



**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)

**Kane Manufacturing Corp.
515 North Fraley Street
Kane, PA. 16735**

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: 0.075" (min.) Perforated Galvannealed Steel Plate Shutter

APPROVAL DOCUMENT: Drawing No. 03-230, titled " 14 Gage (0.075") Perforated Galvannealed Steel Plate Shutter ", sheets 1 through 8 of 8, prepared by Tilteco, Inc., dated October 31, 2003, signed and sealed by Walter A. Tillit Jr., P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval 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 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
08/19/04

**NOA No 04-0709.02
Expiration Date: 08/19/2009
Approval Date: 08/19/2004
Page 1**

Kane Manufacturing Corp.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 03-230, titled " 14 Gage (0.075") Perforated Galvannealed Steal Plate Shutter ", sheets 1 through 8 of 8, prepared by Tilteco, Inc., dated October 31, 2003, signed and sealed by Walter A. Tillit Jr., P.E.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of 14 Gage (0.075") Perforated Galvannealed Steal Plate Shutter, prepared by Architectural Testing, Report No. 01-48048.01, dated January 21, 2004, signed and sealed by Steven M. Urich, P.E.*

C. CALCULATIONS

1. *Anchor calculations dated June 18, 2004, 39 pages, prepared by Tilteco, Inc., signed and sealed by Walter A. Tillit Jr., P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *Mill Certified Inspection Report issued by Ferguson Perforating, Inc., dated July 30, 2004, with chemical analysis and mechanical properties for Galvannealed Steal Plate.*



Helmy A. Makar, P. E.
Product Control Examiner
NOA No 04-0709.02
Expiration Date: 08/19/2009
Approval Date: 08/19/2004

GENERAL NOTES:

1. PERFORATED SHUTTER SHOWN ON THIS PRODUCT APPROVAL DOCUMENT (P.A.D.) HAS BEEN VERIFIED FOR COMPLIANCE IN ACCORDANCE WITH THE 2001 EDITION OF THE FLORIDA BUILDING CODE. THIS PERFORATED SHUTTER MAY BE INSTALLED AT HIGH VELOCITY HURRICANE ZONES. DESIGN WIND LOADS SHALL BE DETERMINED AS PER SECTION 1619 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 STRESS FOR WIND LOADS WAS **NOT** USED IN THEIR ANALYSIS. PERFORATED SHUTTER'S ADEQUACY FOR IMPACT AND FATIGUE RESISTANCE HAS BEEN VERIFIED IN ACCORDANCE WITH SECTION 1606.1.4 OF THE ABOVE MENTIONED CODE AS PER ARCHITECTURAL TESTING REPORT # 01-48084.01 AS PER MIAMI-DADE COUNTY PROTOCOLS TAS 201-94, TAS 202-94 AND TAS 203-94.

- 2. ALL COMPONENTS SHALL BE MADE OF MATERIALS AS SPECIFIED ON SHEETS 2 & 3 OF THIS DRAWING.
- 3. SEE SCHEDULE ON SHEET 8 FOR MAX. PRESSURE RATING VERSUS MAX. SHUTTER SIZE.
- 4. ALL SCREWS TO BE STAINLESS STEEL 304 OR 316 AISI SERIES OR CORROSION RESISTANT COATED CARBON STEEL AS PER DIN 50018 WITH 50 ksi YIELD POINT AND 90 ksi TENSILE STRENGTH.
- 5. BOLTS TO BE ALUMINUM ASSOCIATION 2024-T4 ALLOY & TEMPER, ASTM A-307 GALVANIZED STEEL OR AISI 304 SERIES STAINLESS STEEL, WITH 35 ksi MINIMUM YIELD POINT.
- 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 POURED CONCRETE:
-1/4"Ø TAPCON ANCHORS MANUFACTURED BY ELCO TEXTRON.

NOTES:

- A.1) MINIMUM EMBEDMENT INTO POURED CONCRETE OF TAPCON ANCHORS IS 1 1/4".
- A.2) IN CASE THAT PRECAST STONE, PRECAST CONCRETE PANELS, OR PAVERS BE FOUND ON THE EXISTING WALL OR FLOOR, ANCHORS SHALL BE LONG ENOUGH TO REACH THE MAIN STRUCTURE BEHIND SUCH PANELS, ANCHORAGE SHALL BE AS INDICATED ON NOTE A.1) ABOVE.

(B) TO EXISTING CONCRETE BLOCK WALL:
-1/4"Ø TAPCON ANCHORS AS MANUFACTURED BY ELCO TEXTRON.

NOTES:

- B.1) MINIMUM EMBEDMENT OF TAPCON ANCHORS INTO THE CONCRETE BLOCK UNIT SHALL BE 1 1/4".
- B.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 NOTE B.1) ABOVE.

(C) TO EXISTING WOOD:
-1/4"Ø TAPCON ANCHORS MANUFACTURED BY ITW BUILDEX OR 1/4"Ø WOOD SCREWS.

NOTES:

- C.1) MINIMUM EMBEDMENT INTO WOOD IS 1 1/2".
- (D) ANCHORS SHALL BE INSTALLED FOLLOWING ALL OF THE RECOMMENDATIONS AND SPECIFICATIONS OF THE ANCHOR'S MANUFACTURER.
- 8. ALUMINUM MEMBERS IN CONTACT WITH CONCRETE SHALL BE PROTECTED WITH ALKALI-RESISTANT COATING, SUCH AS HEAVYBODIED BITUMINOUS PAINT OR WATER-WHITE METHACRYLATE LACQUER ACCORDING TO FLORIDA BUILDING CODE EDITION 2001 SECTION 2003.8.4.4.
- 9. ALUMINUM MEMBERS IN CONTACT WITH STEEL SHALL BE PROTECTED ACCORDINGLY WITH SECTION 2003.8.4.2 OF THE 2001 EDITION OF THE FLORIDA BUILDING CODE.

10. 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, BLOCK OR WOOD FRAME BUILDINGS.

11. THE INSTALLATION CONTRACTOR IS TO SEAL/CAULK ALL SHUTTER COMPONENT EDGES WHICH REMAIN IN CONTINUOUS CONTACT WITH THE BUILDING TO PREVENT WIND/RAIN INTRUSION. CAULK AND SEAL SHUTTER TRACKS ALL AROUND FULL LENGTH.

12. PERFORATED SHUTTER INSTALLATION SHALL COMPLY WITH SPECS INDICATED IN THIS DRAWING PLUS ANY BUILDING AND ZONING REGULATIONS PROVIDED BY THE JURISDICTION WHERE PERMIT IS APPLIED TO.

13. (a) THE PRODUCT APPROVAL DOCUMENT (P.A.D.) PREPARED BY THIS ENGINEER IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SITE SPECIFIC PROJECT.

(b) CONTRACTOR TO BE RESPONSIBLE FOR THE SELECTION, PURCHASE AND INSTALLATION INCLUDING LIFE SAFETY OF THIS PRODUCT BASED ON THIS PRODUCT APPROVAL 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 APPROVAL DOCUMENT WILL BE CONSIDERED INVALID IF MODIFIED.

(d) SITE SPECIFIC PROJECTS SHALL BE PREPARED BY A FLORIDA REGISTERED ENGINEER OR ARCHITECT WHICH WILL BECOME THE PROFESSIONAL OF RECORD (P.O.R.) FOR THE PROJECT AND WHO WILL BE RESPONSIBLE FOR THE PROPER USE OF THE P.A.D. PROFESSIONAL OF RECORD, ACTING AS DELEGATED ENGINEER TO THE P.A.D. ENGINEER, SHALL SUBMIT TO THIS LETTER THE SITE SPECIFIC DRAWINGS FOR REVIEW.

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

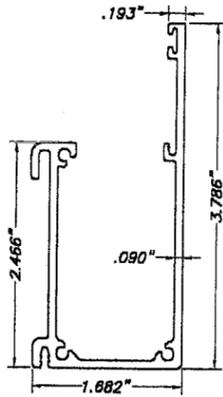
14. SHUTTER'S MANUFACTURER LABEL SHALL BE PLACED ON THE EXPOSED SURFACE OF (A) OR (D) ONE LABEL SHALL BE PLACED FOR EVERY OPENING. LABEL SHALL READ AS FOLLOWS:

KANE MANUFACTURING CORP.
515 NORTH FRALEY
KANE, PA
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.

Approved as complying with the
Florida Building Code
Date 08/19/2004
NOA# 04-2709-02
Miami Dade Product Control
Division
By Helmut A. Melzer

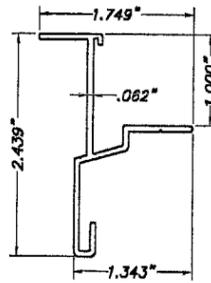
F.B.C.(H.V.H.Z.)

	MIAMI-DADE COUNTY	 <u>6/18/04</u> 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 EB-0008719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167	14 Gage (0.075") Perforated Galvannealed Steel Plate Shutter Kane Manufacturing Corp. 515 North Fraley Kane, PA 16735 <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>--</td> <td>--</td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>--</td> <td>--</td> <td>4</td> <td></td> <td></td> </tr> </tbody> </table>	REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	1	--	--	3			2	--	--	4			AS SHOWN SCALE 10/31/03 DATE 03-230 DRAWING No SHEET 1 OF 8
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE																		
1	--	--	3																				
2	--	--	4																				



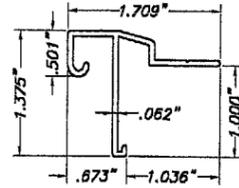
A BOTTOM FRAME CHANNEL

EXTRUDED ALUMINUM
6063-T6 ALLOY
SCALE: 1/2" = 1"



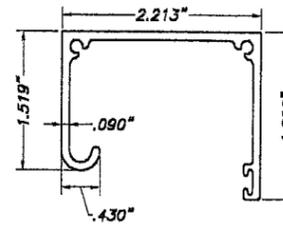
B MAIN FRAME SILL COVER PLATE

EXTRUDED ALUMINUM SCALE:
6063-T6 ALLOY
1/2" = 1"



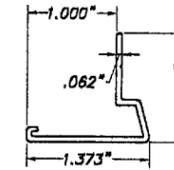
C MAIN FRAME HEAD COVER PLATE

EXTRUDED ALUMINUM
6063-T6 ALLOY
SCALE: 1/2" = 1"



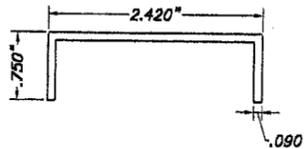
D TOP FRAME CHANNEL

EXTRUDED ALUMINUM
6063-T6 ALLOY
SCALE: 1/2" = 1"



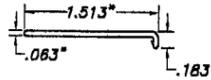
E MAIN FRAME JAMB COVER PLATE

EXTRUDED ALUMINUM
6063-T6 ALLOY
SCALE: 1/2" = 1"



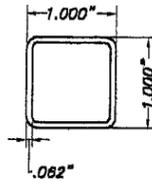
F TOP FRAME CHANNEL SCRIBE

EXTRUDED ALUMINUM
6063-T6 ALLOY
SCALE: 1/2" = 1"



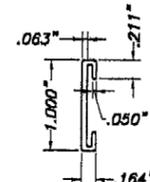
G BOTTOM FRAME CHANNEL INSERT

EXTRUDED ALUMINUM
6063-T6 ALLOY
SCALE: 1/2" = 1"



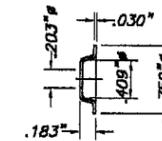
H MAIN FRAME TUBE

EXTRUDED ALUMINUM
6063-T6 ALLOY
SCALE: 1/2" = 1"



I BRACE COVER

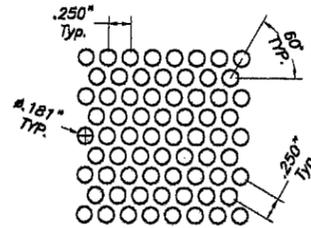
EXTRUDED ALUMINUM
6063-T6 ALLOY
SCALE: 1/2" = 1"



J 3/4" WASHER

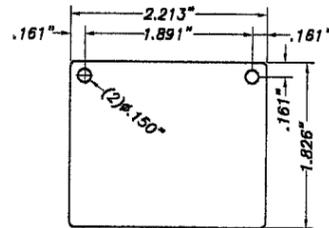
PLATED STEEL
SCALE: 1/2" = 1"

Approved as complying with the
Florida Building Code
Date 08/19/2004
NOA# 04-0709.02
Miami Dade Product Control
Division
By *Helmy A. Helmy*



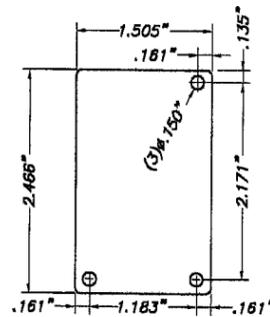
14GA (.075") GALVANNEALED STEEL PERFORATED PLATE

ASTM A-653, A-60



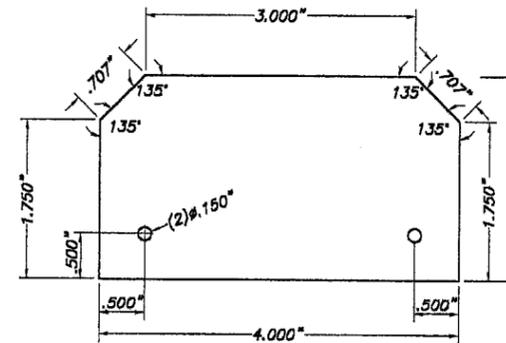
K HEAD END PLATE

(.090" THICK)
.090" ALUMINUM SHEET
3105-H14 ALLOY
SCALE: 1/2" = 1"



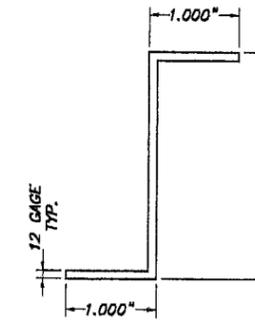
L SILL END PLATE

(.090" THICK)
EXTRUDED ALUMINUM
6063-T6 ALLOY
SCALE: 1/2" = 1"



M LIFT PLATE

12 GA. AISI 304 SERIES STAINLESS STEEL
W/ Fy (Min.) = 30 ksi
SCALE: 1/2" = 1"



M1 LIFT PLATE

12 GA. AISI 304 SERIES STAINLESS STEEL
W/ Fy (Min.) = 30 ksi
SCALE: 1/2" = 1"

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

©2003 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
EB-0006719
WALTER A. TILLIT Jr., P. E.
FLORIDA Lic. # 44167

14 Gage (0.075") Perforated Galvannealed Steel Shutter

Kane Manufacturing Corp.

515 North Fraley
Kane, PA 16735

AS SHOWN SCALE

10/31/03 DATE

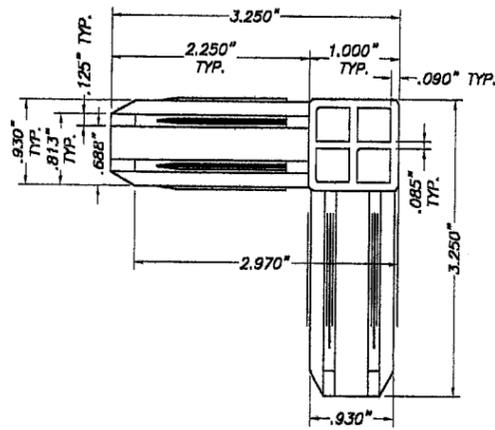
03-230 DRAWING No

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	-	-	3	-	-
2	-	-	4	-	-

SHEET 2 OF 8

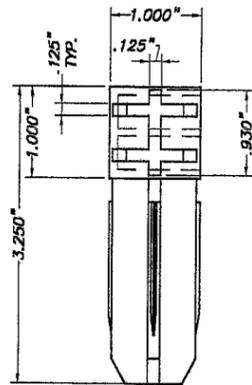
MIAMI-DADE COUNTY

P.E. SEAL/SIGNATURE/DATE



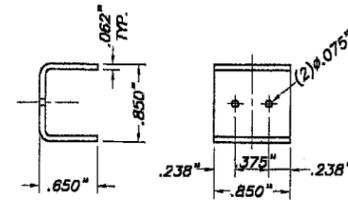
N CORNER KEY FOR MAIN FRAME TUBE (H)

CAST ALUMINUM
SCALE: 1/2" = 1"



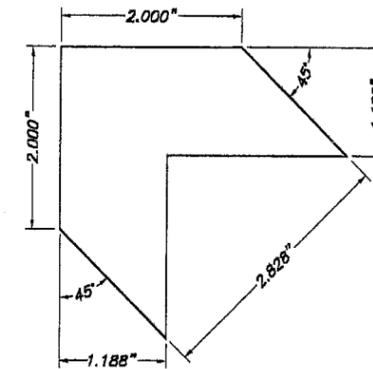
O CONNECTION KEY FOR INTERMEDIATE TUBE TO MAIN FRAME TUBE

SCALE: 1/2" = 1"

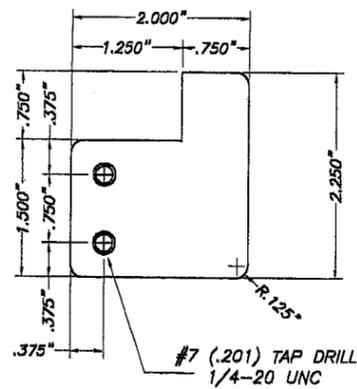


P CORNER KEY FOR (C) & (E) AT TOP AND (E) & (B) AT BOTTOM

18 GAGE STEEL A.S.T.M. A-653, C-90 GALV. STEEL
SCALE: 1/2" = 1"

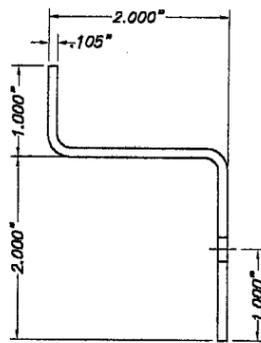


Approved as complying with the Florida Building Code
Date 08/19/2004
NOA# 02-0709-02
Miami Dade Product Control Division
By: *Heather H. Hester*



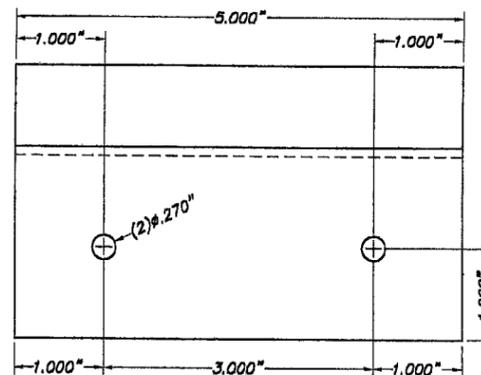
Q LATCH

7 GA. AISI 304 SERIES STAINLESS STEEL
W/ Fy (Min.) = 30 ksi
SCALE: 1/2" = 1"



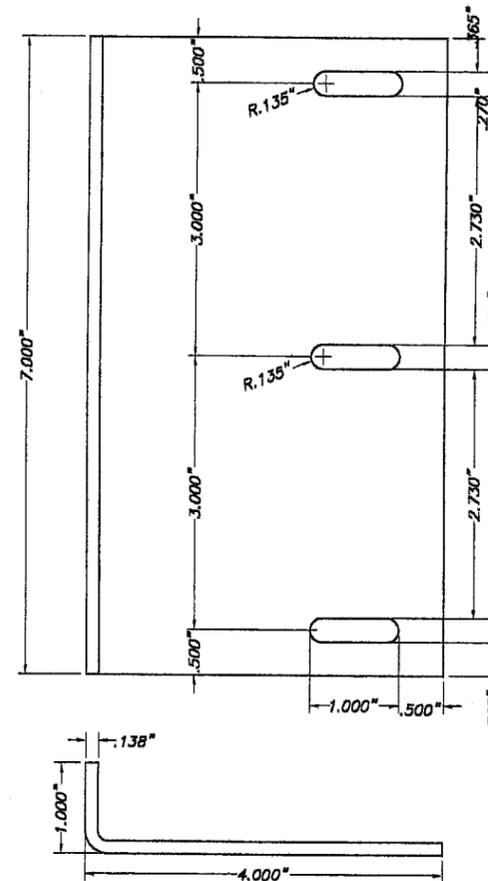
R LATCH PLATE FOR INSIDE (TRAPPED) MOUNTINGS

12 GA. AISI 304 SERIES STAINLESS STEEL W/ Fy (Min.) = 30 ksi
SCALE: 1/2" = 1"



S LATCH PLATE FOR WALL MOUNTINGS

12 GA. AISI 304 SERIES STAINLESS STEEL W/ Fy (Min.) = 30 ksi
SCALE: 1/2" = 1"



SCREWS' LIST

- F1: #8x1/2" S.S. ROBERTSON SELF-DRILLING SCREW
- F2: #8x1" SQUARE DRIVE S.S. PAN HEAD TEK SCREW
- F3: 1/4x1/2" HEX HEAD S.S. BOLT
- F4: #6x3/8" SQUARE DRIVE S.S. PAN HEAD TEK SCREW.
- F5: #8x1/2" SQUARE DRIVE S.S. PAN HEAD TEK SCREW
- F6: #8x5/8" S.S. ROBERTSON SELF-DRILLING SCREW
- F7: 1/4x1 3/4" SQUARE DRIVE S.S. PAN HEAD TEK SCREW
- F8: #6x1/2" PAN HEAD SELF-DRILLING SCREW

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

©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

EB-0006719
WALTER A. TILLIT Jr., P. E.
FLORIDA Lic. # 44167

14 Gage (0.075") Perforated Galvannealed Steel Plate Shutter

Kane Manufacturing Corp.

515 North Fraley
Kane, PA 16735

AS SHOWN SCALE

10/31/03 DATE

03-230 DRAWING No

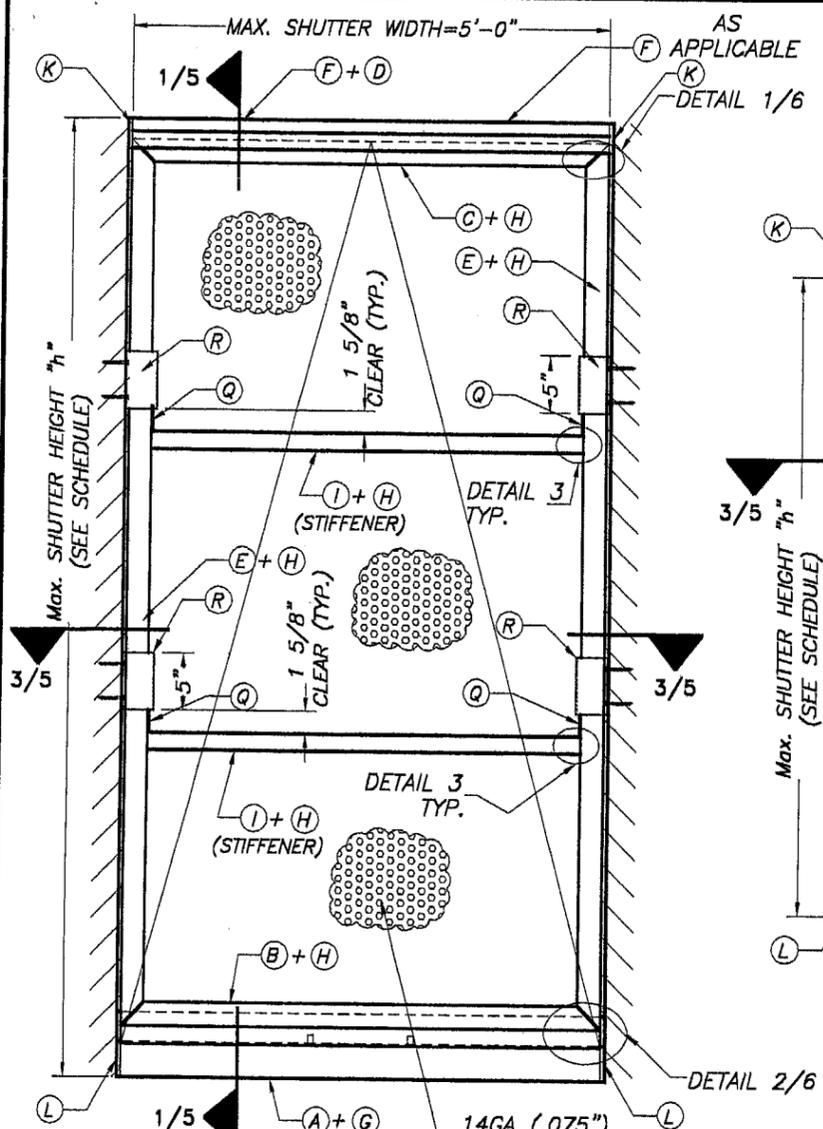
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	-	-	3	-	-
2	-	-	4	-	-

SHEET 3 OF 8

MIAMI-DADE COUNTY

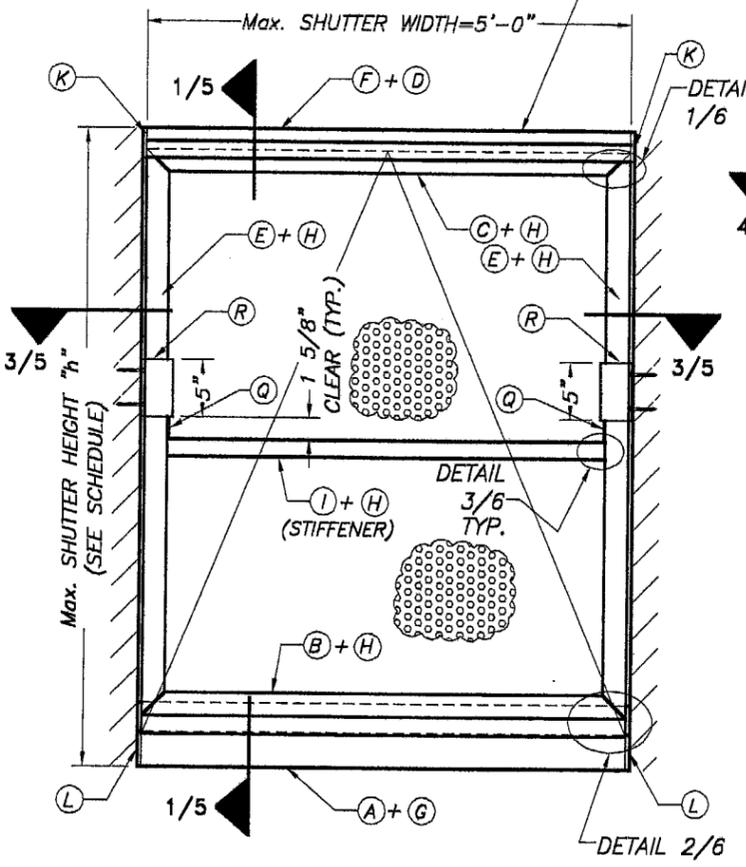
P.E. SEAL/SIGNATURE/DATE

Walter A. Tillit Jr.
9/18/04



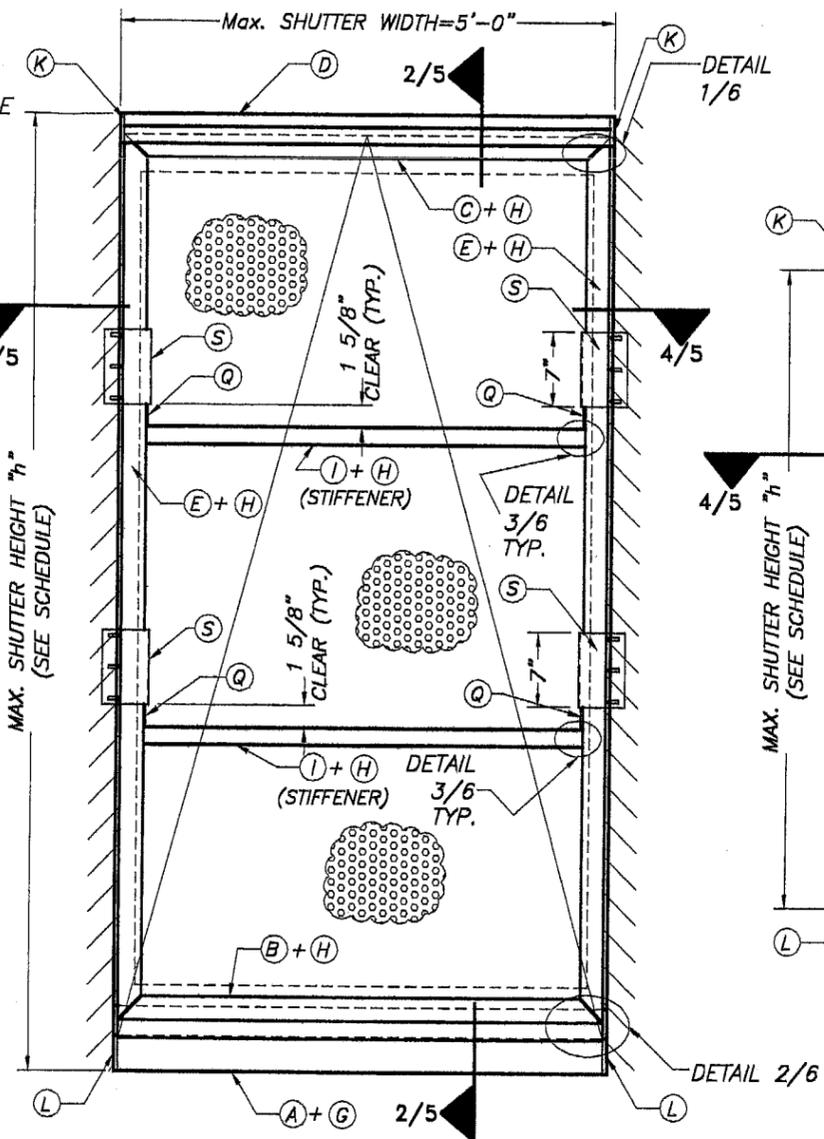
**INSIDE (TRAPPED) MOUNTING INSTALLATION
TYPICAL ELEVATION**

SCALE: N.T.S.



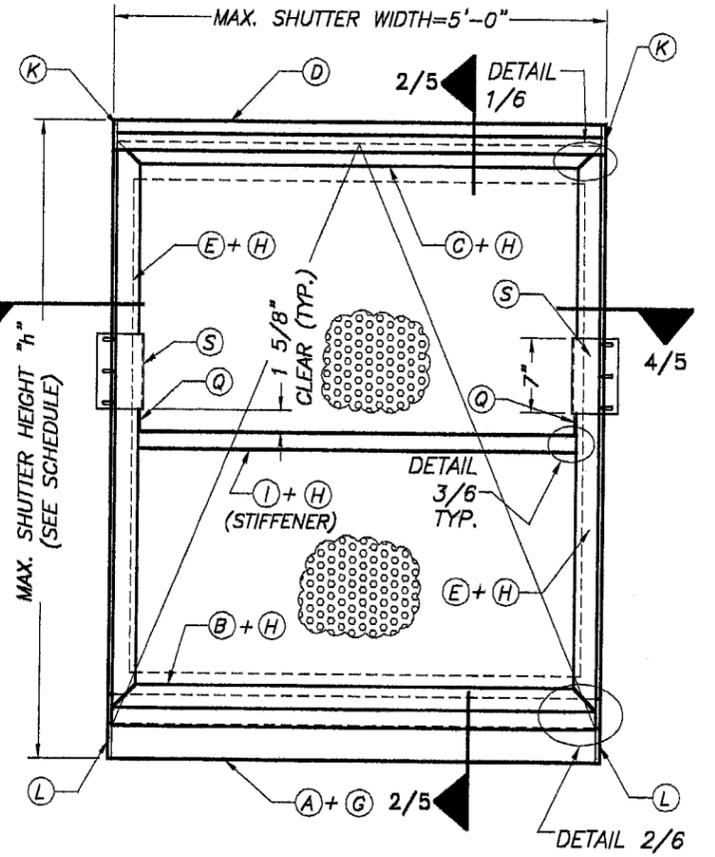
**INSIDE (TRAPPED) MOUNTING INSTALLATION
TYPICAL ELEVATION**

SCALE: N.T.S.



**WALL MOUNTING INSTALLATION
TYPICAL ELEVATION**

SCALE: N.T.S.



**WALL MOUNTING INSTALLATION
TYPICAL ELEVATION**

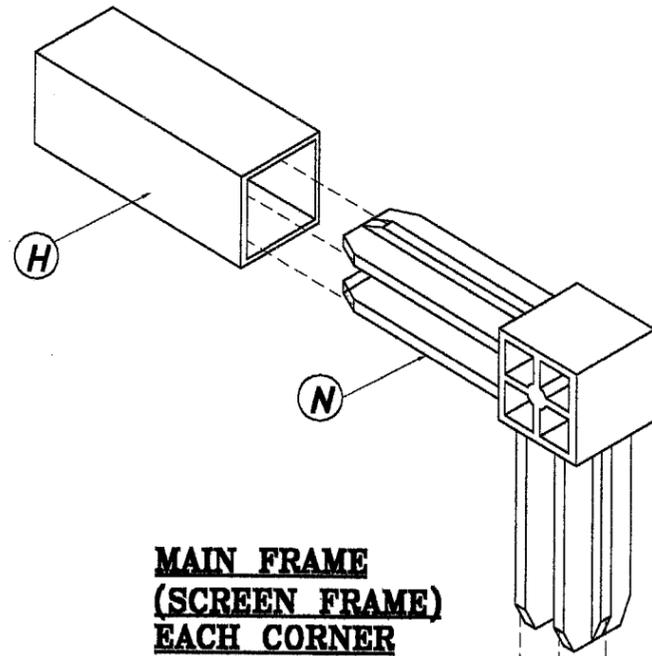
SCALE: N.T.S.

STIFFENERS/ LATCH SCHEDULE FOR A CORRESPONDING SHUTTER HEIGHT "h"(Ft) FOR INSIDE (TRAPPED) OR WALL MOUNTING INSTALLATION			
"h"	MINIMUM # OF STIFFENERS REQUIRED	STIFFENERS SPACING	# OF LATCH REQUIRED
LESS THAN 4'-8"	1	± h/2	2
> 4'-8" UP TO 7'-0"	2	± h/3	4

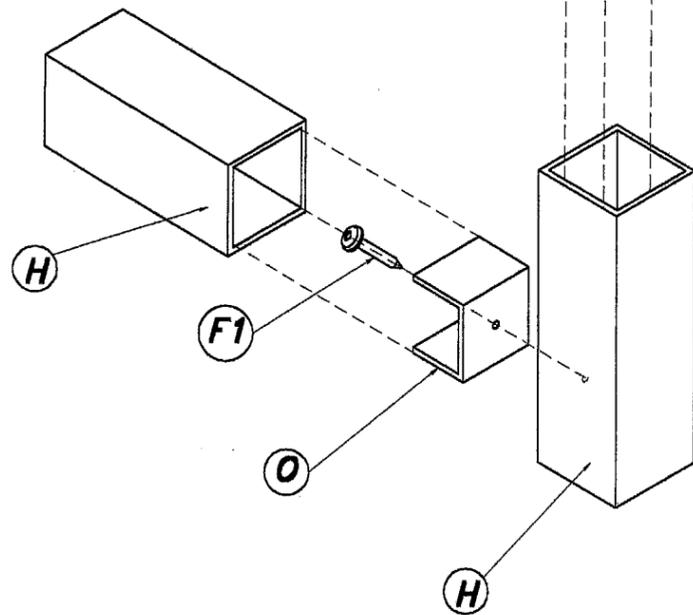
Approved as complying with the
Florida Building Code
Date 08/19/2004
NOA# 04-0709.02
Miami Dade Product Control
Division
By Helmy A. Mator

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

MIAMI-DADE COUNTY	 6/18/04 P.E. SEAL/SIGNATURE/DATE	©2003 TILTECO, INC TILLIT TESTING & ENGINEERING COMPANY 6585 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166 Phone : (305)871-1530 . Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44187	14 Gage (0.075") Perforated Galvannealed Steel Plate Shutter Kane Manufacturing Corp. 515 North Fraley Kane, PA 16735	AS SHOWN SCALE 10/31/03 DATE 03-230 DRAWING No															
		<table border="1"> <tr> <th>REV. No</th> <th>DESCRIPTION</th> <th>DATE</th> <th>REV. No</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> <tr> <td>1</td> <td>-</td> <td>-</td> <td>3</td> <td>-</td> <td>-</td> </tr> <tr> <td>2</td> <td>-</td> <td>-</td> <td>4</td> <td>-</td> <td>-</td> </tr> </table>	REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	1	-	-	3	-	-	2	-	-	4	-
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE														
1	-	-	3	-	-														
2	-	-	4	-	-														

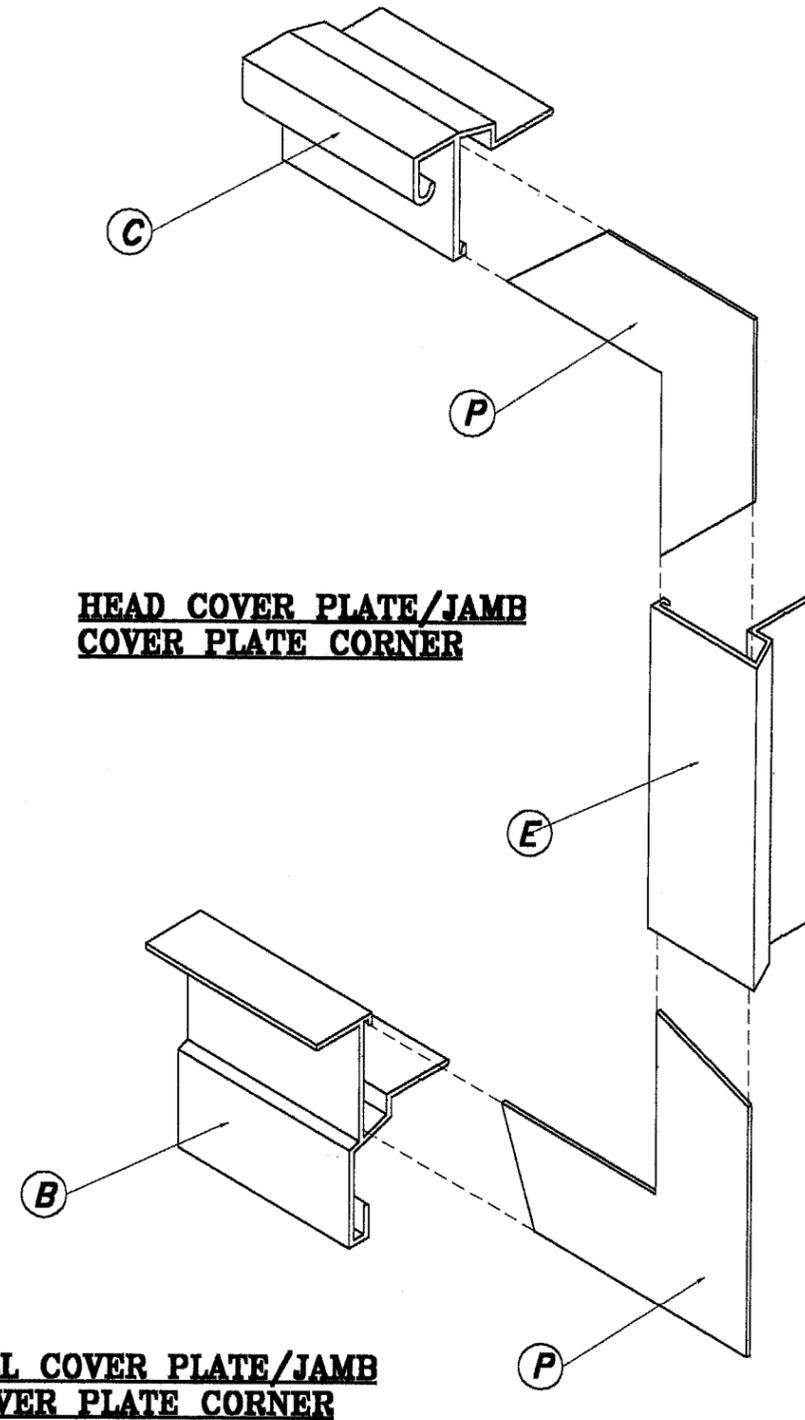


**MAIN FRAME
(SCREEN FRAME)
EACH CORNER**



**MAIN FRAME (SCREEN FRAME)/
INTERMEDIATE STIFFNER
DETAIL 3**

ASSEMBLY DETAILS
(SEE NOTE -/1)



**HEAD COVER PLATE/JAMB
COVER PLATE CORNER**

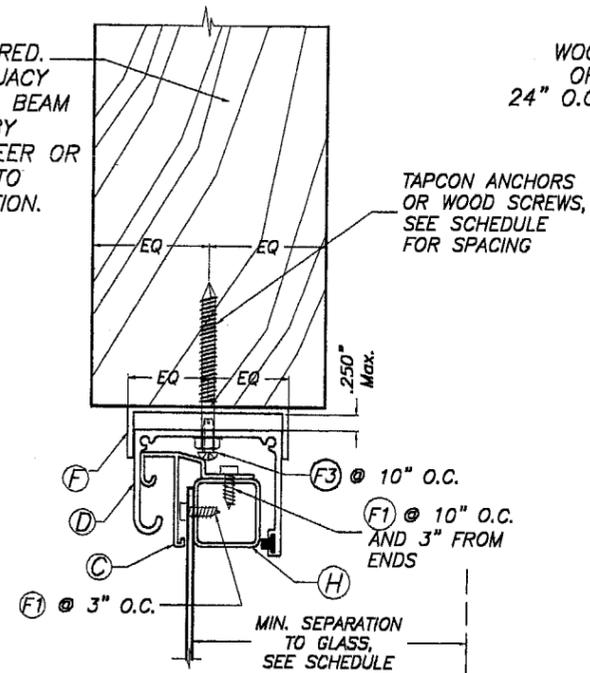
**SILL COVER PLATE/JAMB
COVER PLATE CORNER**

Approved as complying with the
Florida Building Code
Date 08/19/2004
NOA# 04-0709-02
Miami Dade Product Control
Division
By Heinz A. Hester

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

	MIAMI-DADE COUNTY	 <u>6/18/04</u> P.E. SEAL/SIGNATURE/DATE	©2003 TILTECO, INC	14 Gage (0.075") Perforated Galvannealed Steel Plate Shutter	AS SHOWN SCALE																		
			 TILLIT TESTING & ENGINEERING COMPANY 5885 N.W. 36th St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33166 Phone : (305)871-1530 . Fax : (305)871-1531 EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44167	Kane Manufacturing Corp. 515 North Fraley Kane, PA 16735	10/31/03 DATE																		
				<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>-</td> <td>-</td> <td>3</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>-</td> <td>-</td> <td>4</td> <td></td> <td></td> </tr> </tbody> </table>	REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	1	-	-	3			2	-	-	4			03-230 DRAWING No
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE																		
1	-	-	3																				
2	-	-	4																				
					SHEET 6 OF 8																		

WOOD BEAM REQUIRED.
STRUCTURAL ADEQUACY
OF EXISTING WOOD BEAM
TO BE CERTIFIED BY
REGISTERED ENGINEER OR
ARCHITECT PRIOR TO
SHUTTER INSTALLATION.

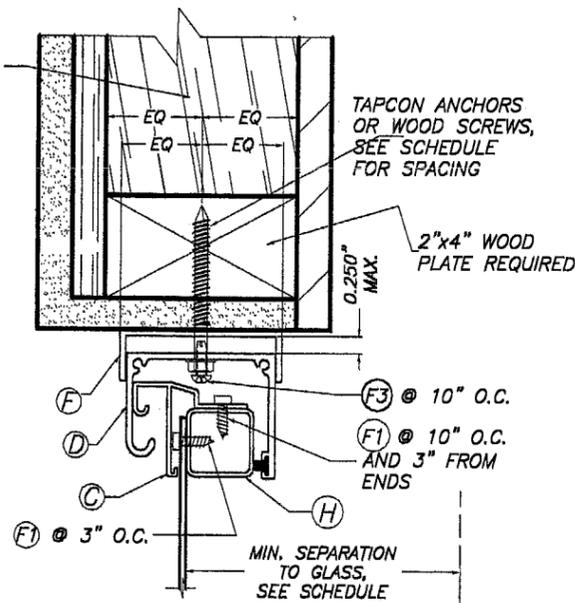


ALTERNATIVE # 1

SCALE: 3/8" = 1"

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

TAPCON ANCHORS
OR WOOD SCREWS,
SEE SCHEDULE
FOR SPACING

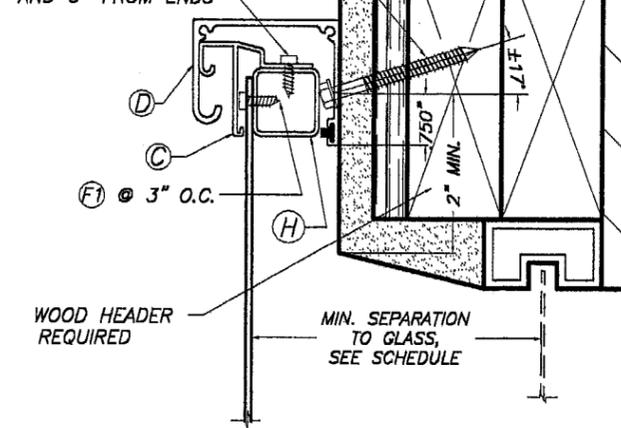


ALTERNATIVE # 3

SCALE: 3/8" = 1"

TAPCON ANCHORS
OR WOOD SCREWS,
SEE SCHEDULE
FOR SPACING

F1 @ 10" O.C.
AND 3" FROM ENDS

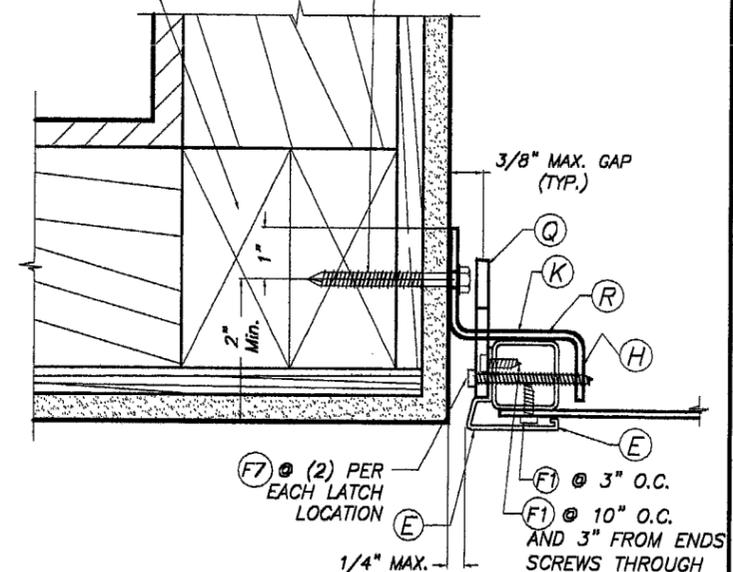


ALTERNATIVE # 5

SCALE: 3/8" = 1"

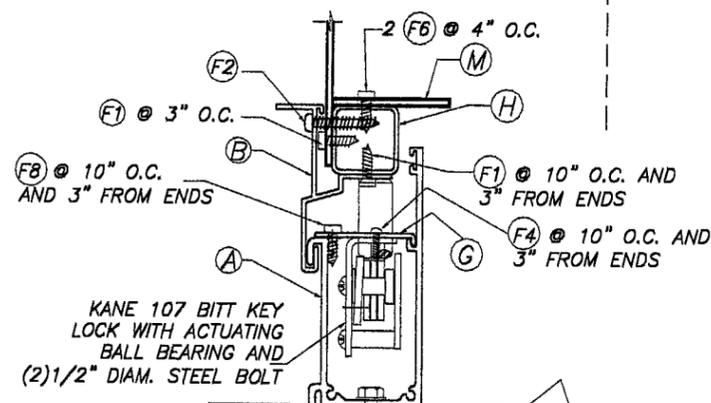
2"x4" WOOD
STUDS
REQUIRED
@ CORNER

(2) 1/4" # TAPCON
ANCHORS OR WOOD
SCREWS PER LATCH



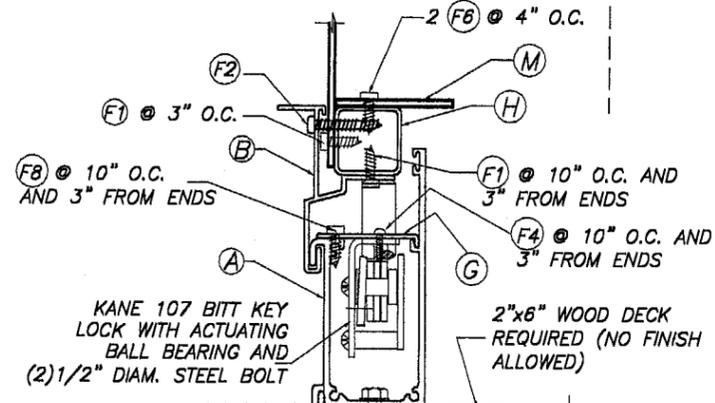
**ALTERNATIVE # 7
LATCH'S INSIDE (TRAPPED)
MOUNTING INSTALLATION**

SCALE: 3/8" = 1"



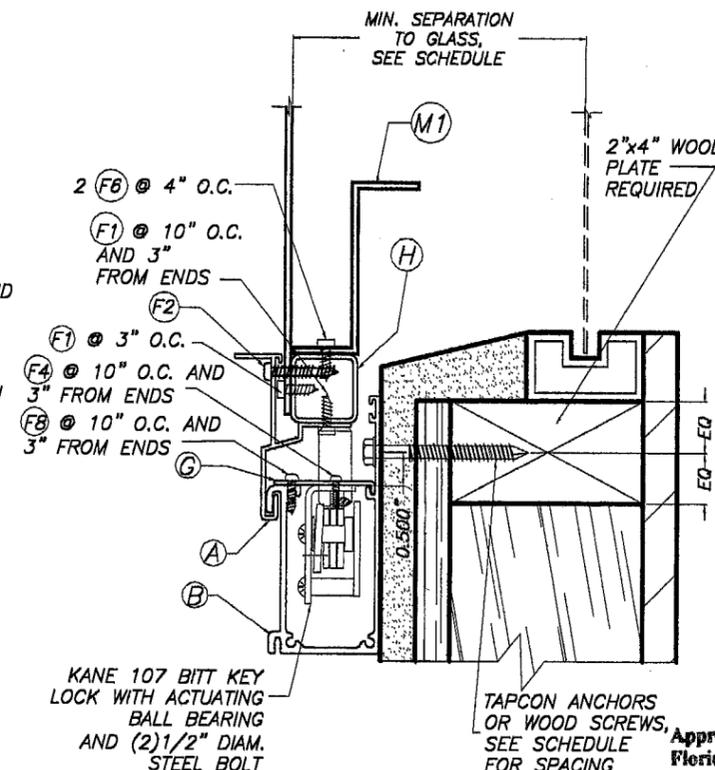
ALTERNATIVE # 2

SCALE: 3/8" = 1"



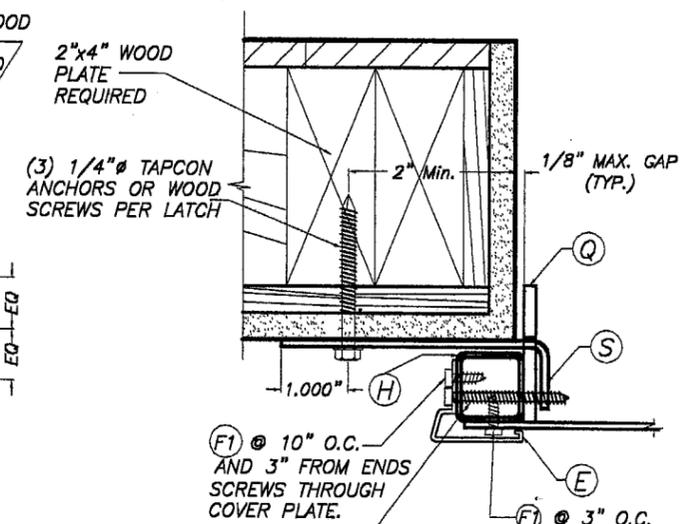
ALTERNATIVE # 4

SCALE: 3/8" = 1"



ALTERNATIVE # 6

SCALE: 3/8" = 1"



**ALTERNATIVE # 8
LATCH'S WALL MOUNTING
INSTALLATION**

SCALE: 3/8" = 1"

Approved as complying with the
Florida Building Code
Date 08/19/2004
NOA# 04-0709-02
Miami Dade Product Control
Division

Helmut A. Moller

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

©2003 TILTECO, INC

TILTECO inc.

TILLIT TESTING & ENGINEERING COMPANY
6999 N.W. 36th. St., Ste. 217, VIRGINIA GARDENS, FLORIDA 33169
Phone : (305)871-1530 . Fax : (305)871-1531
EB-0006719
WALTER A. TILLIT Jr., P. E.
FLORIDA Lic. # 44187

14 Gage (0.075") Perforated
Galvanized Steel Plate Shutter

Kane Manufacturing Corp.

515 North Fraley
Kane, PA 16735

AS SHOWN
SCALE

10/31/03
DATE

03-230
DRAWING No

SHEET 7 OF 8

MIAMI-DADE COUNTY

P.E. SEAL/SIGNATURE/DATE

Walter A. Tillit Jr.
10/19/04

REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE
1	-	-	3	-	-
2	-	-	4	-	-

MAX. SHUTTER SIZE AND CORRESPONDING MAX. DESIGN PRESSURE RATING SCHEDULE

DESIGN PRESSURE RATING (psf.)	MAX. SHUTTER WIDTH	MAX. SHUTTER HEIGHT "h"	MIN. AMOUNT OF INTERMEDIATE STIFFENERS Ⓛ + Ⓜ	MAX. VERTICAL SPACING "S" BETWEEN INTERMEDIATE STIFFENERS Ⓛ + Ⓜ	MIN. SEPARATION TO GLASS
+94.8, -94.8	60"	84"	2	28"	2 13/16"
		56"	1	28"	2 13/16"

MAX. ANCHOR SPACING SCHEDULE FOR TOP & BOTTOM TRACKS *

LOCATION	ANCHOR TYPE	CONCRETE	CONCRETE BLOCK	WOOD
HEAD	TAPCON	10"	10"	10"
	WOOD SCREW	-	-	10"
SILL	TAPCON	10"	10"	10"
	WOOD SCREW	-	-	10"

* SEE SHEETS 5 AND 7 FOR ANCHORS REQUIRED AT LATCH PLATES

ED (EDGE DISTANCE) SHALL BE 3" MIN. IN ANY INSTALLATION EXCEPT THAT IT SHALL BE 2 1/2" AT SECTION 4, SHEET 5

Approved as complying with the Florida Building Code
 Date 08/19/2004
 NOA# 04-0769.02
 Miami Dade Product Control Division
 By Helmy A. Miller

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

MIAMI-DADE COUNTY	 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 EB-0006719 WALTER A. TILLIT Jr., P. E. FLORIDA Lic. # 44187	14 Gage (0.075") Perforated Galvannealed Steel Plate Shutter Kane Manufacturing Corp. 515 North Fraley Kane, PA 16735	AS SHOWN SCALE 10/31/03 DATE 03-230 DRAWING No SHEET 8 OF 8															
		<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>-</td> <td>-</td> <td>3</td> <td>-</td> <td>-</td> </tr> <tr> <td>2</td> <td>-</td> <td>-</td> <td>4</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE	1	-	-	3	-	-	2	-	-	4	-
REV. No	DESCRIPTION	DATE	REV. No	DESCRIPTION	DATE														
1	-	-	3	-	-														
2	-	-	4	-	-														