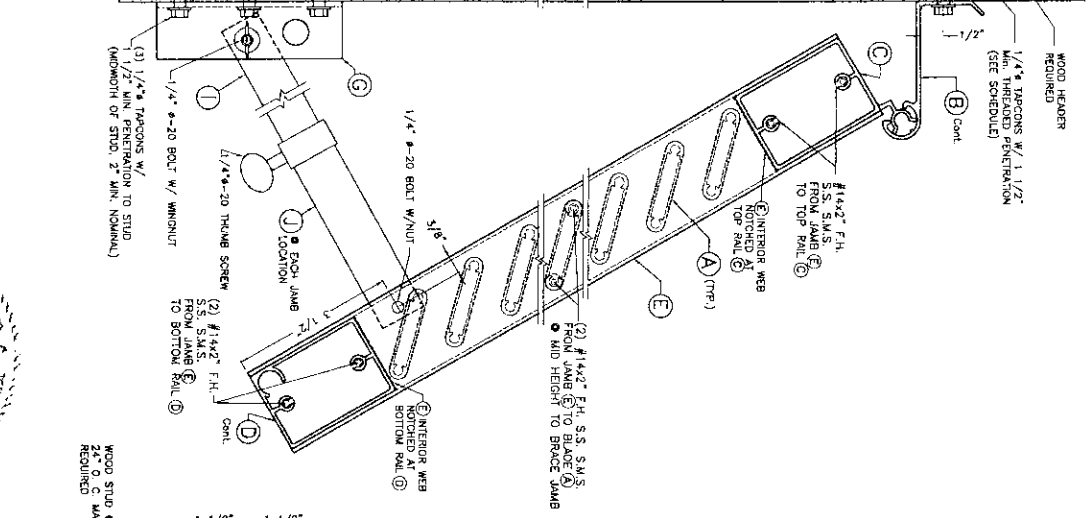
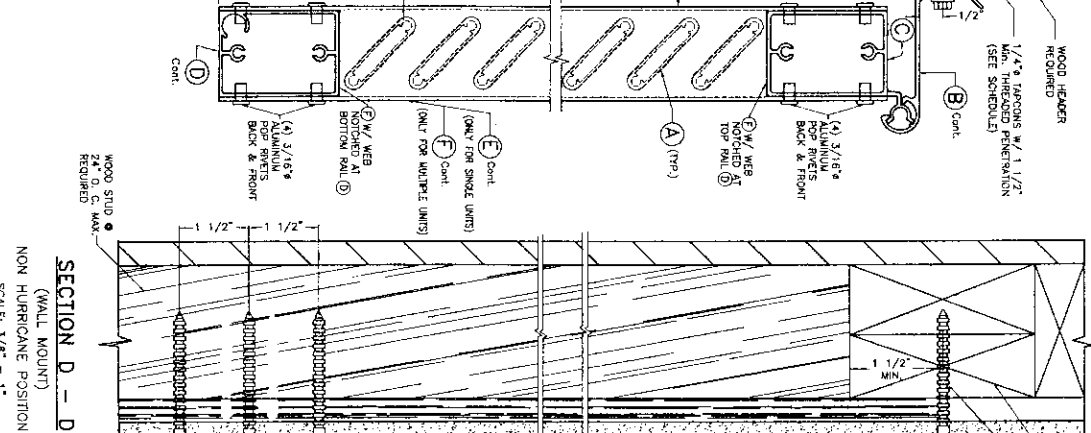
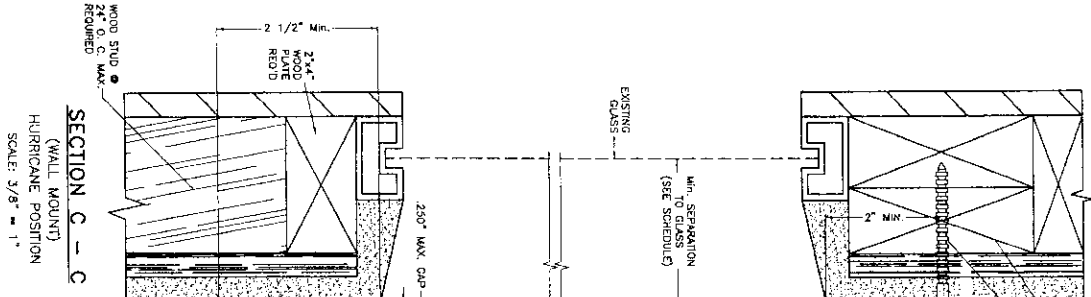
N.T.S.

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

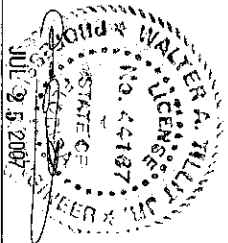


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ASSA / BERTHA H.V. BAHAMA SHUTTER		L.O.	SKANN BY
AMERICAN SHUTTER SYSTEMS ASSOC., INC.		DATE	9/29/08
4288 WESTWOODS DRIVE		DRAWING NO.	06-215
WEST PALM BEACH, FLORIDA 33407		SHEET	3 OF 7

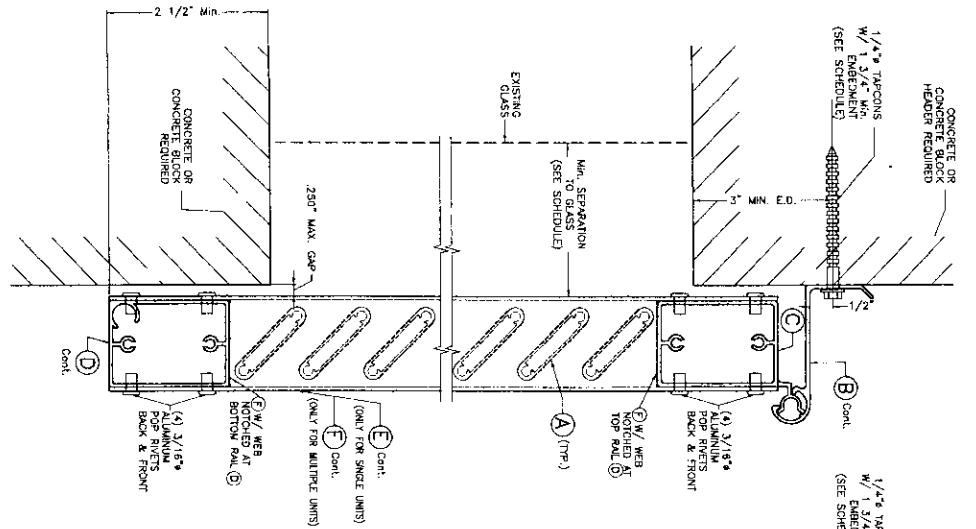


CONNECTION TO WOOD

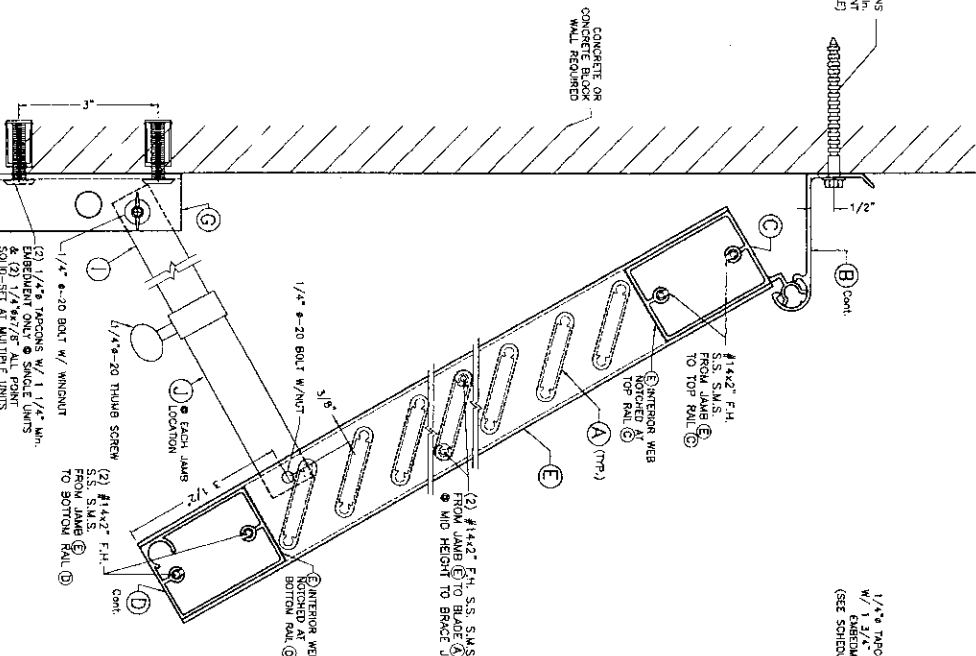


TILECO INC. TILE TESTING & ENGINEERING COMPANY 4335 N.W. 26th Ave., 2nd Floor, Jensen Beach, Florida 33463 Phone: (561) 339-1100 Fax: (561) 339-1101 e-mail: tileco@tileco.com EB-00-06719 WALTER A. TULLY, Jr., P.E. License No. 44187 © 2006 TILECO INC.		ASSA / BERTHA H.V. BAHAMA SHUTTER AMERICAN SHUTTER SYSTEMS ASSOC., INC. 4268 WESTWOODS DRIVE WEST PALM BEACH, FLORIDA 33407	DRAWN BY DATE 9/29/06 06-215 DRAWING NO. SHEET 5 OF 7
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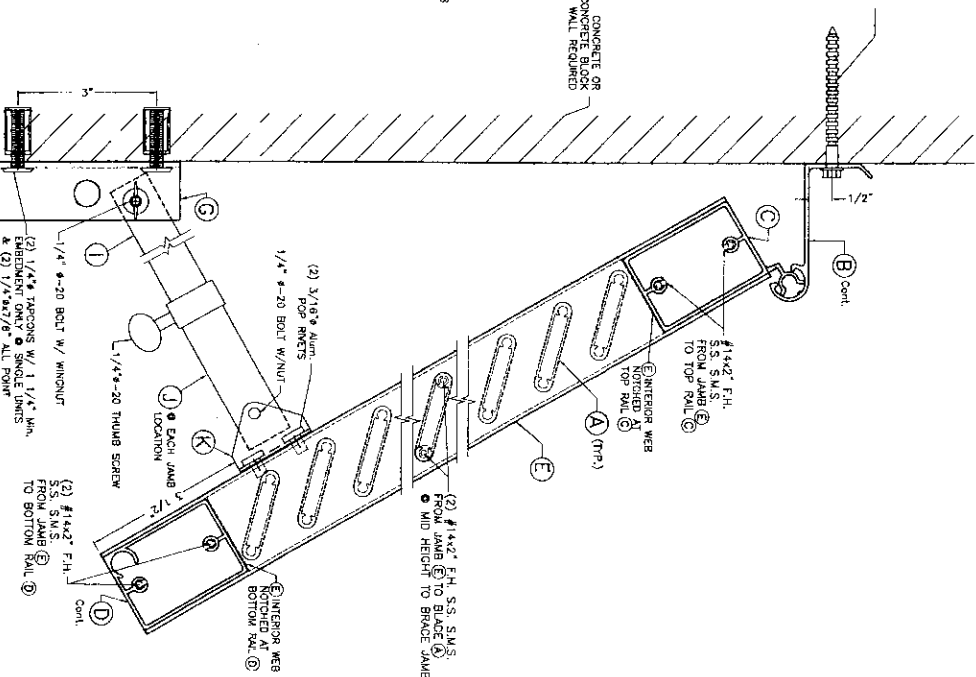
F.B.C. (Non High Velocity Hurricane Zone)



SECTION C - C
(WALL MOUNT)
HURRICANE POSITION
SCALE: 3/8" = 1"

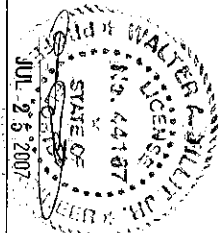


SECTION D - D
(WALL MOUNT)
NON HURRICANE POSITION
SCALE: 3/8" = 1"



ALTERNATE SECTION D - D'
(WALL MOUNT)
NON HURRICANE POSITION
SCALE: 3/8" = 1"

**CONNECTION TO
CONCRETE OR BLOCK**



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www.tileco.com
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FLORIDA LIC. # 44187
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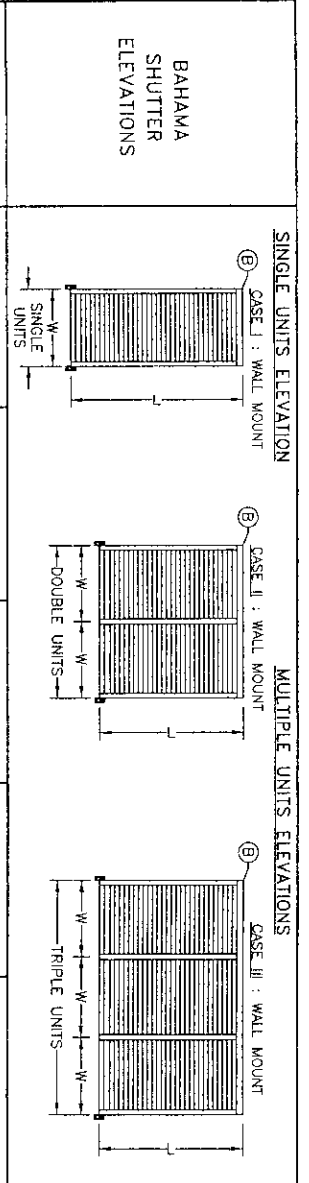
ASSA / BERTHA H.V. BAYAMA SHUTTER
AMERICAN SHUTTER SYSTEMS ASSOC., INC.
1488 WESTROUSE DRIVE
WEST PALM BEACH, FLORIDA 33407

REV. NO.	DESCRIPTION	DATE	REV. NO.	REVISION	DATE
1			2		

U.C. DRAWN BY: 9/29/06
DATE: 06-215
DRAWING NO. SHEET 6 OF 7

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

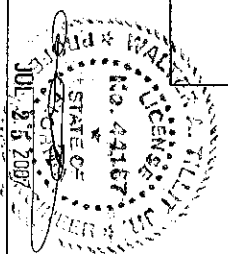
SCHEDULE # 1
MAXIMUM SHUTTER SPAN "L" (in), MAXIMUM SHUTTER WIDTH "W" (in) FOR SINGLE (CASE I) & MULTIPLE (CASES II & III) UNITS FOR A CORRESPONDING DESIGN PRESSURE



CASE	DESIGN PRESSURE RATING (p.s.f.)	MAXIMUM UNIT WIDTH "W" (IN)	MAXIMUM SPAN "L" (IN)	INTERIOR MULLION TYPE REQUIRED	MINIMUM SEPARATION TO GLASS (IN)
I	+45.0, --55.0	42"	97"	N/A	4 5/8"
II & III	+45.0, --50.0	40"	70"	(F)	3 5/8"

SCHEDULE # 2
MAXIMUM ANCHOR SPACING AT TOP FEMALE HINGES (B) FOR SINGLE (CASE I) & MULTIPLE (CASES II & III) UNITS FOR A CORRESPONDING DESIGN PRESSURE & SUBSTRATE TYPE

CASE	DESIGN PRESSURE RATING (p.s.f.)	SUBSTRATE	
		WOOD	POURED CONCRETE
I	+45.0, --55.0	N/A	CONCRETE BLOCK 12"
II & III	+45.0, --50.0	7 1/2"	N/A



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 E-mail: info@tilteco.com
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F.B.C. (Non High Velocity Hurricane Zone)

ASSA / BERTHA H.V. BAHAMA SHUTTER

L.C. DRAWN BY
 8/28/06 DATE

AMERICAN SHUTTER SYSTEMS ASSOC., INC.
 4265 WESTSPADE DRIVE
 WEST PALM BEACH, FLORIDA 33407

06-215 DRAWING NO.
 SHEET 7 OF 7

REV.	NO.	DESCRIPTION	DATE	BY	DATE
1					
2					