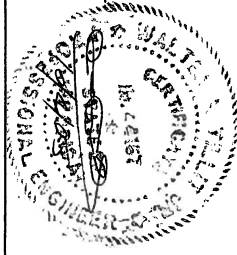


GENERAL NOTES:

1. ROLL-UP SHUTTER SHOWN ON THIS PRODUCT EVALUATION DOCUMENT (P. E. D.) HAS BEEN VERIFIED FOR CODE COMPLIANCE IN ACCORDANCE WITH THE 2004 EDITION OF THE FLORIDA BUILDING CODE. ROLL-UP SHUTTER SHALL NOT BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES (MAM-DAD/BROWARD COUNTIES). DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1609 OF THE ABOVE MENTIONED CODE. FOR A BASIC WIND SPEED AS REQUIRED BY THE JURISDICTION WHERE SHUTTER WILL BE INSTALLED, AND IN ACCORDANCE WITH ASCE 7-98 STANDARDS, IN ORDER TO VERIFY THAT ANCHORS ON THIS P.E.D. ARE TESTED, WERE NOT OVERSTRESSED, A 33% INCREASE IN ALLOWABLE STRESS FOR WIND LOADS WAS NOT USED IN THEIR ANALYSIS.
2. SEE MAXIMUM DESIGN PRESSURE RATINGS ON SHEET 2.
3. ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T6 ALLOY (UNLESS OTHERWISE NOTED).
4. ALL SCREENS TO BE STAINLESS STEEL 304 OR 316 SERIES W/ 50 KSI YIELD STRENGTH AND 90 KSI TENSILE STRENGTH OR CORROSION RESISTANT COATED CARBON STEEL AS PER DN 50018 OR ASTM A 510-03.
5. BOLTS TO BE ASTM A-307 GALVANIZED OR AISI 304 SERIES STAINLESS STEEL WITH 35 KSI MINIMUM YIELD STRENGTH.
6. STORM BARS AT FLOOR AND CEILING MOUNTING INSTALLATIONS MAY BE REMOVABLE AT NON HURRICANE CONDITIONS. HOWEVER, EACH STORM BAR SHALL BEAR A PERMANENT LABEL IN A VISIBLE PLACE WITH A WARNING NOTE INSTRUCTING THE TENANT OR OWNER THAT STORM BARS MUST BE INSTALLED WITH CORRESPONDING HARDWARE DURING PERIODS OF HURRICANE WARNING AND THAT ROLL UP SHUTTERS WILL NOT OFFER HURRICANE PROTECTION UNLESS ALL STORM BARS ARE INSTALLED AS DIRECTED.
7. REMOVABLE STORM BARS SHALL BE STORED IN A CONSPICUOUS PLACE WITH EASY AND IMMEDIATE ACCESS SO THAT THEY CAN BE REACHED AND INSTALLED ANY TIME (HURRICANE CONDITIONS OR NOT) SLATS ARE ROLLED DOWN. THE EFFECT OF THE SLATS ROLLED DOWN WITHOUT STORM BARS IS, THOSE SLATS WILL SLIP OUT OF TRACK DUE TO THE DEFLECTION CAUSED BY WIND FORCES.
8. PROTEUS® FLAME RETARDANT 186, IS A POLY-PROPYLENE MANUFACTURED BY POLY HI SOLIDUR, INC., USED AT SPRING LOADED SYSTEM FOR REMOVABLE STORM BARS & COMPLETS W/ THE FOLLOWING SPECIFICATIONS:

DESIGNATION	PROPERTIES	VALUE
ASTM D-792	DENSITY	9.51 lb/ft ³ (AVERAGE)
ASTM D-638	YIELD STRENGTH	3200 psi (AVERAGE)
ASTM D-638	TENSILE BREAK	3250 psi (AVERAGE)
ASTM D-790	ELONGATION AT BREAK	800 % (AVERAGE)
ASTM D-4020	FLEXURAL MODULUS	145000 psi (AVERAGE)
UL 94	BURN RATING	0.15 ft-lb ² /inch (AVERAGE)
ASTM E-84	FLAME SPREAD INDEX	15 *F (AVERAGE)
ASTM E-84	SMOKE DEVELOPMENT INDEX	375 *F (AVERAGE)
9. ANCHORS TO WALL FOR SIDE RAILS & BOX CONNECTION SHALL BE AS FOLLOWS:
 - 5/16" TAPCON ANCHORS, AS MANUFACTURED BY ELOO TEXTRON, INC.

NOTES:
 A.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO POURED CONCRETE IS 2". NO EMBEDMENT INTO WALL FINISH SHALL BE CONSIDERED AS PART OF THE REQUIRED EMBEDMENT.
 A.2) IN CASE THAT PRECAST STONE, PRECAST CONCRETE OR BRICK PANELS, VENEER OR PAVERS BE FOUND ON THE EXISTING WALL OR FLOOR, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH COVERS. ANCHORAGE SHALL BE AS INDICATED ON NOTE A.1 ABOVE.
 (B) TO EXISTING CONCRETE A.S.T.M. C-90 BLOCK WALL:
 - 5/16" TAPCON ANCHORS AS MANUFACTURED BY ELOO TEXTRON, INC. NO EMBEDMENT INTO WALL FINISH SHALL BE CONSIDERED AS PART OF THE REQUIRED EMBEDMENT.
 B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO CONCRETE BLOCK UNIT SHALL BE 1 1/4".
 B.2) IN CASE THAT PRECAST STONE, PRECAST CONCRETE OR BRICK PANELS, VENEER OR PAVERS BE FOUND ON THE EXISTING WALL OR FLOOR, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH COVERS. ANCHORAGE SHALL BE AS INDICATED ON NOTE B.1 ABOVE.



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 4530 W. 28th St., Suite 100, Miramar, Florida 33189
 Phone: (305) 254-1500 Fax: (305) 254-1501
 WALTER A. TILIT, P. E.
 Florida Lic. #4187

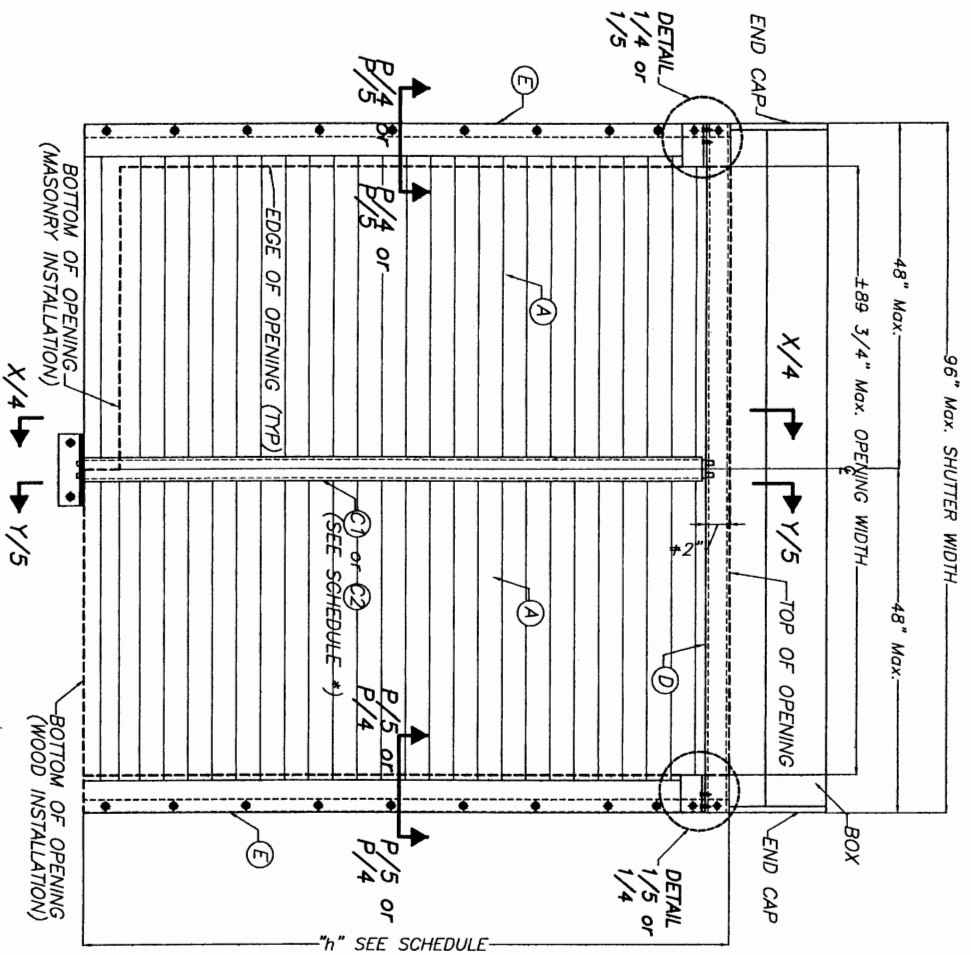
ALUTECH UNITED, INC.
 15 DORON STREET
 SEBASTIAN, FL 32975
 Phone: (320) 254-9100 Fax: (320) 438-5100

REV. #	DATE	BY	CHKD. BY
1			
2			

DRWN. BY: M.C.Y.
 DATE: 9/29/05
 05-310
 DRAWING No.
 SHEET 1 OF 5

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

- (C) TO EXISTING WOOD FRAME WALL (MIN. SPECIFIC GRAVITY = 0.36):
 - #14 (1/4") WOOD SCREWS W/ 2" MIN. THREADED PENETRATION INTO WOOD BEYOND ANY WALL FINISH.
- (D) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
- (E) ANCHORS REQUIRED FOR STORM BARS & HEADER CONNECTIONS SHALL BE AS SPECIFIED ON APPLICABLE SECTIONS SHOWN ON SHEETS 4 & 5 OF 5. WOOD SCREWS SHALL BE COMPLY W/ THE NATIONAL DESIGN SPECIFICATION FROM A484.
10. THE INSTALLATION CONTRACTOR IS TO SEAL/CALK ALL SHUTTER COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION. CALK AND SEAL SHUTTER TRACKS ALL AROUND FULL LENGTH.
11. 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. THIS SHUTTER SHALL ONLY BE ATTACHED TO CONCRETE, CONCRETE BLOCK OR WOOD FRAME BUILDINGS.
12. SHUTTER'S INSTALLATION SHALL COMPLY WITH ALL SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.
13. LIFTING MECHANISM NOT PART OF THIS APPROVAL, BUT SHALL BE CERTIFIED BY AN INDEPENDENT TESTING AGENCY.
14. (a) THIS 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 P.E.D. PROVIDED HE/SHE DOES NOT DEVIATE FROM THE CONDITIONS DETAILED ON THIS DOCUMENT. CONSTRUCTION SAFETY AT SITE IS THE CONTRACTOR'S RESPONSIBILITY.
 (c) THIS P.E.D. 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.
15. SHUTTER'S MANUFACTURER LABEL SHALL BE PLACED ON A READILY VISIBLE LOCATION. 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.

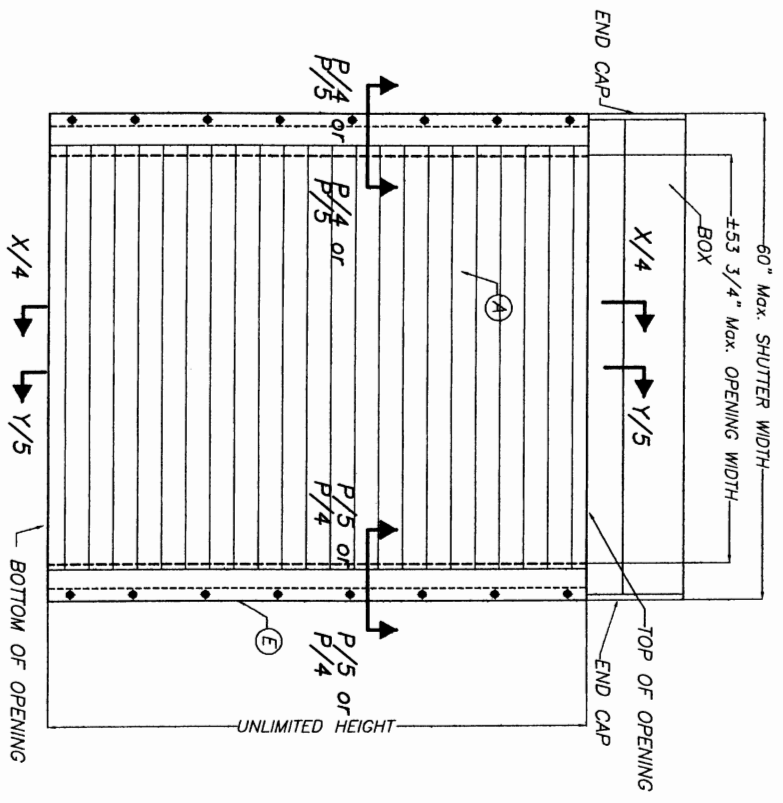


*** MULTIPLE SPAN UNITS SCHEDULE**

DESIGN LOAD (psf)	MAX. ALLOWED REQ'D. STORM BAR "h" (FT)	REQ'D. STORM BAR FRONT AND BACK
+55.0, -55.0	7'-0"	(1)
+25.0, -25.0	7'-0"	(2)
+33.0, -33.0	6'-0"	(2)

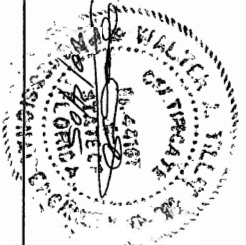
CASE I MULTIPLE SPAN UNITS (STORM BARS REQ'D.)

SCALE: N.T.S. (FRR DESIGN PRESSURE RATING SEE SCHEDULE)



CASE II SINGLE SPAN UNIT (NO STORM BARS REQ'D.)

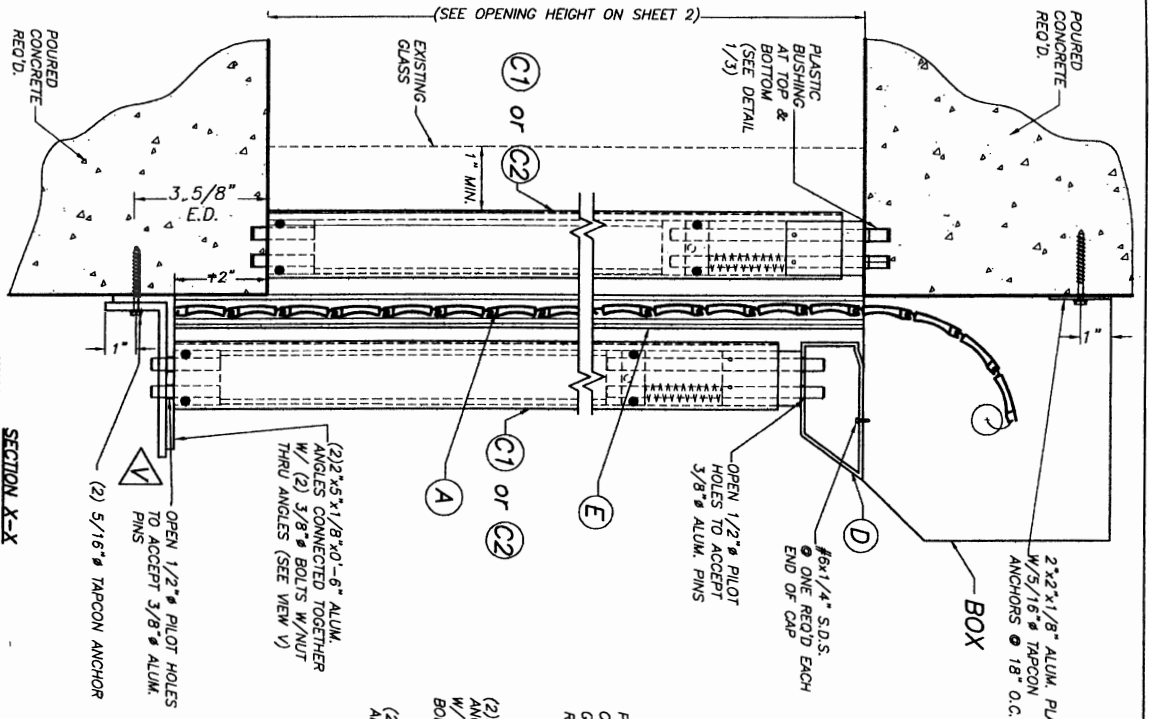
SCALE: N.T.S. DESIGN PRESSURE RATING: +55.0, -55.0 psf



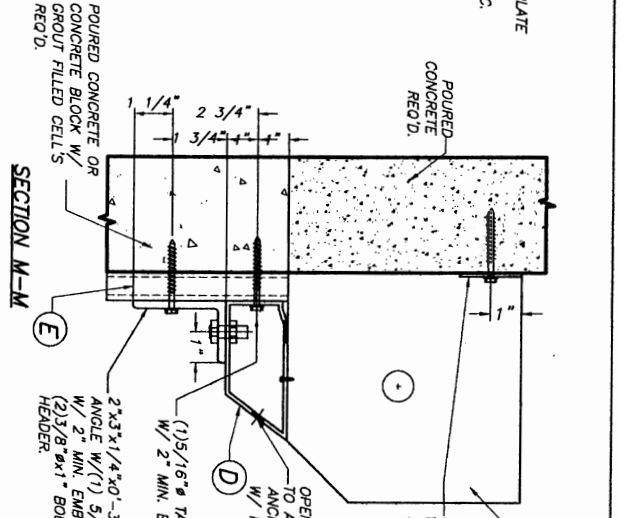
TILETEC Inc.
TULLIT TESTING & ENGINEERING COMPANY
4300 W. 30th St., Tampa, Florida 33611-1431
WALTER A. TULLIT, P. E.
FLORIDA Lic. # 44183

ALUTECH UNITED, INC.
15 DIXON STREET
SEBENVILLE, D.E. 19875
Phone: (302) 854-9100 Fax: (302) 438-8100

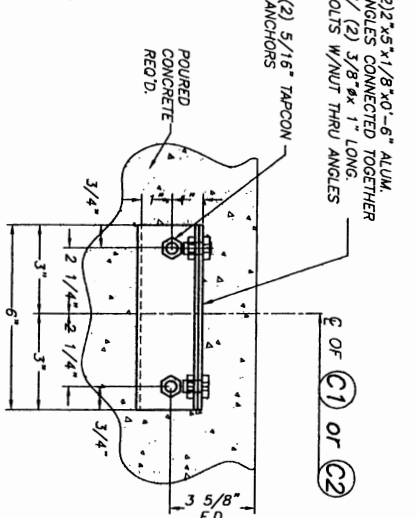
RCE-40/40mm SLAT ROLL-UP SHUTTER		DRAWN BY: M.C.V.	
F.B.C. (Non High Velocity Hurricane Zone)		DATE: 9/29/05	
		DRAWING No: 05-310	
		SHEET 2 OF 5	



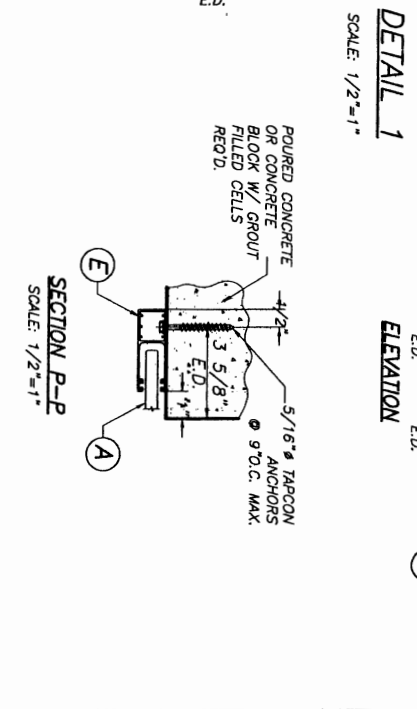
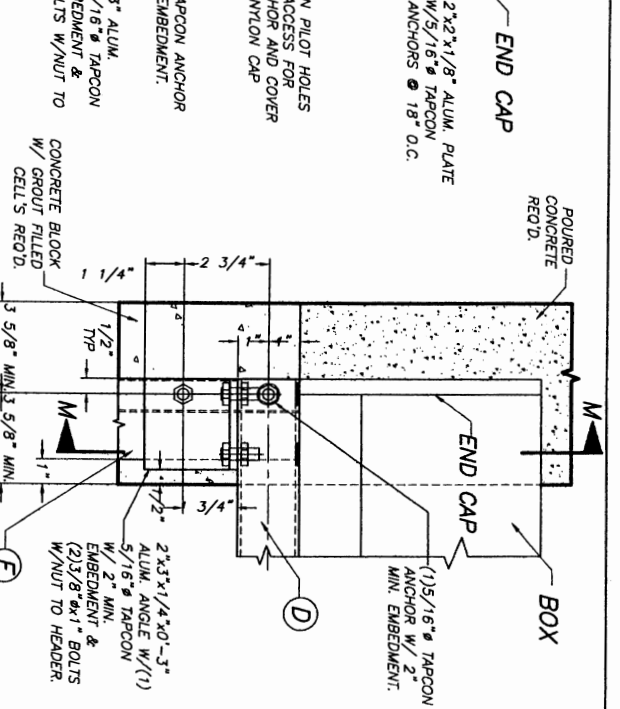
**SECTION X-X
WALL MOUNTING INSTALLATION
W/REMOVABLE STORM BARS**
SCALE: 1/2"=1"
SINGLE SPAN SECTIONS AND DETAILS ARE SIMILAR TO
ABOVE SHOWN WITHOUT STORM BARS AND HEADER TUBE



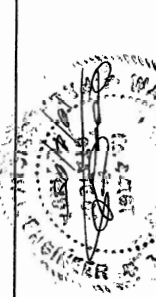
SECTION M-M
SCALE: 1/2"=1"



DETAIL 1
SCALE: 1/2"=1"



SECTION P-P
SCALE: 1/2"=1"



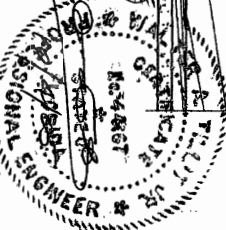
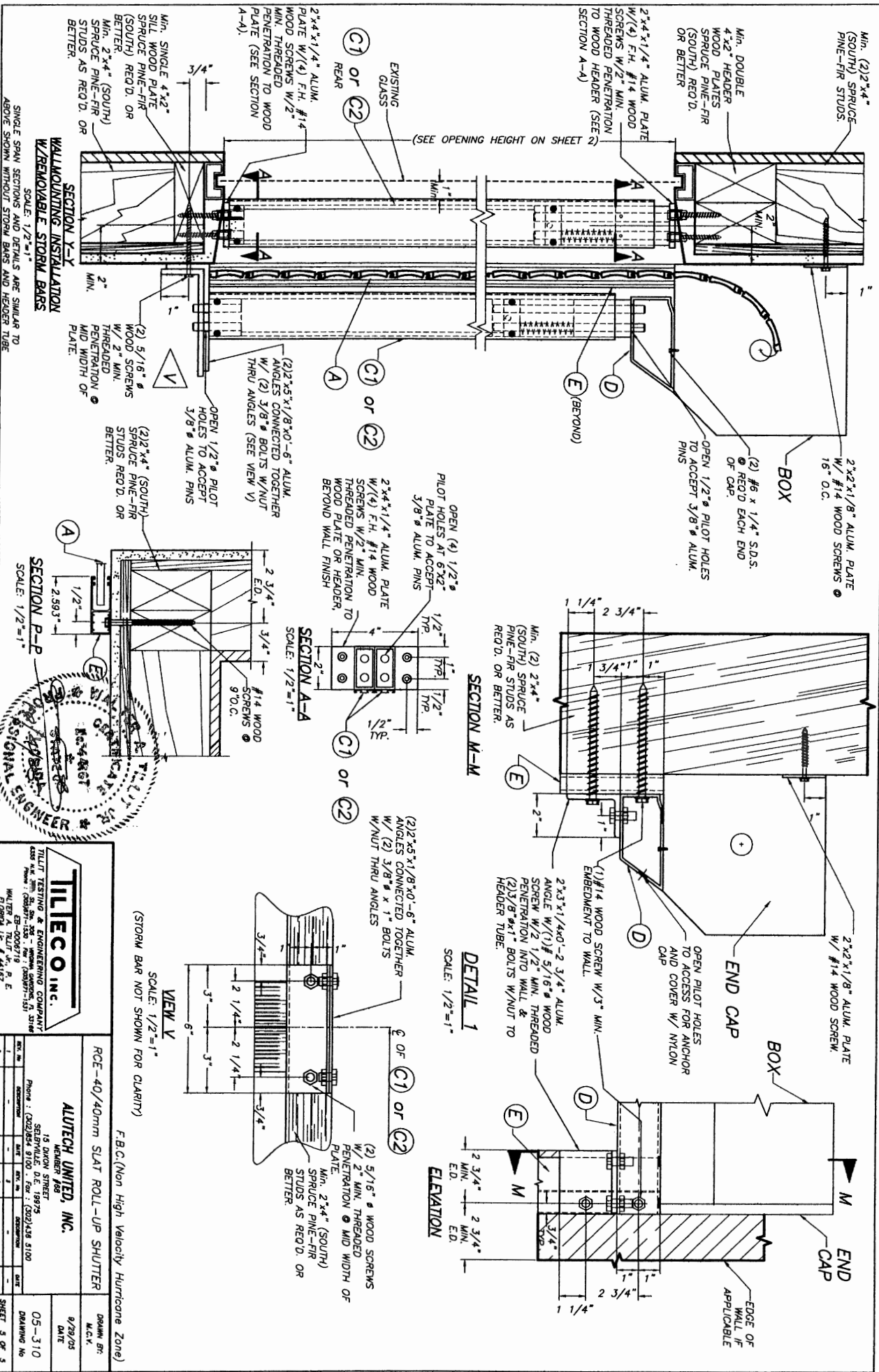
TILECO INC.
TILTUP TESTING & ENGINEERING COMPANY
4800 N.W. 30th St., Ft. Lauderdale, FL 33309
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FAX: (305) 551-1201
E-Mail: tileco@tileco.com
www.tileco.com

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SEBASTIAN, FL 32958
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REV.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

DRAWN BY: M.C.B.
DATE: 9/29/05
05-310
DRAWING NO.
SHEET 4 OF 5

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



TILECO Inc.
 TILLIT TESTING & ENGINEERING COMPANY
 1500 W. 10TH AVENUE, DENVER, CO. 80202
 WALTER A. TILLIT, P.E.
 REG. NO. 15827
 EX-0006719

RCE-40/40mm SLAT ROLL-UP SHUTTER		DRAWING NO. 05-310	
REV. NO.	DESCRIPTION	DATE	BY
1	ISSUED FOR CONSTRUCTION	8/28/05	M.C.H.
2	REVISED		
3	REVISED		
4	REVISED		
5	REVISED		

15 DIXON STREET
 SEBELVILLE, O.E. 18975
 Phone : (723) 294 9100 Fax : (723) 238 8100