



MIAMI-DADE COUNTY
 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

www.buildingcodeonline.com

NOTICE OF ACCEPTANCE (NOA)

Town & Country Industries, Inc.
 400 West McNab Road
 Ft. Lauderdale, Florida 33309

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: 0.050" (min.) Aluminum Storm Panels Shutter

APPROVAL DOCUMENT: Drawing No. 08-351, titled "0.050" Aluminum Storm Panel ", sheets 1 through 6 of 6, prepared by Knezevich Associates Consulting Engineers, dated September 01, 2008, signed and sealed by V.J. Knezevich, P.E. on September 03, 2008 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 # 05-0713.03 & consists of this page 1, evidence submitted pages E-1 and 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
 04/01/2009

NOA No. 09-0114.05
 Expiration Date: 11/16/2010
 Approval Date: 04/01/2009

Town & Country Industries, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

E. MATERIAL CERTIFICATIONS

1. *None.*

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 05-0713.03

A. DRAWINGS

1. *Drawing No. 05-353, titled " 0.050" Aluminum Storm Panel ", sheets 1 through 6 of 6, prepared by Thornton-Tomasetti Group, dated June 29, 2005, last revision #0 dated June 29, 2005 signed and sealed by V.J. Knezevich, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *Anchor Analysis, dated June 15, 2005, 39 pages, prepared by Thornton-Tomasetti Group, signed and sealed by V. J. Knezevich, P.E.*

D. QUALITY ASSOURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

4. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 08-351, titled " 0.050" Aluminum Storm Panel ", sheets 1 through 6 of 6, prepared by Knezevich Associates Consulting Engineers, dated September 01, 2008, signed and sealed by V.J. Knezevich, P.E., on September 03, 2008.*

B. TESTS

1. *None.*

C. CALCULATIONS

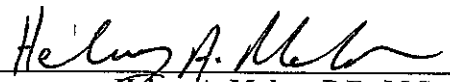
1. *Anchor Analysis, dated September 09, 2008, 19 pages, prepared by Knezevich Associates Consulting Engineers, dated September 01, 2008, signed and sealed by V.J. Knezevich, P.E., on September 03, 2008.*

D. QUALITY ASSOURANCE

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

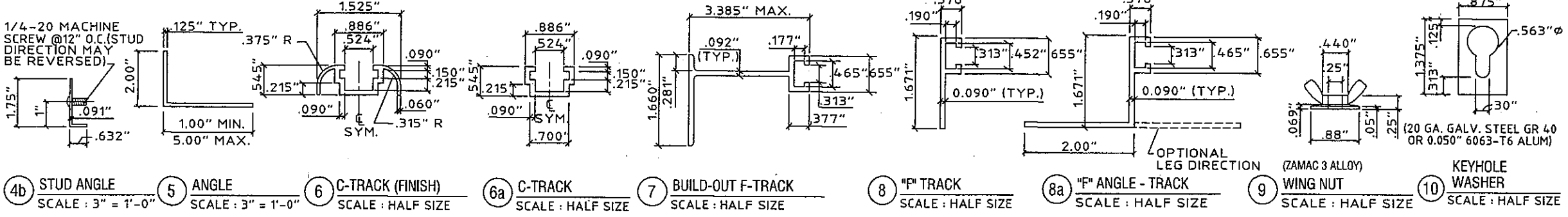
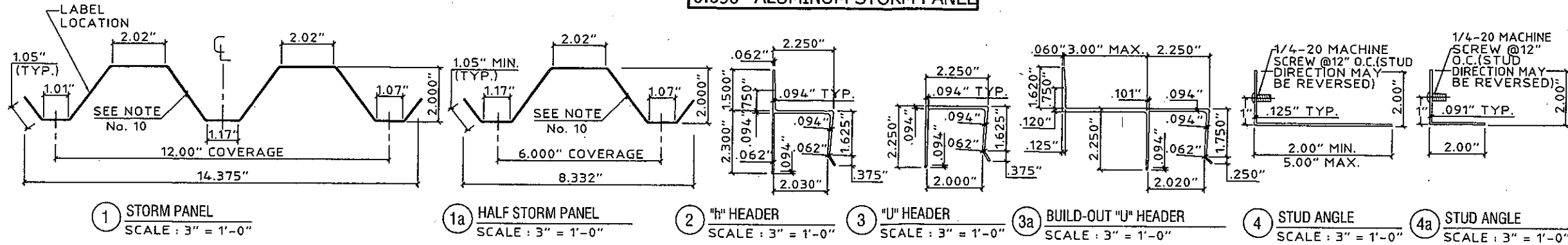
E. MATERIAL CERTIFICATIONS

1. *None.*



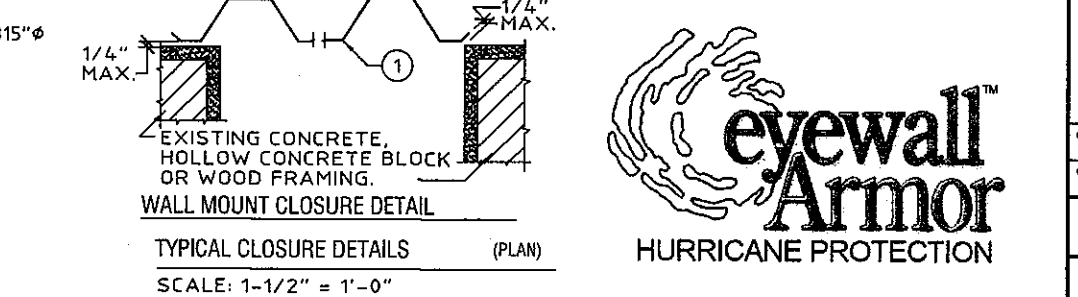
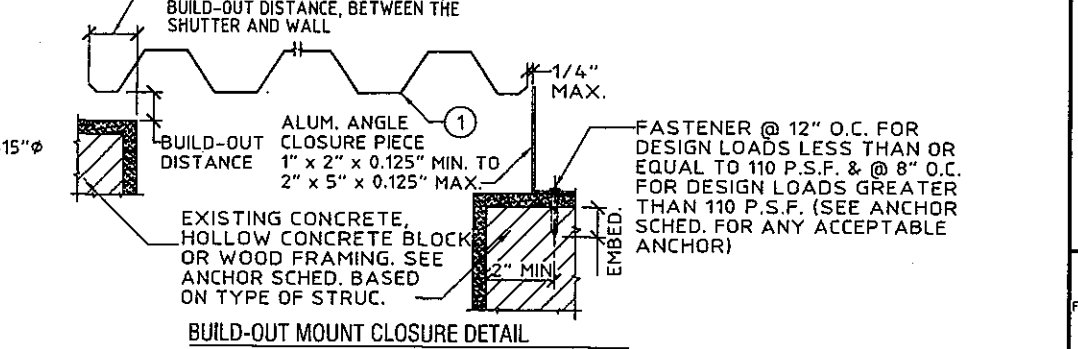
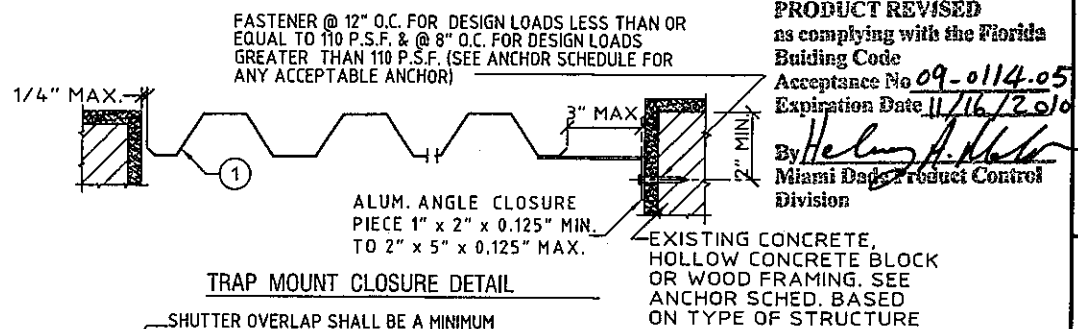
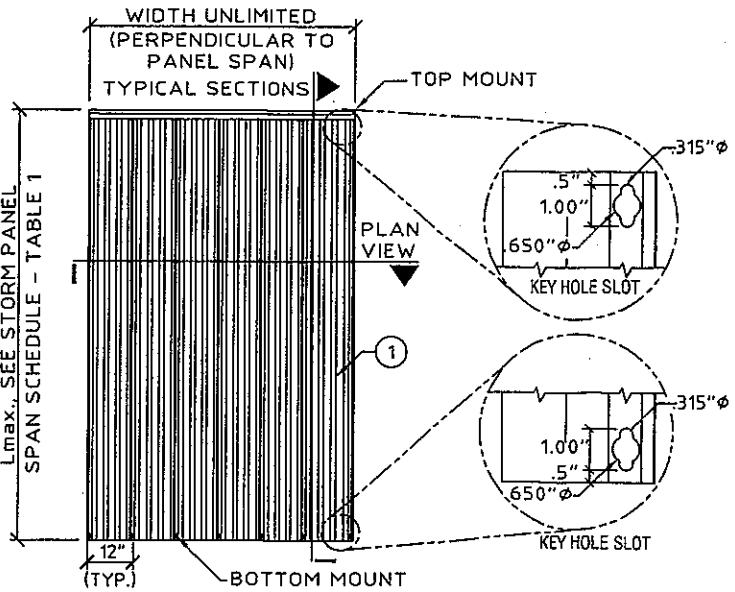
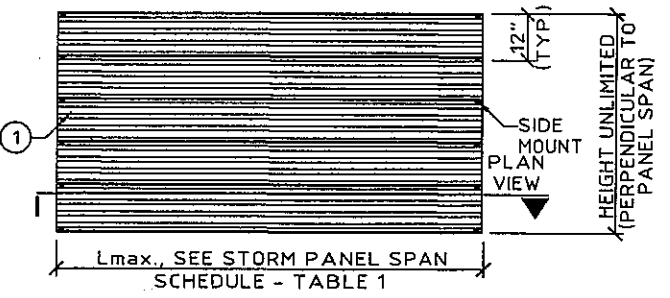
Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No. 09-0114.05
Expiration Date: 11/16/2010
Approval Date: 04/01/2009

0.050" ALUMINUM STORM PANEL



GENERAL NOTES:

- THESE APPROVAL DOCUMENTS REPRESENT A SHUTTER SYSTEM ANALYZED WITH THE PROVISION SET FOR THE ISSUANCE OF A NOTICE OF ACCEPTANCE (NOA) BY MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION FOR THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OF THE FLORIDA BUILDING CODE.
- NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. WIND LOAD DURATION FACTOR $C_D = 1.6$ WAS USED FOR WOOD LAG SCREW DESIGN.
- DETERMINE THE POSITIVE AND NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY.
- THESE APPROVAL DOCUMENTS ARE GENERIC AND DO NOT INCLUDE INFORMATION FOR SITE-SPECIFIC APPLICATION OF THIS SHUTTER SYSTEM.
- USE OF THESE APPROVAL DOCUMENTS SHALL COMPLY WITH CHAPTER 61G15-23 OF THE FLORIDA ADMINISTRATIVE CODE.
- THESE APPROVAL DOCUMENTS ARE SUITABLE TO BE APPLIED BY THE CONTRACTOR PROVIDED THE CONTRACTOR DOES NOT DEVIATE FROM THE CONDITIONS DETAILED HEREIN AND THE CONTRACTOR VERIFIES THAT THE EXISTING STRUCTURE DOES NOT DEVIATE IN EITHER FORM OR MATERIAL FROM THE STRUCTURAL SUBSTRATES DETAILED HEREIN.
- ANY MODIFICATIONS OR ADDITIONS TO THESE APPROVAL DOCUMENTS WILL VOID THE APPROVAL DOCUMENTS.
- WHEN THE SITE CONDITIONS DEVIATE FROM THESE APPROVAL DOCUMENTS, THE BUILDING OFFICIAL MAY ELECT ONE OF THE FOLLOWING OPTIONS:
 A) REQUIRE THAT SITE SPECIFIC DOCUMENTS BE PREPARED, SIGNED, DATED AND SEALED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT, WHICH DETAIL AND JUSTIFY THE DEVIATION. SAID DOCUMENTS SHALL BE SUBMITTED TO THE PRODUCT ENGINEER FOR REVIEW AS A CONDITION TO THE BUILDING OFFICIAL GRANTING HIS/HER APPROVAL.
 B) REQUIRE THAT A ONE-TIME SITE SPECIFIC APPROVAL BE APPLIED FOR AND SECURED FROM THE MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION.
- WHEN THE SITE CONDITION DEVIATIONS OCCUR WITHIN THE HIGH VELOCITY HURRICANE ZONE AREAS ONLY OPTION "B" SHALL BE ACCEPTED BY THE BUILDING OFFICIAL.
- PRODUCT MARKINGS SHALL BE WITHIN 12" OF ONE END OF THE PANEL WITH A MINIMUM OF ONE MARKING PER PANEL AND SHALL BE PERMANENTLY LABELED AS FOLLOWS:
 TOWN & COUNTRY INDUSTRIES,
 FT. LAUDERDALE, FL
 MIAMI-DADE COUNTY PRODUCT APPROVED
- STORM PANELS SHALL BE 3004-H34 OR 5052-H34 ALUMINUM ALLOY, WITH THE FOLLOWING MINIMUM THICKNESS AND MECHANICAL PROPERTIES: NOMINAL 0.050"
- ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N.
- ALL BOLTS AND WASHERS SHALL BE GALVANIZED OR STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 K.S.I., U.O.N.
- TOP & BOTTOM DETAILS SHOWN MAY BE INTERCHANGED AS FIELD CONDITIONS DICTATE. PANELS MAY BE MOUNTED HORIZONTALLY WHERE APPLICABLE, EXCEPT FOR "h" AND "U" HEADER MOUNTING CONDITIONS.



Ka
KNEZEVICH ASSOCIATES
 Consulting Engineers
 2590 S.W. 105th Terrace, Suite 3330A, Ft. Lauderdale, FL 33309
 (954) 821-6933 • F (954) 452-7960 • COA 27989
 website: www.knezevich.com email: vk@knezevich.com

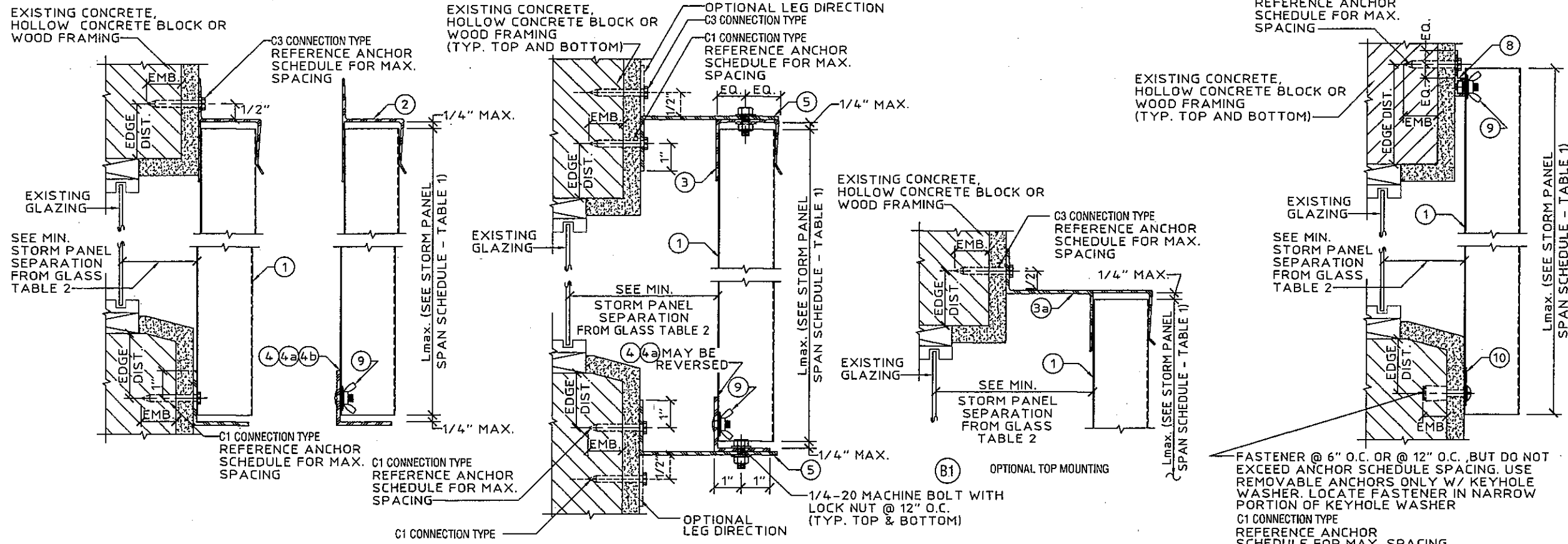
Town & Country INDUSTRIES
 Wholesale Aluminum and Building Products
 400 WEST McVAB ROAD
 FORT LAUDERDALE, FL 33309
 PHONE 954.970.9999 FAX 954.970.9988

no.	date	by	description

V.J. Knezevich
 Professional Engineer
 FL License No.: PE 0010983
 FLORIDA CONTRACTOR: 27989

Sept 3, 2008
 drawn by scale
 wbs (AS NOTED)
 date 09/01/2008
 project no.
08-351

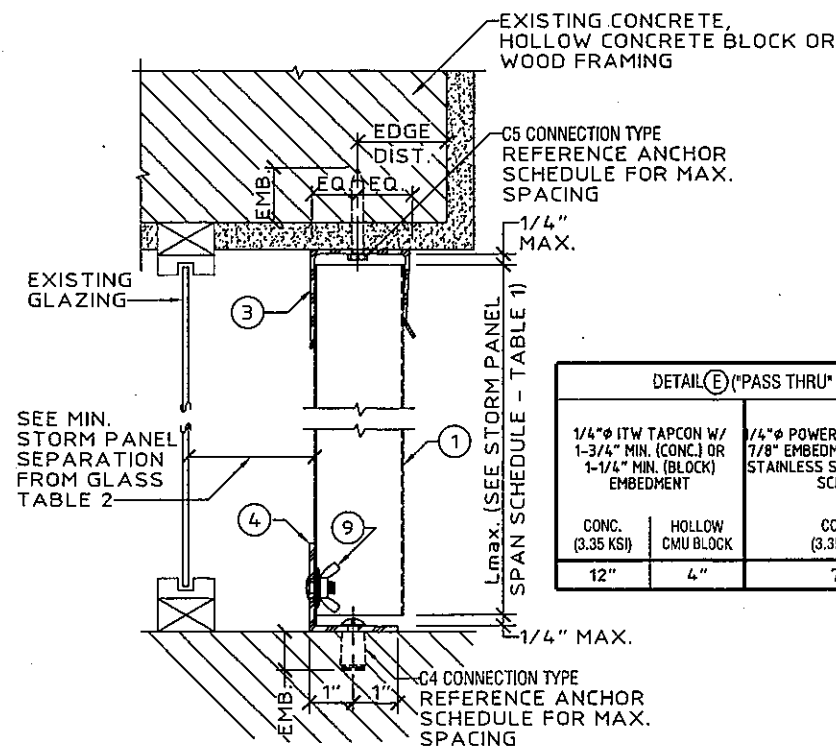
0.050" ALUMINUM STORM PANEL



A WALL MOUNT SECTION
SCALE: 3" = 1' - 0"

B BUILD-OUT MOUNT SECTION
SCALE: 3" = 1' - 0"

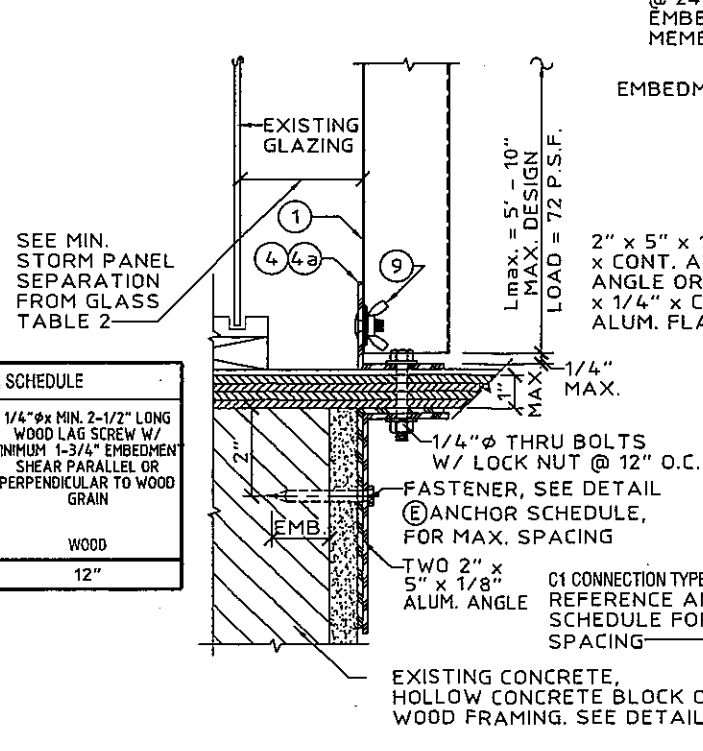
C "F" TRACK/DIRECT MOUNT SECTION
SCALE: 3" = 1' - 0"



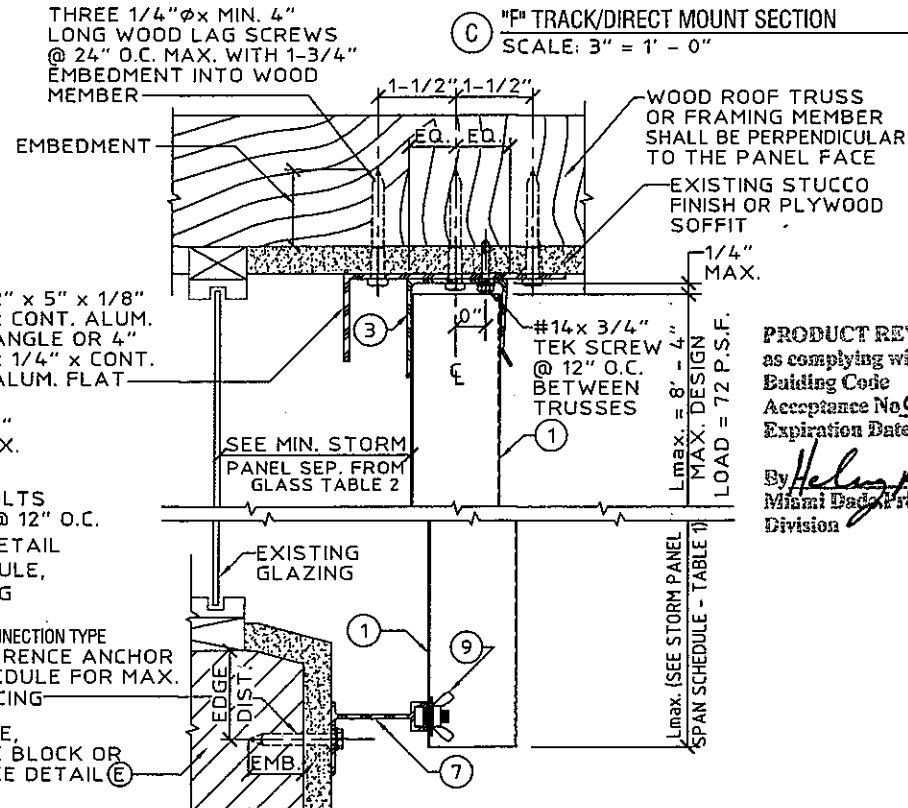
D CEILING/FLOOR MOUNT SECTION
SCALE: 3" = 1' - 0"

DETAIL (E) ("PASS THRU" SEC.) ANCHOR SCHEDULE

1/4" Ø ITW TAPCON W/ 1-3/4" MIN. (CONC.) OR 1-1/4" MIN. (BLOCK) EMBEDMENT		1/4" Ø POWERS CALK-IN W/ 7/8" EMBEDMENT & 1/4"-20 STAINLESS STEEL MACHINE SCREW	1/4" Ø x MIN. 2-1/2" LONG WOOD LAG SCREW W/ MINIMUM 1-3/4" EMBEDMENT SHEAR PARALLEL OR PERPENDICULAR TO WOOD GRAIN
CONC. (3.35 KSI)	HOLLOW CMU BLOCK	CONC. (3.35 KSI)	WOOD
12"	4"	7"	12"



E "PASS THRU" SECTION
SCALE: 3" = 1' - 0"



F CEILING MOUNT / BUILD OUT SECTION
SCALE: 3" = 1' - 0"

FASTENER @ 6" O.C. OR @ 12" O.C., BUT DO NOT EXCEED ANCHOR SCHEDULE SPACING. USE REMOVABLE ANCHORS ONLY W/ KEYHOLE WASHER. LOCATE FASTENER IN NARROW PORTION OF KEYHOLE WASHER
C1 CONNECTION TYPE REFERENCE ANCHOR SCHEDULE FOR MAX. SPACING

PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 09-0114.05 Expiration Date 11/16/2010
By *[Signature]*
Miami Design Product Control Division

Ka
KNEZEVICH ASSOCIATES
Consulting Engineers
2590 S.W. 103th Ave. Fort Lauderdale, FL 33304
(954) 821-6933 • F (954) 452-7965 • COA 27989
website: www.knezevich.com email: vk@knezevich.com
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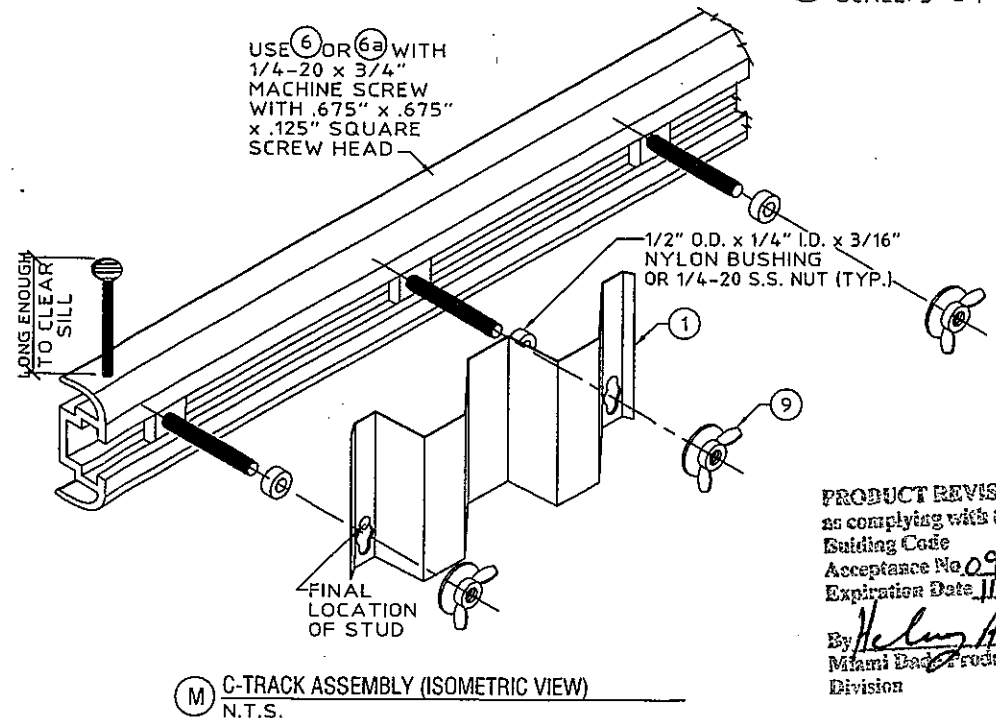
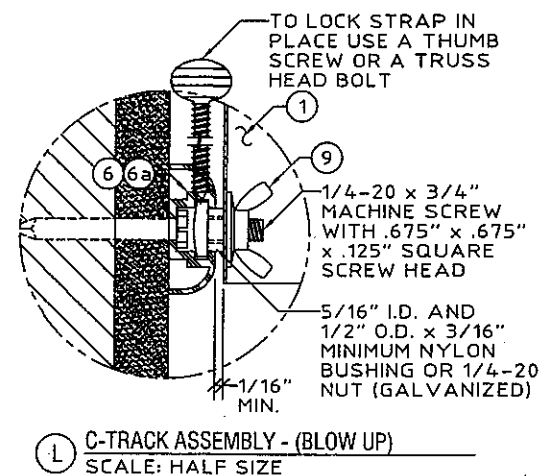
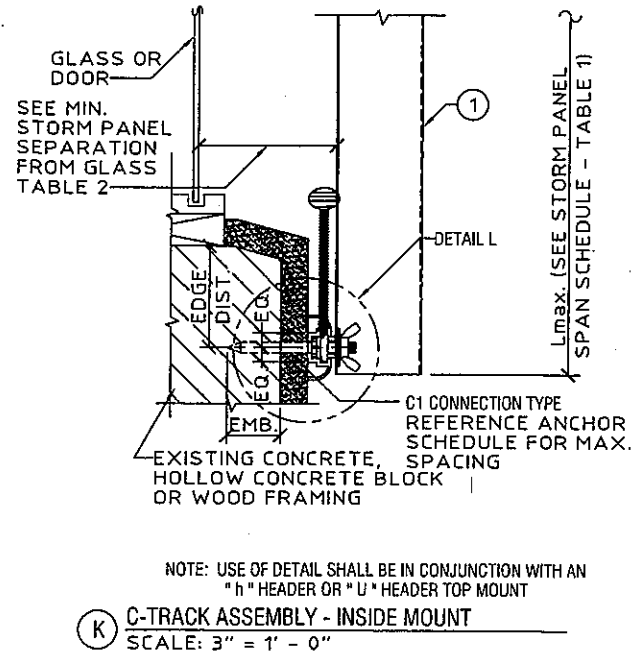
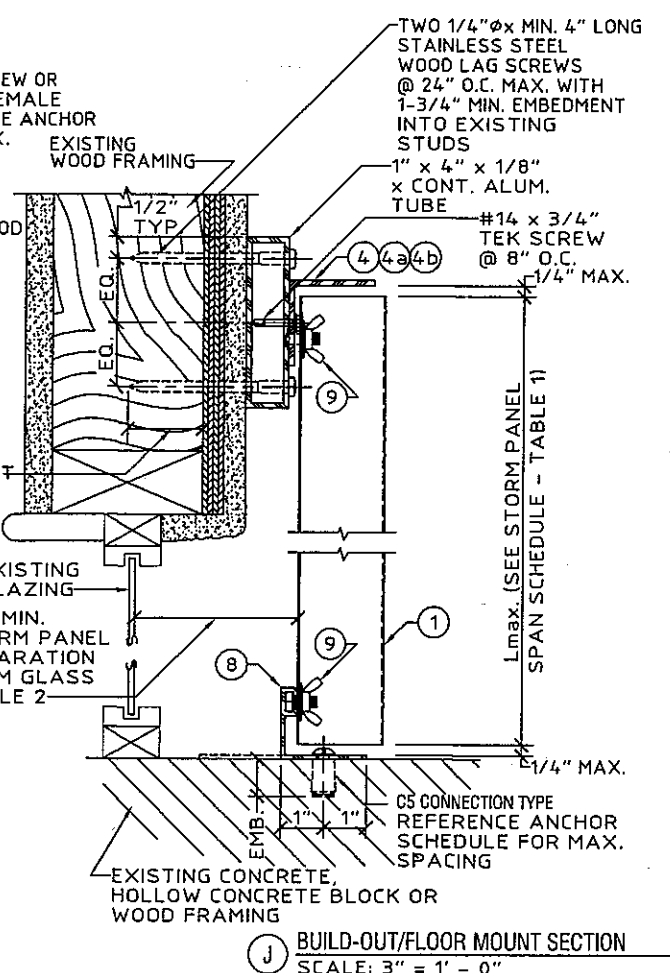
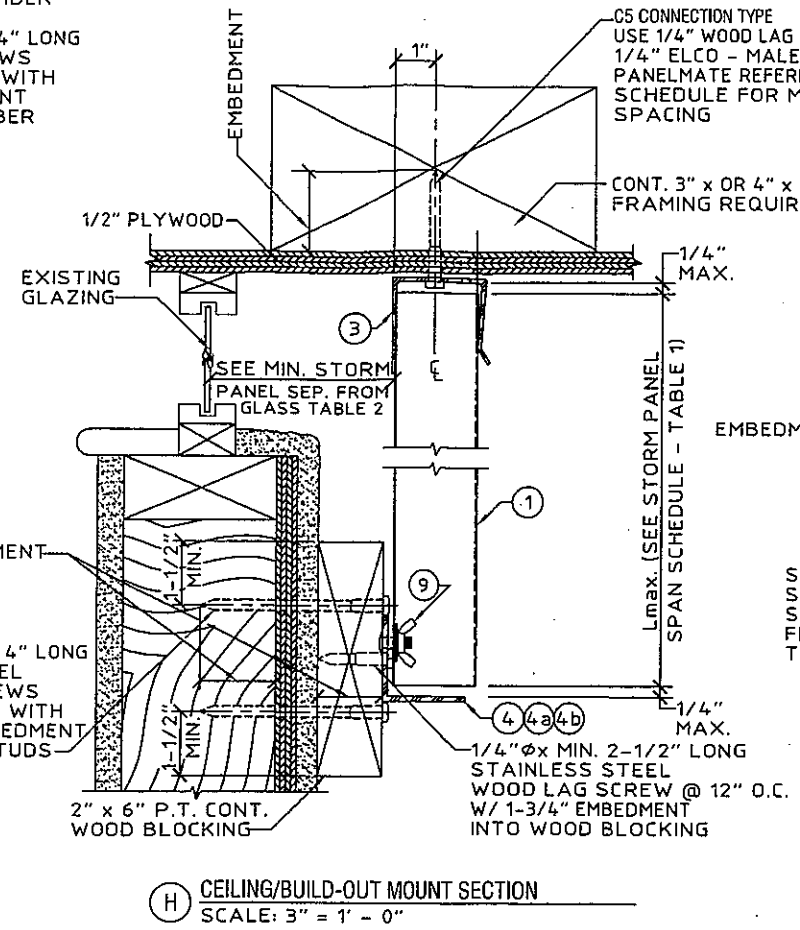
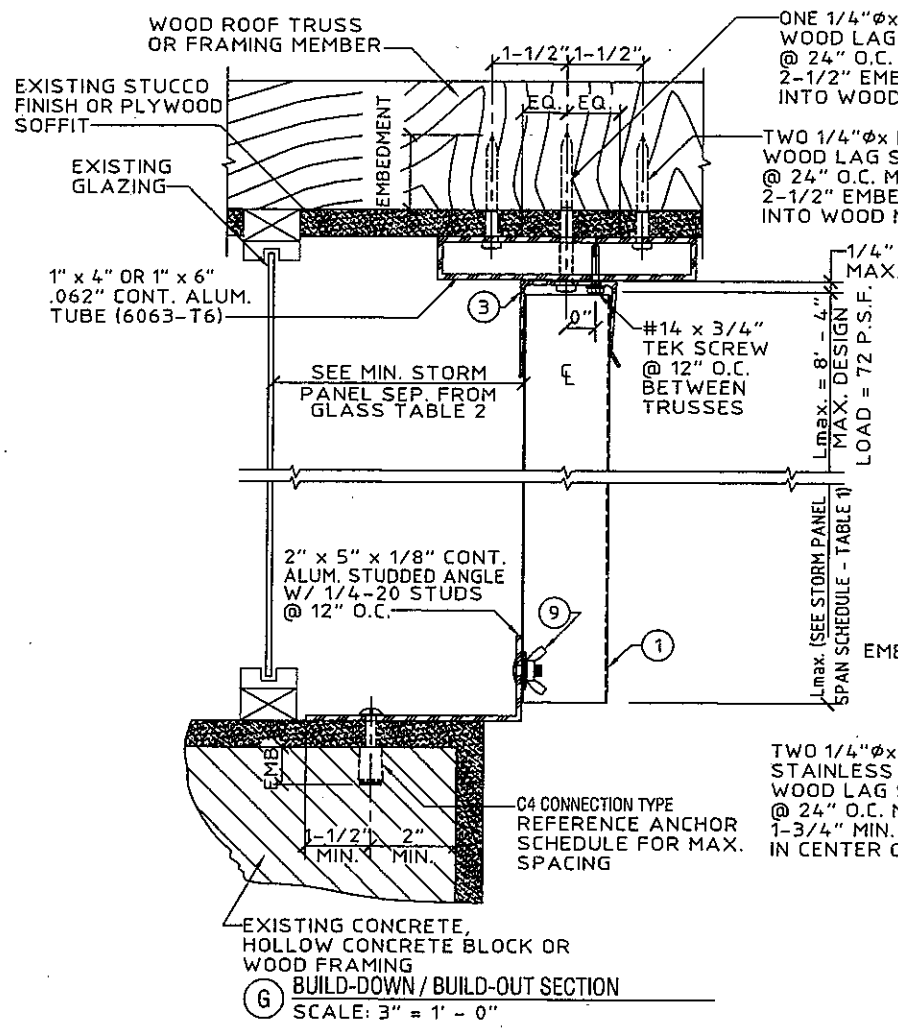
Town & Country INDUSTRIES
Wholesale Aluminum and Building Products
400 WEST McNAB ROAD
FORT LAUDERDALE, FL 33309
PHONE 954-970-9999 FAX 954-970-9988

revisions	description	by	date

V.J. Knezevich
Professional Engineer
FL License No.: PE 0010983
FLORIDA COA No.: 27989

[Signature]
Sept 3 2008
drawn by *[Signature]* scale AS NOTED
date 05/15/2008
project no. **08-351**
PAGE 2 of 6

0.050" ALUMINUM STORM PANEL



PRODUCT REVISED as complying with the Florida Building Code
Acceptance No. 09-0114:05
Expiration Date 11/16/2010
By *Helmut A. Miller*
Miami Beach Product Control Division

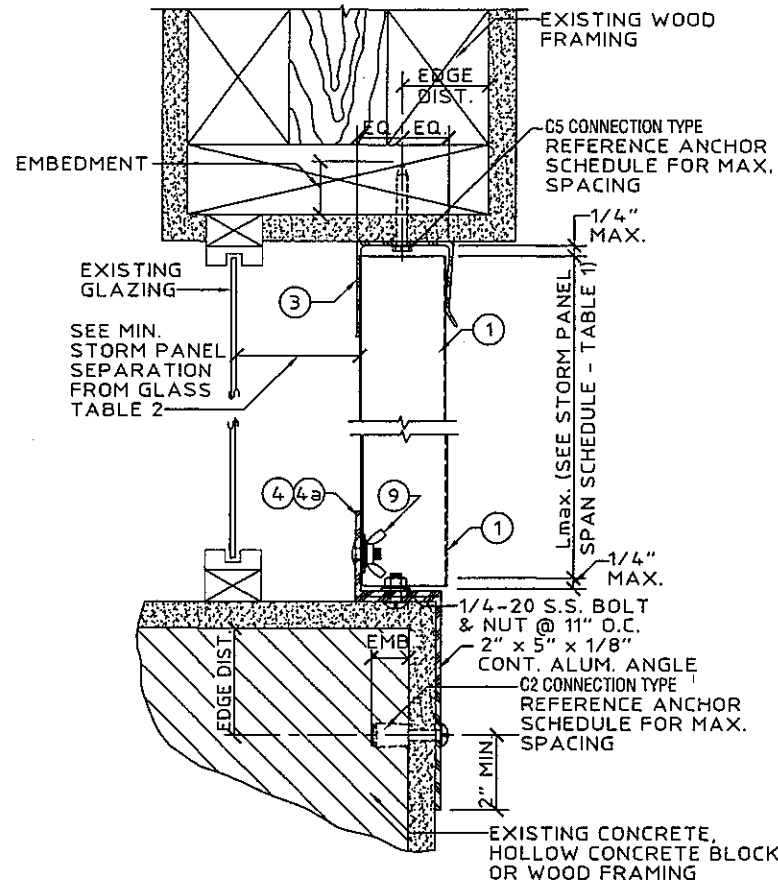
ka
KNEZEVICH ASSOCIATES
Consulting Engineers
2580 S.W. 105th Terrace, Suite 3332A
Davie, Florida 33324
(954) 821-6933 • F. (954) 452-7960 • COA 27989
website: www.knezevich.com email: VJK@knezevich.com
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Town & Country INDUSTRIES
Wholesale Aluminum and Building Products
400 WEST McNAB ROAD
FORT LAUDERDALE, FL 33309
PHONE 954.970.9999 FAX 954.970-9988

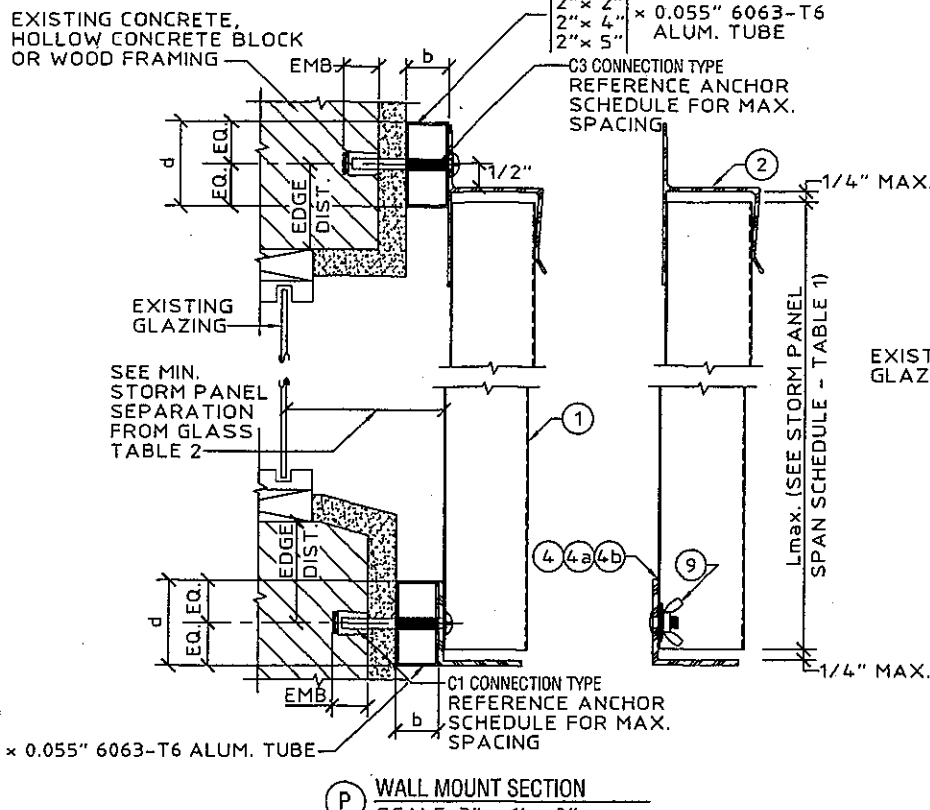
no.	description	date	by

V.J. Knezevich
Professional Engineer
FL License No.: PE 0010983
FLORIDA COA No.: 27989
[Signature]
Sept 3, 2008
drawn by *[Signature]* scale AS NOTED
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PAGE 3 of 6

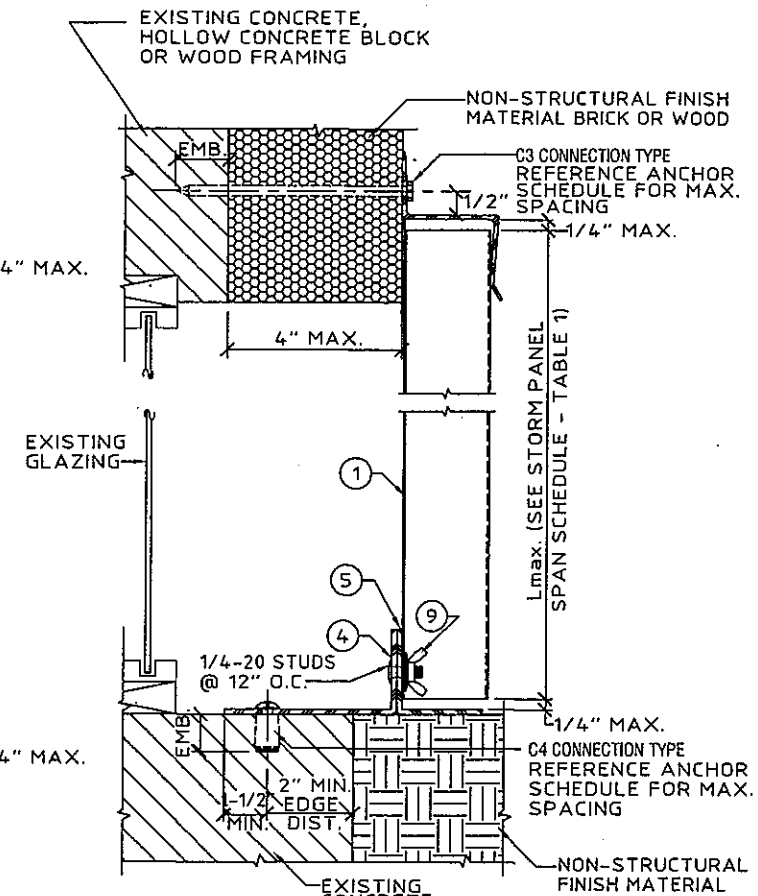
0.050" ALUMINUM STORM PANEL



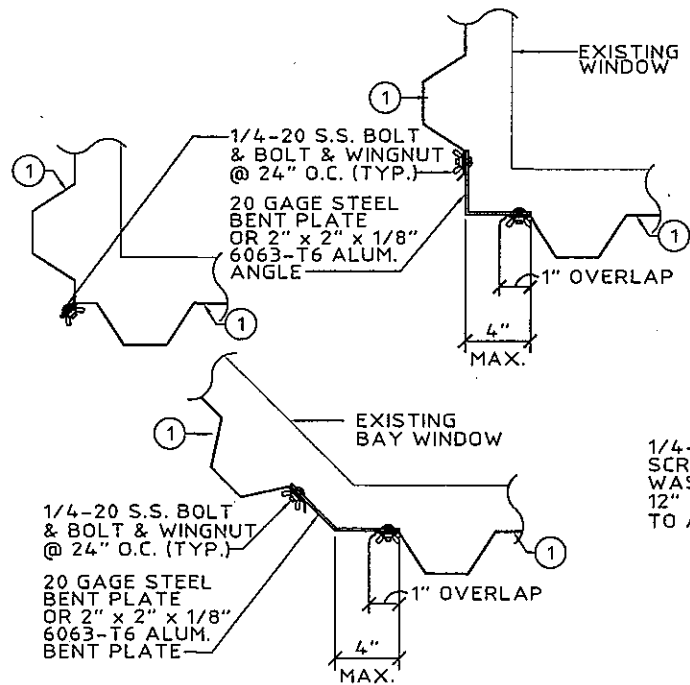
N WOOD CEILING/ INSIDE MOUNT SECTION
SCALE: 3" = 1'-0"



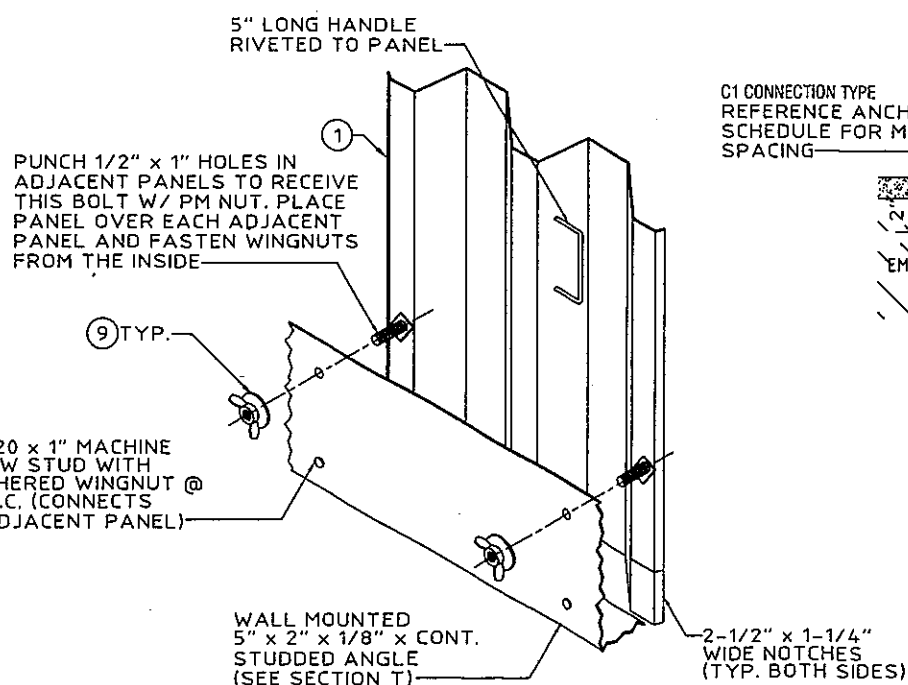
P WALL MOUNT SECTION
SCALE: 3" = 1'-0"



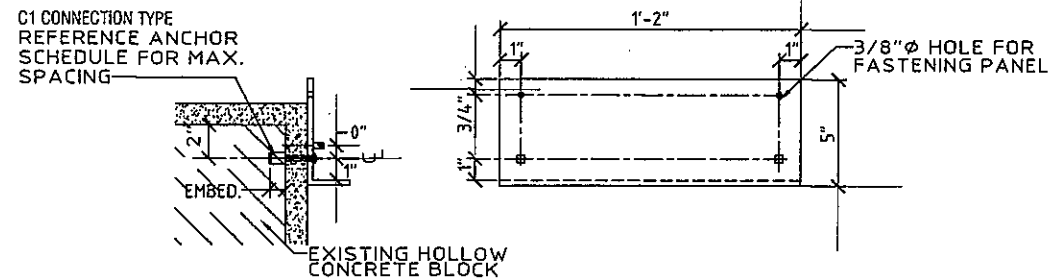
Q WALL MOUNT / BUILD OUT SECTION
SCALE: 3" = 1'-0"



R TYPICAL CORNER CLOSURE DETAILS (PLAN)
SCALE: 1-1/2" = 1'-0"




S OPTIONAL INTERIOR FASTENING DETAIL (ISOMETRIC)
N.T.S.



T INTERIOR FASTENING ANGLE ASSEMBLY
SCALE: 1-1/2" = 1'-0"
(MAX. PANEL HEIGHT = 7'-4" & MAX. DESIGN LOAD 72.00 P.S.F.)

DETAILS (S) & (T) NOTE:
THESE DETAILS DEPICT THE CONNECTION OF THE LAST PANEL FOR AN OPENING WITH PANELS INSTALLED FROM INSIDE. USE OF THESE DETAILS SHALL BE IN CONJUNCTION WITH AN "H" HEADER OR "U" HEADER TOP MOUNT.

PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No. 09-0114.05
Expiration Date 11/16/2010
By *Helmut A. Helber*
Miami Dade Product Control Division



KNEZEVICH ASSOCIATES
Consulting Engineers
2590 S.W. 105th Terrace, Suite Florida 33324
(954) 821-6933 • F (954) 452-7960 • COA 27898
website: www.knezevich.com email: VJK@knezevich.com

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Phone 954.970.9999 FAX 954.970.9988

no.	date	by	description

V.J. Knezevich
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FLORIDA COA No. 27898

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