



**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)

**Lookout Shutters, Inc.**  
1268 Mauldin Road  
Calhoun, GA 30701

### 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: "Lookout" Clear Storm Panels Shutter

**APPROVAL DOCUMENT:** Drawing No. 9902D, titled " Clear Storm Panel ", sheets 1 through 4 of 4, prepared by Thomas J. Twomey, P.E., dated April 04, 2001, last revision dated December 09, 2003, signed and sealed by Thomas J. Twomey, P.E. on December 10, 2003 bearing the Miami-Dade County Product Control Renewal stamp with the Notice of Acceptance number and the renewal 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 **renews NOA # 01-0802.08** and consists of this page 1, evidence submitted page E-1 as well as approval document mentioned above.

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



*Helmy A. Makar*  
02/11/2009

NOA No. 09-0105.04  
Expiration Date: 01/08/2014  
Approval Date: 02/11/2009  
Page 1

**Lookout Shutters, Inc.**

**NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED**

**1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 01-0802.08**

**A. DRAWINGS:**

1. *Drawing No. 9902D, titled " Clear Storm Panel ", sheets 1 through 4 of 4, prepared by Thomas J. Twomey, P.E., dated April 04, 2001, last revision dated December 09, 2003, signed and sealed by Thomas J. Twomey, P.E. on December 10, 2003*

**B. TESTS:**

1. *Test report on Large Missile Impact Test, Uniform Static Air Pressure Test and Cyclic Wind Pressure Test of storm panel shutter, prepared by American Test Lab of South Florida, Report No.0604.02-01, dated 07/17/2001, signed and sealed by William R. Mehner, P.E. and Henry Hattem, P.E.*
2. *Test report on Large Missile Impact Test and Uniform Static Air Pressure Test of storm panel shutter, prepared by American Test Lab of South Florida, Addendum to ATL Report No.0604.02-01, dated 05/29/2003, signed and sealed by William F. Wescott, P.E.*

**C. CALCULATIONS:**

1. *Anchor analysis, dated 07/31/01, prepared by Thomas J. Twomey, P.E., signed and sealed by Thomas J. Twomey, P.E.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade building Code Compliance Office.*

**E. MATERIAL CERTIFICATION:**

1. *General Electric Company N.O.A. No. 00-0718.02 for LEXAN Sheets Products.*

**2. NEW EVIDENCE SUBMITTED**

**A. DRAWINGS:**

1. *None.*

**B. TESTS:**

1. *None.*

**C. CALCULATIONS:**

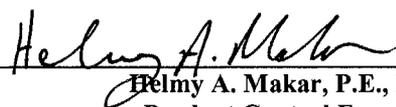
1. *None.*

**D. QUALITY ASSURANCE**

1. *By Miami-Dade building Code Compliance Office.*

**E. MATERIAL CERTIFICATION:**

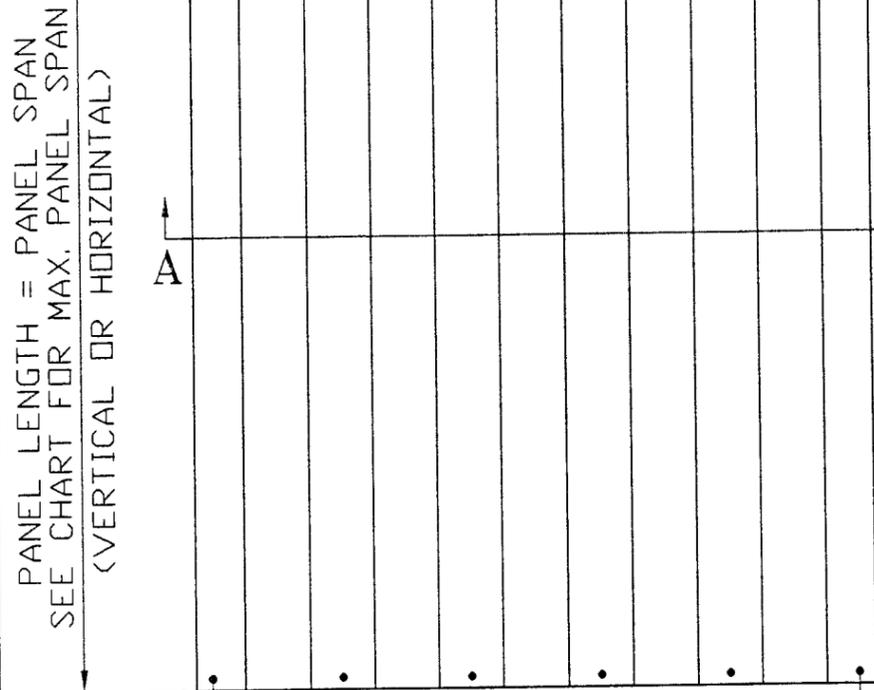
1. *None.*



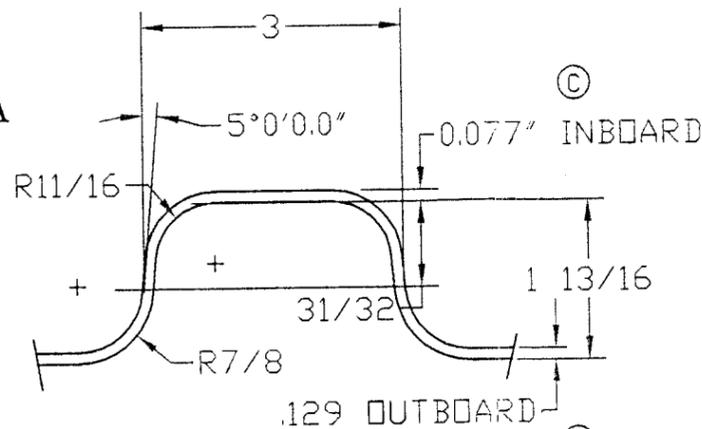
Helmy A. Makar, P.E., M.S.  
Product Control Examiner  
NOA No. 09-0105.04

Expiration Date: 01/08/2014  
Approval Date: 02/11/2009

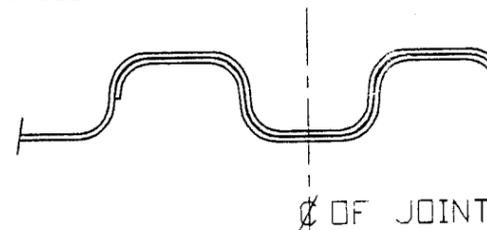
1/2" DIA. HOLES 6" C/C OR AS NOTED  
ON DETAILS A thru F, SHT 3 of 4



3/4" MINIMUM 1/2" DIA. HOLE  
TO EDGE DISTANCE TOP  
& BOTTOM



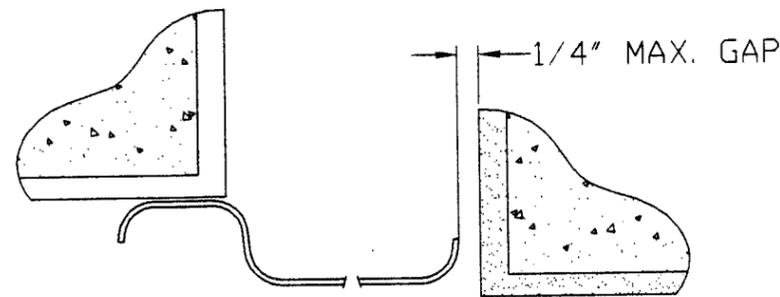
**D** PANEL DIMENSIONS



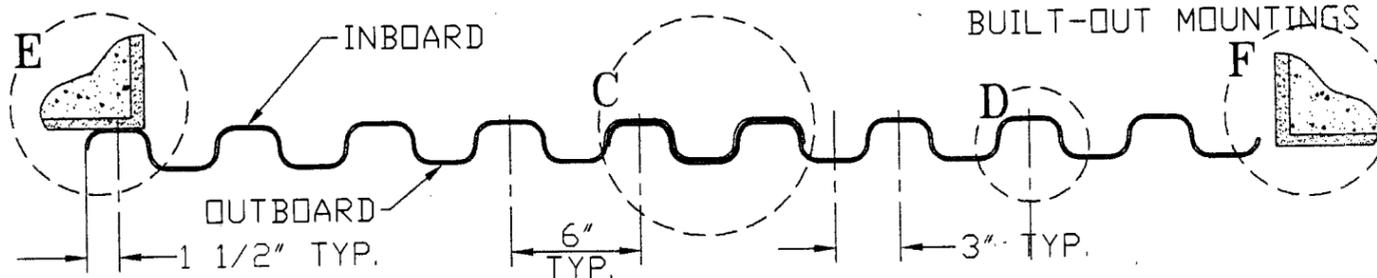
**C** LAP JOINTS  
TWO LAP MINIMUM JOINT  
MULTIPLE LAPS PERMISSIBLE  
NO FASTENERS REQUIRED AT LAP  
JOINT. 27" MAX. DISTANCE FROM  
Ø TO Ø OF JOINTS

Approved as complying with the  
Florida Building Code  
Date 01/08/2004  
NOA# 01-0802-08  
Miami Dade Product Control  
Division  
By *Heather A. Miller*

LOOKOUT SHUTTERS, INC.  
CALHOUN, GEORGIA  
MIAMI-DADE COUNTY PRODUCT  
CONTROL APPROVED



**E** **F** EDGE CLOSURE DETAILS  
NO FASTENERS REQUIRED



**1** CLEAR STORM PANEL SECTION A-A

PRODUCT RENEWED  
as complying with the Florida  
Building Code  
Acceptance No. 09-0105-04  
Expiration Date 01/08/2014  
By *Heather A. Miller*  
Miami Dade Product Control  
Division

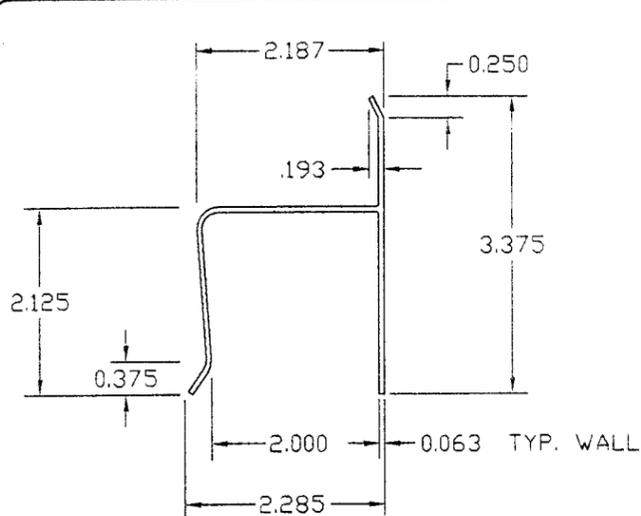
SEE SHEET 4 OF 4 FOR  
CLOSURE DETAILS FOR  
BUILT-OUT MOUNTINGS

**GENERAL NOTES**

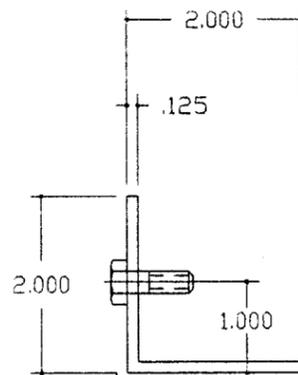
- THIS SHUTTER SYSTEM IS DESIGNED IN ACCORDANCE THE 2001 EDITION OF THE FLORIDA BUILDING CODE.
- POSITIVE AND NEGATIVE DESIGN PRESSURE CALCULATIONS SHALL BE PERFORMED FOR SPECIFIC JOBS IN ACCORDANCE WITH ASCE 7-98 "MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES." TABLES SHALL BE REFERENCED AT APPROPRIATE DESIGN LOADS.
- LOOKOUT CLEAR STORM PANELS SHALL BE MADE OF GENERAL ELECTRIC CO. UV RATED LEXAN XL-10 SHEET PER MIAMI-DADE COUNTY N.O.A. #00-0718.02. EXTRUSION SHOWN SHALL BE 6063-T6 ALUMINUM, U.O.N.
- PRODUCT MARKING MUST BE A STAMP OF PERMANENT INK OR A PERMANENT TYPE LABEL AND SHALL BE APPLIED TO THE STORM PANEL IN SUCH A MANNER THAT THE LABEL REMAINS LEGIBLE AND VISIBLE AFTER INSTALLATION AS FOLLOWS:
- ALL BOLTS AND WASHERS SHALL BE GALVANIZED OR STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 K.S.I. UNLESS MADE OF RUBBER.
- TOP & BOTTOM DETAILS SHOWN MAY BE INTERCHANGED AS FIELD CONDITIONS DICTATE. PANELS MAY BE MOUNTED HORIZONTALLY WHERE APPLICABLE.
- PANELS SHALL BE FASTENED ACCORDING TO FASTENER MANUFACTURERS' INSTALLATION SPECIFICATIONS AND AS SHOWN HEREIN.
- TO VERIFY THE ANCHOR CALCULATIONS, A 33-1/3 % INCREASE IN ALLOWABLE LOADS HAVE BEEN USED IN THE DESIGN OF THE ANCHORS FOR THIS PRODUCT APPROVAL.

**CLEAR STORM PANEL**

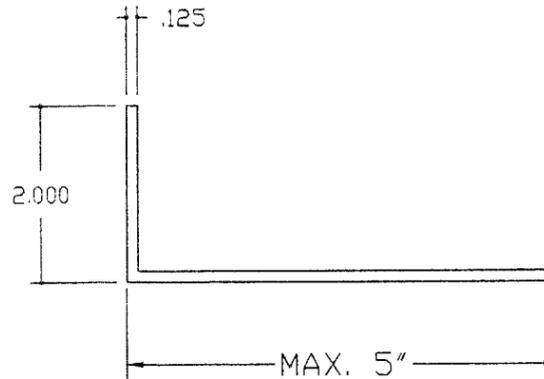
BR DIM.	ADDED
BR MAX C/C	27"
BR MAX WIDTH	
DATE	BY
DESCRIPTION	
D	C
C	12/9/03
B	4/15/03
A	4/15/03
SYN	
REVISIONS	
CONTENTS HEREOF CONTAIN PROPRIETARY TRADE SECRETS THAT ARE ALSO PROTECTED BY PENDING PATENTS	
© 2000 LOOKOUT SHUTTERS, INC.	
LOOKOUT SHUTTERS, INC. CLEAR STORM PANEL	
THOMAS J. TWOMEY PROFESSIONAL ENGINEER FLA REG No. 25626 2531 EXCHANGE CT WEST PALM BEACH FLORIDA 33409 561-688-2844	
SEAL	
DATE: 12/10/03	
DESIGNED BY JON WISE	
DATE: 04/04/01	
SCALE AS NOTED DRAWING NUMBER 9902D	
1 OF 4	



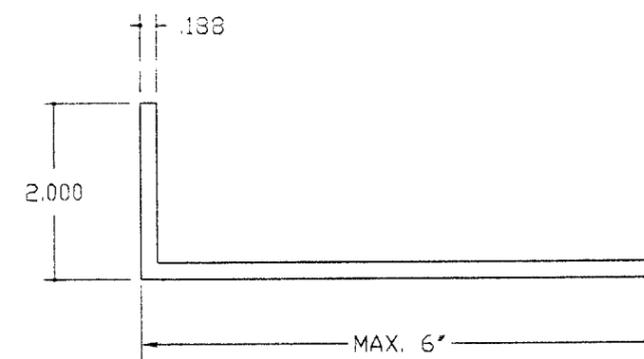
**② "h" HEADER**



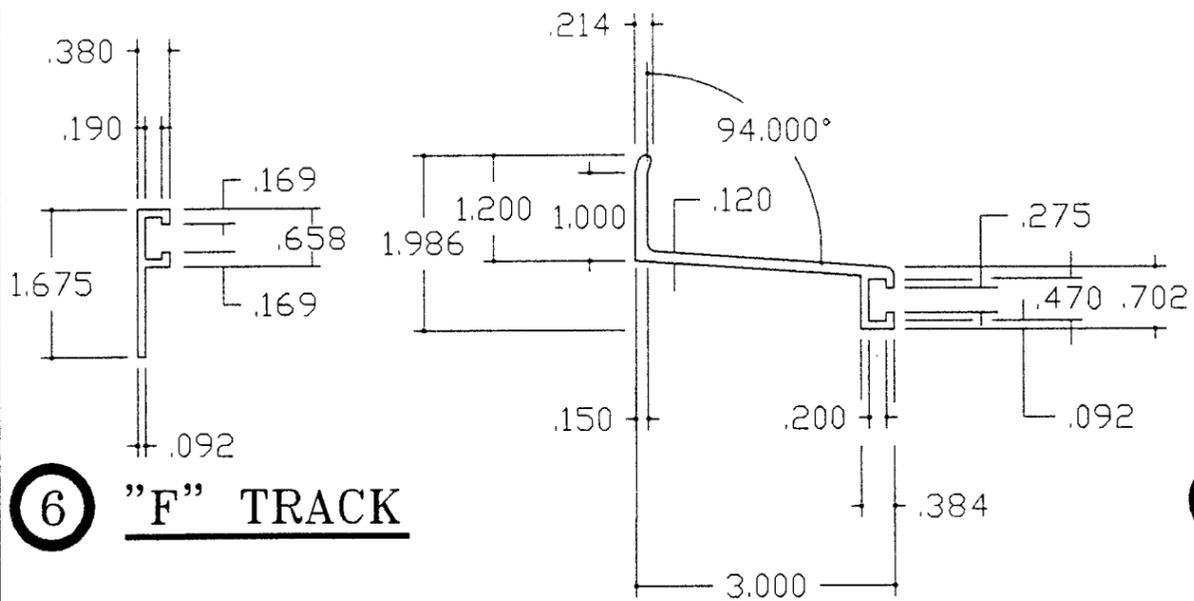
**③ STUDDED ANGLE**



**④ ANGLE**



**⑤ CLOSURE ANGLE**



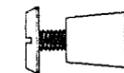
**⑥ "F" TRACK**

**⑦ EXTENDED "F" TRACK**



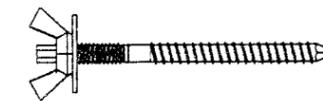
**⑧ TAPCON**

1/4" ELCO TAPCON WITH 1 3/4" MINIMUM EMBEDMENT & 2" MIN. EDGE DISTANCE



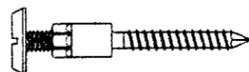
**⑨ RAWL CALK-IN**  
CMU & CONCRETE USE ONLY

1/4-20 RAWL CALK-IN WITH 7/8" EMBEDMENT, 1/4-20 PAN HEAD BOLT W/3/4" DIA. HEAD & 2" MIN. EDGE DISTANCE.



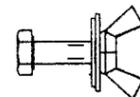
**⑩ MALE PANELMATE**

1/4" Ø ELCO MALE PANELMATE PLUS & 1/4-20 WASHER WINGNUT. MUST HAVE 1 7/8" MIN. \*EMBEDMENT FOR CONC. AND WOOD & 1 1/4" FOR MASONRY WITH 2" MIN. EDGE DISTANCE



1/4" Ø ELCO FEMALE PANELMATE WITH PAN HEAD BOLT. MUST HAVE 1 7/8" MIN. \*EMBEDMENT FOR CONC. AND WOOD & 1 1/4" FOR MASONRY WITH 2" MIN. EDGE DISTANCE

**⑪ FEMALE PANELMATE**



1/4-20 HEX HEAD BOLT x 3/4" WITH SPENCER PRODUCTS "LOK LOK" 1/4-20 WASHERWINGNUT/ INTEGRAL RUBBER WASHER.

**⑫ BOLT & LOOK LOK W'WINGNUT**



1/4" LAG BOLT WITH 1 3/4" MIN. THREAD \*EMBEDMENT IN SHEAR, PARALLEL OR PERPENDICULAR TO WOOD GRAIN & IN CENTER OF WOOD FRAMING MEMBER

**⑬ LAG BOLT**  
WOOD FRAMING USE ONLY

**PRODUCT RENEWED**  
as complying with the Florida Building Code  
Acceptance No. 09-0105.04  
Expiration Date 01/08/2014  
By *Helmut A. Moller*  
Miami Dade Product Control Division

Approved as complying with the Florida Building Code  
Date 01/08/2004  
NOA# 01-0801-08  
Miami Dade Product Control Division  
By *Helmut A. Moller*

**SEE ADDITIONAL HARDWARE NOTE AT SHEET 4 of 4**

**1. \*EMBEDMENT IS THE DEPTH INTO THE CONCRETE MASONRY UNIT (CMU), CONCRETE OR WOOD FRAMING MEMBER AS NOTED AND DO NOT INCLUDE STUCCO OR OTHER FINISHES.**

D	C	B	A
			7/1/2002
			BR
			GENERAL REVS
			DATE
			BY
			REVISIONS

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**LOOKOUT SHUTTERS, INC.**  
CLEAR STORM PANEL

**THOMAS J. TWOMEY**  
PROFESSIONAL ENGINEER  
FLA REG No. 25626  
2631 EXCHANGE CT  
WEST PALM BEACH  
FLORIDA 33409  
561-688-2844

SEAL

*[Signature]*

DATE: 12/10/03

DESIGNED BY  
JON WISE

DATE:  
04/04/01

SCALE AS NOTED  
DRAWING NUMBER

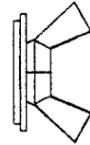
9902D

2 OF 4



RUBBER WASHER OF 60 DUROMETER RUBBER  
5/8" O.D. x 1/4" I.D. x 1/16" THICK. MUST BE  
USED AT ALL CONNECTIONS USING HOLE OR  
KEYHOLE OF DETAIL #1, CLEAR STORM PANEL.

### 15 RUBBER WASHER



SPENCER PRODUCTS "LOOK LOK" 1/4-20  
WASHER/ WINGNUT WITH INTEGREL RUBBER  
WASHER

### 16 "LOOK LOK" WINGNUT

## PANEL SCHEDULE

POS.- NEG. DESIGN LOAD W P.S.F.	MAX. PANEL LENGTH "L" (INCHES)	MINIMUM SEPERATION FROM GLASS SCHEDULE (INCHES)
86	36	4-3/4
81	41-1/2	4-3/4
76	47	4-3/4
71	52-1/2	4-3/4
66	58	4-3/4
61	63-1/2	4-3/4
56	69	4-3/4

Ⓐ

### PANEL SCHEDULE NOTES:

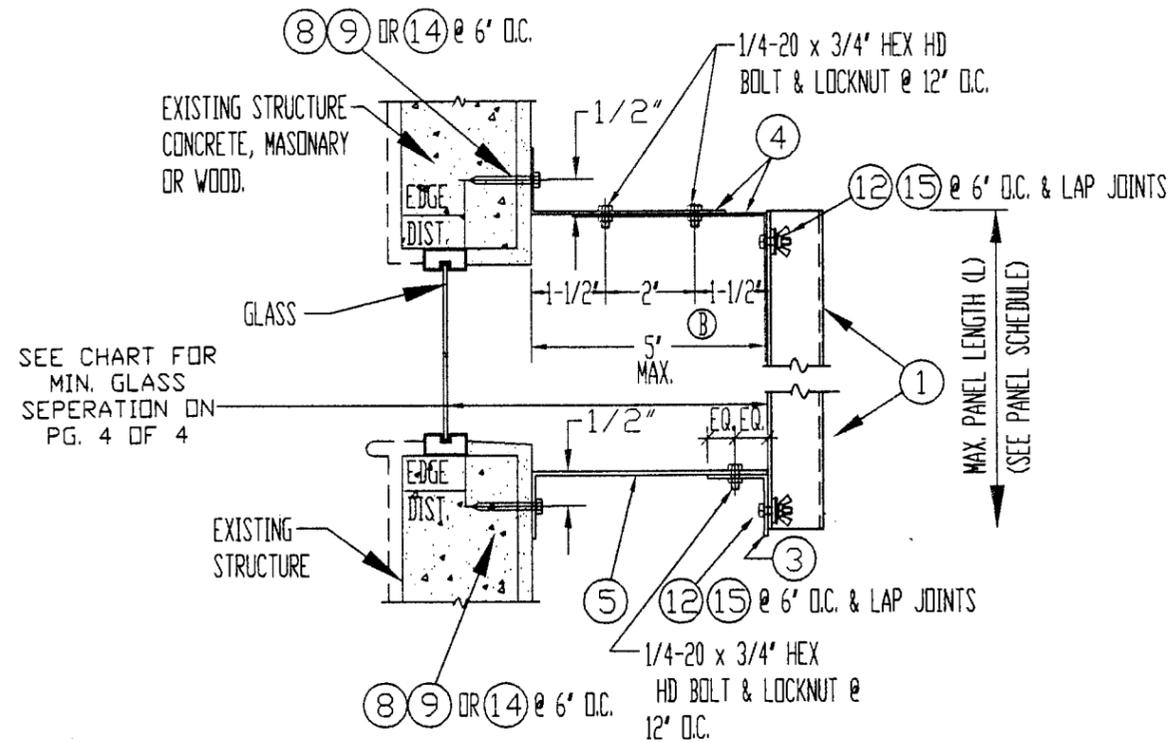
1. ENTER TABLE WITH  
NEGATIVE DESIGN LOAD TO  
DETERMINE MAX. PANEL SPAN.  
POSITIVE LOADS LESS THAN  
OR EQUAL TO THE NEGATIVE  
LOAD ARE ACCEPTABLE .

2. ENTER TABLE WITH  
POSITIVE DESIGN LOAD TO  
DETERMINE MINIMUM  
SEPERATION FROM GLASS.

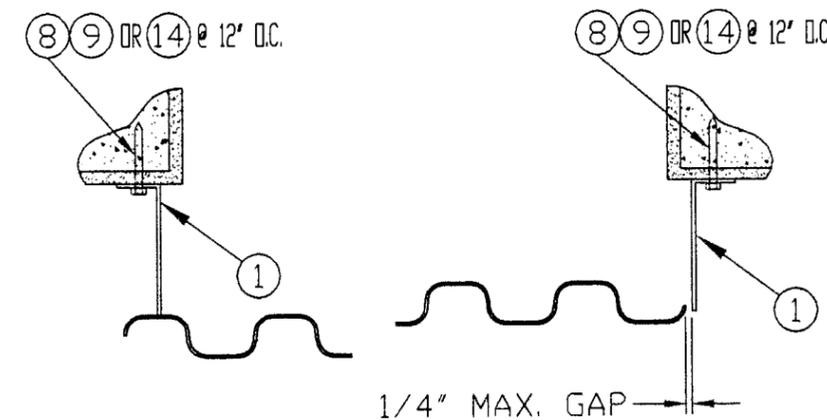
3. FOR DESIGN LOADS  
BETWEEN TABULATED  
VALUES, USE NEXT HIGHER  
LOAD OR LINEAR  
INTERPOLATION MAY BE  
USED TO DETERMINE  
ALLOWABLE SPANS.

**PRODUCT RENEWED**  
as complying with the Florida  
Building Code  
Acceptance No. 09-0105.04  
Expiration Date 01/08/2014  
By Heung A. Heung  
Miami Dade Product Control  
Division

Approved as complying with the  
Florida Building Code  
Date 01/08/2004  
NOA# 01-0802-08  
Miami Dade Product Control  
Division  
By Heung A. Heung



### SECTION F BUILD-OUT MOUNT



### SECTION G CLOSURE DETAILS FOR BUILT-OUT MOUNT

REV	DATE	BY	DESCRIPTION
D			
C			
B	12/9/03	BR	DIM ADDED
A	4/15/03	BR	DIM CHD/TEST

CONTENTS HEREOF CONTAIN  
PROPRIETARY TRADE SECRETS  
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SHUTTERS, INC.

**LOOKOUT**  
SHUTTERS, INC.  
CLEAR STORM PANEL

**THOMAS J. TWOMEY**  
PROFESSIONAL  
ENGINEER  
FLA REG No. 25628  
2631 EXCHANGE CT  
WEST PALM BEACH  
FLORIDA 33409  
561-688-2844

SEAL  
*[Signature]*

DATE: 2/10/03

DESIGNED BY  
JON WISE

DATE:  
04/04/01

SCALE AS NOTED

DRAWING NUMBER  
**9902D**

4 OF 4