



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

NOTICE OF ACCEPTANCE (NOA)

Alufab Hurricane Shutters, Inc.
13000 N. W. 38th Avenue
OPA-LOCKA, Florida 33054

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 High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 0.0295" (min.) Galvanized Steel Storm Panels Shutter

APPROVAL DOCUMENT: Drawing No. 03-244, titled "0.0295" thick galv. Steel storm panel ", sheets 1 through 8 of 8, prepared by Tilteco, Inc., dated December 04, 2003, last revision #2 dated October 20, 2004, 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 Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the 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 # 04-0210.01 and consists of this page 1, evidence submitted page(s) as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E.**

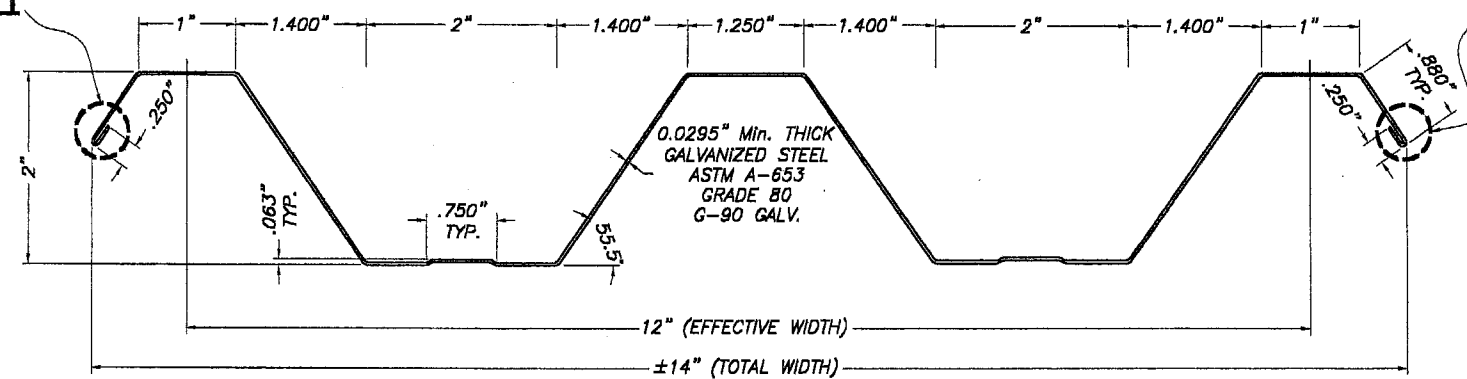


Helmy A. Makar
11/25/2004

NOA No 04-1104.01
Expiration Date: 04/29/2009
Approval Date: 11/25/2004
Page 1

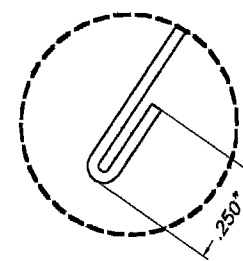
		 OCT 21 2004 P.E. SEAL/SIGNATURE/DATE	© 2003 TILTECO, INC.  TILLIT TESTING & ENGINEERING COMPANY 6595 N.W. 36th. St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166 Phone : (305)871-1530 . Fax : (305)871-1531 e-mail: tilteco@aol.com EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167	0.0295" THICK GALV. STEEL STORM PANEL ALUFAB HURRICANE SHUTTERS, INC. 13000 N.W. 38th AVE. OPA-LOCKA, FL 33054	AS SHOWN SCALE 12/4/03 DATE 03-244 DRAWING No															
			MIAMI-DADE COUNTY	<table border="1"> <thead> <tr> <th>REV. No</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV. No</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>GENERAL</td> <td>3/30/04</td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>NOTES 8 A.2, B.2</td> <td>10/20/04</td> <td>4</td> <td></td> <td></td> </tr> </tbody> </table>	REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	1	GENERAL	3/30/04	3			2	NOTES 8 A.2, B.2	10/20/04	4
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE															
1	GENERAL	3/30/04	3																	
2	NOTES 8 A.2, B.2	10/20/04	4																	

DETAIL 1

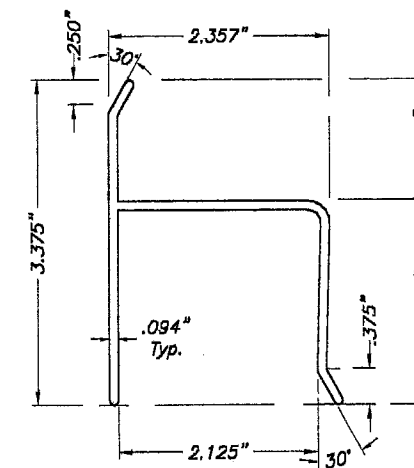


1 PANEL
SCALE: N.T.S.

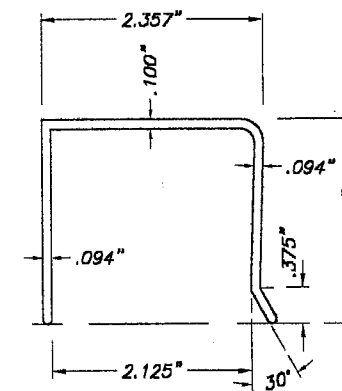
DETAIL 1



DETAIL 1
SCALE: N.T.S.

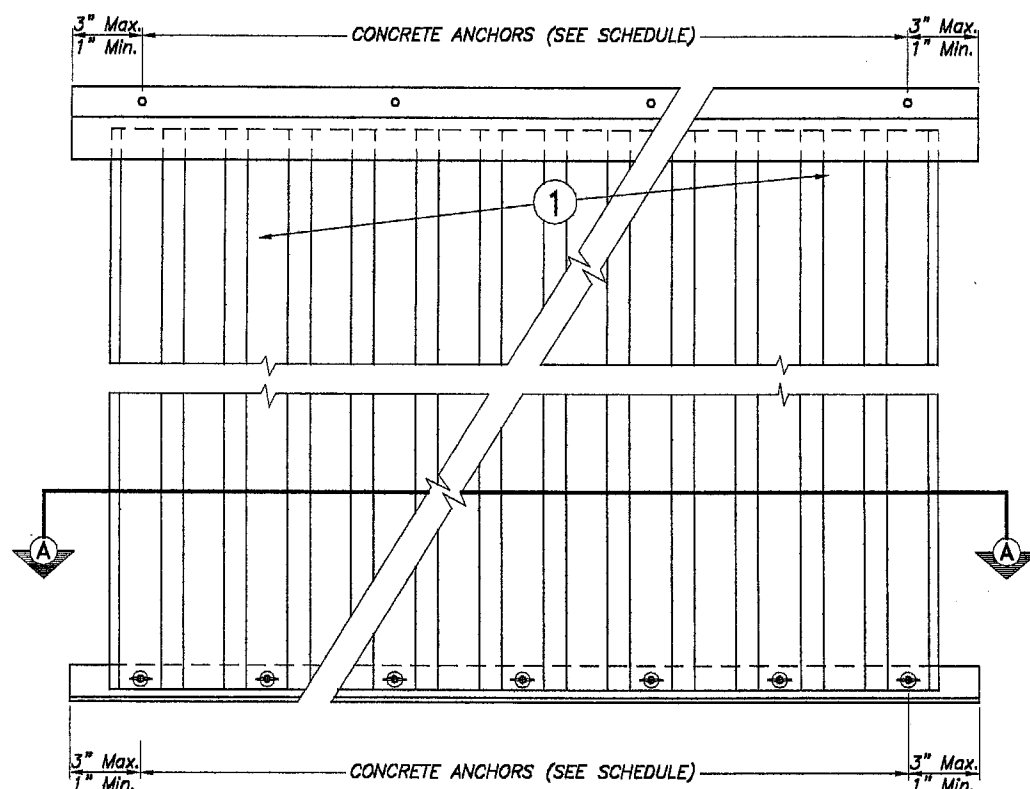


2 h HEADER
(6005-T5 ALUMINUM ALLOY)
SCALE: 1/2" = 1"

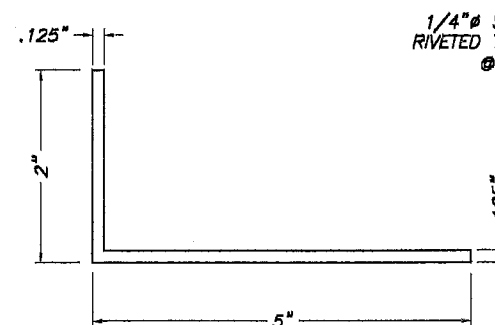


3 u HEADER
(6005-T5 ALUMINUM ALLOY)
SCALE: 1/2" = 1"

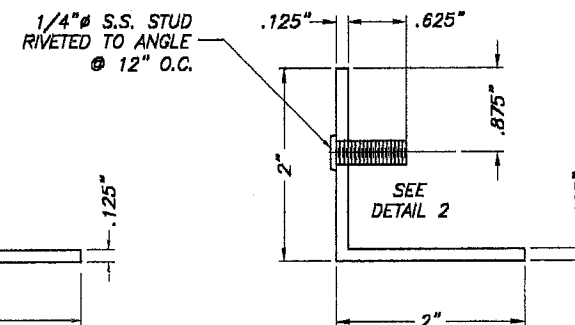
COMPONENTS



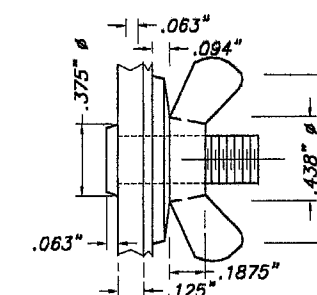
STORM PANEL ELEVATION
SCALE: N.T.S.



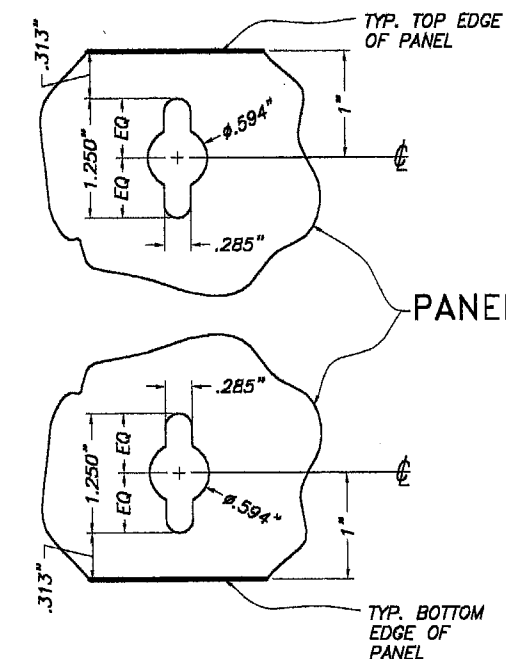
4 2"x5" (Max.) x 1/8" ANGLE
SCALE: 1/2" = 1"



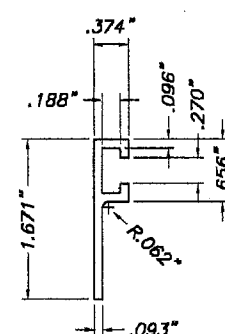
5 ANGLE WITH STUD
SCALE: 1/2" = 1"



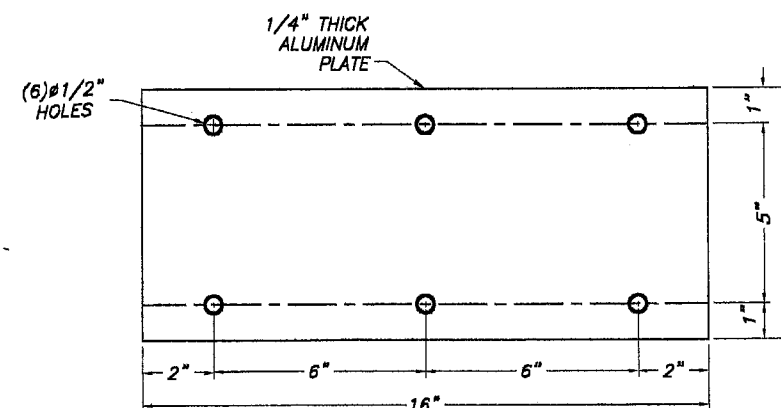
DETAIL 2:
STUD W/ WING NUT
SCALE: 1" = 1"



8 KEY HOLE AT PANEL
SCALE: N.T.S.



6 F TRACK
SCALE: 1/2" = 1"



7 1/4"x7"x16" PLATE
SCALE: 3/16" = 1"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 04-1104.01
Expiration Date 04/29/2009
By *Helmut A. Miller*
Miami Dade District Control
Division

F.B.C.(H.V.H.Z.)

SECTION A-A
SCALE: N.T.S.

MIAMI-DADE COUNTY

P.E. SEAL/SIGNATURE/DATE

OCT 21 2004

© 2003 TILTECO, INC

TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
3595 N.W. 38th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
EB-0006719
WALTER A. TILLIT Jr., P. E.
FLORIDA Lic. # 44167

0.0295" THICK GALV. STEEL
STORM PANEL

ALUFAB HURRICANE SHUTTERS, INC.
13000 N.W. 38th AVE.
OPA-LOCKA, FL 33054

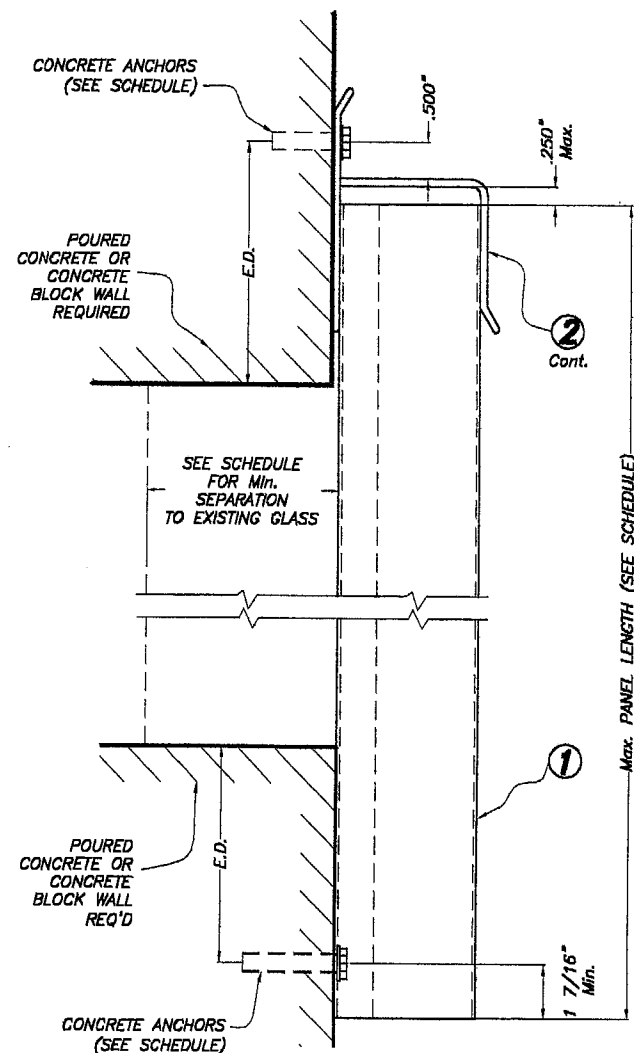
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	GENERAL	3/30/04	3	-	-
2	-	-	4	-	-

AS SHOWN
SCALE

12/4/03
DATE

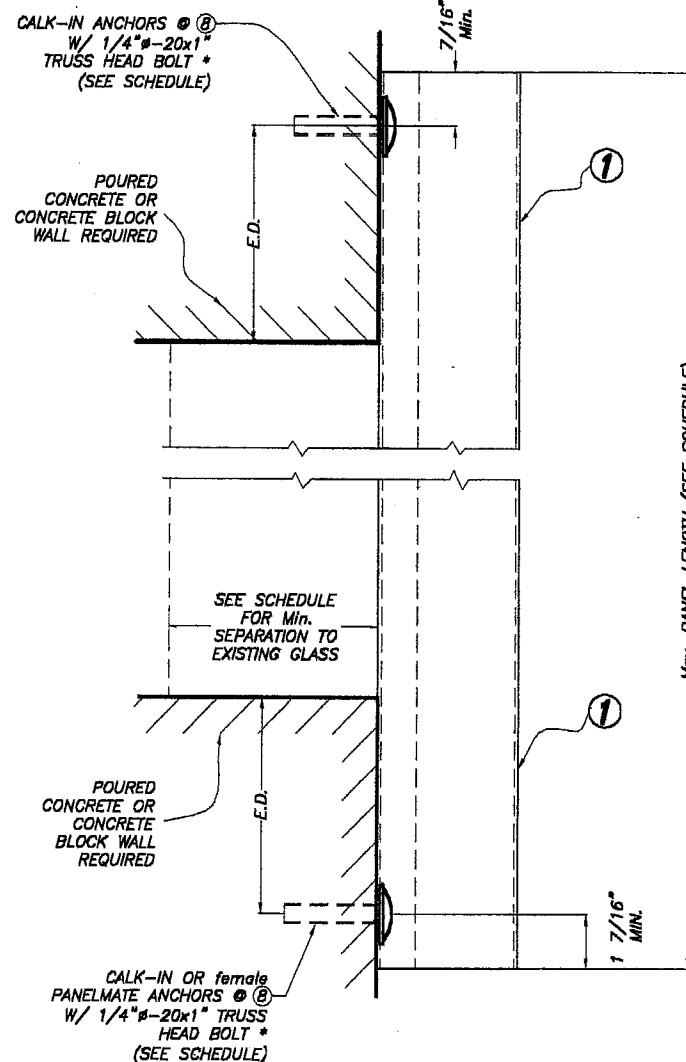
03-244
DRAWING No

SHEET 2 OF 8



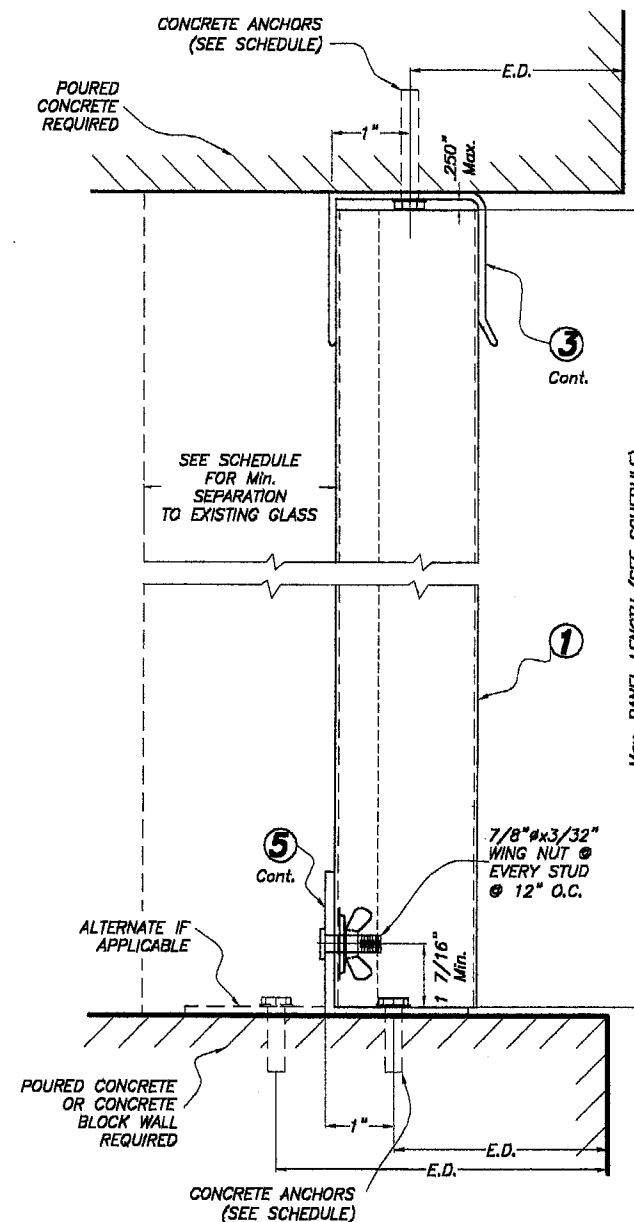
WALL MOUNTING INSTALLATION - SECTION 1

SCALE: 3/8" = 1"



DIRECT MOUNTING INSTALLATION - SECTION 2

SCALE: 3/8" = 1"



SECTION 3A ADJACENT PANELS

INTERNALLY REMOVABLE PANEL ①
W/SIDEWALK BOLT CONNECTED TO ⑤
THRU 1/2" HOLES AT ⑤ @ 12" O.C.
& FASTENED AT REAR W/ 7/8" #3/32"
WING NUT @ EVERY SIDEWALK BOLT.

7/8" #3/32"
WING NUT @
EVERY STUD
@ 6" O.C.

REMOVE 2 STUDS AT OVERLAP
BETWEEN INT. REMOVABLE PANEL
& ADJACENT PANEL AND OPEN
1/2" HOLES AT ⑤ TO ACCEPT
STUDS FROM INTERNALLY
REMOVABLE PANEL

POURED CONCRETE
OR CONCRETE
BLOCK WALL
REQUIRED

ALTERNATE IF
APPLICABLE

CONCRETE ANCHORS
(SEE SCHEDULE)

SECTION 3B INTERNALLY REMOVABLE PANEL**

E.D. = EDGE DISTANCE
(SEE SCHEDULE ON
SHEET 6 OF 8)

NOTE FOR COMBINATION OF SECTIONS:
FLOOR/WALL/CEILING MOUNTING SECTIONS CAN BE
COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

* TRUSS HEAD BOLT TO
BE 9/16" # HEAD S.S.
MACHINE SCREW W/ LENGTH
AS PER NOTES A.2 & B.2
ON SHEET 1.

CEILING AND FLOOR MOUNTING INSTALLATION - SECTION 3

SCALE: 3/8" = 1"

** NOTE:

INTERNALLY REMOVABLE PANEL SHOWN ON
SECTION 3B SHALL ALWAYS BE INSTALLED
IN BETWEEN ADJACENT PANELS MOUNTED
AS SHOWN ON SECTION 3A.

† NOTE:

INTERNALLY REMOVABLE PANEL SHALL BE
PROVIDED W/ AN ADEQUATE REMOVABLE
HANDLE IN ORDER TO INSTALL PANEL.

F.B.C.(H.V.H.Z.)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 04-1164.01
Expiration Date 04/29/2009
By *Walter A. Tillit Jr.*
Miami Dade Product Control
Division
MIAMI-DADE COUNTY

OCT 21 2004
P.E. SEAL/SIGNATURE/DATE

© 2003 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6595 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
EB-0006719
WALTER A. TILLIT JR., P. E.
FLORIDA Lic. # 44167

0.0295" THICK GALV. STEEL
STORM PANEL

ALUFAB HURRICANE SHUTTERS, INC.

13000 N.W. 38th AVE.
OPA-LOCKA, FL 33054

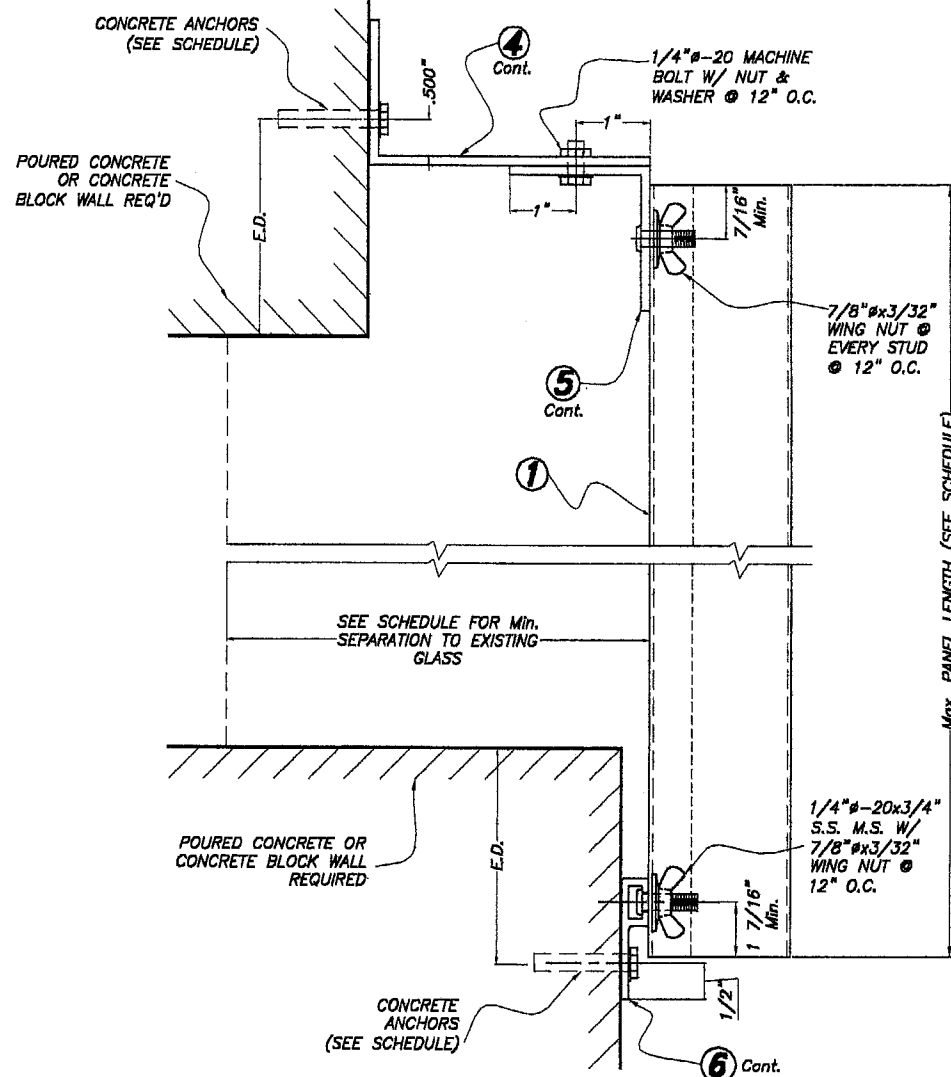
AS SHOWN
SCALE

12/4/03
DATE

03-244
DRAWING No

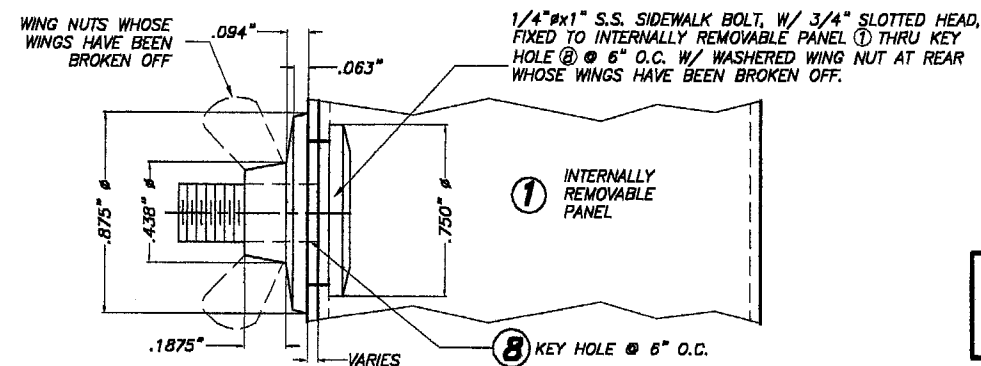
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	GENERAL	3/30/04	3	-	-
2	GENERAL	10/20/04	4	-	-

SHEET 3 OF 8



BUILD-OUT INSTALLATION - SECTION 4

SCALE: 3/8" = 1"



DETAIL 3 - INSTALLATION OF 1/4"x1" SIDEWALK BOLT @ REMOVABLE PANEL

E.D. = EDGE DISTANCE
(SEE SCHEDULE ON
SHEET 6 OF 8)

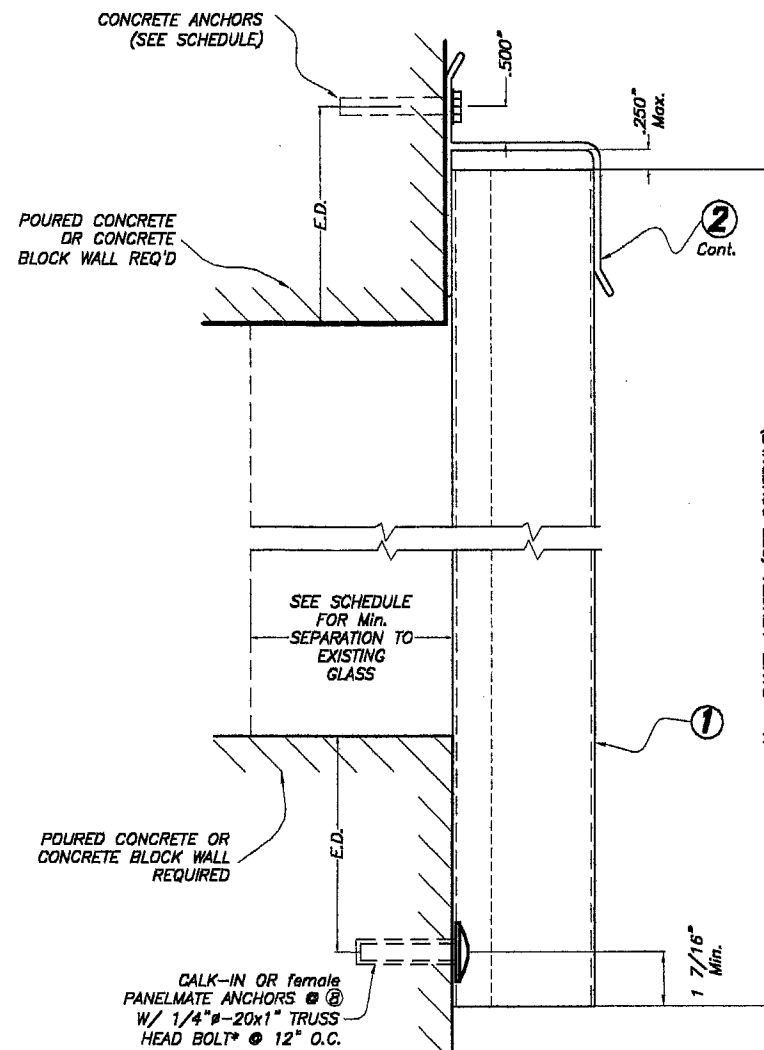
* TRUSS HEAD BOLT TO
BE 9/16"# HEAD S.S.
MACHINE SCREW W/ LENGTH
AS PER NOTES A.2 & B.2
ON SHEET 1.

** NOTE:

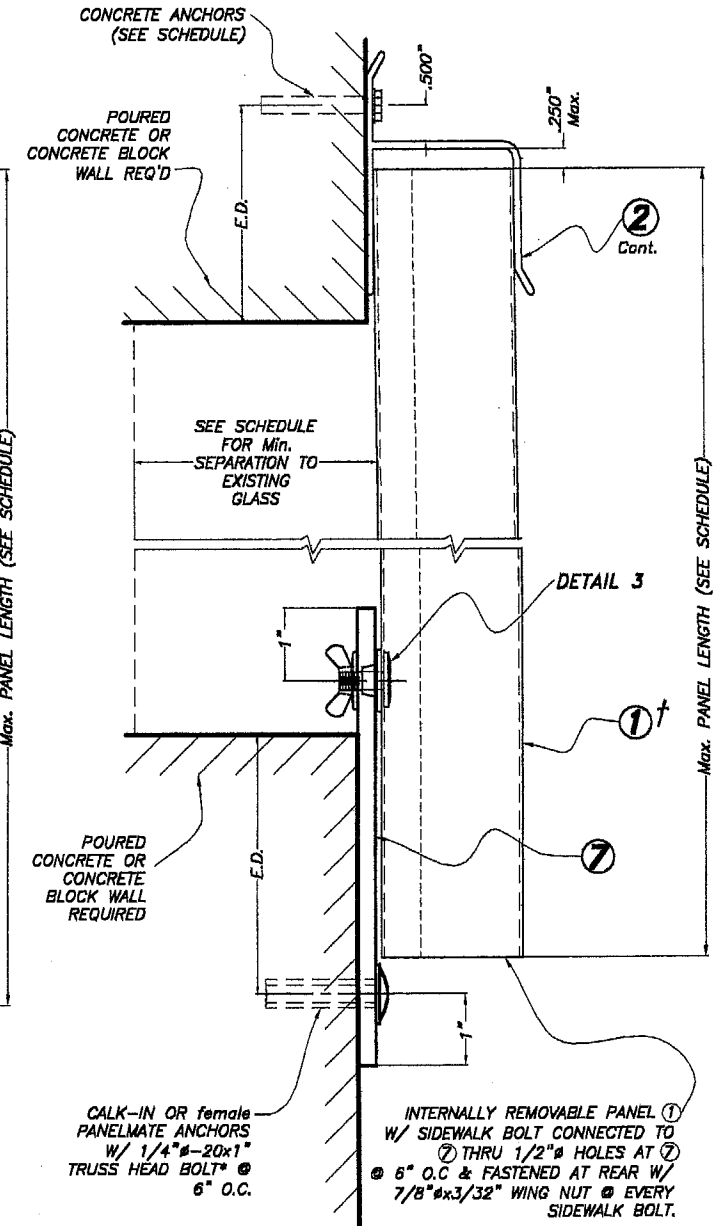
INTERNALLY REMOVABLE PANEL SHOWN ON
SECTION 5B SHALL ALWAYS BE INSTALLED
IN BETWEEN ADJACENT PANELS MOUNTED
AS SHOWN ON SECTION 5A.

† NOTE:

INTERNALLY REMOVABLE PANEL SHALL BE
PROVIDED W/ AN ADEQUATE REMOVABLE
HANDLE IN ORDER TO INSTALL PANEL.



SECTION 5A ADJACENT PANELS



SECTION 5B INTERNALLY REMOVABLE PANEL**

WALL MOUNTING INSTALLATION - SECTION 5

SCALE: 3/8" = 1"

F.B.C.(H.V.H.Z.)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 04-1104.01
Expiration Date 04/29/2009
By *Helmut A. Miller*
Miami Dade Product Control
Division
MIAMI-DADE COUNTY

OCT 21 2004
P.E. SEAL/SIGNATURE/DATE

© 2003 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
8595 N.W. 38th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166
Phone : (305)871-1530, Fax : (305)871-1531
e-mail: tilteco@aol.com
EB-0006719
WALTER A. TILLIT Jr., P. E.
FLORIDA Lic. # 44167

0.0295" THICK GALV. STEEL
STORM PANEL

ALUFAB HURRICANE SHUTTERS, INC.

13000 N.W. 38th AVE.
OPA-LOCKA, FL 33054

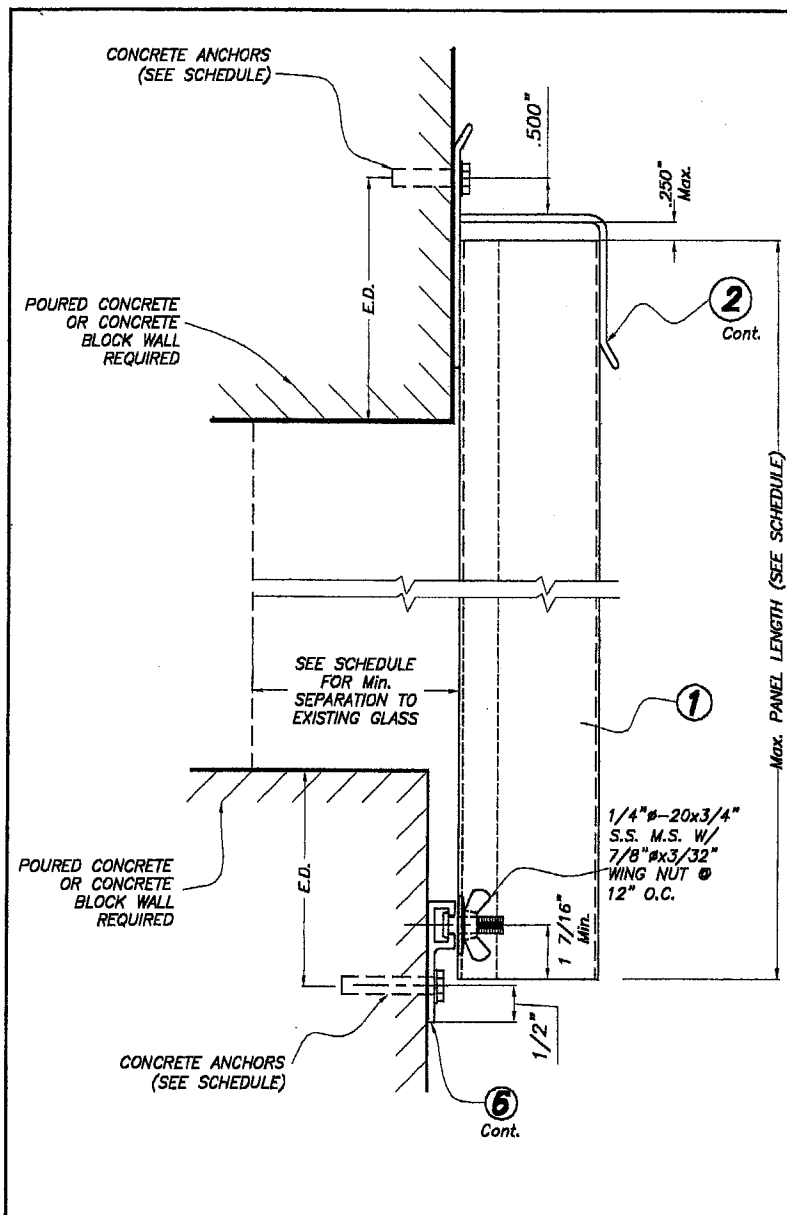
AS SHOWN
SCALE

12/4/03
DATE

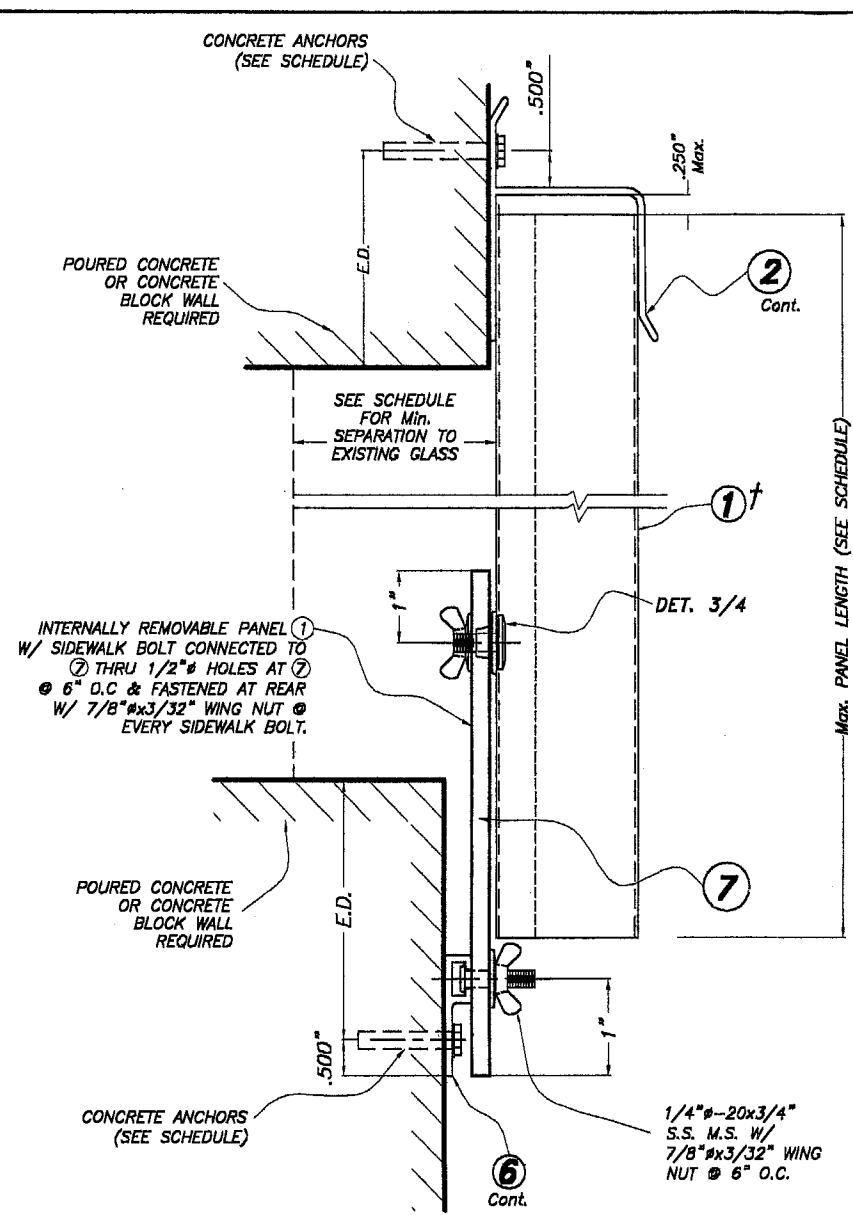
03-244
DRAWING No

SHEET 4 OF 8

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	GENERAL	3/30/04	3	-	-
2	GENERAL	10/20/04	4	-	-



**SECTION 6A
ADJACENT PANELS**



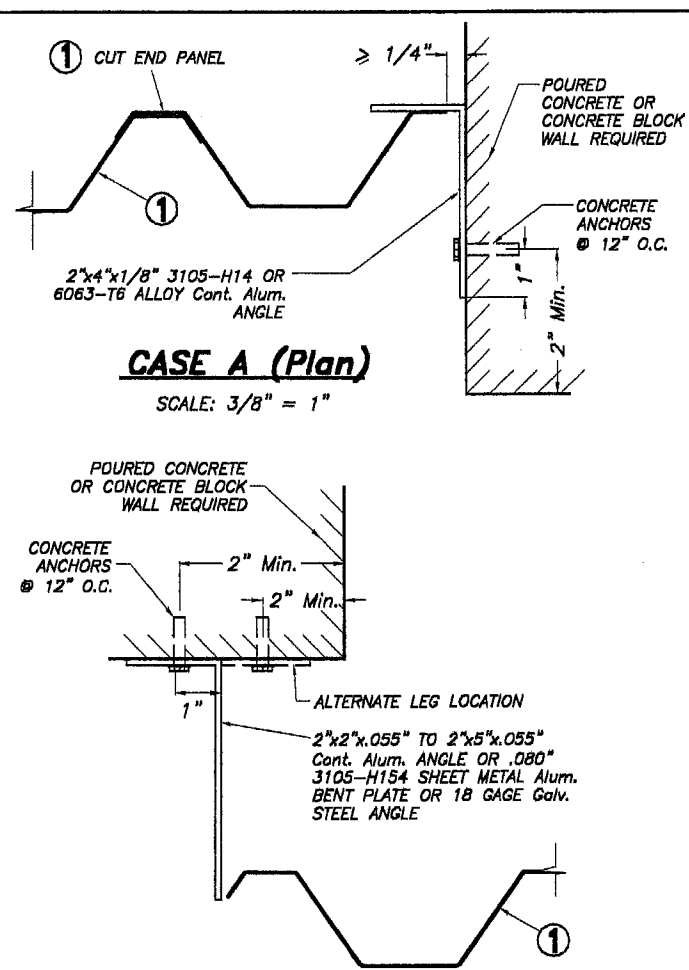
**SECTION 6B
INTERNALLY REMOVABLE PANEL ****

**WALL MOUNTING INSTALLATION
- SECTION 6**

SCALE: 3/8" = 1"

**** NOTE:**
INTERNALLY REMOVABLE PANEL SHOWN ON SECTION 6B SHALL ALWAYS BE INSTALLED IN BETWEEN ADJACENT PANELS MOUNTED AS SHOWN ON SECTION 6A.

† NOTE:
INTERNALLY REMOVABLE PANEL SHALL BE PROVIDED W/ AN ADEQUATE REMOVABLE HANDLE IN ORDER TO INSTALL PANEL.

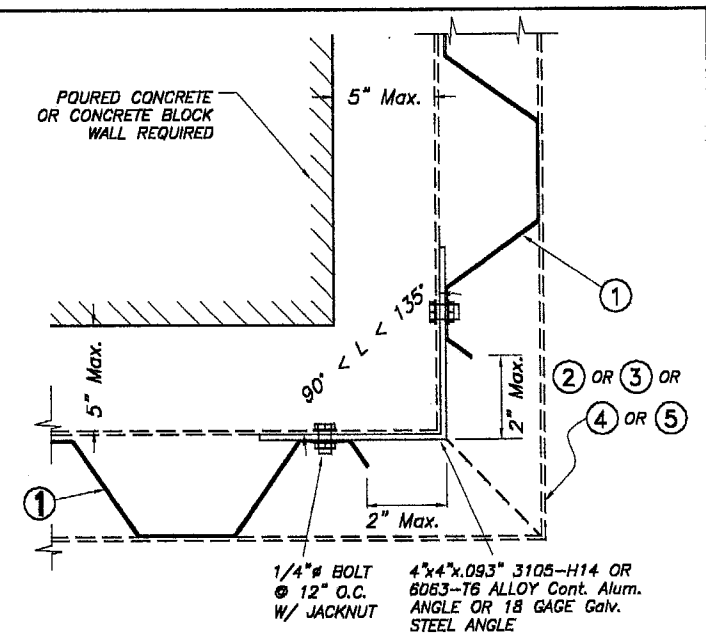


CASE A (Plan)

SCALE: 3/8" = 1"

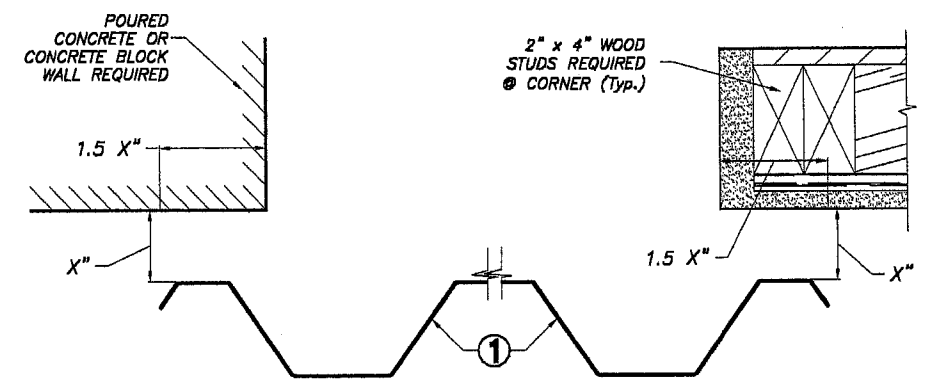
CASE C (Plan)

SCALE: 3/8" = 1"



CASE B (Plan)

SCALE: 3/8" = 1"





CASE D (Plan)

SCALE: 3/8" = 1"

END CLOSURES DETAILS

E.D. = EDGE DISTANCE
(SEE SCHEDULE ON SHEET 6 OF 8)

F.B.C.(H.V.H.Z.)

	PRODUCT REVISED as complying with the Florida Building Code Acceptance No <u>04-1104.01</u> Expiration Date <u>04/29/2009</u> By <u>Helmut A. Meier</u> Miami Dade Product Control Division MIAMI-DADE COUNTY	 OCT 21 2004 P.E. SEAL/SIGNATURE/DATE	© 2003 TILTECO, INC.  TILLIT TESTING & ENGINEERING COMPANY 8595 N.W. 38th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166 Phone : (305)871-1530 . Fax : (305)871-1531 e-mail: tilteco@aol.com EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167	0.0295" THICK GALV. STEEL STORM PANEL			AS SHOWN SCALE
	ALUFAB HURRICANE SHUTTERS, INC. 13000 N.W. 38th AVE. OPA-LOCKA, FL 33054			12/4/03 DATE			
	REV. No			DESCRIPTION	DATE	REV. No	DESCRIPTION
1	GENERAL	3/30/04	3				
2			4				

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM ANCHOR SPACING SCHEDULE FOR INSTALLATIONS INTO CONCRETE AND C.B.S. STRUCTURES *

MAXIMUM DESIGN PRESSURE RATING "W" (p.s.f.) AND CORRESPONDING MAXIMUM PANEL LENGTH SCHEDULE

MAXIMUM DESIGN PRESSURE RATING W (p.s.f.)	Max. PANEL LENGTH (ft.) (SEE SECTIONS)	MINIMUM SEPARATION TO GLASS	APPLICABLE TO SECTION # AND ANY COMBINATION OF THEM
+90.0, -90.0	8'-0"	2 3/4"	1 THRU 6
+72.0, -72.0	>8'-0" TO 8'-6"	3 1/8"	1 THRU 6
+66.0, -66.0	>8'-6" TO 8'-9"	3 1/8"	1 THRU 6
+45.0, -45.0	>8'-9" TO 10'-0"	3 1/8"	1 THRU 6

E. D. = EDGE DISTANCE

ANCHORS LEGEND

ANCHORS TYPE	ANCHOR MIN. SPACING
TAPCON	3.0"
CALK-IN	2.5"
PANELMATE	3.0"

* SEE SHEET 7 & 8 OF 8 FOR ANCHORS TYPE & SPACING FOR INSTALLATIONS INTO WOOD FRAME BUILDINGS.

** MAXIMUM ANCHOR SPACINGS ARE VALID FOR 3 1/2" EDGE DISTANCE. FOR E. D. LESS THAN 3 1/2", REDUCE ANCHOR SPACING BY MULTIPLYING SPACING SHOWN ON SCHEDULE BY THE FOLLOWING FACTORS. (NOTE: Min. E. D. FOR CALK-IN ANCHORS IS 2 1/2"). FOR THIS OPERATION TO BE POSSIBLE, REDUCED SPACING OBTAINED USING FACTOR SHALL NOT BE LESS THAN MINIMUM SPACING INDICATED FOR EACH ANCHOR TYPE AT ANCHORS LEGEND.

ACTUAL E. D.	FACTOR	
	TAPCON/PANELMATE	CALK-IN
3"	.86	.75
2 1/2"	.71	.50
2"	.50	-

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **						APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	TAPCONS		CALK-IN		PANELMATE			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+45.0, -45.0	12"	12"	12"	12"	12"	12"	1 (TOP)	8'-9"
	-	-	12"	12"	12"	12"	1 (BOTTOM)	
	-	-	12"	12"	12"	12"	2 (TOP & BOTTOM)	
	12"	-	12"	-	12"	-	3A & 3B (TOP)	
	12"	7 1/2"	11"	7"	12"	6 1/2"	3A & 3B (BOTTOM)	
	12"	12"	12"	12"	12"	12"	4 (TOP)	
	12"	12"	12"	12"	12"	12"	4 (BOTTOM)	
	12"	12"	12"	12"	12"	12"	5A & 5B (TOP)	
	-	-	12"	12"	12"	12"	5A (BOTTOM)	
	-	-	6"	6"	6"	6"	5B (BOTTOM)	
	12"	12"	12"	12"	12"	12"	6A & 6B (TOP)	
	12"	12"	12"	12"	12"	12"	6A (BOTTOM)	
9"	4"	8 1/2"	4"	9 1/2"	3 1/2"	6B (BOTTOM)		
+45.0, -45.0	12"	11 1/2"	12"	11 1/2"	12"	11"	1 (TOP)	>8'-9" TO 10'-0"
	-	-	12"	6"	12"	6"	1 (BOTTOM)	
	-	-	12"	6"	12"	6"	2 (TOP & BOTTOM)	
	12"	-	12"	-	12"	-	3A & 3B (TOP)	
	12"	7"	9 1/2"	6"	12"	5 1/2"	3A & 3B (BOTTOM)	
	12"	11 1/2"	12"	11 1/2"	12"	11"	4 (TOP)	
	12"	11 1/2"	12"	11 1/2"	12"	11"	4 (BOTTOM)	
	12"	11 1/2"	12"	11 1/2"	12"	11"	5A & 5B (TOP)	
	-	-	12"	6"	12"	6"	5A (BOTTOM)	
	-	-	6"	6"	6"	6"	5B (BOTTOM)	
	12"	11 1/2"	12"	11 1/2"	12"	11"	6A & 6B (TOP)	
	12"	11 1/2"	12"	11 1/2"	12"	11"	6A (BOTTOM)	
9"	4"	8 1/2"	4"	9 1/2"	3 1/2"	6B (BOTTOM)		
+66.0, -66.0	12"	7"	12"	7"	12"	6 1/2"	1 (TOP)	8'-9"
	-	-	12"	6"	12"	6"	1 (BOTTOM)	
	-	-	12"	6"	12"	6"	2 (TOP & BOTTOM)	
	11 1/2"	-	9"	-	12"	-	3A & 3B (TOP)	
	9"	5"	7 1/2"	5"	10 1/2"	4 1/2"	3A & 3B (BOTTOM)	
	12"	9"	12"	9"	12"	8 1/2"	4 (TOP)	
	12"	9"	12"	9"	12"	8 1/2"	4 (BOTTOM)	
	12"	7"	12"	7"	12"	6 1/2"	5A & 5B (TOP)	
	-	-	12"	6"	12"	6"	5A (BOTTOM)	
	-	-	6"	6"	6"	6"	5B (BOTTOM)	
	12"	7"	12"	7"	12"	6 1/2"	6A & 6B (TOP)	
	12"	9"	12"	9"	12"	8 1/2"	6A (BOTTOM)	
9"	4"	8 1/2"	4"	9 1/2"	3 1/2"	6B (BOTTOM)		

MAXIMUM DESIGN LOAD W (p.s.f.)	MAXIMUM ANCHORS SPACING FOR E. D. = 3 1/2" **						APPLICABLE TO SECTIONS # & ANY COMBINATION OF THEM	MAXIMUM PANEL LENGTH "L" (ft.)
	TAPCONS		CALK-IN		PANELMATE			
	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY	TO CONCRETE	TO MASONRY		
+72.0, -72.0	12"	12"	12"	12"	12"	11 1/2"	1 (TOP)	6'-0"
	-	-	12"	12"	12"	6"	1 (BOTTOM)	
	-	-	12"	12"	12"	6"	2 (TOP & BOTTOM)	
	12"	-	12"	-	12"	-	3A & 3B (TOP)	
	12"	7"	10"	6 1/2"	12"	6"	3A & 3B (BOTTOM)	
	12"	12"	12"	12	12"	11 1/2"	4 (TOP)	
	12"	12"	12"	12"	12"	11 1/2"	4 (BOTTOM)	
	12"	12"	12"	12"	12"	11 1/2"	5A & 5B (TOP)	
	-	-	12"	12"	12"	6"	5A (BOTTOM)	
	-	-	6"	6"	6"	6"	5B (BOTTOM)	
	12"	12"	12"	12"	12"	11 1/2"	6A & 6B (TOP)	
	12"	12"	12"	12"	12"	11 1/2"	6A (BOTTOM)	
9"	4"	8 1/2"	4"	9 1/2"	3 1/2"	6B (BOTTOM)		
+72.0, -72.0	12"	5 1/2"	12"	5 1/2"	12"	5 1/2"	1 (TOP)	>6'-0" TO 8'-6"
	-	-	12"	6"	12"	6"	1 (BOTTOM)	
	-	-	12"	6"	12"	6"	2 (TOP & BOTTOM)	
	11"	-	8 1/2"	-	12"	-	3A & 3B (TOP)	
	8 1/2"	5"	7"	4 1/2"	9 1/2"	4"	3A & 3B (BOTTOM)	
	12"	8 1/2"	12"	8 1/2"	12"	8"	4 (TOP)	
	12"	8 1/2"	12"	8 1/2"	12"	8"	4 (BOTTOM)	
	12"	5 1/2"	12"	5 1/2"	12"	5 1/2"	5A & 5B (TOP)	
	-	-	12"	6"	12"	6"	5A (BOTTOM)	
	-	-	6"	6"	6"	6"	5B (BOTTOM)	
	12"	5 1/2"	12"	5 1/2"	12"	5 1/2"	6A & 6B (TOP)	
	12"	8 1/2"	12"	8 1/2"	12"	8"	6A (BOTTOM)	
-	-	-	-	-	-	6B (BOTTOM)		
+90.0, -90.0	7 1/2"	-	7"	-	7 1/2"	-	1 (TOP)	8'-0"
	-	-	12"	6"	12"	6"	1 (BOTTOM)	
	-	-	12"	6"	12"	6"	2 (TOP & BOTTOM)	
	9"	-	7"	-	10"	-	3A & 3B (TOP)	
	7"	4"	6"	3 1/2"	8"	3 1/2"	3A & 3B (BOTTOM)	
	12"	6 1/2"	12"	6 1/2"	12"	6"	4 (TOP)	
	12"	7"	12"	7"	12"	6 1/2"	4 (BOTTOM)	
	7 1/2"	-	7"	-	7 1/2"	-	5A & 5B (TOP)	
	-	-	12"	6"	12"	6"	5A (BOTTOM)	
	-	-	6"	6"	6"	6"	5B (BOTTOM)	
	7 1/2"	-	7"	-	7 1/2"	-	6A & 6B (TOP)	
	12"	7"	12"	7"	12"	6 1/2"	6A (BOTTOM)	
-	-	-	-	-	-	6B (BOTTOM)		

F.B.C.(H.V.H.Z.)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 04-1104.01
Expiration Date 04/29/2009
By *Walter A. Tillit Jr.*
Miami Dade Product Control
Division
MIAMI-DADE COUNTY

OCT 21 2004
P.E. SEAL/SIGNATURE/DATE

©2003 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6595 N.W. 36th. St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
EB-0006719
WALTER A. TILLIT JR., P. E.
FLORIDA Lic. # 44167

0.0295" THICK GALV. STEEL
STORM PANEL

ALUFAB HURRICANE SHUTTERS, INC.
13000 N.W. 38th AVE.
OPA-LOCKA, FL 33054

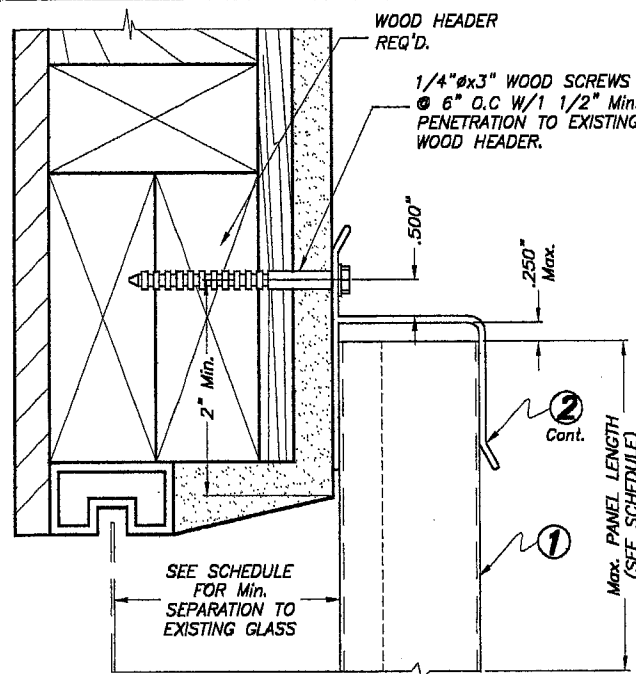
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	GENERAL	3/30/04	3		
2			4		

AS SHOWN
SCALE

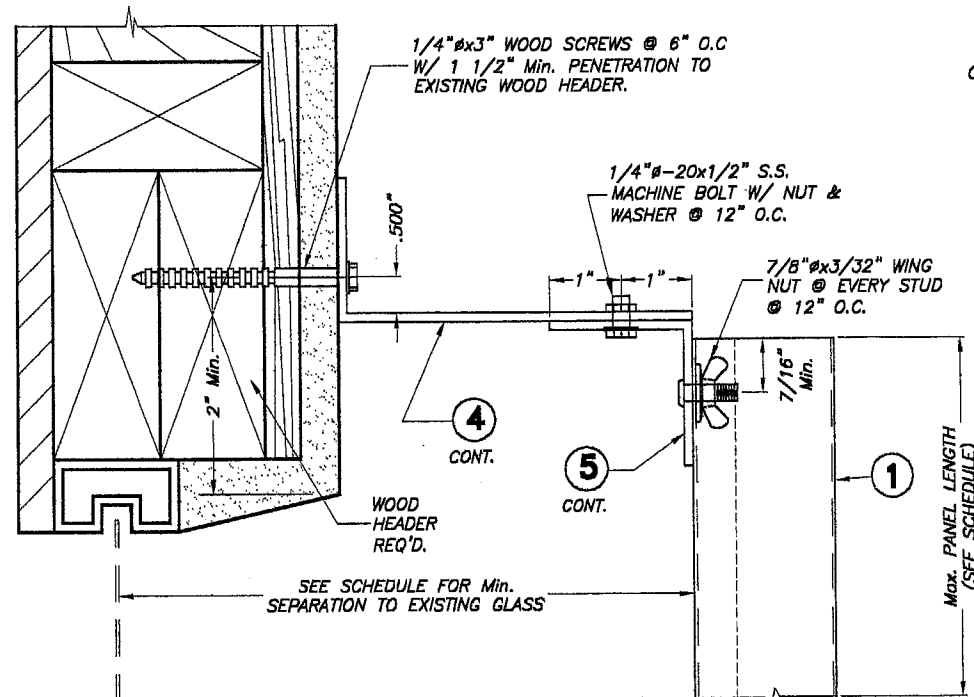
12/4/03
DATE

03-244
DRAWING No

SHEET 6 OF 8



ALTERNATIVE 1



ALTERNATIVE 3

4"x8" (Min.) EXISTING WOOD BEAM REQUIRED. STRUCTURAL ADEQUACY OF EXISTING WOOD BEAM TO BE CERTIFIED BY REGISTERED ENGINEER OR ARCHITECT PRIOR TO SHUTTER INSTALLATION.

1/4"x3" WOOD SCREWS @ 6" O.C. W/ 1 1/2" Min. PENETRATION TO EXISTING WOOD BEAM

SEE SCHEDULE FOR Min. SEPARATION TO EXISTING GLASS

ALTERNATIVE 4

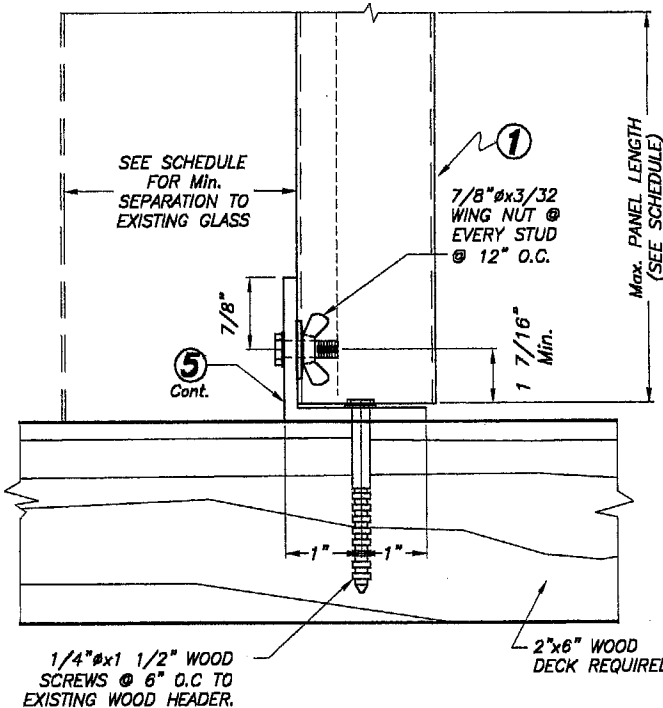
1"x4"x1/8" (Min.) 6063-T5 Alum. TUBE W/ (2) 5/16"x4" WOOD SCREWS TO EACH RAFTER OR TRUSS. LOCATE SCREWS AT MIDWIDTH OF EXISTING WOOD MEMBER, (2" Min. NOMINAL WIDTH) W/ 2" Min. PENETRATION.

WOOD TRUSSES OR RAFTER @ 24" O.C. REQUIRED

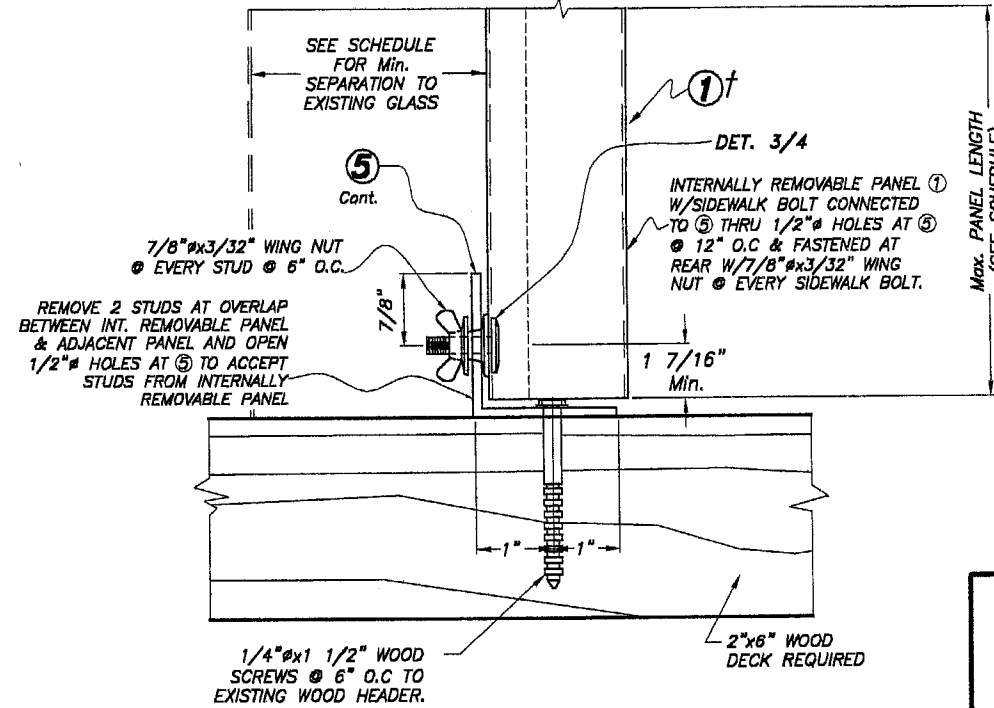
#14x3/4" S.S. S.M.S. @ 6" O.C.

SEE SCHEDULE FOR Min. SEPARATION TO EXISTING GLASS

ALTERNATIVE 5



**ALTERNATIVE 2A
ADJACENT PANELS**



**ALTERNATIVE 2B
INTERNALLY REMOVABLE PANEL****

† NOTE:

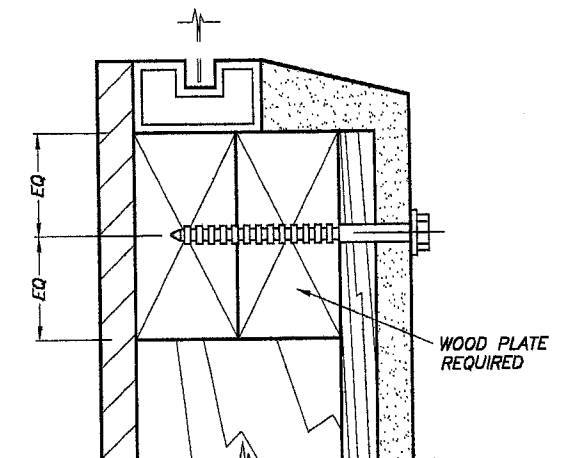
INTERNALLY REMOVABLE PANEL SHALL BE PROVIDED W/ AN ADEQUATE REMOVABLE HANDLE IN ORDER TO INSTALL PANEL.

** NOTE:

INTERNALLY REMOVABLE PANEL SHOWN ON ALTERNATIVE 2B SHALL ALWAYS BE INSTALLED IN BETWEEN ADJACENT PANELS MOUNTED AS SHOWN ON ALTERNATIVE 2A.

NOTES:

1. INSTALLATIONS ARE VALID ONLY FOR DESIGN WIND LOADS AND Max. PANEL LENGTHS AS PER SCHEDULE ON SHEET 6 OF 8.
2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.



**ALTERNATIVE WOOD FRAME CONDITION
& ANCHOR LOCATION AT BOTTOM**

SCALE: 1/4" = 1"

NOTE: SHUTTER TRACKS NOT SHOWN FOR CLARITY

F.B.C.(H.V.H.Z.)

NOTE FOR COMBINATION OF SECTIONS:
FLOOR/ WALL/ CEILING MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

INSTALLATION DETAILS ON EXISTING WOOD BUILDINGS

SCALE: 3/8" = 1"

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 04-1104.01
Expiration Date 04/29/2009
By *Helmut A. Miller*
Miami Dade Product Control
Division
MIAMI-DADE COUNTY

OCT 21 2004

P.E. SEAL/SIGNATURE/DATE

©2003 TILTECO, INC

TILTECO INC.

TILLIT TESTING & ENGINEERING COMPANY
6995 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166
Phone: (305)871-1530 Fax: (305)871-1531
e-mail: tilteco@aol.com
EB-0006719
WALTER A. TILLIT Jr., P. E.
FLORIDA Lic. # 44167

0.0295" THICK GALV. STEEL
STORM PANEL

ALUFAB HURRICANE SHUTTERS, INC.

13000 N.W. 38th AVE.
OPA-LOCKA, FL 33054

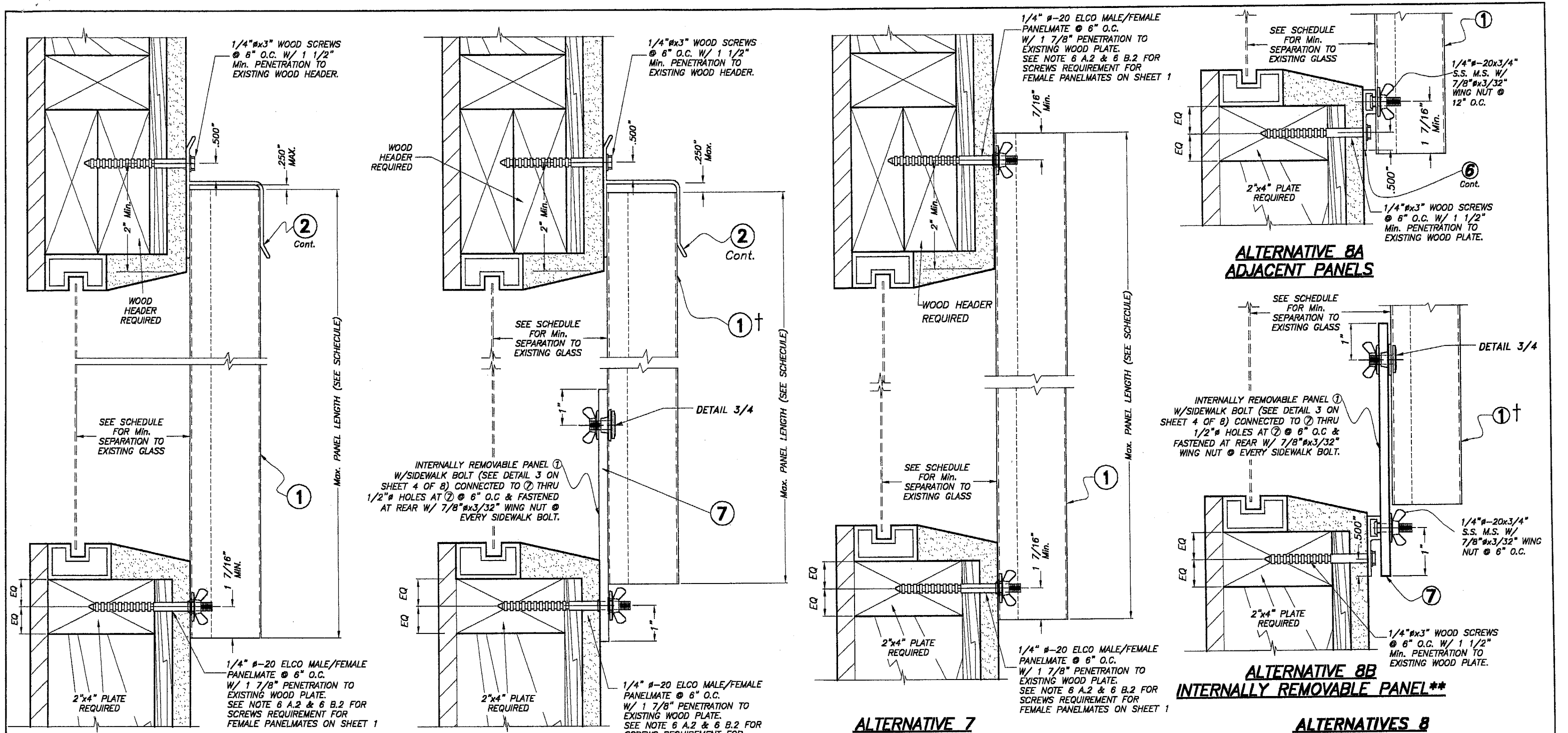
AS SHOWN
SCALE

12/4/03
DATE

03-244
DRAWING No

SHEET 7 OF 8

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	GENERAL	3/30/04	3		
2			4		



**ALTERNATIVE 6A
ADJACENT PANELS**

**ALTERNATIVE 6B
INTERNALLY REMOVABLE PANEL****

ALTERNATIVE 7

**ALTERNATIVE 8B
INTERNALLY REMOVABLE PANEL****

ALTERNATIVES 8

WALL MOUNTING INSTALLATIONS

ALTERNATIVES 6

**** NOTE:**
INTERNALLY REMOVABLE PANEL SHOWN ON ALTERNATIVE 8B & 8B SHALL ALWAYS BE INSTALLED IN BETWEEN ADJACENT PANELS MOUNTED AS SHOWN ON ALTERNATIVE 6A & 8A.

† NOTE:
INTERNALLY REMOVABLE PANEL SHALL BE PROVIDED W/ AN ADEQUATE REMOVABLE HANDLE IN ORDER TO INSTALL PANEL.

NOTE FOR COMBINATION OF SECTIONS:
WALL MOUNTING SECTIONS CAN BE COMBINED IN ANY WAY TO SUIT ANY INSTALLATION.

NOTES:
1. INSTALLATIONS ARE VALID ONLY FOR DESIGN WIND LOADS AND Max. PANEL LENGTHS AS PER SCHEDULE ON SHEET 3 OF 6
2. FOR NEW WOOD FRAME CONSTRUCTION: WOOD MEMBERS TO BE SOUTHERN PINE No. 2, W/ SPECIFIC DENSITY OF 0.55 OR EQUAL.

F.B.C.(H.V.H.Z.)

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 04-1104.01
Expiration Date 04/29/2009
By *Helmut A. Meier*
Miami Dade Product Control
Division
MIAMI-DADE COUNTY

OCT 21 2004
P.E. SEAL/SIGNATURE/DATE

© 2003 TILTECO, INC.
TILTECO INC.
TILLIT TESTING & ENGINEERING COMPANY
6595 N.W. 36th. St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166
Phone : (305)871-1530 . Fax : (305)871-1531
e-mail: tilteco@aol.com
EB-0008719
WALTER A. TILLIT Jr., P. E.
FLORIDA Lic. # 44167

0.0295" THICK GALV. STEEL STORM PANEL						AS SHOWN SCALE
ALUFAB HURRICANE SHUTTERS, INC.						12/4/03 DATE
13000 N.W. 38th AVE. OPA-LOCKA, FL 33054						03-244 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	SHEET 8 OF 8
1	GENERAL	3/30/04	3			
2	GENERAL	10/20/04	4			