



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

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov

Hurst Awning Company, Inc.
 6865 N.W. 36th Ave.
 Miami, FL 33147

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: 0.035" (min.) Steel Storm Panel Shutter Systems

APPROVAL DOCUMENT: Drawing No. 05-343, titled "20 ga. Steel Storm Panel", sheets 1 through 6 of 6, prepared by Thornton-Tomasetti Group, dated June 28, 2005, last revision #1 dated July 12, 2006, signed and sealed by V. J. Knezevich, P.E., bearing the Miami-Dade County Product Control Renewal 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 unit shall bear a permanent label with the manufacturer's name or logo, city, state and 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 **renews NOA # 05-0712.03** and consists of this page 1, evidence submitted pages E-1, E-2, E-3, & 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
 03/01/2007

NOA No 06-0928.05
Expiration Date: 02/16/ 2012
Approval Date: 03/01/2007
 Page 1



Hurst Awning Company, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVALS

A. DRAWINGS

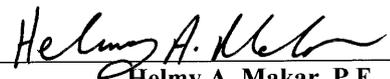
1. *Drawing No. 95-331, Hurst Awning Co., 20 gage, "Steel" Storm Panels, Sheets 1 thru 6, prepared by Knezevich & Associates, dated 6/09/95 with Revision No. 6, dated 07/17/96, signed and sealed by V.J. Knezevich, P.E.*

B. TESTS

1. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of 20 ga. galvanized steel storm panels, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-94-312c, dated September 23, 1994, signed and sealed by Hector M. Medina, P.E.*
2. *Test report on Uniform Static Air Pressure Test of 20 ga. galvanized steel storm panels, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-94-317b, dated September 27, 1994, signed and sealed by Hector M. Medina, P.E.*
3. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of 20 ga. galvanized steel storm panels, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-94-401b, dated January 17, 1995, signed and sealed by Hector M. Medina, P.E.*
4. *Test report on Large Missile Impact and Uniform Static Air Pressure Test of "20 ga. steel" storm panels, prepared by Construction Testing Corp., Report No. CTC-95-021, dated June 9, 1995, signed and sealed by Christopher Tyson, P.E.*
5. *Test report on Large Missile Impact and Cyclic Wind Pressure Test, of 20 Gage Steel Storm Panels, prepared by Construction Testing Corporation, Report No. CTC-95-031, dated August 31, 1995, signed and sealed by Christopher G. Tyson, P.E.*
6. *Test report on Uniform Static Air Pressure Test, Large Missile Impact Test, Cyclic Wind Pressure Test prepared by Construction Testing Corporation, Report Nos. CTC-96-006 and CTC-96-006R, dated March 7, 1996, signed and sealed by Christopher G. Tyson, P.E.*

C. CALCULATIONS

1. *Anchor analysis dated 7/03/95, Pages 1 through 24, prepared by Knezevich & Associates, Inc., signed and sealed by V.J. Knezevich, P.E.*
2. *Anchorage Calculations for 12 additional details/conditions, Hurst Awning Co., Inc., dated 9/19/95, pages 1 through 37, prepared by Knezevich & Associates, Inc., signed by V.J. Knezevich, P.E.*
3. *Comparative Analysis and Anchorage Calculations for 20 Ga. Steel Storm Panels, Hurst Awning Co., Inc., dated 04/03/96, pages 1 thru 31 of 31, revised on 07/18/96 pages 1 thru 40 of 40, prepared by Knezevich & Associates, Inc., signed by V.J. Knezevich, P.E.*



Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No 06-0928.05
Expiration Date: 02/16/ 2012
Approval Date: 03/01/2007

Hurst Awning Company, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

D. MATERIAL CERTIFICATION

1. *Mill Certified Inspection Report issued by RAUTARUUKKI OY dated 12/31/94 with chemical composition and mechanical properties for galvanized steel, ASTM A446-93.*
2. *Certified Tensile Test Report from independent lab QC Metallurgical, Report Number SFM-1307 dated 6/14/95 for 20 Ga. steel.*
3. *Certified Tensile Test Report from independent lab QC Metallurgical, Report Number 6DM-1044, dated 04/24/96 for 20 Ga. steel.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 98-1021.03

A. DRAWINGS

1. *Drawing No. 98-218, titled "20 Ga. Steel Storm Panel", prepared by Knezevich & Associates, Inc., dated September 30, 1998, last revision #2 dated January 4, 1999, sheets 1 through 8 of 8, signed and sealed by V. J. Knezevich, P.E., on January 6, 1999.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of 20 gage storm panels, prepared by Construction Testing Corporation, Report No. CTC-98-044, dated September 8, 1998, signed and sealed by Christopher G. Tyson, P.E.*

C. CALCULATIONS

1. *Revised anchor calculations, dated September 30, 1998, sheets 1 through 33, by Knezevich and Associates, Inc., signed and sealed by V.J. Knezevich, P.E. on October 7, 1998.*
2. *Revised anchor calculations, dated January 6, 1999, sheets 1 through 6, by Knezevich and Associates, Inc., signed and sealed by V.J. Knezevich, P.E. on January 6, 1999.*

D. MATERIAL CERTIFICATION

1. *Mill Certified Inspection Report, dated 05/13/98, for Galvanized Steel, ASTM 653 by R R Metals with chemical composition and physical properties.*
2. *Tensile Test Report from Certified Testing Laboratories, report # CTL-800D, dated 09/03/98 for galvanized steel, signed and sealed by Ramesh Patel, P.E.*

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 01-1224.01

A. DRAWINGS

See NOA 98-1021.03

B. TESTS

See NOA 98-1021.03



Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No 06-0928.05
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Hurst Awning Company, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

See NOA 98-1021.03

D. MATERIAL CERTIFICATIONS

See NOA 98-1021.03

E. STATEMENTS

1. See NOA 98-1021.03
2. Letter from Hurst Awning Company, Inc., dated 10/18/01, stating that the engineer who performed the review of the product is still in the engineering business and that the product has not changed.

F. OTHER

NOA 98-1021.03.

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #02-0315.11

A. DRAWINGS

See NOA 02-0315.11 (General Notes)

B. TESTS

See NOA 01-1224.01

C. CALCULATIONS

See NOA 01-1224.01

D. MATERIAL CERTIFICATIONS

See NOA 01-1224.01

E. STATEMENTS

See NOA 01-1224.01

F. OTHER

See NOA 01-1224.01

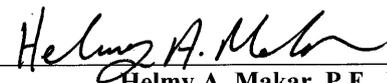
5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #05-0712.03

A. DRAWINGS

1. *Drawing No. 05-343, titled "20 ga. Steel Storm Panel", sheets 1 through 6 of 6, prepared by Thornton-Tomasetti Group, dated June 28, 2005, last revision #1 dated July 12, 2006, signed and sealed by V. J. Knezevich, P.E.*

B. TESTS

1. *None.*



Helmy A. Makar, P.E., M.S.
Product Control Examiner
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NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. *Revised anchor calculations, dated June 10, 2005, pages 1 through 49, prepared by Thornton-Tomasetti Group, signed and sealed by V.J. Knezevich, P.E. on June 10, 2005.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

6. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

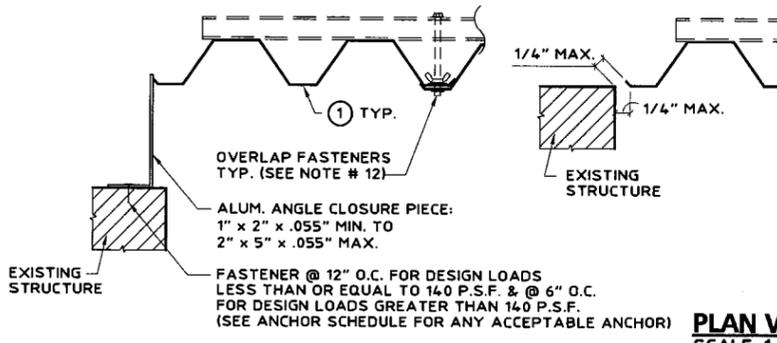
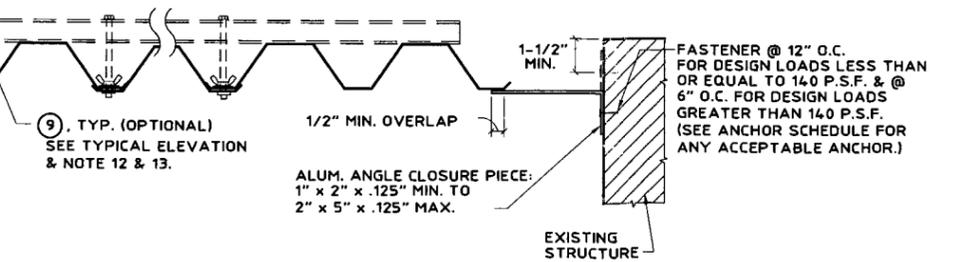
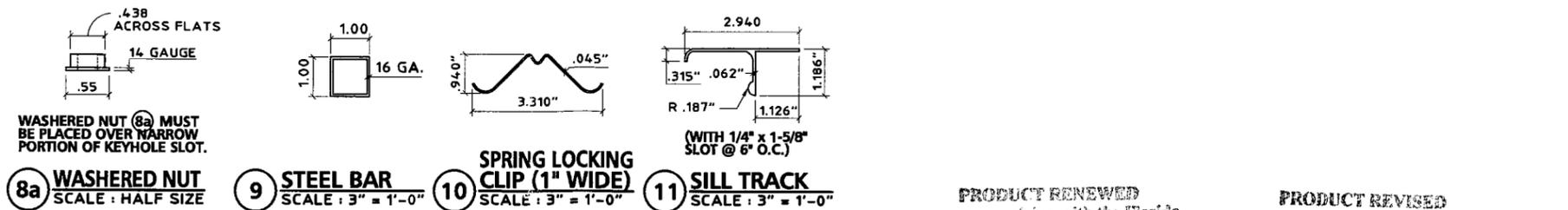
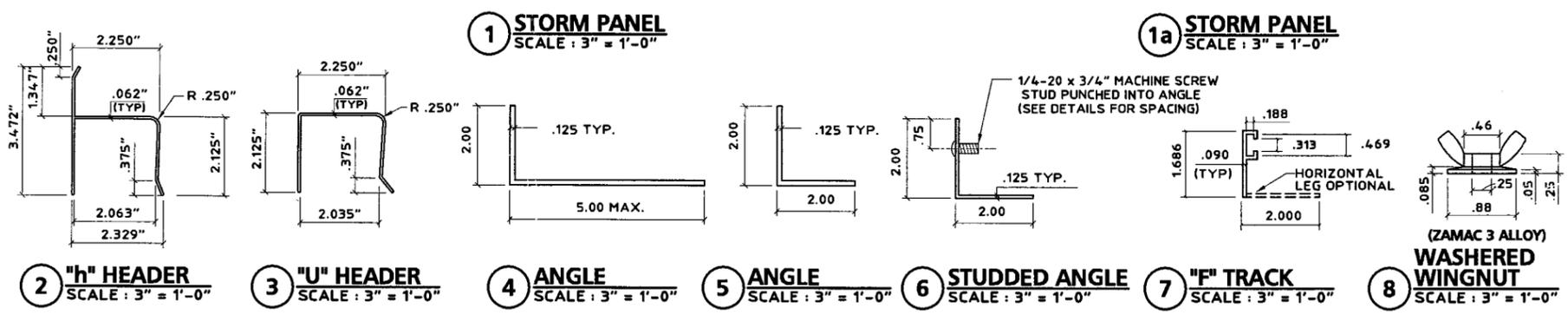
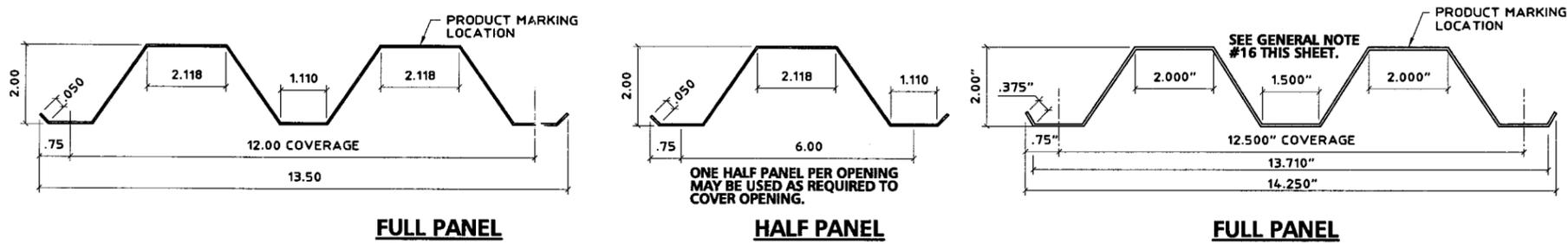
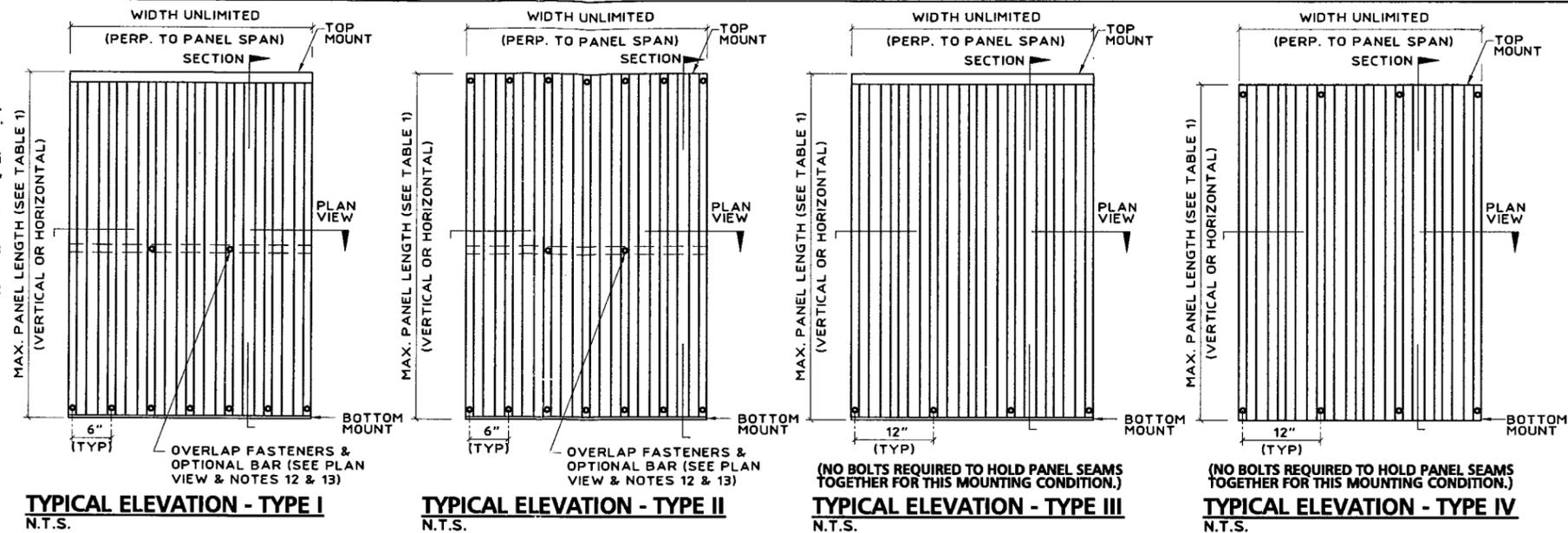


Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No 06-0928.05
Expiration Date: 02/16/ 2012
Approval Date: 03/01/2007

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 2004, WITH 2005 SUPPLEMENT.
- 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. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH ASCE 7-02, A DIRECTIONALITY FACTOR OF $K_d = 0.85$ SHALL BE USED.
- 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 APPROVALS.
- WHEN THE SITE CONDITIONS DEVIATE FROM THESE APPROVAL DOCUMENTS, THE BUILDING OFFICIAL MAY ELECT ONE OF THE FOLLOWING OPTIONS:
 - 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.
 - 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:

HURST AWNING CO., INC.
MIAMI, FLORIDA
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED
- ALL BOLTS AND WASHERS SHALL BE GALVANIZED OR STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 KSI OR APPROVED COATED HARDWARE.
- STORM PANELS SHALL BE 20 GAUGE STEEL ($t = .035"$) CONFORMING TO ASTM A653, SQ. GRADE 50, G60 GALVANIZED COATING. ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM, U.O.N.
- FOR TYPE I & TYPE II PANELS, AN OPTIONAL 1" x 1" x 16 GA STEEL BAR MAY BE USED TO CONTROL DEFLECTION OF STORM PANEL SYSTEM ON INSTALLATIONS BELOW 30' ABOVE GRADE PROVIDED THAT THE PANEL SPANS USED ARE 10' OR LESS, AND THAT THE SEPARATION FROM GLASS IS 2" OR MORE BUT LESS THAN 2.5".
- TYPE I & II PANELS SHALL BE FASTENED AT MIDSPAN W/ 1/4-20 x 1" BOLTS WITH DIE CAST ALUMINUM WASHERED WINGNUTS OR JACKNUTS (SEE TYPICAL ELEVATIONS). FOR PANEL SPANS LESS THAN 48", MIDSPAN FASTENERS ARE NOT REQUIRED. TYPE I & II PANELS UTILIZING A STEEL BAR SHALL BE FASTENED AT OVERLAPS AT MIDSPAN TO A 1" x 1" x 16 GAUGE STEEL BAR USING 1/4-20 x 3-1/2" BOLTS WITH DIE CAST ALUMINUM WASHERED WINGNUTS OR JACKNUTS (SEE TYPICAL ELEVATIONS). FOR TYPE III & IV PANELS, FASTENERS AT PANEL MIDSPAN ARE NOT REQUIRED.
- 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.
- AT LEAST ONE WARNING NOTE PER OPENING SHALL BE PLACED IN A CONSPICUOUS LOCATION ON ANY OF THE COMPONENTS OF THE STORM PANEL SYSTEM ADVISING THE HOME OWNER OR TENANT THAT THE STORM PANELS WILL NOT OFFER HURRICANE PROTECTION UNLESS ALL REINFORCING BOLTS AND OR BARS ARE PROPERLY INSTALLED WHEN REQUIRED. WARNING LABEL SHALL BE FASTENED WITH PERMANENT ADHESIVE OR MECHANICALLY.
- WHEN PANEL (1a) IS USED, 6-1/4" AND 12-1/2" O.C. SHALL BE USED IN ALL DETAILS IN THESE DRAWINGS IN LIEU OF 6" AND 12" BUT FASTENER SPACING SHALL NOT EXCEED THAT SHOWN IN ANCHOR SCHEDULES.



PRODUCT RENEWED
as complying with the Florida
Building Code
Acceptance No 06-0928.05
Expiration Date 02/16/2012
By Helmut A. Weber
Miami Dade Product Control
Division

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 05-0712.03
Expiration Date 02/16/2007
By Helmut A. Weber
Miami Dade Product Control
Division

Thornton-Tomasetti Group
330 N. Andrews Ave., Suite 450 • Ft. Lauderdale, FL 33301
Tel: (954) 522-3690 • Fax: (954) 522-3691 • COA # 7519
Website: www.theTGroup.com
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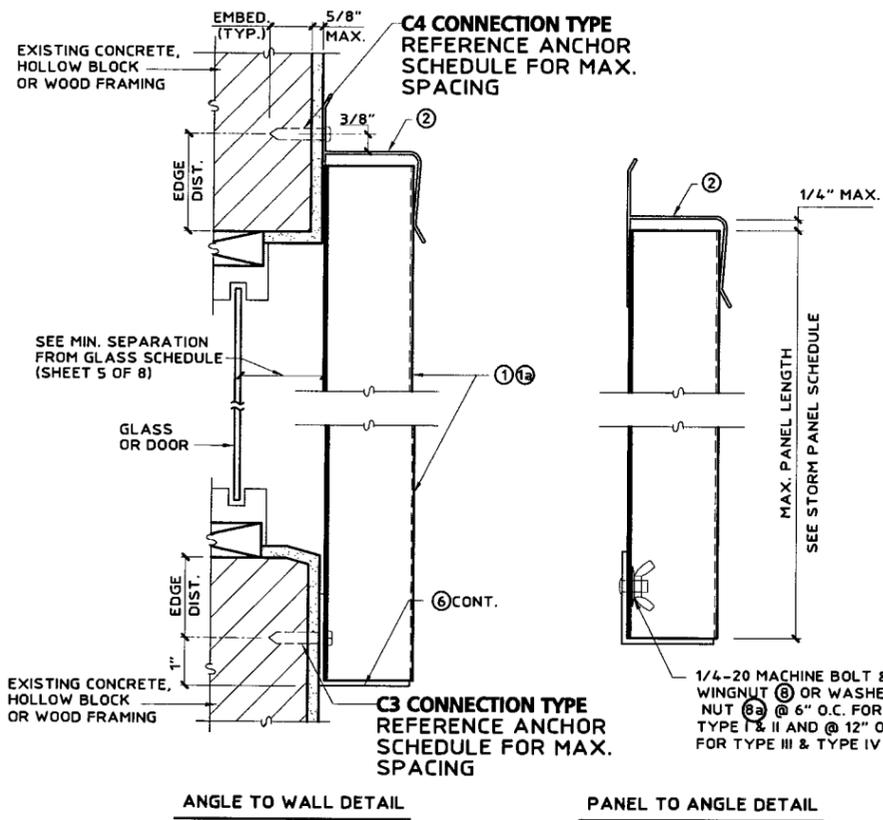
20 GA. STEEL STORM PANEL
Manufacturers of Hurricane & Security Protection Products
6865 N.W. 36th Avenue
Miami, Florida 33147
Phone: (305) 635-0900
Toll Free: (800) 327-0905
Fax: (305) 634-9078
HURST
AWNING COMPANY, INC.
QUALITY SERVICE SINCE 1957

V.J. Knezevich
Professional Engineer
FL License No. 0010983
JUL 15 2006

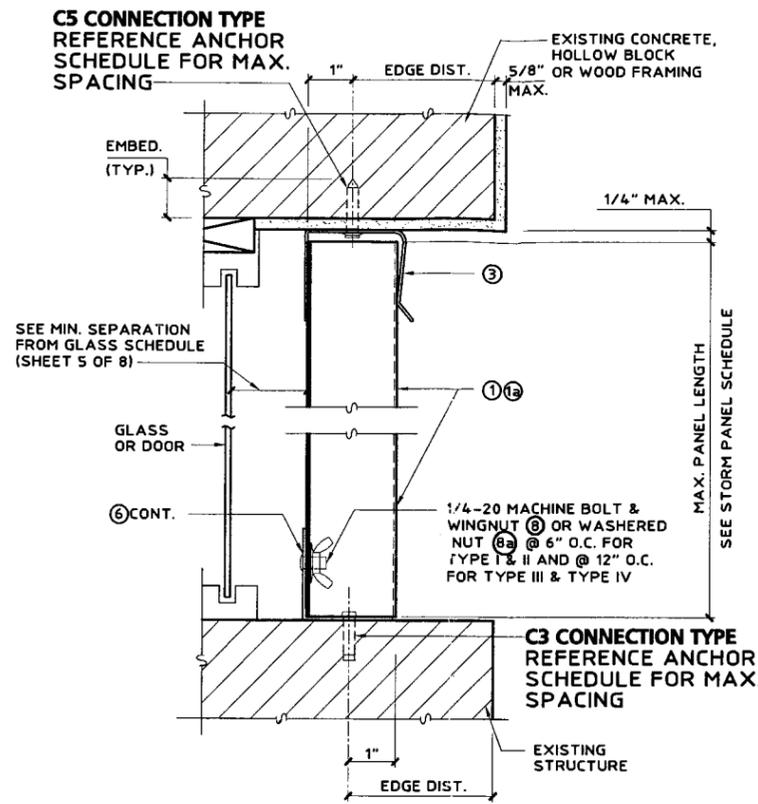
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revisions

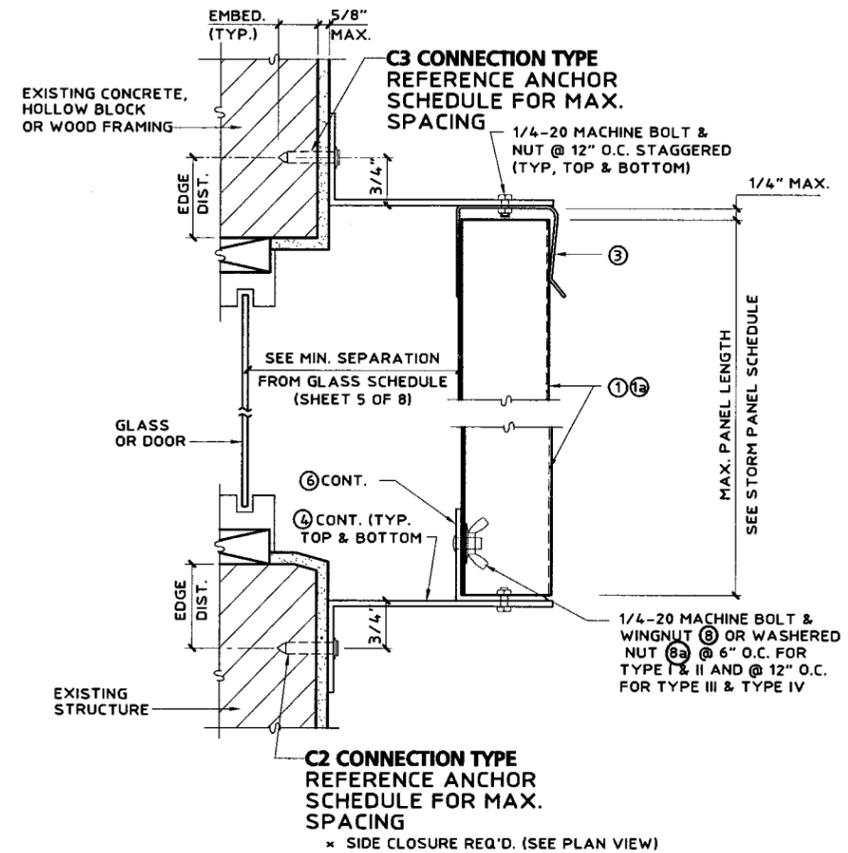
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scale: AS NOTED
design by: VJK
checked by: VJK
drawing no.: 05-343
sheet 1 of 6



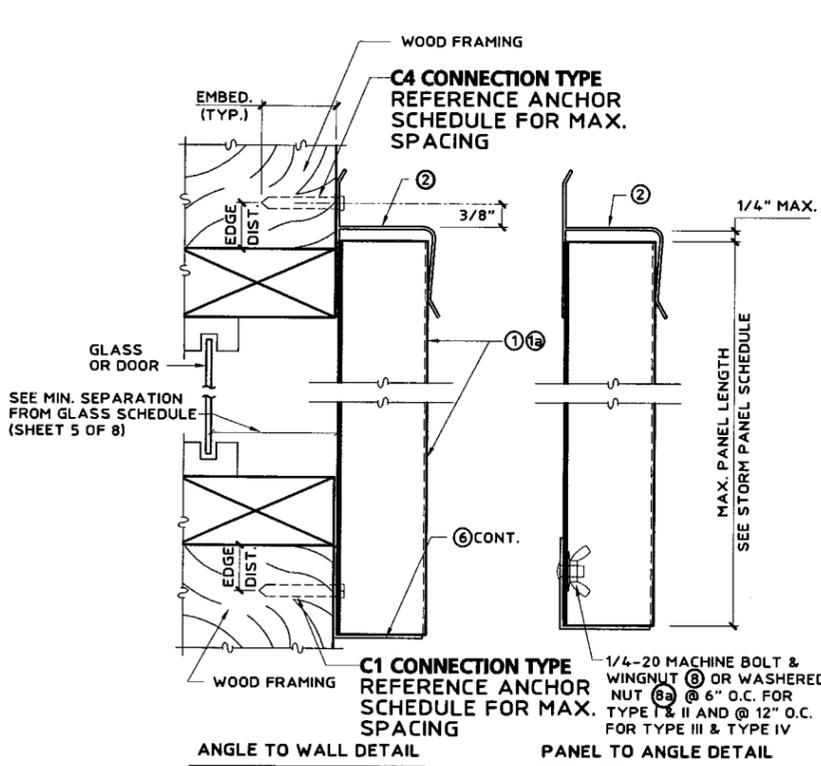
A WALL MOUNT SECTION
SCALE: 3" = 1' - 0"



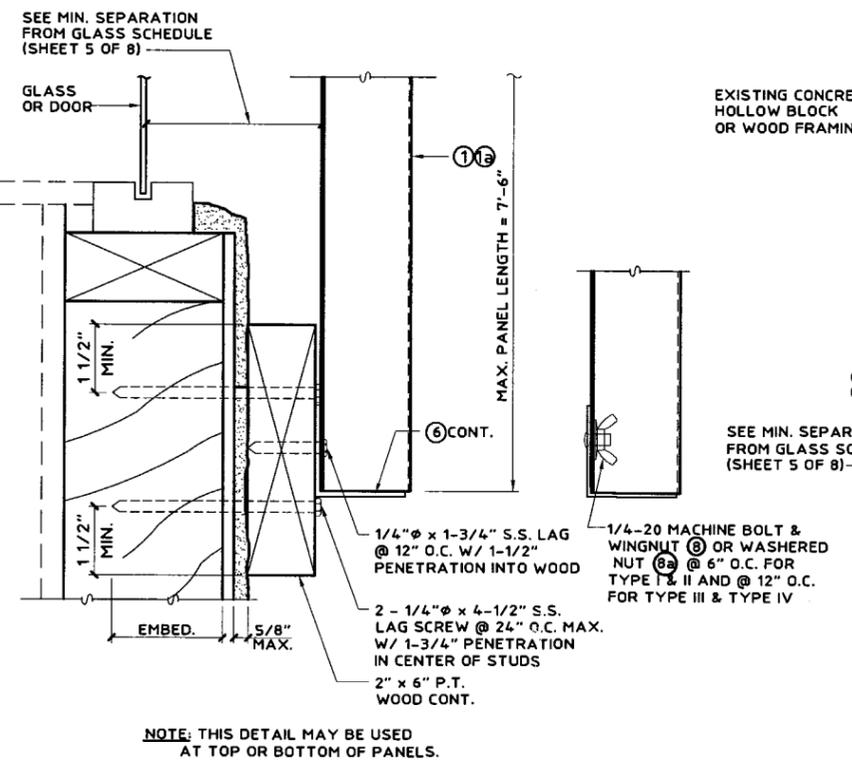
B CEILING/INSIDE MOUNT SECTION
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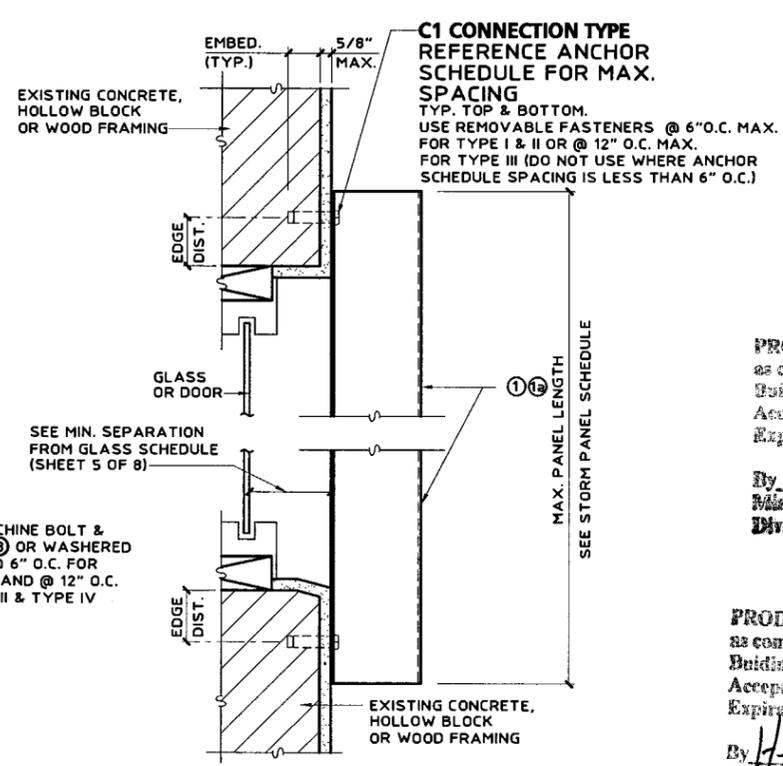
C BUILD-OUT MOUNT SECTION
SCALE: 3" = 1' - 0"



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



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



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

NOTE: THIS DETAIL MAY BE USED AT TOP OR BOTTOM OF PANELS.
NOTE: USE OF THIS DETAIL IS LIMITED TO ± 72 PSF.

Thornton-Tomasetti Group
330 N. Andrews Ave., Suite 450 • Ft. Lauderdale, FL 33301
Tel. (954) 322-3690 • Fax (954) 522-3691 • COA # 7519
Website: www.tti-group.com
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20 GA. STEEL STORM PANEL
Manufacturers of Hurricane & Security Protection Products
6865 N.W. 36th Avenue
Miami, Florida 33147
Phone: (305) 635-0900
Toll Free: (800) 327-0905
Fax: (305) 634-9078
HURST
AWNING COMPANY, INC.
"QUALITY SERVICE SINCE 1957"

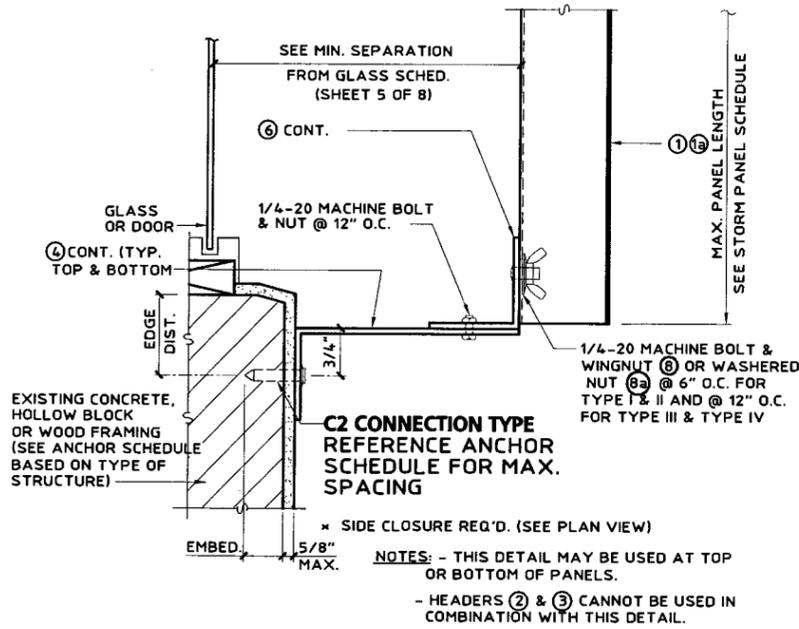
V.J. Knezevich
Professional Engineer
FL License No.: PE 010983
JUL 13 2006

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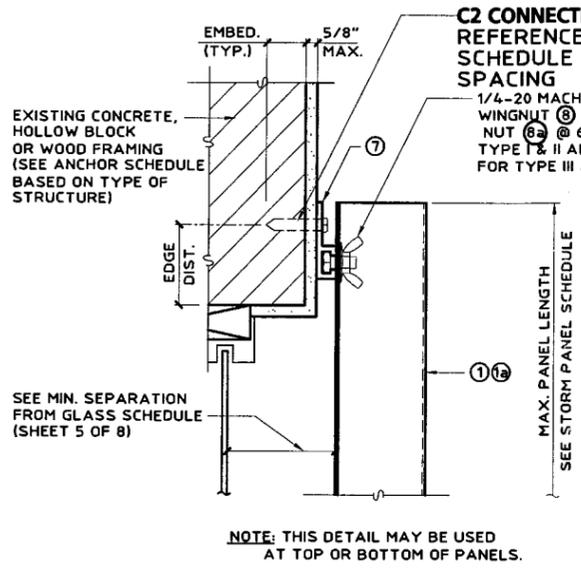
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revisions		description	
no.	date	by	description
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1	07/12/2006	NW	COUNTY COMMENTS

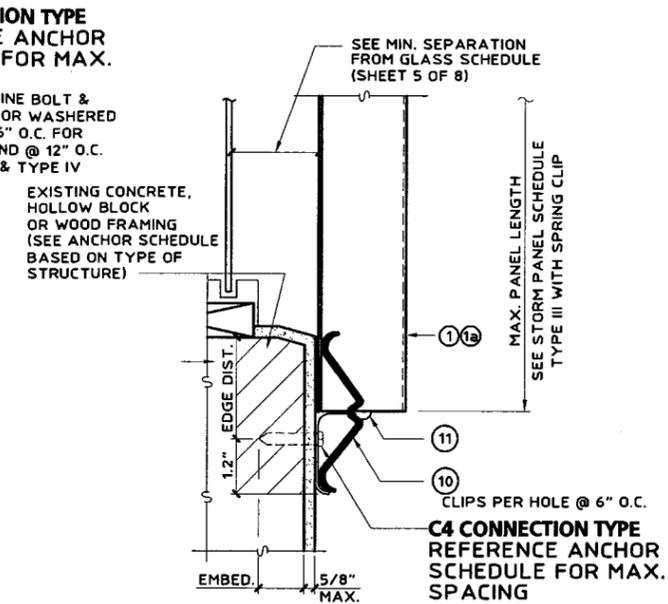
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scale	AS NOTED
design by	VJK
checked by	VJK
drawn by	MCR
drawing no.	05-343
sheet	2 of 6



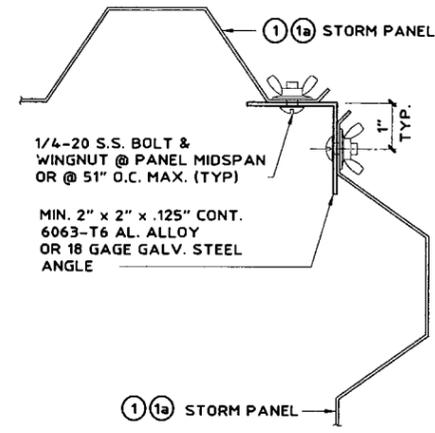
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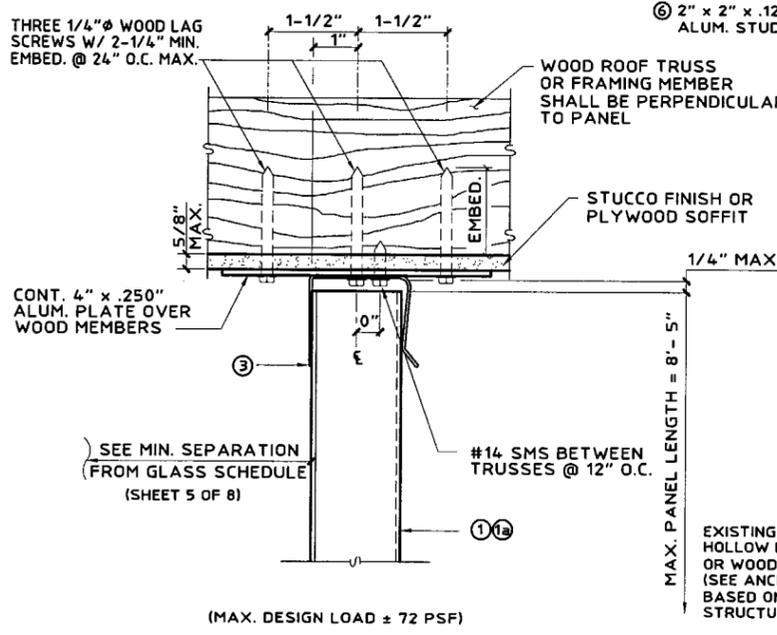
H WALL MOUNT DETAIL
SCALE: 3" = 1' - 0"



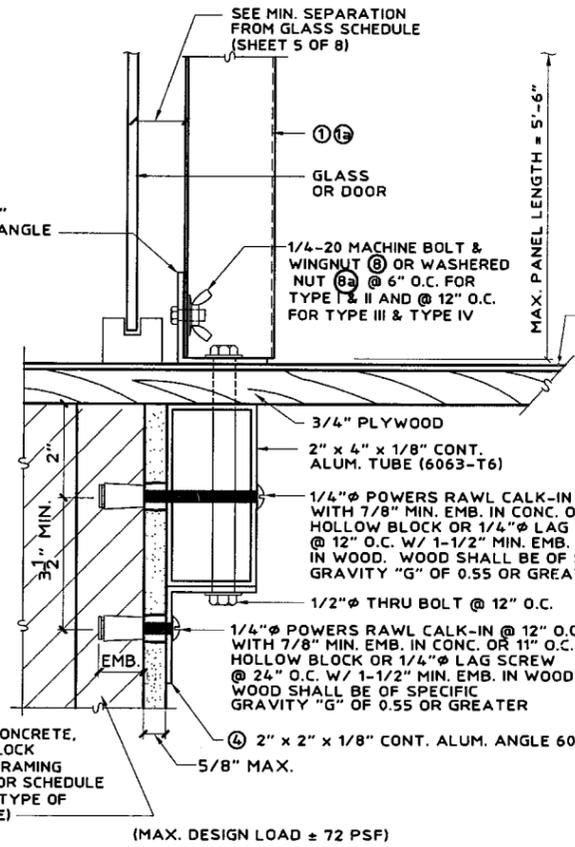
I ALT. WALL MOUNT W/ SPRING CLIP (SILL ONLY)
SCALE: 3" = 1' - 0"



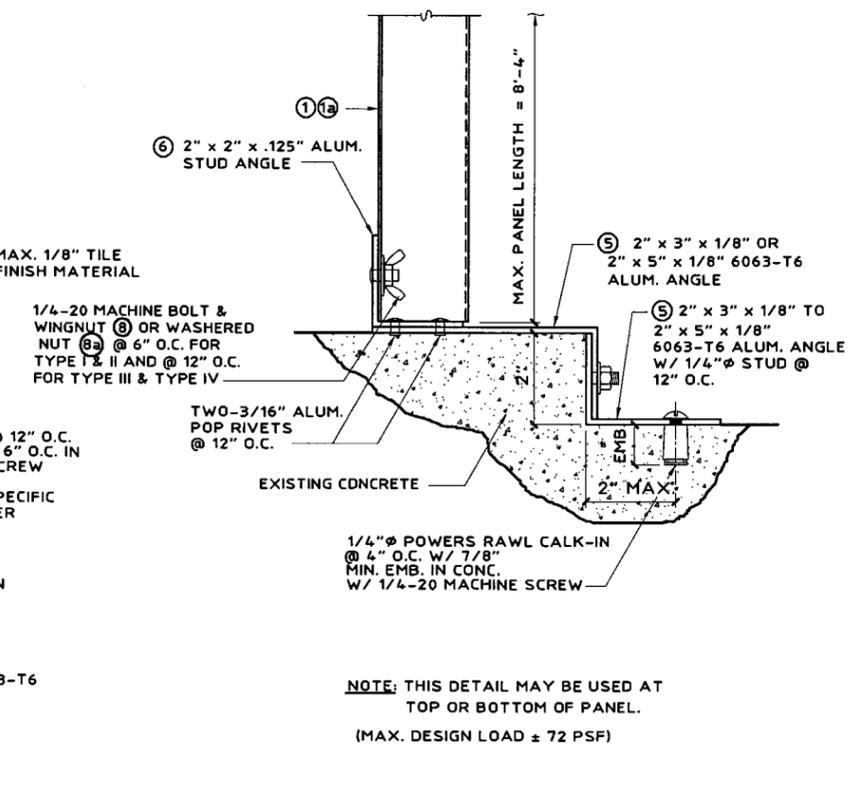
J CORNER DETAIL
SCALE: 3" = 1' - 0"



K SOFFIT CONNECTION DETAIL
SCALE: 3" = 1' - 0"



N \"PASS THRU\" DETAIL
SCALE: 3" = 1' - 0"



O EDGE MOUNT DETAIL
SCALE: 3" = 1' - 0"

Thornton-Tomasetti Group
 330 N. Andrews Ave., Suite 450 - Ft. Lauderdale, FL 33301
 Tel. (954) 522-3690 • Fax (954) 522-3691 • COA # 7519
 Website: www.TheTTGroup.com
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20 GA. STEEL STORM PANEL
 Manufacturers of Hurricane & Security Protection Products
 6865 N.W. 36th Avenue
 Miami, Florida 33147
 Phone: (305) 635-0900
 Toll Free: (800) 327-0905
 Fax: (305) 634-9078
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 AWNING COMPANY, INC.
 "QUALITY SERVICE SINCE 1957"

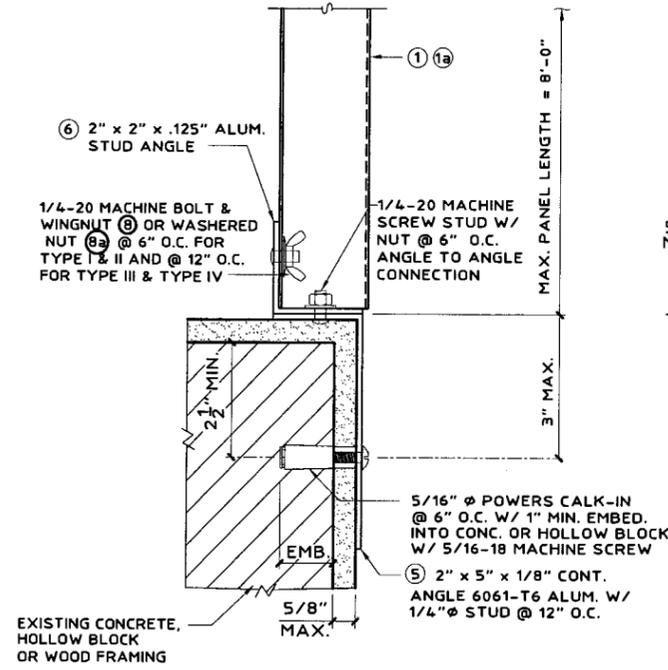
V.J. Knezevich
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 JUL 19 2006

PRODUCT RENEWED
 as complying with the Florida
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 By *Helmut A. Miller*
 Miami Code Product Control
 Division

PRODUCT REVISED
 as complying with the Florida
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 Expiration Date 02/16/2007
 By *Helmut A. Miller*
 Miami Code Product Control
 Division

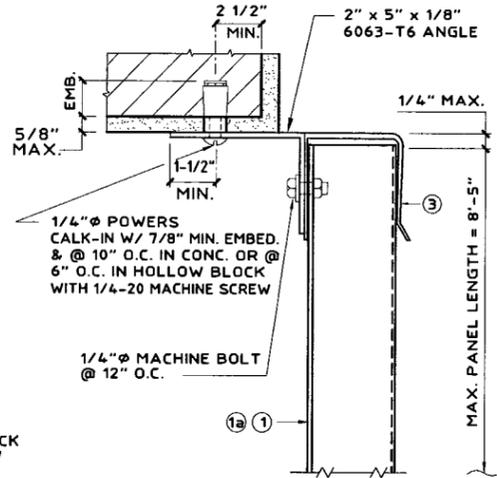
revisions		description
no.	date	description
1	06/28/2005	NW COUNTY COMMENTS
2	07/12/2006	NW COUNTY COMMENTS

date: 06/28/2005
 scale: AS NOTED
 design by: VJK
 drawing no.: 05-343
 sheet 3 of 6



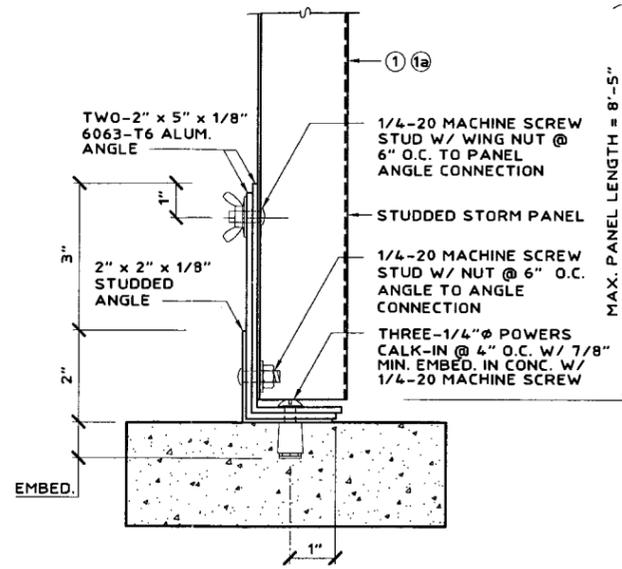
NOTE: THIS DETAIL MAY BE USED AT TOP OR BOTTOM OF PANEL.
(MAX. DESIGN LOAD ± 72 PSF)

P EDGE MOUNT DETAIL
SCALE: 3" = 1' - 0"



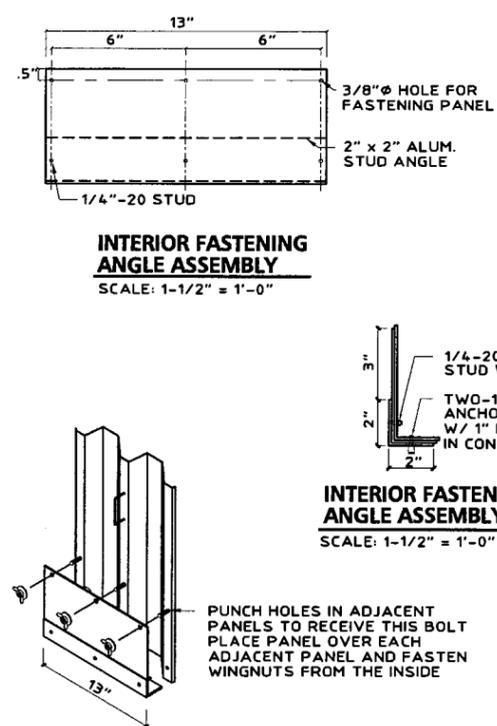
(MAX. DESIGN LOAD ± 72 PSF)

S ANGLE TO "U" HEADER BUILD-OUT
SCALE: 3" = 1' - 0"



(MAX. DESIGN LOAD ± 72 PSF)

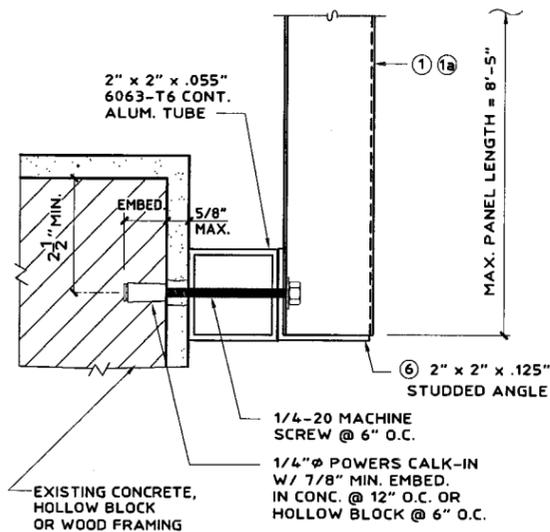
T ASSEMBLY MOUNT
SCALE: 3" = 1' - 0"



INTERIOR FASTENING ANGLE ASSEMBLY
SCALE: 1-1/2" = 1'-0"

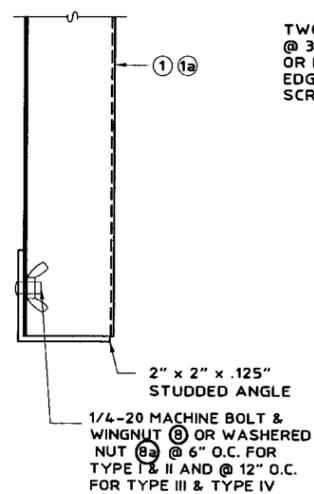
INTERIOR FASTENING ANGLE ASSEMBLY
SCALE: 1-1/2" = 1'-0"

U STORM PANEL INTERIOR FASTENING DETAIL (USE WITH DETAIL T)
SCALE: 3" = 1' - 0"



NOTE: THIS DETAIL MAY BE USED AT TOP OR BOTTOM OF PANEL.
(MAX. DESIGN LOAD ± 72 PSF)

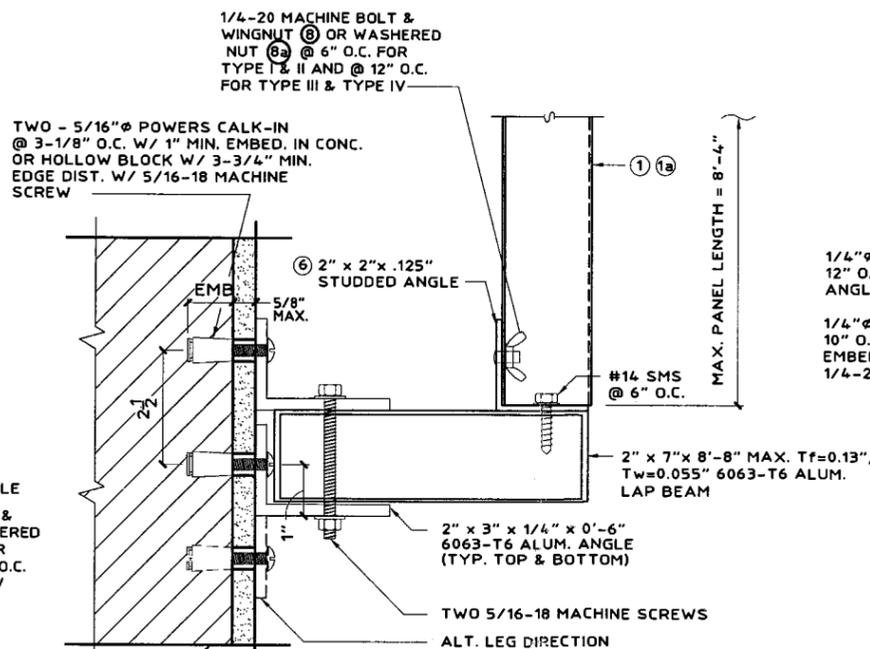
V 2" x 2" ALUM. TUBE BUILD-OUT
SCALE: 3" = 1' - 0"



EXISTING CONCRETE, HOLLOW BLOCK OR WOOD FRAMING

NOTE: THIS DETAIL MAY BE USED AT TOP OR BOTTOM OF PANEL.
(MAX. DESIGN LOAD ± 72 PSF)

W STORM PANEL SUPPORT BEAM
SCALE: 3" = 1' - 0"



NOTE: THIS DETAIL MAY BE USED AT TOP OR BOTTOM OF PANEL.
(MAX. DESIGN LOAD ± 72 PSF)

X STORM PANEL BUILD-OUT
SCALE: 3" = 1' - 0"

PRODUCT RENEWED
as complying with the Florida Building Code
Acceptance No. 06-0928.05
Expiration Date 02/16/2012
By Helmut A. Melton
Miami Dade Product Control Division

By Helmut A. Melton
Miami Dade Product Control Division

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Toll Free: (800) 327-0905
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THURSTON AWNING COMPANY, INC.
"QUALITY SERVICE SINCE 1977"

V.J. Knezevich
Professional Engineer
FL License No. PE 010983
JUL 13 2006

no.	date	description
0	06/28/2005	NW
1	07/12/2006	NW

date 06/28/2005
Scale AS NOTED
design by VJK
checked by VJK
drawing no. 05-343
sheet 4 of 6

TABLE 1 - STORM PANEL 1 & 1a SCHEDULE

NEGATIVE DESIGN LOAD W (PSF)	TYPE I	TYPE II	TYPE III	TYPE IV
	FOR MOUNTING CONDITIONS W/ "h" OR "U" HEADERS & SILLS USING STUDS, BOLTS OR DIRECT MOUNT @ 6" O.C.	FOR MOUNTING CONDITIONS W/ HEADERS & SILLS USING STUDS, BOLTS OR DIRECT MOUNT @ 6" O.C.	FOR MOUNTING CONDITIONS W/ "h" OR "U" HEADERS & SILLS USING STUDS, BOLTS OR DIRECT MOUNT @ 12" O.C.	FOR MOUNTING CONDITIONS W/ HEADERS & SILLS USING STUDS, BOLTS OR DIRECT MOUNT @ 12" O.C.
	BOLTS OR BAR REQ'D. AT MIDSPAN OVERLAPS	BOLTS OR BAR REQ'D. AT MIDSPAN OVERLAPS	NO BOLTS OR BAR REQ'D. AT MIDSPAN OVERLAPS	NO BOLTS OR BAR REQ'D. AT MIDSPAN OVERLAPS
	L max. (FT-IN)	L max. (FT-IN)	L max. (FT-IN)	L max. (FT-IN)
40.0	8 - 8	12 - 0	8 - 8	11 - 6
45.0	8 - 8	12 - 0	8 - 8	10 - 10
50.0	8 - 8	11 - 9	8 - 8	10 - 3
55.0	8 - 8	11 - 2	8 - 8	9 - 9
60.0	8 - 8	10 - 9	8 - 8	9 - 4
62.0	8 - 8	10 - 6	8 - 8	9 - 3
65.0	8 - 8	10 - 4	8 - 8	9 - 0
70.0	8 - 6	9 - 11	8 - 8	8 - 8
72.0	8 - 4	9 - 9	8 - 7	8 - 7
75.0	8 - 0	9 - 7	8 - 4	8 - 4
80.0	7 - 6	9 - 3	8 - 1	8 - 1
90.0	6 - 8	8 - 9	7 - 2	7 - 8
100.0	6 - 0	8 - 3	6 - 6	7 - 3
110.0	5 - 6	7 - 11	5 - 10	6 - 11
120.0	5 - 0	7 - 7	5 - 5	6 - 7
130.0	4 - 7	7 - 3	5 - 0	6 - 4
140.0	4 - 3	7 - 0	4 - 7	6 - 1
150.0	4 - 0	6 - 9	4 - 3	5 - 11

NOTES:

1. ENTER TABLE 1 WITH NEGATIVE DESIGN LOAD TO DETERMINE MAXIMUM PANEL LENGTH.
2. REFERENCE APPROPRIATE COLUMN IN STORM PANEL SCHEDULE BASED ON MOUNTING CONDITIONS IN FIELD.
3. SEE NOTE No. 16 ON PAGE 1.

TABLE 2 - MIN. STORM PANEL SEPARATION FROM GLASS SCHEDULE

POSITIVE DESIGN LOAD W (PSF)	ACTUAL SHUTTER SPAN (L) (FT - IN)	MINIMUM SEPARATION FOR INSTALLATIONS 30' OR LESS ABOVE GRADE (INCHES)		MINIMUM SEPARATION FOR INSTALLATIONS GREATER THAN 30' ABOVE GRADE (INCHES)
		BAR	NO BAR	NO BAR
40.0	5 - 0	2	2-1/2	1-1/4
	8 - 5	2	2-1/2	1-1/2
	12 - 0	N/A	3-1/4	2-1/2
50.0	5 - 0	2	2-1/2	1-1/4
	8 - 5	2	2-1/2	1-5/8
	11 - 9	N/A	3-1/4	2-3/4
60.0	5 - 0	2	2-1/2	1-1/4
	8 - 5	2	2-1/2	1-5/8
	10 - 9	N/A	3-1/4	2-1/2
70.0	5 - 0	2	2-1/2	1-1/4
	8 - 5	2	2-1/2	1-3/4
	9 - 11	N/A	3-1/4	2-1/4
80.0	5 - 0	2	2-1/2	1-1/4
	8 - 5	2	2-1/2	1-7/8
	9 - 3	N/A	3-1/4	2-1/8
90.0	5 - 0	2	2-1/2	1-1/4
	8 - 5	2	2-1/2	1-3/8
	8 - 9	N/A	3-1/4	2
100.0	4 - 0	2	2-1/2	1-1/4
	6 - 0	2	2-1/2	1-3/8
	8 - 3	2	2-1/2	2
110.0	4 - 0	2	2-1/2	1-1/4
	6 - 0	2	2-1/2	1-3/8
	7 - 11	2	2-1/2	1-7/8
120.0	4 - 0	2	2-1/2	1-1/4
	6 - 0	2	2-1/2	1-3/8
	7 - 7	2	2-1/2	1-7/8

NOTES:

1. ENTER TABLE 2 WITH POSITIVE DESIGN LOAD TO DETERMINE MINIMUM SEPARATION FROM GLASS.
2. FOR DESIGN LOADS BETWEEN TABULATED VALUES USE NEXT HIGHER LOAD OR LINEAR INTERPOLATION MAY BE USED TO DETERMINE ALLOWABLE PANEL LENGTH.
3. " N/A " DESIGNATES NOT APPLICABLE - MUST MEET "NO BAR" REQUIREMENTS.

PRODUCT RENEWED
 as complying with the Florida Building Code
 Acceptance No. 06-0928.05
 Expiration Date 02/16/2012
 By Helmut A. Mahr
 Miami Dade Product Control Division

PRODUCT REVISED
 as complying with the Florida Building Code
 Acceptance No. 05-0712.03
 Expiration Date 02/16/2007
 By Helmut A. Mahr
 Miami Dade Product Control Division

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HURST
 AWING COMPANY, INC.
 "QUALITY SERVICE SINCE 1957"

V.J. Knezevich
 Professional Engineer
 FL License No.: PE 0910983

JUL 13 2006

revisions		description	date
no.	date	description	date
0	06/28/2005	NW	
1	07/12/2006	NW	

PREVIOUSLY DRAWING No. 98-218
 COUNTY COMMENTS

date: 06/28/2005
 scale: AS NOTED
 design by: VJK
 checked by: VJK
 drawn by: MCR
 drawing no. 05-343
 sheet 5 of 6

ANCHOR SCHEDULE

FASTENER MAXIMUM SPACING (INCHES) REQUIRED FOR VARIOUS DESIGN LOADS AND SPANS

EXIST. STRUC.	ANCHOR TYPE	LOAD (W) P.S.F. MAX. (SEE NOTE 1)	MIN. 2" EDGE DISTANCE															MIN. 3" EDGE DISTANCE																										
			SPANS UP TO 5'-0" (SEE NOTE 1)					SPANS UP TO 8'-5" (SEE NOTE 1)					SPANS UP TO 12'-0" (SEE NOTE 1)					SPANS UP TO 5'-0" (SEE NOTE 1)					SPANS UP TO 8'-5" (SEE NOTE 1)					SPANS UP TO 12'-0" (SEE NOTE 1)																
			CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)					CONNECTION TYPE (SEE NOTE 3)																
			C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5	C1	C2	C3	C4	C5							
CONCRETE		43.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	7	11	12.5	12.5	12.5	4	7	12.5	12.5	12.5	12.5	12.5	12.5	7	12.5	12.5	12.5	4	9	12.5	12.5	12.5	4	9											
		50.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	5	9	12.5	12.5	12.5	3	6.25	12.5	12.5	12.5	12.5	12.5	12.5	5	11	12.5	12.5	12.5	3	7	12.5	12.5	12.5	3	7										
		72.0	12.5	12.5	12.5	7	11	12.5	12.5	12.5	3	6.25	12.5	8	5	4	12.5	12.5	12.5	7	12.5	12.5	12.5	3	7	12.5	8	5	4	12.5	8	5	4	12.5	8	5	4							
		84.0	12.5	12.5	12.5	5	9	12.5	12.5	8	5	12.5	5	4	3	12.5	12.5	12.5	6	11	12.5	8	3	6.25	12.5	6	4	4	12.5	6	4	4	12.5	6	4	4								
	150.0	12.5	11	7	5	10	4	3	3	10	4	3	3	12.5	12	7	6.25	11	4	3	3	11	4	3	3	12.5	11	4	3	3	12.5	11	4	3	3									
		43.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	4	7	12.5	12.5	12.5	5	12.5	12.5	12.5	12.5	12.5	12.5	7	12.5	12.5	12.5	4	9	12.5	12.5	12.5	4	9												
		50.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	5	11	12.5	12.5	12.5	3	7	12.5	12.5	12.5	12.5	12.5	5	11	12.5	12.5	12.5	3	7	12.5	12.5	12.5	3	7											
		72.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	3	6.25	12.5	12.5	12.5	7	12.5	12.5	12.5	12.5	12.5	12.5	3	7	12.5	8	5	4	12.5	8	5	4	12.5	8	5	4									
		84.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	5	11	12.5	12.5	12.5	3	6.25	12.5	12.5	12.5	12.5	12.5	5	11	12.5	12.5	12.5	3	6.25	12.5	12.5	12.5	3	6.25	12.5	12.5	12.5	3	6.25						
		43.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	4	7	12.5	12.5	12.5	5	12.5	12.5	12.5	12.5	12.5	12.5	6	12	12.5	12.5	12.5	3	8	12.5	12.5	12.5	3	8											
		50.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	3	6.25	12.5	12.5	12.5	4	12.5	12.5	12.5	12.5	12.5	12.5	4	10	12.5	12.5	12.5	3	7	12.5	12.5	12.5	3	7											
		72.0	12.5	12.5	12.5	4	7	12.5	12.5	8	4	10	5	3	3	12.5	12.5	12.5	6	12.5	12.5	10	7	12.5	5.6	2.5	4	5	12.5	5.6	2.5	4	5	12.5	5.6	2.5	4	5						
84.0		12.5	12.5	12.5	3	6.25	12.5	9	5	4	8	4	4	12.5	12.5	12.5	4	10	12.5	11	7	6.25	11	5	3	4	12.5	11	5	3	4	12.5	11	5	3	4								
	43.0	12.5	12.5	12.5	7	10	12.5	12.5	12.5	6.25	10	10	9	4	12.5	12.5	12.5	8	12.5	12.5	12.5	3	7	11	11	10	5	12.5	11	11	10	5	12.5	11	11	10	5							
	50.0	12.5	12.5	12.5	5	9	12	12	12	5	8	8	5	3	12.5	12.5	12.5	6	11	12.5	12.5	6.25	9	9	5	4	12.5	9	9	5	4	12.5	9	9	5	4								
	72.0	12.5	12.5	12.5	6.25	8	8	5	3	6	3	3	12.5	12.5	12.5	3	7	9	9	5	4	6.25	3	5	3	3	12.5	3	5	3	3	12.5	3	5	3	3								
	84.0	12	12	12	5	7	5	3	3	5	5	12.5	12.5	12.5	6.25	8	6	3	3	5	12.5	12.5	6.25	8	6	3	3	12.5	6.25	8	6	3	12.5	6.25	8	6	3							
	43.0	12.5	12.5	12.5	7	10	12.5	12.5	12.5	6.25	10	10	9	4	12.5	12.5	12.5	8	12.5	12.5	12.5	3	7	11	11	10	5	12.5	11	11	10	5	12.5	11	11	10	5							
	50.0	12.5	12.5	12.5	5	9	12	12	12	5	8	8	5	3	12.5	12.5	12.5	6	11	12.5	12.5	6.25	9	9	5	4	12.5	9	9	5	4	12.5	9	9	5	4								
	72.0	12.5	12.5	12.5	6	8	8	4	3	5	3	3	12.5	12.5	12.5	3	7	9	9	5	4	6.25	3	5	3	3	12.5	3	5	3	3	12.5	3	5	3	3								
	84.0	12	12	12	5	7	5	3	3	5	5	12.5	12.5	12.5	6.25	8	5	3	3	5	12.5	12.5	6.25	8	5	3	3	12.5	6.25	8	5	3	12.5	6.25	8	5	3							
	43.0	12.5	12.5	12.5	6	8	11	11	11	4	8	8	7	3	12.5	12.5	12.5	7	11	12.5	12.5	7	10	10	9	4	12.5	10	10	9	4	12.5	10	10	9	4								
	50.0	12.5	12.5	12.5	4	6.25	10	10	10	4	7	7	4	3	12.5	12.5	12.5	5	10	12.5	12.5	6	8	8	5	4	12.5	6	8	8	5	4	12.5	6	8	8	5	4						
	72.0	11	11	11	4	6.25	6.25	2.5	4	4	4	4	4	12.5	12.5	12.5	7	8	8	5	4	6	3	3	3	12.5	4	6	3	3	12.5	4	6	3	3									
	84.0	10	10	10	4	5	4	4	4	4	4	12.5	12.5	12.5	6	7	5	3	3	12.5	12.5	6	7	5	3	3	12.5	3	5	3	3	12.5	3	5	3	3								
	43.0	12.5	12.5	12.5	6	8	11	11	11	4	8	8	7	3	12.5	12.5	12.5	7	11	12.5	12.5	7	10	10	9	4	12.5	10	10	9	4	12.5	10	10	9	4								
	50.0	12.5	12.5	12.5	4	6.25	10	10	10	4	7	7	4	3	12.5	12.5	12.5	5	10	12.5	12.5	6	8	8	5	4	12.5	6	8	8	5	4	12.5	6	8	8	5	4						
	72.0	11	11	11	4	6.25	6.25	2.5	4	4	4	4	4	12.5	12.5	12.5	7	8	8	5	4	6	3	3	3	12.5	4	6	3	3	12.5	4	6	3	3									
	84.0	10	10	10	4	5	4	4	4	4	4	12.5	12.5	12.5	6	7	5	3	3	12.5	12.5	6	7	5	3	3	12.5	3	5	3	3	12.5	3	5	3	3								
	43.0	12.5	12.5	12.5	7	10	12.5	12.5	12.5	6	9	9	8	4	12.5	12.5	12.5	8	12.5	12.5	12.5	3	7	11	11	9	5	12.5	11	11	9	5	12.5	11	11	9	5							
	50.0	12.5	12.5	12.5	5	8	12	12	12	5	8	8	5	3	12.5	12.5	12.5	5	10	12.5	12.5	6.25	9	9	5	4	12.5	6.25	9	9	5	4	12.5	6.25	9	9	5	4						
	72.0	12.5	12.5	12.5	6	8	8	4	3	5	3	3	12.5	12.5	12.5	3	7	9	9	5	4	6.25	3	5	3	3	12.5	3	5	3	3	12.5	3	5	3	3								
	84.0	12	12	12	5	7	5	3	3	5	5	12.5	12.5	12.5	6.25	8	5	3	3	5	12.5	12.5	6.25	8	5	3	3	12.5	6.25	8	5	3	12.5	6.25	8	5	3							
	43.0	12.5	12.5	12.5	9	12.5	12.5	12.5	3	8	12.5	12.5	11	5	12.5	12.5	12.5	9	12.5	12.5	12.5	3	8	12.5	12.5	11	5	12.5	12.5	12.5	11	5	12.5	12.5	12.5	11	5							
	50.0	12.5	12.5	12.5	6.25	12	12.5	12.5	7	11	11	6.25	5	12.5	12.5	12.5	6.25	12	12.5	12.5	12	12.5	12.5	12	11	11	6.25	5	12.5	12.5	12.5	12	11	11	6.25	5	12.5	12.5	12.5	12	11	11	6.25	5
	72.0	12.5	12.5	12.5	3	8	11	11	6.25	4	7	4	3	3	12.5	12.5	12.5	3	8	11	11	6.25	4	7	4	3	12.5	4	7	4	3	12.5	4	7	4	3								
	84.0	12.5	12.5	12.5	7	9	6.25	4	4	6.25	3	8	11	6.25	4	6.25	3	12.5	12.5	12.5	7	9	6.25	4	4	6.25	3	12.5	6.25	4	4	6.25	3	12.5	6.25	4	4	6.25	3	12.5	6.25	4	4	6.25
	43.0	12.5	12.5	12.5	9	12.5	12.5	12.5	3	8	12.5	12.5	11	5	12.5	12.5	12.5	9	12.5	12.5	12.5	3	8	12.5	12.5	11	5	12.5	12.5	12.5	11	5	12.5	12.5	12.5	11	5							
	50.0	12.5	12.5	12.5	6.25	12	12.5	12.5	7	11	11	6.25	5	12.5	12.5	12.5	6.25	12	12.5	12.5	12	12.5	12.5	12	11	11	6.25	5	12.5	12.5	12.5	12	11	11	6.25	5	12.5	12.5	12.5	12	11	11	6.25	5
	72.0	12.5	12.5	12.5	3	8	11	11	6.25	4	7	4	3	3	12.5	12.5	12.5	3	8	11	11	6.25	4	7	4	3	12.5	4	7	4	3	12.5	4	7	4	3								
	84.0	12.5	12.5	12.5	7	9	6.25	4	4	6.25	3	8	11	6.25	4	6.25	3	12.5	12.5	12.5	7	9	6.25	4	4	6.25	3	12.5	6.25	4	4	6.25	3	12.5	6.25	4	4							