



**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.miamidade.gov](http://www.miamidade.gov)

**NOTICE OF ACCEPTANCE (NOA)**

**Hurst Awning Co., Inc.**  
**6865 N.W. 36<sup>th</sup> 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: 0.063" Aluminum (5052 H32 Alloy) Storm Panels Shutter**

**APPROVAL DOCUMENT:** Drawing No. 05-345, titled "0.063" Aluminum 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 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 # 03-0701.01 and consists of this page 1, evidence submitted pages E-1, E-2, E-3, & E-4 as well as approval document mentioned above.

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



*Helmy A. Makar*  
 08/24/2006

**NOA No 05-0712.02**  
**Expiration Date: 07/10/ 2008**  
**Approval Date: 08/24/ 2006**  
**Page 1**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVALS**

**A. DRAWINGS**

1. *Drawing No. 95-330, Hurst Aluminum Co., 0.063" Aluminum Storm Panels, Sheets 1 through 6, prepared by Knezevich & Associates, dated 06/09/95, revision 9 dated 06/18/97, signed and sealed by V.J. Knezevich, P.E.*

**B. TESTS**

1. *Test report on Large Missile Impact and Uniform Static Air Pressure Test of "Aluminum" storm panels, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-94-292b, dated September 13, 1995, signed and sealed by Hector M. Medina, P.E.*
2. *Test report on Uniform Static Air Pressure Test of "Aluminum" storm panels, prepared by Construction Research Laboratory, Inc., Report No. CRL-S1021C, dated August 17, 1994, signed and sealed by Vipin N. Tolat, P.E.*
3. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of .060" aluminum storm panels, prepared by Hurricane Engineering & Testing, Inc., Report No. HETI-94-395b, dated December 14, 1994, signed and sealed by Hector M. Medina, P.E.*
4. *Test report on Large Missile Impact and Uniform Static Air Pressure Test of 0.063" aluminum storm panels, prepared by Construction Testing Corp., Test Report No. CTC 95-022 dated 06/09/95, signed and sealed by Christopher Tyson, P.E.*
5. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of 20 ga. Steel Storm Panels, prepared by Construction Testing Corp., Test Report No. CTC 95-031 dated August 31, 1995, signed and sealed by Christopher Tyson, P.E. (This test has been submitted exclusively to verify anchor calculations)*
6. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of .063" aluminum storm panels, prepared by Construction Testing Corporation, Report No. CTC-96-007, dated March 14, 1996, signed and sealed by Christopher G. Tyson, P.E.*
7. *Test report on Large Missile Impact Test and Uniform Static Air Pressure Test and Cyclic Wind Pressure Test of .063" aluminum storm panels, prepared by Construction Testing Corporation, Report No. CTC-96-007R, dated March 14, 1996, signed and sealed by Christopher G. Tyson, P.E.*
8. *Test report on Large Missile Impact Test and Uniform Static Air Pressure Test and Cyclic Wind Pressure Test of 20 ga. Steel Storm Panels, prepared by Construction Testing Corporation, Report No. CTC-96-006R, dated March 07, 1996, signed and sealed by Christopher G. Tyson, P.E. (This test has been submitted exclusively to verify the T-track and the Epcon anchor calculations as in Samples F & B respectively).*
9. *Test report on Large Missile Impact Test and Cyclic Wind Pressure Test of 20 ga. 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. (This test has been submitted exclusively to verify the build out sill mount with out the aluminum tubes as in Sample B).*



Helmy A. Makar, P.E.

Product Control Division

NOA No 05-0712.02

Expiration Date: 07/10/ 2008

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**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**C. CALCULATIONS**

1. *Comparative Analysis and Anchor Analysis, dated 7/11/95, pages 1 through 23, 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. *Calculations for revised anchor schedule and revised storm panel schedule, dated 06/13/96, pages 1 through 30, prepared by Knezevich & Associates, Inc., signed and sealed by V.J. Knezevich, P.E.*
4. *Calculations for 0.063" aluminum storm panels, dated 05/06/97, pages 1 through 36, prepared by Knezevich & Associates, Inc., signed and sealed by V.J. Knezevich, P.E.*
5. *Anchor calculations, dated 06/10/97, pages 1 through 10, prepared by Knezevich & Associates, Inc., signed and sealed by V.J. Knezevich, P.E.*

**D. MATERIAL CERTIFICATIONS**

1. *Mill Certified Inspection Report of coils, not dated, for Aluminum Alloy 5052-H32 by American Douglas Metals, with chemical composition and physical properties.*
2. *Tensile Test Report #94-268 from ATEC Associates, Inc., dated 08/10/94 for Aluminum sample #S1021, tested per ASTM E8-93, signed and sealed by Peter G. Read, P.E.*
3. *Tensile Test Report from HETI, Project #HETI 94-T26a dated 10/03/94 for Aluminum sample, tested per ASTM E8-93, signed and sealed by Hector M. Medina, P.E.*
4. *Certified Tensile Test Report by QC Metallurgical, Report No. 5FM-1307 dated 6/14/95 for 0.063" x 5025 aluminum alloy.*

**2. EVIDENCE SUBMITTED UNDER PRODUCT APPROVAL NO. 98-1021.02**

**A. DRAWINGS**

1. *Drawing No. 98-217, prepared by Knezevich & Associates, Inc., titled "0.063" Aluminum Storm Panel", 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 5, 1999.*

**B. TESTS**

1. *Test report on Large Missile Impact Test, Uniform Static Air Pressure Test, and Cyclic Wind Pressure Test of 0.063" aluminum storm panels, prepared by Construction Testing Corporation, Report No. CTC-98-043, dated September 8, 1998, signed and sealed by Christopher G. Tyson, P.E.*

**C. CALCULATIONS**

1. *Revised anchor calculations, dated September 30, 1998, pages 1 through 32, prepared by Knezevich & Associates, Inc., signed and sealed by V.J. Knezevich, P.E. on October 7, 1998.*



Helmy A. Makar, P.E.  
Product Control Division  
NOA No 05-0712.02

Expiration Date: 07/10/ 2008  
Approval Date: 08/24/ 2006

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

2. *Revised anchor calculations, dated January 5, 1999, pages 1 through 5, prepared by Knezevich & Associates, Inc., signed and sealed by V.J. Knezevich, P.E. on January 6, 1999.*

**D. MATERIAL CERTIFICATIONS**

1. *Mill Certified Inspection Report, dated May 1, 1998, for Aluminum Alloy 5052-H32 (0.063" thick) by Amerimet, with chemical composition and physical properties.*
2. *Tensile Test Report from Certified Testing Laboratories, report # CTL-800D, dated 09/03/98, for Aluminum sample #98-043, signed and sealed by Ramesh Patel, P.E.*

**3. EVIDENCE SUBMITTED UNDER PRODUCT APPROVAL NO. 99-0421.07**

**A. DRAWINGS**

1. *None.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. MATERIAL CERTIFICATIONS**

1. *None.*

**4. EVIDENCE SUBMITTED UNDER PRODUCT APPROVAL NO. 02-0315.08**

**A. DRAWINGS**

See NOA 99-0421.07

**B. TESTS**

See NOA 99-0421.07

**C. CALCULATIONS**

See NOA 99-0421.07

**D. MATERIAL CERTIFICATIONS**

See NOA 99-0421.07

**E. STATEMENTS**

See NOA 99-0421.07

**F. OTHER**

See NOA 99-0421.07



Helmy A. Makar, P.E.

Product Control Division

NOA No 05-0712.02

Expiration Date: 07/10/ 2008

Approval Date: 08/24/ 2006

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 03-0701.01**

**A. DRAWINGS**

1. *None.*

**B. TESTS**

1. *None.*

**C. CALCULATIONS**

1. *None.*

**D. MATERIAL CERTIFICATIONS**

1. *None.*

**6. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS**

1. *Drawing No. 05-345, titled "0.063" Aluminum 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.*

**C. CALCULATIONS**

1. *Revised anchor calculations, dated June 16, 2005, pages 1 through 49, prepared by Thornton-Tomasetti Group, signed and sealed by V.J. Knezevich, P.E. on June 16, 2005.*

**D. QUALITY ASSURANCE**

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

**E. MATERIAL CERTIFICATIONS**

1. *None.*



Helmy A. Makar, P.E.

Product Control Division

NOA No 05-0712.02

Expiration Date: 07/10/ 2008

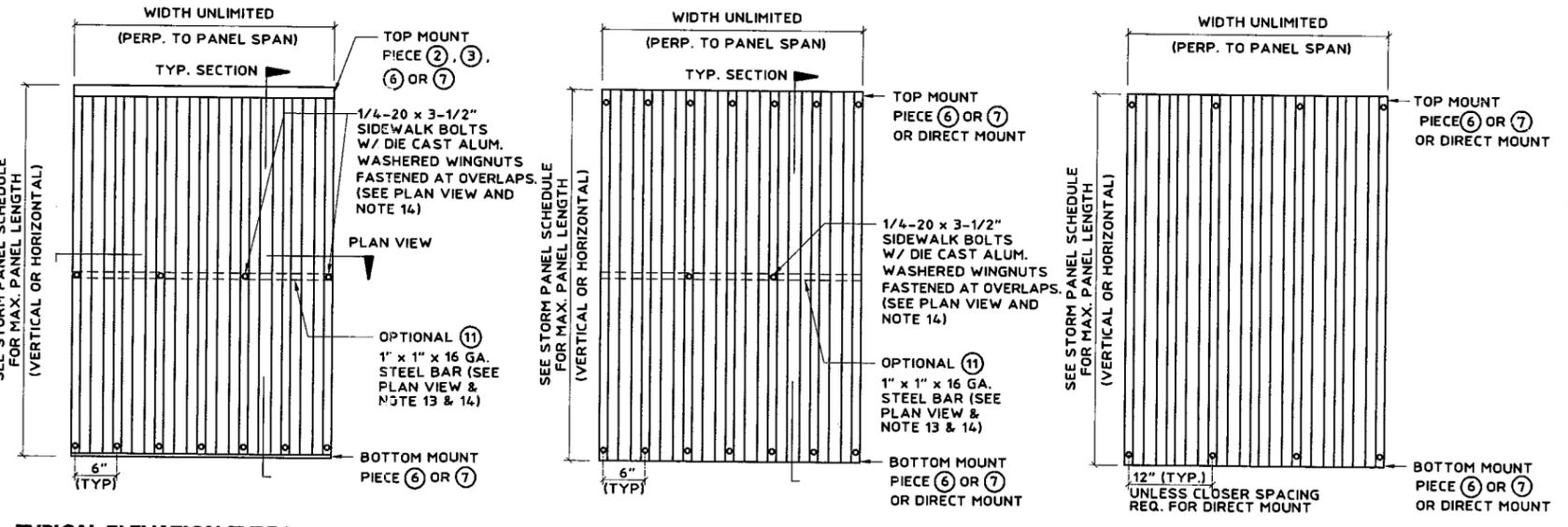
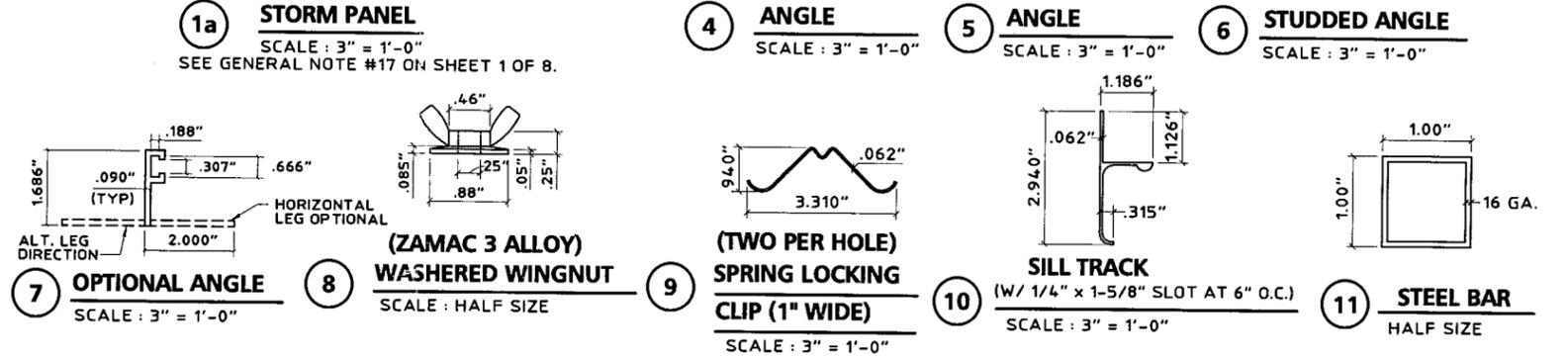
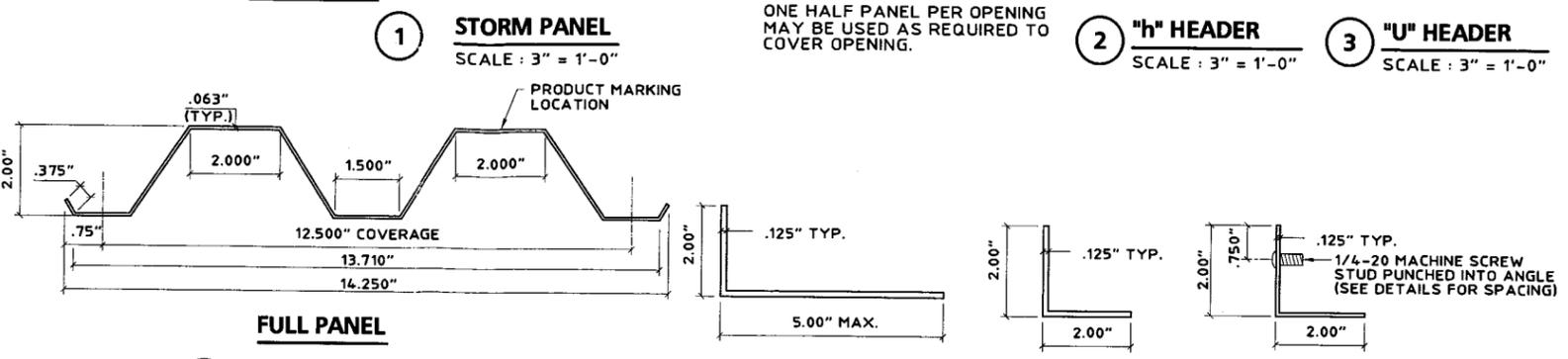
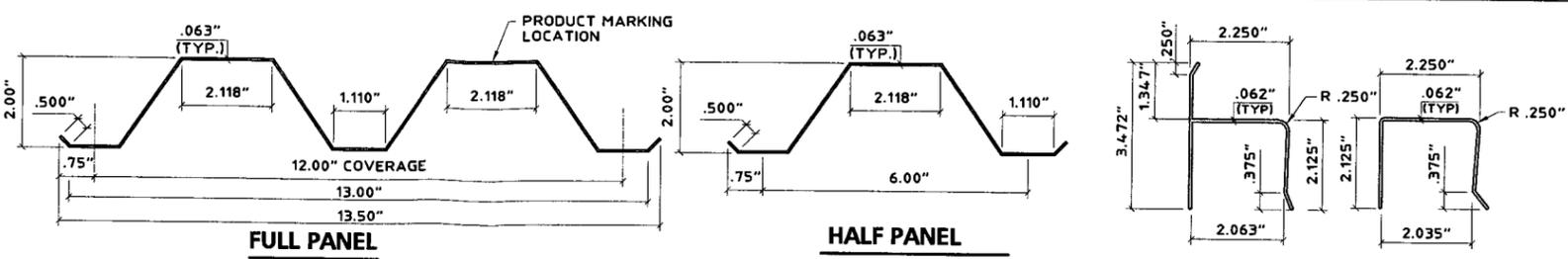
Approval Date: 08/24/ 2006

**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 APPROVAL DOCUMENTS.
- 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.
- STORM PANELS SHALL BE 5052-H32 ALUMINUM ALLOY, WITH THE FOLLOWING BARE METAL THICKNESS AND MECHANICAL PROPERTIES:
 

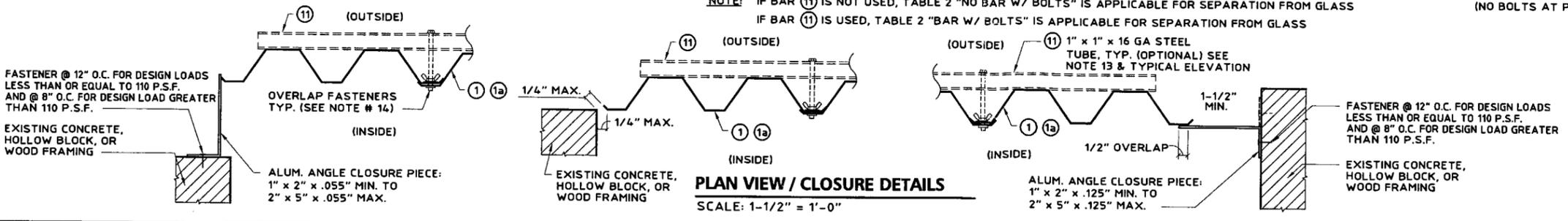
0.063" MIN. BARE METAL THICKNESS, WITH A MIN.  $F_y = 25.0$  KSI
- ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N
- TYPE I & TYPE II PANELS, OPTIONAL 1" x 1" x 16 GA STEEL BAR MAY BE USED TO CONTROL DEFLECTION OF STORM PANEL SYSTEM ON INSTALLATIONS BELOW 30' ABOVE THE GRADE, PROVIDED THAT THE PANEL SPANS USED ARE 101" OR LESS, THAT DESIGN LOADS ARE BELOW  $\pm 72$  PSF AND THAT THE SEPARATION FROM GLASS IS 1-7/8" OR MORE BUT LESS THAN 2.5".
- TYPE I & II PANELS SHALL BE FASTENED AT PANEL OVERLAPS AT MIDSPAN WITH 1/4-20 x 1" BOLTS W/ DIE CAST ALUM. WASHERED WINGNUTS OR JACKNUTS (SEE TYPICAL ELEVATION). FOR TYPE I OR II PANEL SPANS LESS THAN 33" OVERLAP FASTENERS & TUBULAR BAR ARE NOT REQUIRED NO STEEL BAR OR OVERLAP FASTENERS ARE REQUIRED FOR INSTALLATION TYPE III. (SEE TYPICAL ELEVATION TYPE III). TYPE I & II PANELS UTILIZING A STEEL BAR SHALL BE FASTENED AT OVERLAPS AT MIDSPAN TO A 1" x 1" x 16 GAGE STEEL BAR USING 1/4-20 x 3-1/2" BOLTS W/ DIE CAST ALUM. WASHERED WINGNUTS OR JACKNUTS, (SEE TYP. ELEVATION).
- 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 TUBE ARE PROPERLY INSTALLED WHEN REQUIRED. WARNING LABEL SHALL BE FASTENED WITH PERMANENT ADHESIVE OR MECHANICALLY. ADDITIONAL WARNING LABEL SHALL BE PLACED WHEN SPRING LOCKING CLIPS ARE USED STATING THAT TWO SPRING LOCKING CLIPS ARE REQUIRED PER HOLE.
- WHEN PANEL (1a) IS USED, 6-1/4" AND 12-1/2" O.C. ANCHOR FASTENERS SPACING 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.



**TYPICAL ELEVATION-TYPE I**  
 NOTE: IF BAR (11) IS NOT USED, TABLE 2 "NO BAR W/ BOLTS" IS APPLICABLE FOR SEPARATION FROM GLASS  
 IF BAR (11) IS USED, TABLE 2 "BAR W/ BOLTS" IS APPLICABLE FOR SEPARATION FROM GLASS

**TYPICAL ELEVATION-TYPE II**  
 NOTE: IF BAR (11) IS NOT USED, TABLE 2 "NO BAR W/ BOLTS" IS APPLICABLE FOR SEPARATION FROM GLASS  
 IF BAR (11) IS USED, TABLE 2 "BAR W/ BOLTS" IS APPLICABLE FOR SEPARATION FROM GLASS

**TYPICAL ELEVATION-TYPE III**  
 (NO BOLTS AT PANEL OVERLAPS OR BAR ARE REQUIRED)



**PRODUCT REVISED**  
 as complying with the Florida Building Code  
 Acceptance No. 05-0712.02  
 Expiration Date 07/10/2008  
 By *Heung H. Hahn*  
 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.TheTTGroup.com  
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**0.063" ALUMINUM 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

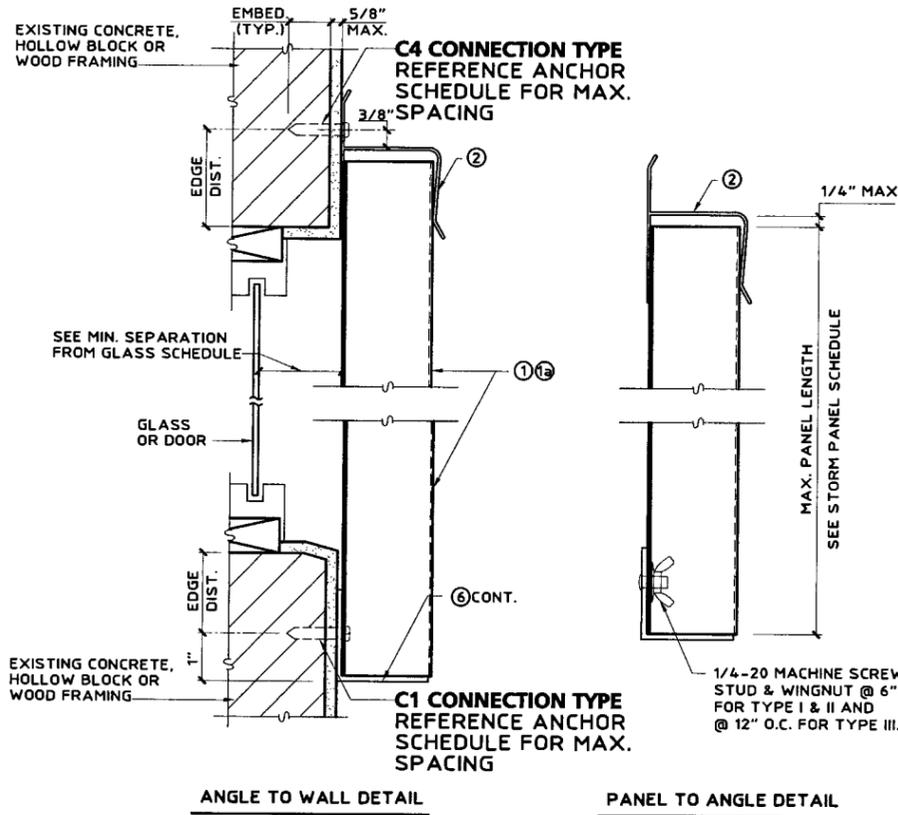
**V.J. Knezevich**  
 Professional Engineer  
 FL License No.: PE 0070983

JUL 13 2006

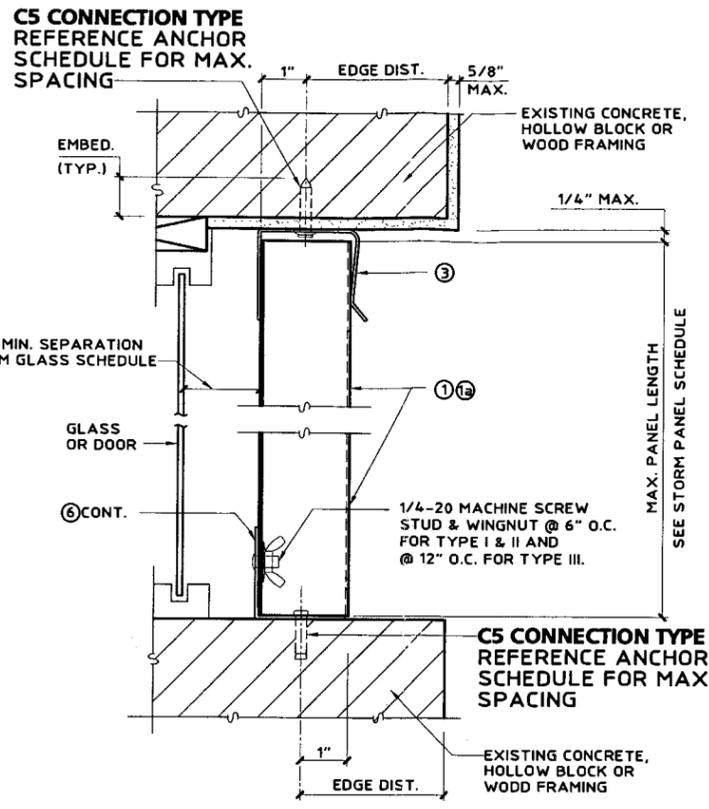
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1	07/12/2006	NW	COUNTY COMMENTS

revisions

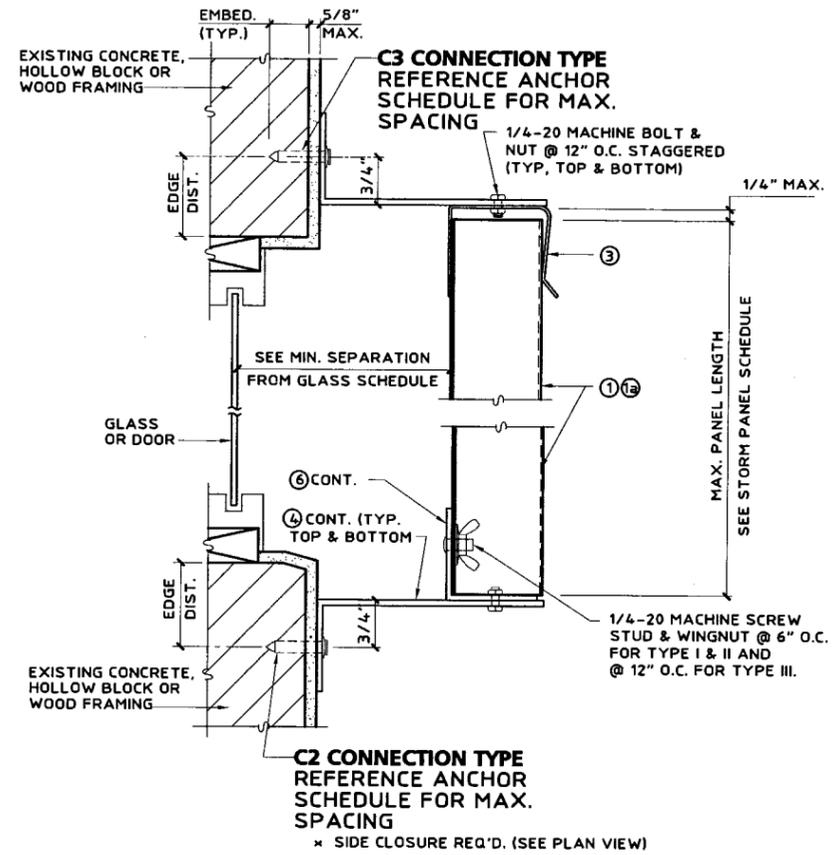
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 scale AS NOTED  
 design by VJK  
 checked by VJK  
 drawing no. 05-345  
 sheet 1 of 6



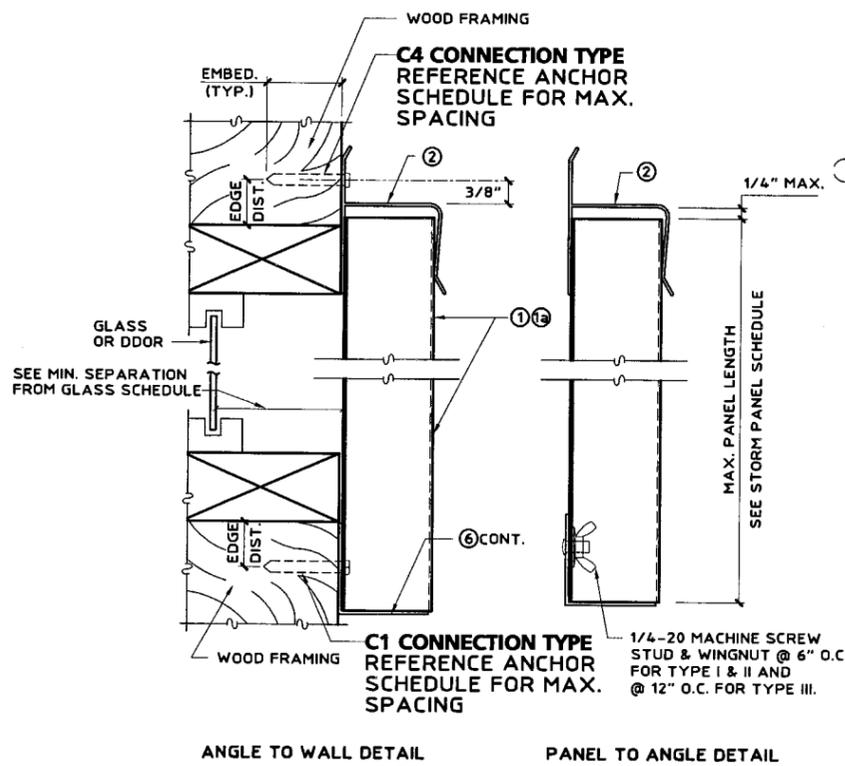
**A WALL MOUNT SECTION**  
SCALE: 3" = 1'-0"



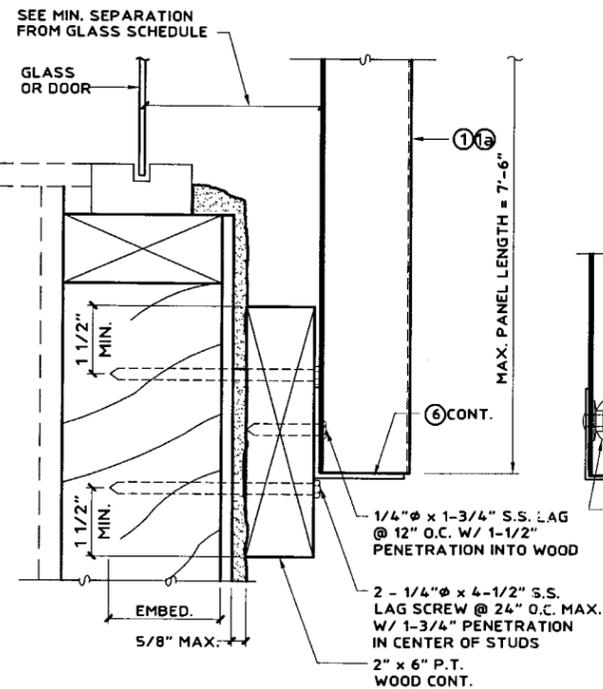
**B CEILING/INSIDE MOUNT SECTION**  
SCALE: 3" = 1'-0"



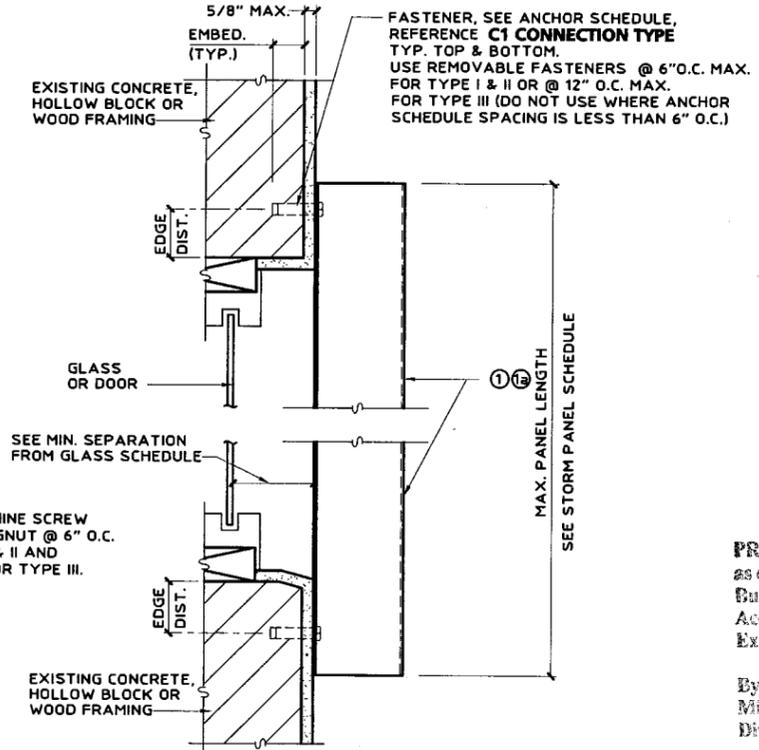
**C BUILD-OUT MOUNT SECTION**  
SCALE: 3" = 1'-0"



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



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



**F WALL MOUNT SECTION (DIRECT MOUNT)**  
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.

PRODUCT REVISED as complying with the Florida Building Code  
Acceptance No. 05-0712.02  
Expiration Date 07/10/2008  
By: *Helmut A. Mahr*  
Miami Dade Product Control Division

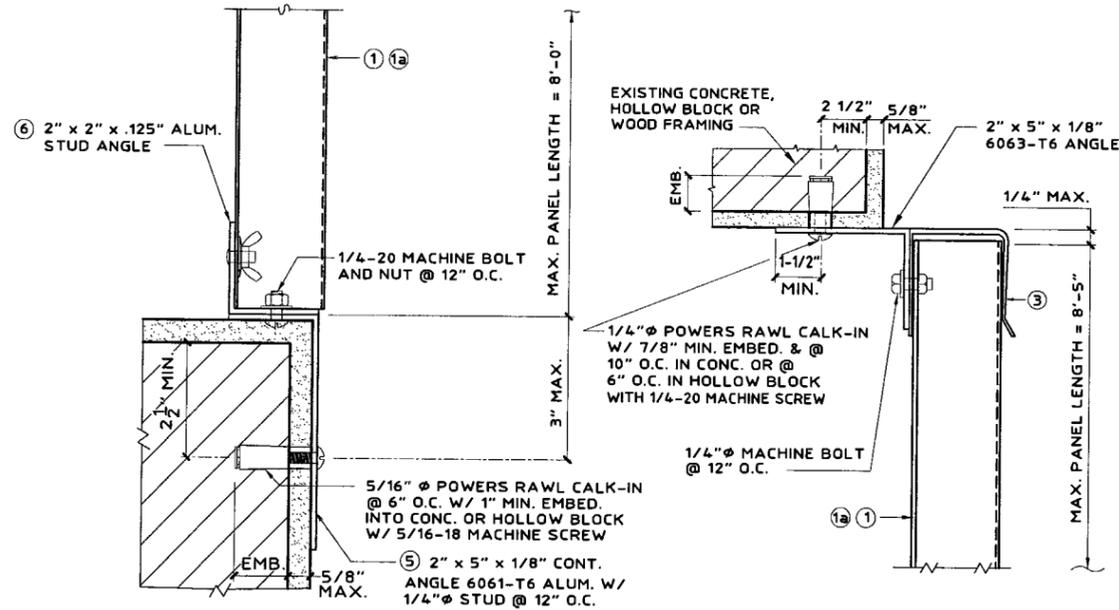
**Thornton-Tomasetti Group**  
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Website: www.TheTTGroup.com  
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**0.063" ALUMINUM STORM PANEL**  
Manufacturers of Hurricanes & Security Protection Products  
6865 N.W. 36th Avenue  
Miami, Florida 33147  
Phone: (305) 635-0900  
Toll Free: (800) 327-0905  
Fax: (305) 634-9078  
**HURSTI**  
AWNING COMPANY, INC.  
"QUALITY SERVICE SINCE 1957"

**V.J. Knezevich**  
Professional Engineer  
FL License No.: PE 0011987  
JUL 13 2006

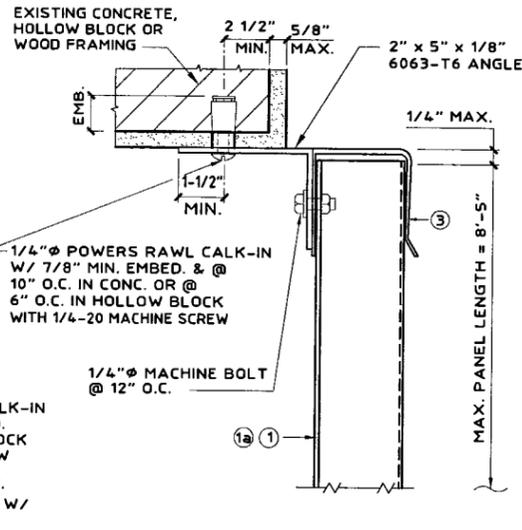
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0	06/28/2005	PRELIMINARY DRAWING NO. 98-217
1	07/12/2006	COUNTY COMMENTS

date: 06/28/2005  
scale: AS NOTED  
design by: VJK  
checked by: VJK  
drawing no.: 05-345  
sheet 2 of 6



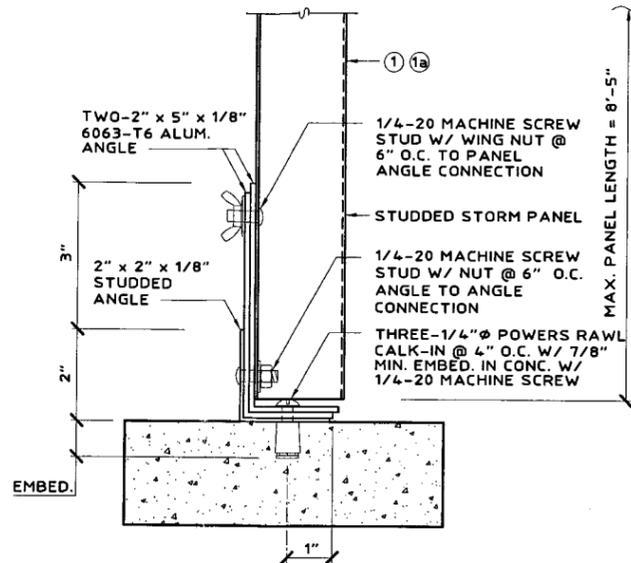
**NOTE:** THIS DETAIL MAY BE USED AT TOP OR BOTTOM OF PANEL.  
(MAX. DESIGN LOAD ± 72 PSF)

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



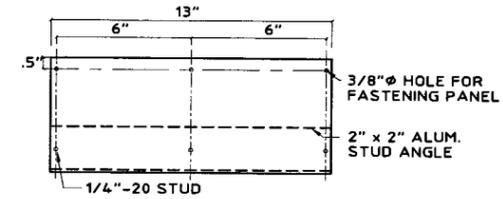
(MAX. DESIGN LOAD ± 72 PSF)

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

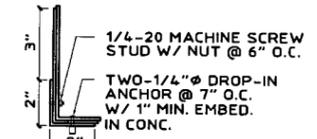


(MAX. DESIGN LOAD ± 72 PSF)

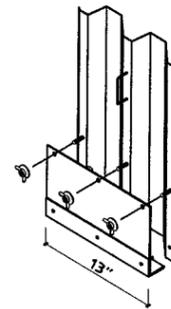
**T** **ASSEMBLY MOUNT**  
SCALE: 3" = 1'-0"



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

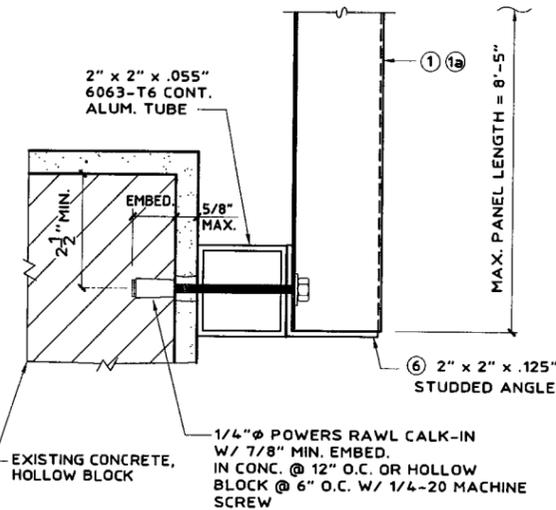


**INTERIOR FASTENING ANGLE ASSEMBLY**  
SCALE: 1-1/2" = 1'-0"



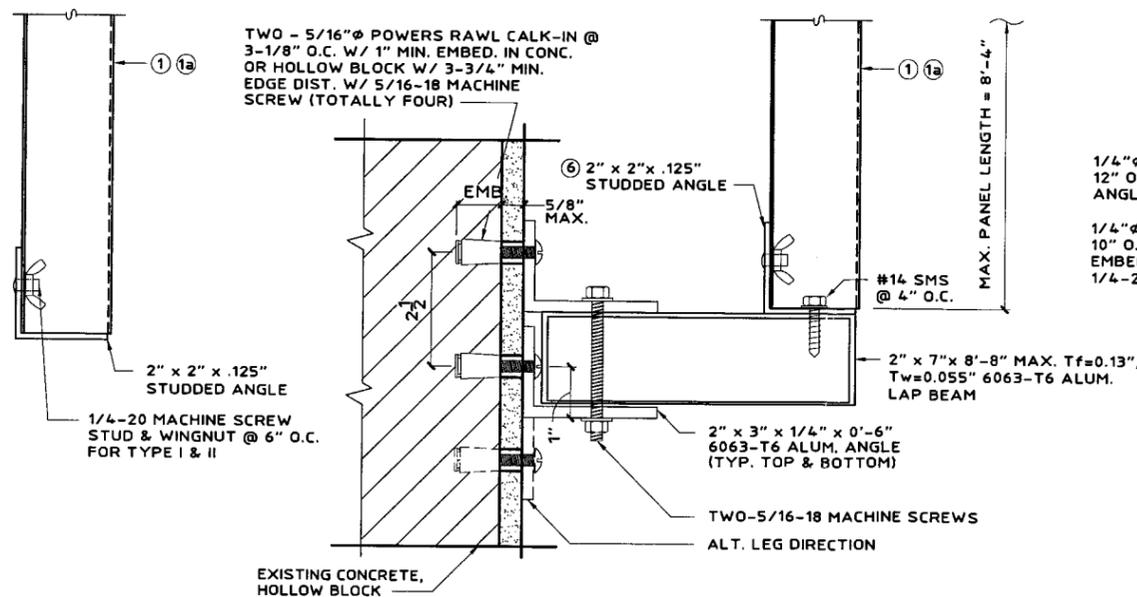
PUNCH HOLES IN ADJACENT PANELS TO RECEIVE THIS BOLT. PLACE PANEL OVER EACH ADJACENT PANEL AND FASTEN WINGNUTS FROM THE INSIDE.

**STORM PANEL INTERIOR FASTENING DETAIL (USE WITH DETAIL T)**  
SCALE: N.T.S.



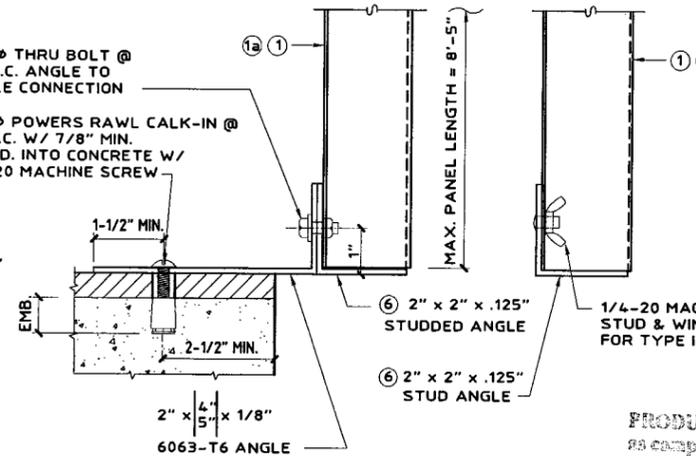
**NOTE:** THIS DETAIL MAY BE USED AT TOP OR BOTTOM OF PANEL.  
(MAX. DESIGN LOAD ± 72 PSF)

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



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

**V** **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)

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

**Thornton-Tomasetti Group**  
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Website: www.TheTTGroup.com  
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**C-063 ALUMINUM 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 0610983

JUL 13 2006

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

**PRODUCT REVISED**  
as complying with the Florida Building Code  
Acceptance No. 05-0712.02  
Expiration Date 07/10/2008  
By: *Helmut A. Mohr*  
Miami Dade Product Control Division

date	06/28/2005
scale	AS NOTED
design by	VJK
checked by	VJK
drawing no.	05-345
sheet	4 of 6

TABLE 1	STORM PANEL ① & ①a SCHEDULE				
	NEGATIVE DESIGN LOAD (W) (PSF)	TYPE I	TYPE II	TYPE III	
		*  L max. (FT-IN)	*  L max. (FT-IN)	*	
				① ABOVE CONDITIONS TOP & BOTTOM W/ NO SPRING LOCKING CLIP	② ABOVE CONDITIONS AT TOP & SPRING LOCKING CLIP AT BOTTOM
40.0	8 - 5	10 - 8	11 - 0	8 - 8	
50.0	8 - 5	10 - 5	10 - 5	8 - 8	
60.0	8 - 5	9 - 11	9 - 11	8 - 7	
70.0	8 - 5	9 - 7	8 - 9	7 - 4	
75.0	8 - 0	9 - 5	8 - 5	6 - 10	
80.0	7 - 6	9 - 3	7 - 8	6 - 5	
90.0	6 - 8	9 - 0	6 - 10	5 - 9	
100.0	6 - 0	8 - 9	6 - 2	5 - 2	
110.0	5 - 6	8 - 7	5 - 7	4 - 8	
120.0	5 - 0	8 - 4	5 - 1	4 - 3	
130.0	4 - 7	8 - 2	4 - 9	3 - 11	
140.0	4 - 3	7 - 10	4 - 4	3 - 8	
150.0	4 - 0	7 - 4	4 - 1	3 - 5	
160.0	3 - 9	6 - 11	3 - 10	3 - 2	
170.0	3 - 6	6 - 6	3 - 7	3 - 0	
180.0	3 - 4	6 - 1	3 - 5	2 - 10	
190.0	3 - 2	5 - 9	3 - 3	2 - 8	
200.0	3 - 0	5 - 6	3 - 1	2 - 7	
210.0	2 - 10	5 - 3	2 - 11	2 - 5	
220.0	2 - 9	5 - 0	2 - 9	2 - 4	
230.0	2 - 7	4 - 9	2 - 8	2 - 3	

\* NOTES:

- ENTER TABLE 1 WITH NEGATIVE DESIGN LOAD TO DETERMINE MAXIMUM PANEL LENGTH.
- REFERENCE APPROPRIATE COLUMN IN STORM PANEL SCHEDULE BASED ON MOUNTING CONDITIONS IN FIELD.
- SEE NOTE No. 17 ON PAGE 1.

PRODUCT REVISED  
as complying with the Florida  
Building Code  
Acceptance No. 05-0712.02  
Expiration Date 07/10/2008  
By *Helmut A. M...*  
Miami Dade Product Control  
Division

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

NOTES:

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

Thornton-Tomasetti Group

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0.063" ALUMINUM STORM PANEL

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Phone: (305) 635-0900  
Toll Free: (800) 327-0905  
Fax: (305) 634-9078

**HURST**  
ALUMINUM COMPANY, INC.  
"QUALITY SERVICE SINCE 1937"

V.J. Knezevich  
Professional Engineer  
FL License No. PE010983

*[Signature]*  
JUL 13 2006

no.	date	description

date 06/28/2005

scale AS NOTED

design by VJK

drawn by MCR

checked by VJK

drawing no. 05-345

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																										
			SPANS UP TO 5'-0" (SEE NOTE 1)					SPANS UP TO 8'-5" (SEE NOTE 1)					SPANS UP TO 11'-0" (SEE NOTE 1)																
			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												
CONCRETE		48.0	12.5	12.5	12.5	12.5	12.5	12.5	12.5	6	9	12.5	12.5	12.5	4	7	12.5	12.5	12.5	12.5	12.5	6	11	12.5	12.5	12.5	4	9	
		62.0	12.5	12.5	12.5	9	12.5	12.5	12.5	4	7	12.5	12.5	9	3	5	12.5	12.5	12.5	9	12.5	12.5	4	9	12.5	12.5	9	3	6
		72.0	12.5	12.5	12.5	7	11	12.5	12.5	12.5	3	6	12.5	10	6	5	12.5	12.5	12.5	7	12.5	12.5	3	7	12.5	10	7	6	
	*	48.0															12.5	12.5	12.5	12.5	12.5	6	11	12.5	12.5	12.5	4	8	
		62.0															12.5	12.5	12.5	9	12.5	12.5	4	9	12.5	12.5	9	3	6
		72.0															12.5	12.5	12.5	7	12.5	12.5	3	7	12.5	9	6	5	
	*	48.0	12.5	12.5	12.5	10	11	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	5	11	12.5	12.5	12.5	3	8	
		62.0	12.5	12.5	12.5	6	9	12.5	12.5	12.5	5	12.5	10	6	4	12.5	12.5	12.5	7	12.5	12.5	12.5	3	8	12.5	12.5	7	6	
		72.0	12.5	12.5	12.5	4	7	12.5	12.5	8	4	11	6	4	3	12.5	12.5	12.5	6	12.5	12.5	10	7	12.5	8	5	5		
	*	48.0	12.5	12.5	12.5	3	6	11	7	4	3	8	3			12.5	12.5	12.5	4	9	12.5	8	5	5	11	4	3	4	
		62.0	12.5	12.5	12.5	3	6	11	7	4	3	8	3			12.5	12.5	12.5	4	9	12.5	8	5	5	11	4	3	4	
		92.0	12.5	12.5	12.5	3	6	11	7	4	3	8	3			12.5	12.5	12.5	4	9	12.5	8	5	5	11	4	3	4	
*	48.0	8	3			8	3			8	3			10	4	3			4	10	4	3		4	10	4	3	4	
	62.0	12.5	12.5	12.5	5	9	12.5	12.5	12.5	5	9	9	8	4	12.5	12.5	12.5	6	11	12.5	12.5	6	11	11	9	5			
	72.0	12.5	12.5	12.5	3	7	10	10	8	4	7	6	3	3	12.5	12.5	12.5	4	9	11	11	9	5	8	6	4	4		
*	48.0	12.5	12.5	12.5	3	7	10	10	8	4	7	6	3	3	12.5	12.5	12.5	3	7	9	9	5	4	7	4	3	3		
	62.0	12.5	12.5	12.5	3	7	10	10	8	4	7	6	3	3	12.5	12.5	12.5	3	7	9	9	5	4	7	4	3	3		
	92.0	12.5	12.5	12.5	3	7	10	10	8	4	7	6	3	3	12.5	12.5	12.5	3	7	9	9	5	4	7	4	3	3		
*	48.0	11	11	11		4	6	6	4	5	3			12.5	12.5	12.5	7	8	8	5	4	6	3	3	3				
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
*	48.0	12.5	12.5	12.5	4	7	10	10	10	4	8	8	6	3	5	12.5	12.5	12.5	5	10	12.5	12.5	6	10	10	8	4		
	62.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10	8	4	7	6	3	3			
	72.0	12.5	12.5	12.5	5	8	8	6	3	6	4			12.5	12.5	12.5	3	8	10	10</									