



DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER)
BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
Miami, Florida 33175-2474
T (786) 315-2590 F (786) 315-2599

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/economy

Shutter-Tech, Inc.
7485 West 2nd Court
Hialeah, FL 33014

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County RER- Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section 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: Aluminum Hinged Colonial Shutter

APPROVAL DOCUMENT: Drawing No. 280002, titled "Maximum Impact Duraweld Colonial Shutter", sheets 1 through 6 of 6, prepared by Ramms Engineering, Inc., dated May 09, 2008, signed and sealed by Robert S. Monsour, P.E., on November 03, 2015, bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved", and NOA number, per TAS-201, TAS-202, and TAS-203, 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 #14-0127.05 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

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

Helmy A. Makar
11/19/2015



NOA No. 15-0714.20
Expiration Date: 09/04/2018
Approval Date: 11/19/2015
Page 1

Shutter-Tech, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 08-0520.09

A. DRAWINGS

1. *Drawing No. 280002, titled "Maximum Impact Colonial Shutter", sheets 1 through 6 of 6, prepared by Ramms Engineering, Inc., dated May 09, 2008, signed and sealed by Robert S. Monsour, P.E.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test, and Uniform Static Air Pressure Test of colonial shutters, prepared by American Test Lab of South Florida, Report No. 0907.01-07, dated December 04, 2007, signed and sealed by William R. Mehner, P.E. and Henry Hattem, P.E.*

C. CALCULATIONS

1. *Anchor analysis dated 07/24/2008, 6 Pages, prepared by Ramms Engineering, Inc., signed and sealed by Robert S. Monsour, P.E.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 13-0710.03

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE


1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *FBC, 2010 Edition compliance letter issued by Ramms Engineering, Inc., dated June 25, 2013, signed and sealed by Robert S. Mansour, P.E.*


Henry A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 15-0714.20
Expiration Date: 09/04/2018
Approval Date: 11/19/2015

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 14-07127.05

A. DRAWINGS

1. *Drawing No. 280002, titled "Maximum Impact Duraweld Colonial Shutter", sheets 1 through 6 of 6, prepared by Ramms Engineering, Inc., dated May 09, 2008, last revision dated January 16, 2014, signed and sealed by Robert S. Monsour, P.E., on January 22, 2014.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. STATEMENTS

1. *Asset Purchase Agreement.*

4. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 280002, titled "Maximum Impact Duraweld Colonial Shutter", sheets 1 through 6 of 6, prepared by Ramms Engineering, Inc., dated May 09, 2008, signed and sealed by Robert S. Monsour, P.E., on November 03, 2015.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Department of Regulatory and Economic Resources.*

E. MATERIAL CERTIFICATIONS

1. *None.*


Henry A. Makar, P.E., M.S.

Product Control Section Supervisor

NOA No. 15-0714.20

Expiration Date: 09/04/2018

Approval Date: 11/19/2015

SHUTTER-TECH, INC.

MAXIMUM IMPACT™ DURAWELD COLONIAL SHUTTER

NOTES:

HIGH VELOCITY HURRICANE ZONE (HVHZ)

THIS SHUTTER TECH COLONIAL SHUTTER COMPLIES WITH THE FLORIDA BUILDING CODE FIFTH EDITION 2014 (H.V.H.Z.)

FBC CERTIFIED TESTING IN ACCORDANCE WITH TAS 201-94 AND 202-94 AND 203-94 PROTOCOLS.

MINIMUM DESIGN LOADS CALCULATIONS PERFORMED PER ASCE 7-10 'MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES'

ALL ALUMINUM EXTRUSIONS TO BE ALLOY 6063-T6

BACKING SHALL BE .093 THICK POLYCARBONATE SECURED WITH #64 or #68 S.S. POBRIVETS 11" O.C. MAX.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT HINGES SHALL BE WITH 1/4" MASONRY SCREWS WITH 1 1/4" MINIMUM EMBEDMENT.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT BRACKETS SHALL BE 1/4"-20 MACHINE SCREW ANCHOR WITH 7/8" MINIMUM EMBEDMENT OR FEMALE PANELMATE WITH 1/4"-20 M/S (FLOOR PLUG) WITH 1 1/4" MINIMUM EMBEDMENT OR 1/4" MALE PANELMATE WITH 1/4"-20 WASHERED WINGNUTS WITH 1 1/4" MINIMUM EMBEDMENT.

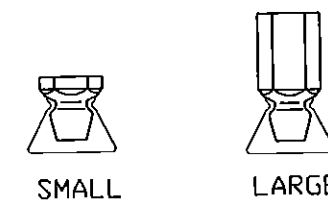
ANCHORAGE OF SHUTTER TO WOOD AT HINGES SHALL BE 1/4" WOOD LAGS WITH 1" MIN. EMBEDMENT OR 1/4" MASONRY SCREWS WITH 1 7/8" MINIMUM EMBEDMENT

ANCHORAGE OF SHUTTER TO WOOD AT BRACKETS SHALL BE 1/4" MALE PANELMATES WITH 1/4"-20 WASHERED WINGNUTS OR 1/4" FEMALE PANELMATE WITH 1/4"-20 M.S. (FLOOR PLUG) WITH 1 7/8" MINIMUM EMBEDMENT.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE SOUNDNESS OF THE STRUCTURE TO ENSURE PROPER ANCHORAGE.

EACH COLONIAL SHUTTER SHALL BEAR PERMANENT LABEL SHOWING SHUTTER TECH, INC. HIALEAH, FL - MIAMI DADE COUNTY PRODUCT CONTROL APPROVED

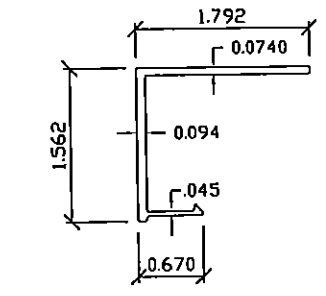
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0714.20
Expiration Date 09/04/2018
By *[Signature]*
Miami Dade Product Control



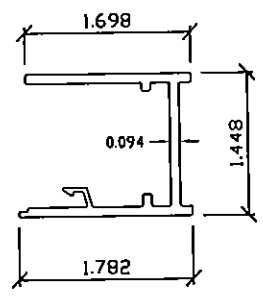
10 TIE BACK BULLETS AND CLIPS

ROBERT S. MONSOUR, PE
11955
RAMMS ENGINEERING, INC.

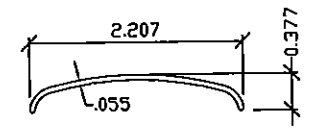
Monsour
11/3/15



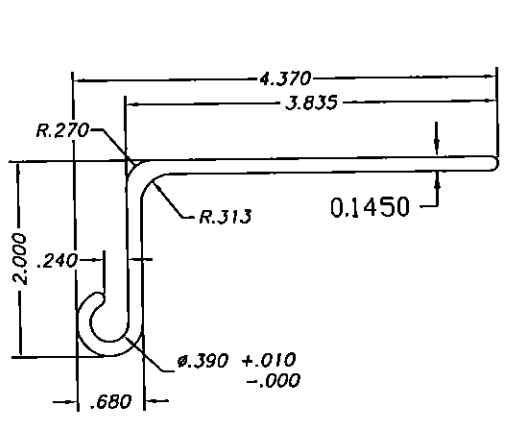
1 SNAP CAP



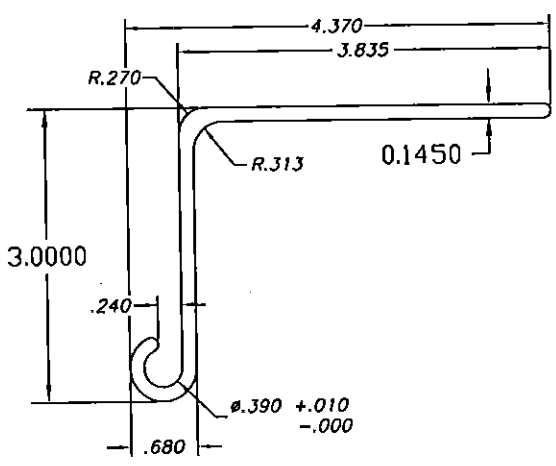
2 OUTER FRAME



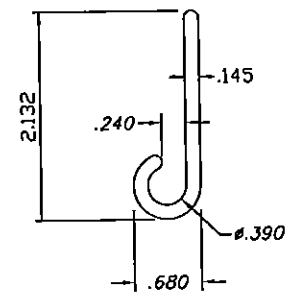
3 BLADE



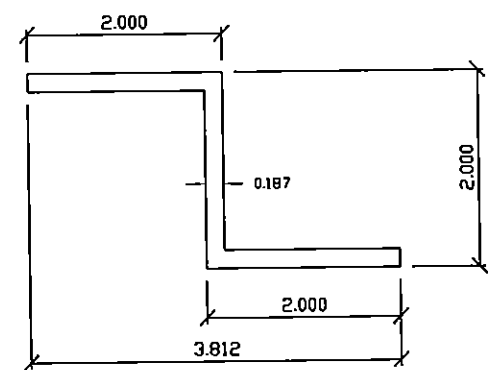
4 FEMALE HINGE
3" IN LENGTH



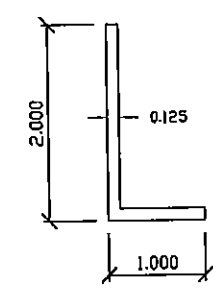
5 B/O FEMALE HINGE
3" IN LENGTH



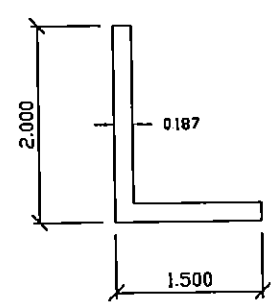
6 MALE HINGE
3" IN LENGTH



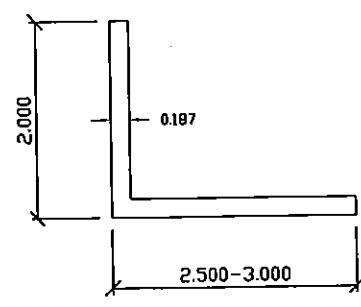
7 TIE DOWN Z BRACKET
ALTERNATE TO 9 4" IN LENGTH



8 CORNER KEY



9 TIE DOWN ANGLE BRACKETS
4" IN LENGTH



REVISIONS	BY
01/16/14	SP
11/02/14	SP

RAMMS ENGINEERING, INC.
Structural Design
11955
2100 W. 76th STREET, SUITE 311
HIALEAH, FLORIDA 33016
TELEPHONE: 305-822-3141
EB 0006024

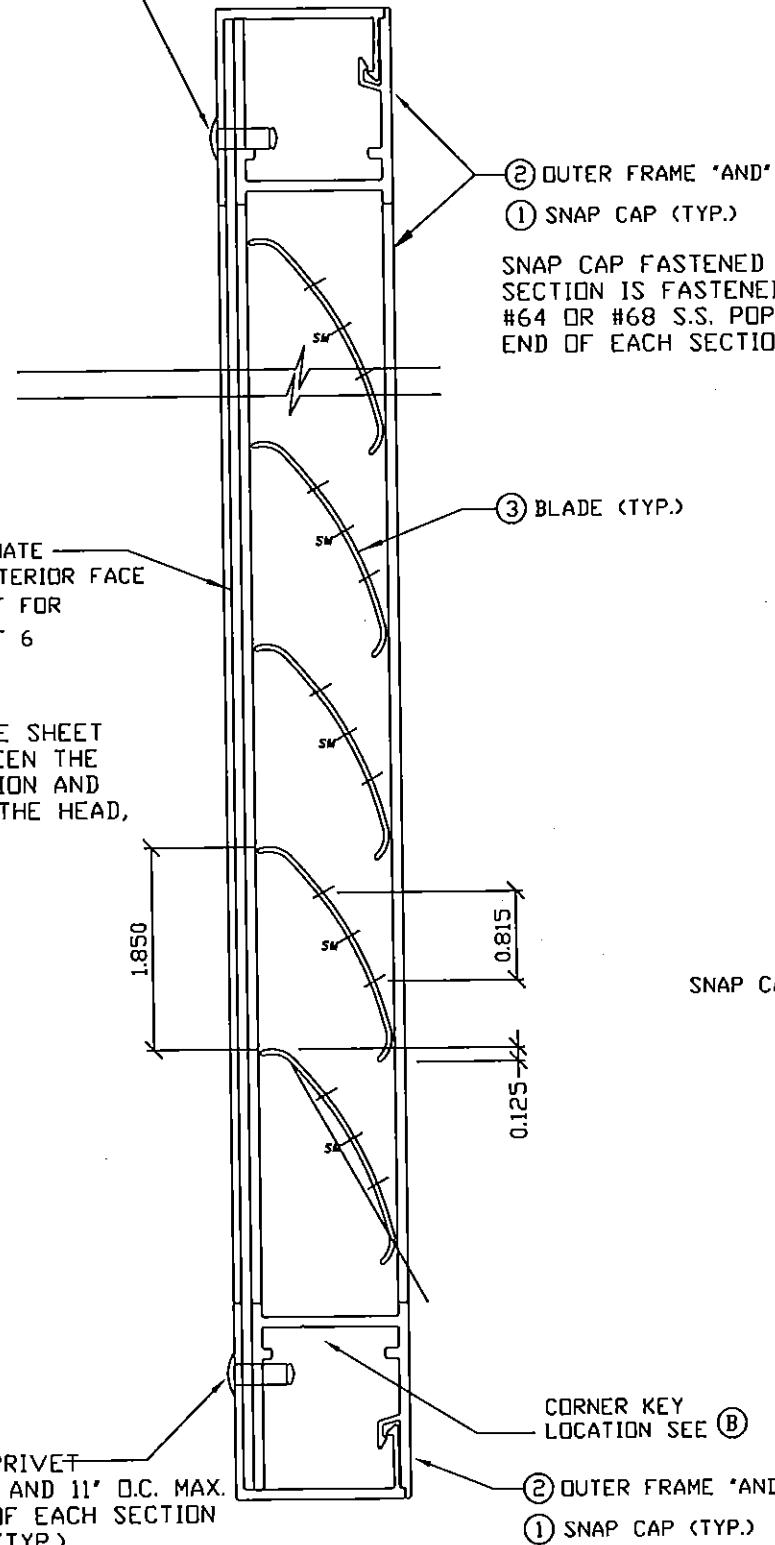
MAXIMUM IMPACT DURAWELD COLONIAL SHUTTER
SHUTTER-TECH, INC.
7485 W. SECOND CT. HIALEAH, FL 33014

SEP / RSM
DATE: 05/09/2008
SCALE: SHOWN
OR: 280002
REV: 1
6

HIGH VELOCITY HURRICANE ZONE

REVISIONS	BY
01/16/14	SP

#64 or #68 S.S. POPRIVET
4 1/2" IN FROM END AND 11" O.C. MAX.
AROUND PERIMETER OF EACH SECTION
OF POLYCARBONATE (TYP.)



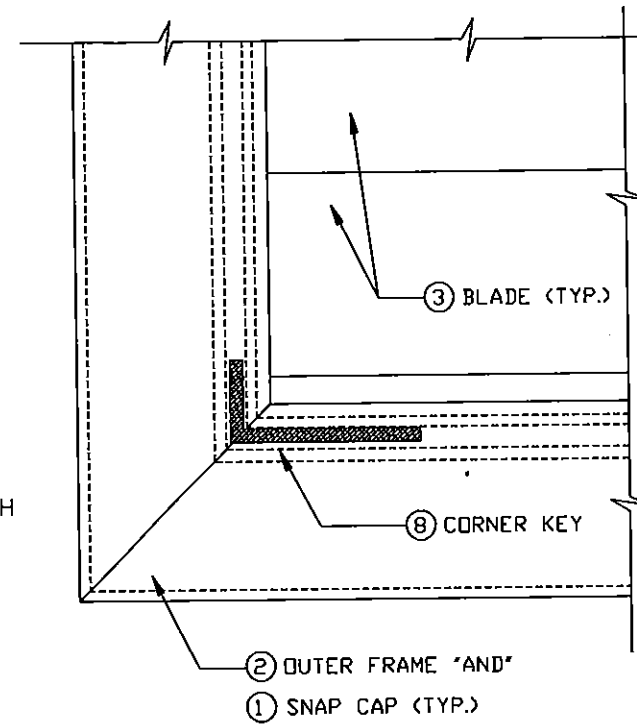
.093 THICK POLYCARBONATE
BACKING (TYP.) ON EXTERIOR FACE
OF EACH PANEL EXCEPT FOR
DETAIL "K" SHEET 5 OF 6

THE POLYCARBONATE SHEET
IS INSERTED BETWEEN THE
OUTER FRAME SECTION AND
THE SNAP CAP AT THE HEAD,
JAMBS, AND SILL.

#64 or #68 S.S. POPRIVET
4 1/2" IN FROM END AND 11" O.C. MAX.
AROUND PERIMETER OF EACH SECTION
OF POLYCARBONATE (TYP.)

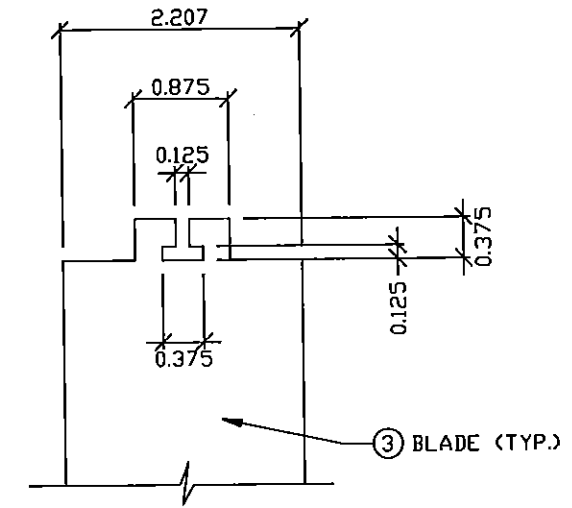
(A) TYPICAL CROSS SECTION ASSEMBLY

② OUTER FRAME "AND"
① SNAP CAP (TYP.)
SNAP CAP FASTENED TO OUTER FRAME
SECTION IS FASTENED ON (BACK SIDE)
WITH #64 OR #68 S.S. POPRIVETS 4 1/2" FROM
END OF EACH SECTION AND 11" O.C. MAX.

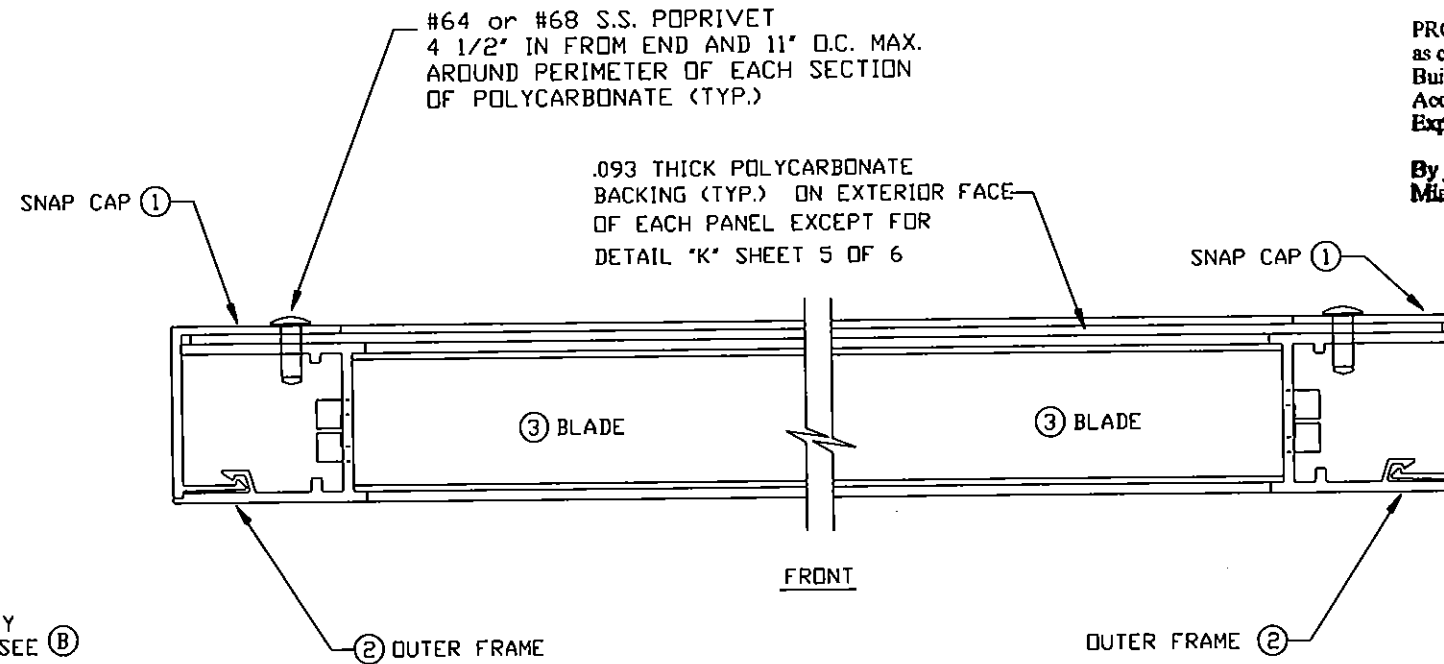


(B) CORNER KEY DETAIL ELEV.

SILL AND HEADER ATTACHED TO EACH JAMB
WITH CORNER KEY TACK WELDED TO SILL,
JAMBS AND HEADER. EACH MITER CORNER CUT IS
WELDED.



(C) BLADE PUNCH DETAIL



(D) PLAN VIEW CROSS SECTION

#64 or #68 S.S. POPRIVET
4 1/2" IN FROM END AND 11" O.C. MAX.
AROUND PERIMETER OF EACH SECTION
OF POLYCARBONATE (TYP.)

.093 THICK POLYCARBONATE
BACKING (TYP.) ON EXTERIOR FACE
OF EACH PANEL EXCEPT FOR
DETAIL "K" SHEET 5 OF 6

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0714.20
Expiration Date 09/04/2018
By *Heidi A. Miller*
Miami Date Product Control

Robert S. Monsour
11/3/15
ROBERT S. MONSOUR, PE
11955
RAMMS ENGINEERING, INC.

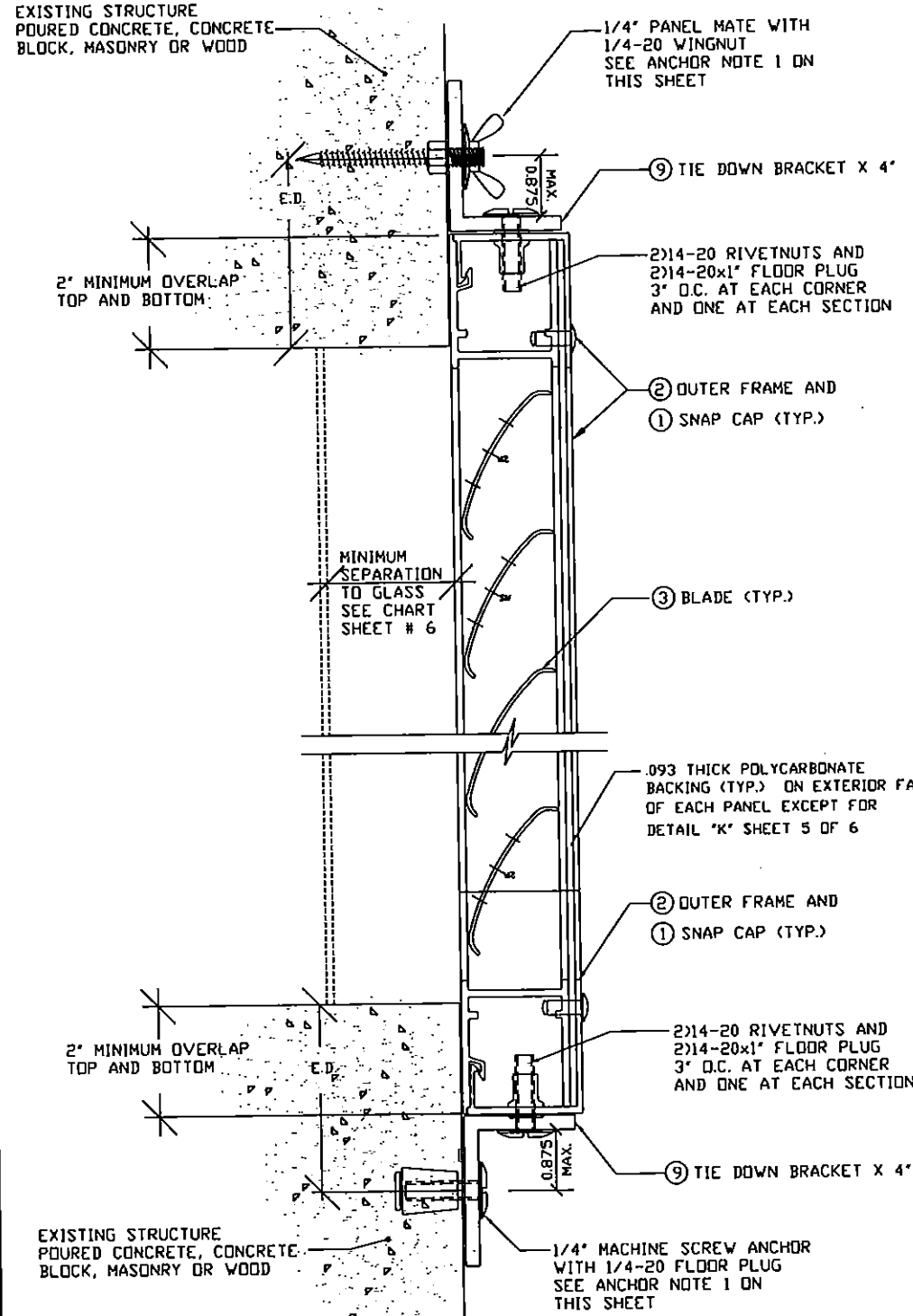
RAMMS ENGINEERING, INC.
Structural Design
2100 W. 76th STREET, SUITE 311
HIALEAH, FLORIDA 33016
TELEPHONE: 305-822-3141

MAXIMUM IMPACT DURAWELD COLONIAL SHUTTER
SHUTTER-TECH, INC.
7485 W. SECOND CT. HIALEAH, FL 33014

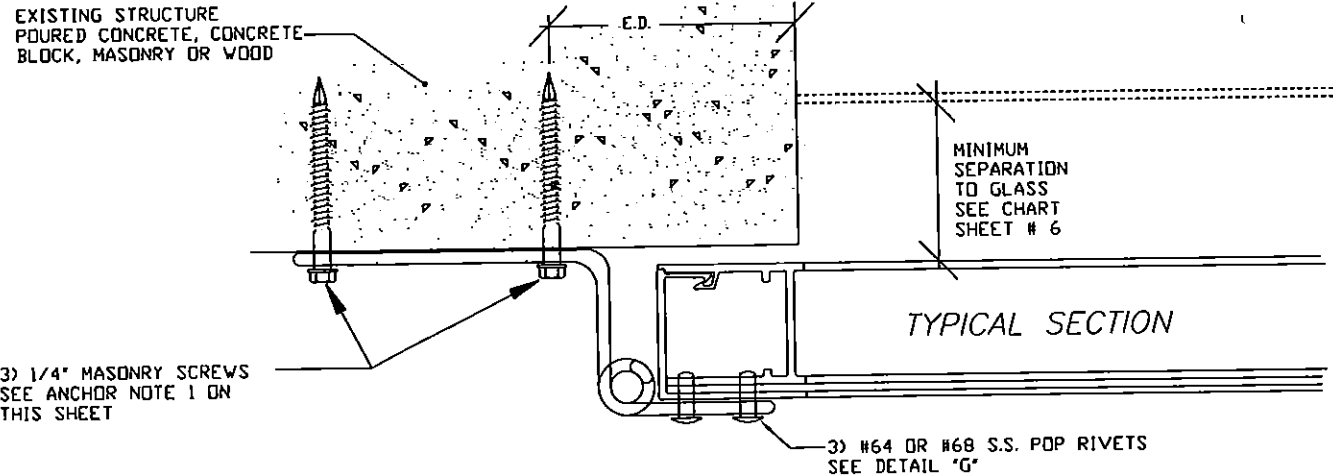
SEP / RSM
05/09/2008
SCALE SHOWN
280002
SHEET
2
6

HIGH VELOCITY HURRICANE ZONE

REVISIONS	BY
01/16/14	SP



E) WALL MOUNT CROSS SECTION HURRICANE POSITION



F) WALL MOUNT CROSS SECTION HURRICANE POSITION

ANCHOR NOTE 1:

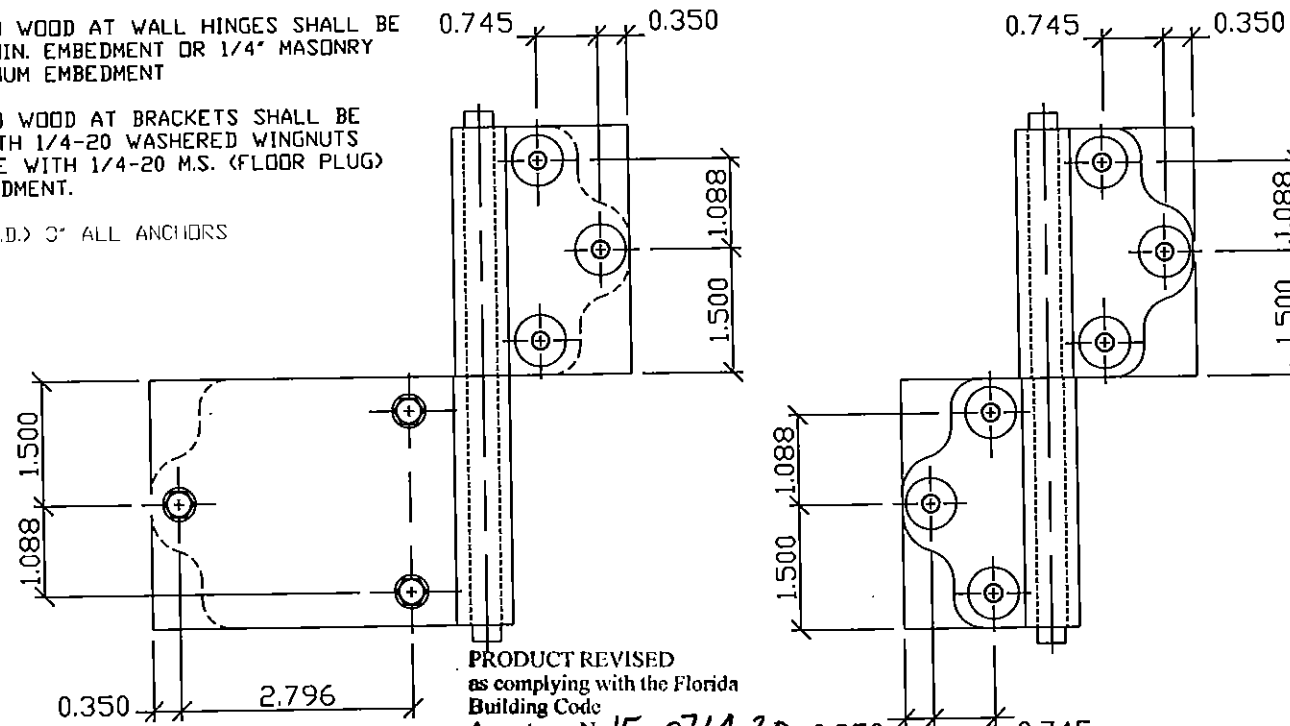
ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT WALL HINGES SHALL BE WITH 1/4\"/>

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT BRACKETS SHALL BE 1/4-20 MACHINE SCREW ANCHOR OR FEMALE PANELMATE WITH 1/4-20 M/S (FLOOR PLUG) OR 1/4\"/>

ANCHORAGE OF SHUTTER TO WOOD AT WALL HINGES SHALL BE 1/4\"/>

ANCHORAGE OF SHUTTER TO WOOD AT BRACKETS SHALL BE 1/4\"/>

MINIMUM EDGE DISTANCE (E.D.) 3\"/>



G) WALL AND SECTION HINGES ANCHOR AND RIVET LOCATION

PRODUCT REVISED as complying with the Florida Building Code Acceptance No 15-0714.20 Expiration Date 09/04/2018 By Heba A. M. Miami Date Product Control

ROBERT S. MONSOUR, PE
11955
RAMMS ENGINEERING, INC.

Monsour
11/3/15

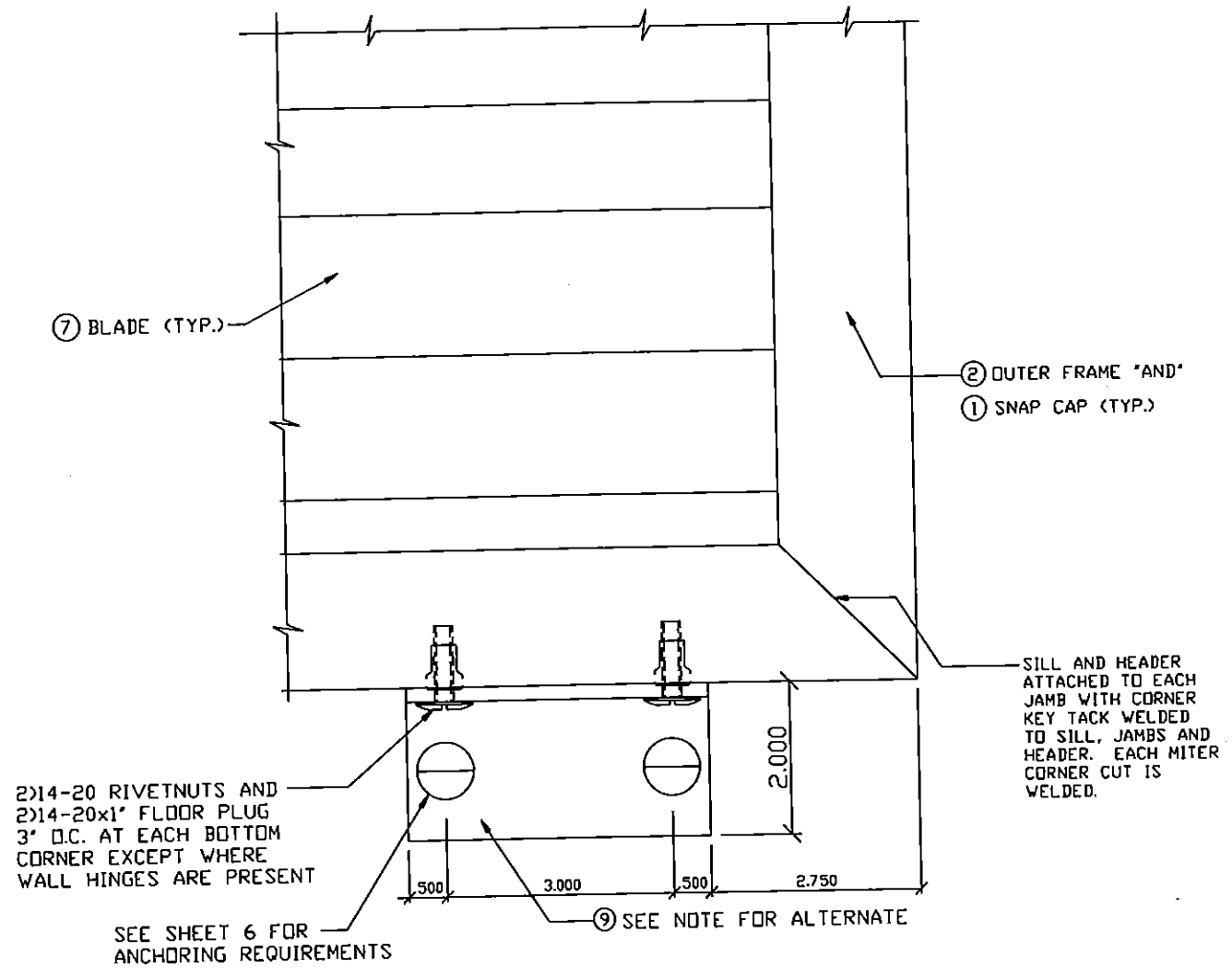
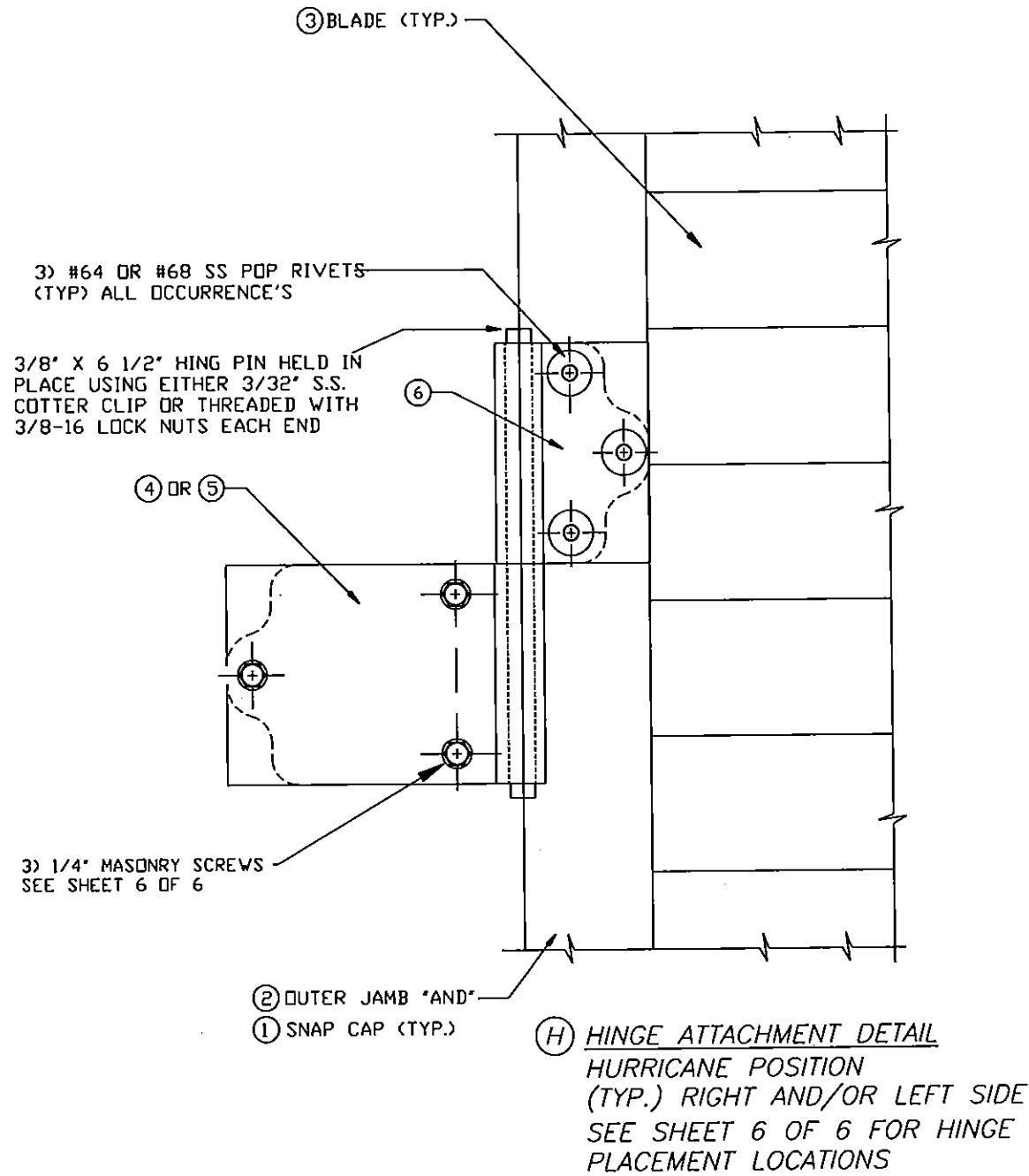
RAMMS ENGINEERING, INC.
Structural Design
2100 W. 76th STREET, SUITE 311
HALEAH, FLORIDA 33016
11955
EB 0006024

MAXIMUM IMPACT DURAWELD COLONIAL SHUTTER
SHUTTER-TECH, INC.
7485 W. SECOND CT. HALEAH, FL 33014

SEP / RSM
05/09/2008
280002
3
6

HIGH VELOCITY HURRICANE ZONE

REVISIONS	BY
01/16/14	SP



NOTE:
 WHEN #7 TIE DOWN Z BRACKET IS USED AS AN ALTERNATIVE TO #9 TIE DOWN BRACKETS, THE Z BRACKET IS NOT REQUIRED TO BE ATTACHED TO THE SHUTTER. THE Z BRACKET ONLY NEEDS TO BE ANCHORED TO THE WALL.

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 15-0714-20
 Expiration Date 09/04/2018
 By *[Signature]*
 Miami Design Product Control

[Signature]
 11/3/15

ROBERT S. MONSOUR, PE
 11955
 RAMMS ENGINEERING, INC.

RAMMS ENGINEERING, INC.
Structural Design
 2100 W. 76th STREET, SUITE 311
 HIALEAH, FLORIDA 33016
 TELEPHONE: 305-822-3141

MAXIMUM IMPACT DURAWELD COLONIAL SHUTTER

SHUTTER-TECH, INC.

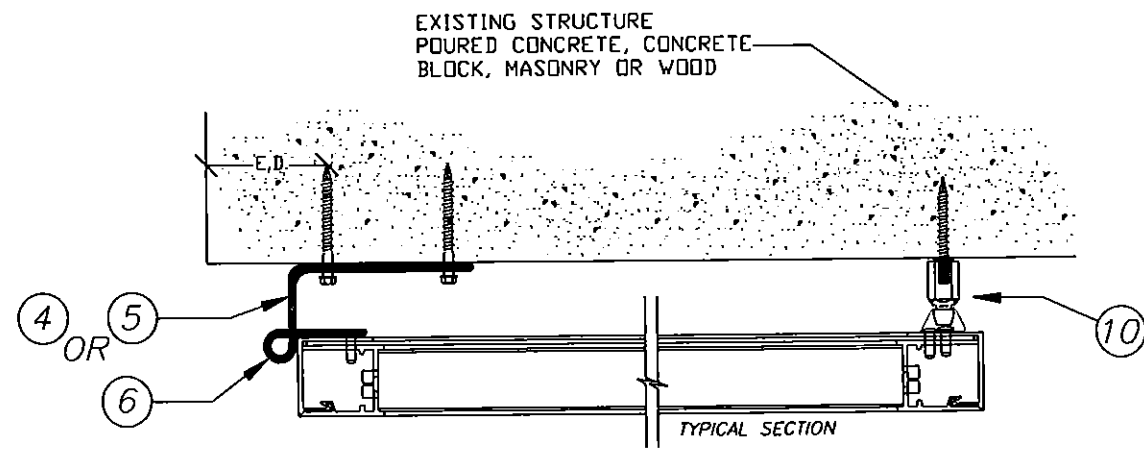
7485 W. SECOND CT. HIALEAH, FL 33014

DATE	BY
05/09/2008	SEP / RSM

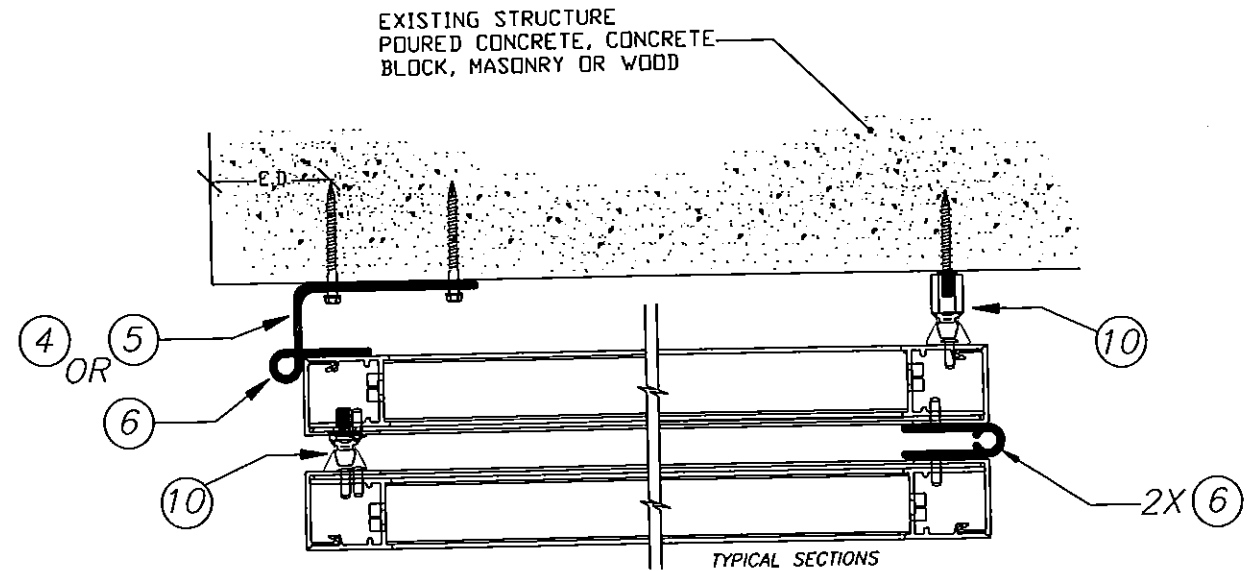
JOB NO. 280002
 SHEET 4 OF 6

PLAN VIEW STACKING CONFIGURATIONS

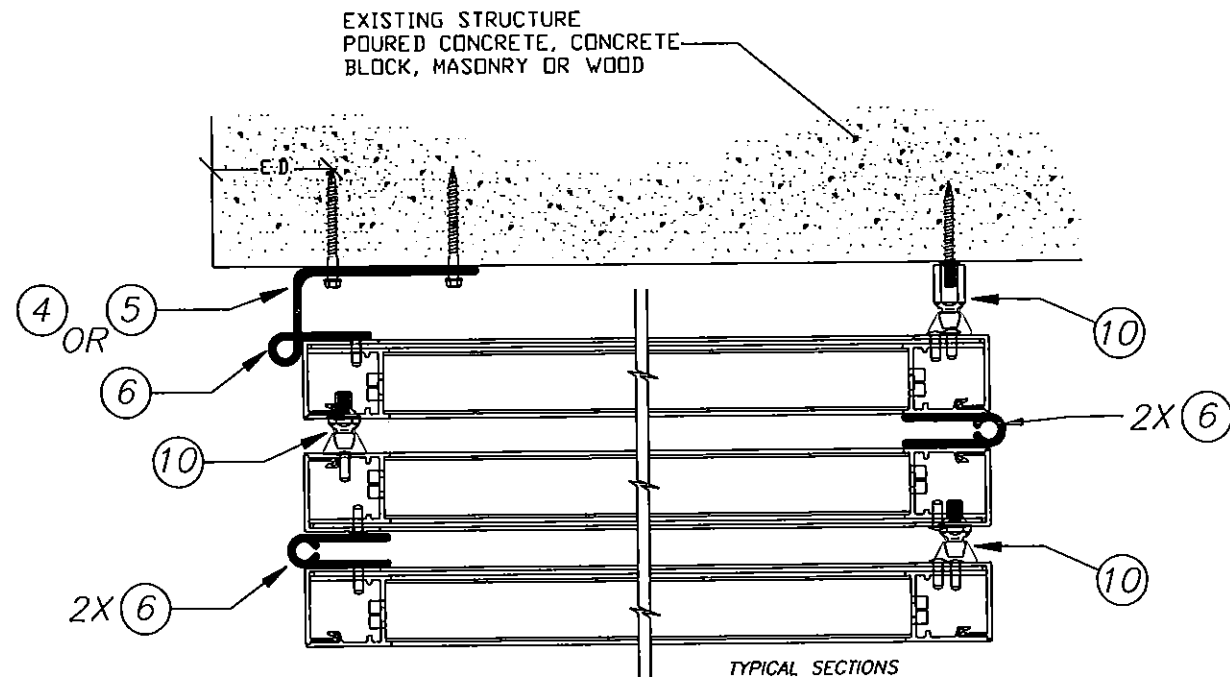
REVISIONS	BY
01/16/14	SP



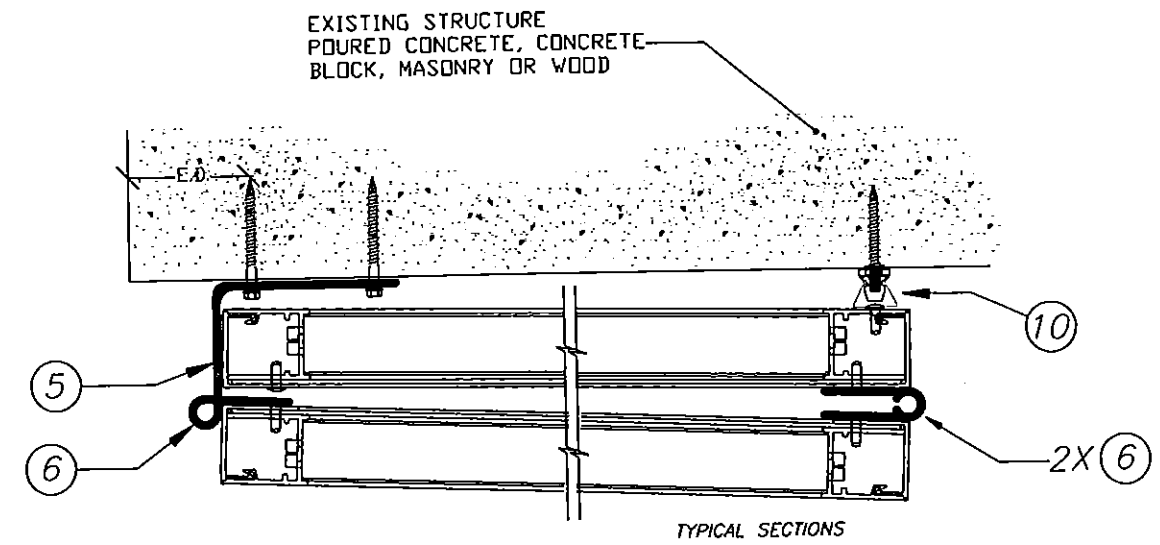
J SINGLE SECTION
NON HURRICANE POSITION
(TYP.) RIGHT AND/OR LEFT SIDE



K DOUBLE SECTION
NON HURRICANE POSITION
(TYP.) RIGHT AND/OR LEFT SIDE
THIS DETAIL HAS A 3 9/16" SEPERATION TO GLASS



L TRIPLE SECTION
NON HURRICANE POSITION
(TYP.) RIGHT AND/OR LEFT SIDE



M DOUBLE SECTION ALTERNATE
NON HURRICANE POSITION
(TYP.) RIGHT AND/OR LEFT SIDE

NOTE:
SEE SHEET 3 AND 6 OF 6 FOR ANCHOR
LOCATIONS AND REQUIREMENTS

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0714.20
Expiration Date 09/04/2018
By *Healy A. Miller*
Miami Data Product Control

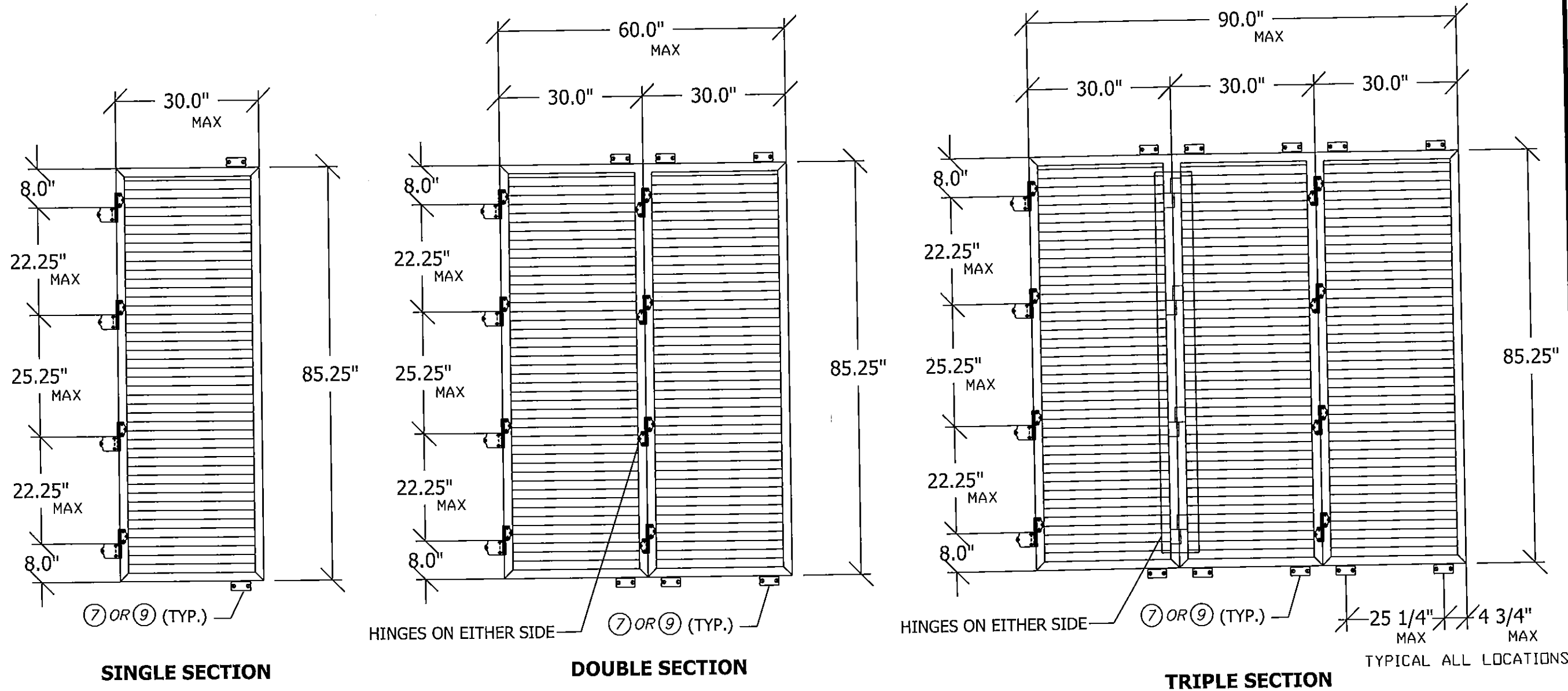
Monsour
11/2/15
ROBERT S. MONSOUR, PE
11955
RAMMS ENGINEERING, INC.

RAMMS ENGINEERING, INC.
Structural Design
2100 W. 76th STREET, SUITE 311
HIALEAH, FLORIDA 33016
11955
EB 0006024
TELEPHONE: 305-822-3141

MAXIMUM IMPACT DURAWELD COLONIAL SHUTTER
SHUTTER-TECH, INC.
7485 W. SECOND CT. HIALEAH, FL 33014

DATE	SEP / RSM
APPROVED	
DATE	10/18/2006
SCALE	SHOWN
JOB	280002
SHEET	5
OF	6

HURRICANE POSITION ELEVATION VIEWS AND LIMITATIONS



SINGLE SECTION

DOUBLE SECTION

TRIPLE SECTION

DETAIL "J, L AND M" SHEET 5 OF 6			
DESIGN RATING PRESSURE IN P.S.F.	MAXIMUM SECTION WIDTH	MAXIMUM HEIGHT	MINIMUM SEPARATION TO GLASS
+57.0,-71.8	30'	85 1/4'	2 7/8'

DETAIL "K" SHEET 5 OF 6			
DESIGN RATING PRESSURE IN P.S.F.	MAXIMUM SECTION WIDTH	MAXIMUM HEIGHT	MINIMUM SEPARATION TO GLASS
+57.0,-71.8	30'	85 1/4'	3 9/16'

SEE SHEET 4 OF 6 FOR BRACKET SPECIFICATIONS

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT WALL HINGES SHALL BE WITH 1/4" MASONRY SCREWS WITH 1 1/4" MINIMUM EMBEDMENT.

ANCHORAGE OF SHUTTER TO CONCRETE OR MASONRY AT BRACKETS SHALL BE 1/4"-20 MACHINE SCREW ANCHOR OR FEMALE PANELMATE WITH 1/4"-20 M/S (FLOOR PLUG) OR OR 1/4" MALE PANELMATE WITH 1/4"-20 WASHERED WINGNUTS

ANCHORAGE OF SHUTTER TO WOOD AT WALL HINGES SHALL BE 1/4" WOOD LAGS WITH 1" MIN. EMBEDMENT OR 1/4" MASONRY SCREWS WITH 1 7/8" MINIMUM EMBEDMENT

ANCHORAGE OF SHUTTER TO WOOD AT BRACKETS SHALL BE 1/4" MALE PANELMATES WITH 1/4"-20 WASHERED WINGNUTS OR 1/4" FEMALE PANELMATE WITH 1/4"-20 M.S. (FLOOR PLUG) WITH 1 7/8" MINIMUM EMBEDMENT.

MINIMUM EDGE DISTANCE (E.D.) 3" ALL ANCHORS

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 15-0714.20
 Expiration Date 09/04/2018
 By *[Signature]*
 Miami Dade Product Control

ROBERT S. MONSOUR, PE
 11955
 RAMMS ENGINEERING, INC.

REVISIONS	BY
01/16/14	SP

RAMMS ENGINEERING, INC.
Structural Design
 2100 W. 78th STREET, SUITE 311
 HIALEAH, FLORIDA 33016
 TELEPHONE: 305-822-3141
 11955 EB 0006024

MAXIMUM IMPACT DURAWELD COLONIAL SHUTTER
SHUTTER-TECH, INC.
 7485 W. SECOND CT. HIALEAH, FL 33014

SEP / RSM
05/09/2008
SOUL SHOWN
JOB 280002
SHEET 6