



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

Lights of America, Inc.
611 Reyes Drive
Walnut, CA 91789

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: 0.118" (min.) Clear Lexan Corrugated Storm Panels Shutter

APPROVAL DOCUMENT: Drawing No. LTAM0002, titled "Clear Lexan Corrugated Hurricane Shutters", sheets 1 and 2 of 2, prepared by PTC, LLC, dated June 13, 2007, last revision #A dated October 02, 2007, signed and sealed by Marlon S. Hampton, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and the approval 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 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
 11/22/2007

NOA No. 07-0621.05
Expiration Date: 11/22/2012
Approval Date: 11/22/2007

Lights of America, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. LTAM0002, titled " Clear Lexan Corrugated Hurricane Shutters ", sheets 1 and 2 of 2, prepared by PTC, LLC, dated June 13, 2007, last revision #A dated October 02, 2007, signed and sealed by Marlon S. Hampton, P.E.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test, and Uniform Static Air Pressure Test, prepared by Certified Testing Laboratories, Report No. CTLA 1666W, dated May 07, 2007, signed and sealed by Ramesh Patel, P.E.*

C. CALCULATIONS

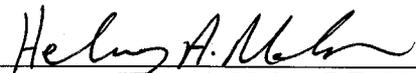
1. *Anchor calculations, dated 06/13/2007, Pages 1 through 6 of 6, prepared by PTC, LLC, signed and sealed by Marlon S. Hampton, P.E.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *Lexan 9034 per GE N.O.A. # 03-1210.04.*



Helmy A. Makar, P.E., M.S.
Product Control Examiner
NOA No. 07-0621.05
Expiration Date: 11/22/2012
Approval Date: 11/22/2007

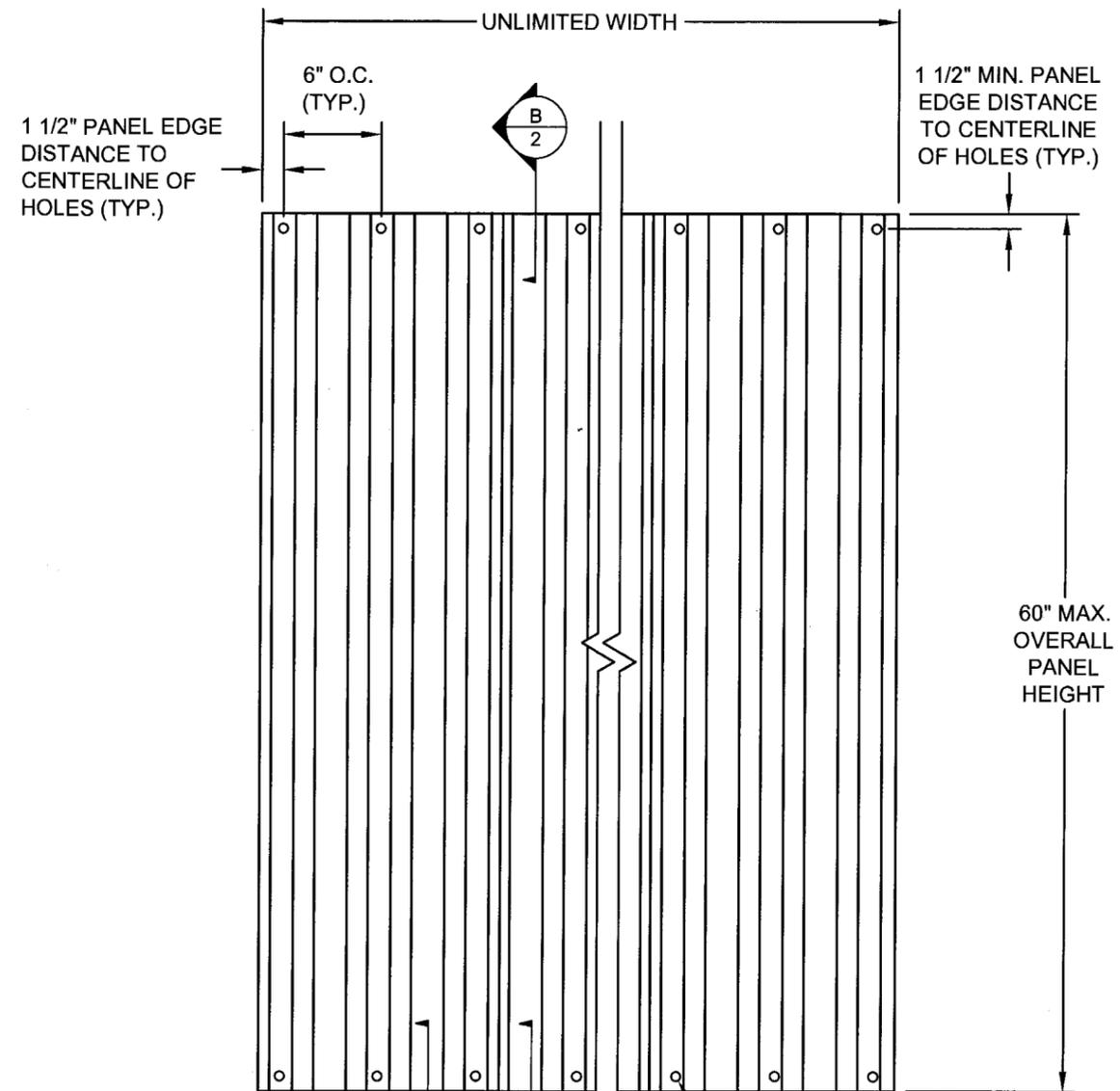
GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS APPROVED AS A LARGE MISSILE IMPACT PROTECTIVE SYSTEM IN ACCORDANCE WITH THE 2004 FLORIDA BUILDING CODE AND ITS 2005 AND 2006 SUPPLEMENTS, INCLUDING HIGH VELOCITY HURRICANE ZONE (HVHZ). TESTING PROTOCOLS WERE IN ACCORDANCE WITH TAS 201-94, TAS 202-94, AND TAS 203-94.
2. THE IMPACT PROTECTIVE SYSTEM SHALL BE INSTALLED IN A MANNER TO COMPLETELY COVER THE ENTIRE FENESTRATION (WALL OPENING) IN ALL DIRECTIONS AND SHALL BE SET FLUSH WITH THE WALL OPENING SURFACE.
3. WHEN INSTALLED AS INDICATED, THE PRODUCT HEREIN IS CONSIDERED A NON-POROUS IMPACT PROTECTIVE SYSTEM, AND WHEN USED INSIDE THE HVHZ, MINIMUM SEPARATION FROM THE PROTECTED FENESTRATION ASSEMBLY IS REQUIRED AND SHALL BE AS INDICATED HEREIN.
4. THE PRODUCT DESCRIBED HEREIN IS DESIGNED FOR USE AS A FENESTRATION PROTECTION DEVICE DURING PERIODS OF HIGH WINDS. THE STORM PANEL IS TEMPORARY AND REMOVABLE AND NOT INTENDED TO BE A PERMANENT PART OF THE STRUCTURE ALTHOUGH THE INSTALLATION ANCHORS SHALL REMAIN A PERMANENT PART OF THE STRUCTURE.
5. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, THEN THE BUILDING OFFICIAL MAY ELECT ONE OF THE FOLLOWING OPTIONS:
 A. OUTSIDE HVHZ: REQUIRE THAT A LICENSED ENGINEER OR ARCHITECT PREPARE AND SUBMIT SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
 B. INSIDE HVHZ: REQUIRE THAT A ONE-TIME SITE SPECIFIC APPROVAL BE APPLIED FOR AND OBTAINED FROM THE MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION.
6. PANEL MATERIAL: LEXAN.
7. PANELS MAY BE MOUNTED HORIZONTALLY, WHERE APPLICABLE.
8. THE DRAWING SECTIONS HEREIN DEPICT TYPICAL CONCRETE/MASONRY AND WOOD INSTALLATION ANCHORAGE CONNECTIONS. THESE DETAILS MAY BE USED INTERCHANGEABLY AS FIELD CONDITIONS DICTATE.
9. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY AND 2X FRAMING AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED LOADS TO THE FOUNDATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
10. SEE THE DESIGN PRESSURE RATING ON THIS SHEET.

LIGHTS OF AMERICA CLEAR LEXAN CORRUGATED HURRICANE SHUTTERS

INSTALLATION NOTES:

1. ONE (1) INSTALLATION ANCHOR IS REQUIRED AT EACH ANCHOR LOCATION SHOWN.
2. THE NUMBER OF INSTALLATION ANCHORS DEPICTED PER PANEL IN THE TYPICAL PANEL ASSEMBLY DETAIL ON SHEET 2 IS THE MINIMUM NUMBER OF ANCHORS TO BE USED AT EACH END OF AN INDIVIDUAL PANEL FOR PRODUCT INSTALLATION.
3. THE MALE ELCO PANELMATE INSTALLATION ANCHOR (TESTED ANCHOR) MAY BE USED IN CONCRETE / MASONRY AND WOOD SUBSTRATES. THE ITW TAPCON SG INSTALLATION ANCHOR (NOA 06-0222.07 COMPONENT APPROVAL) SHALL ONLY BE USED FOR CONCRETE / MASONRY SUBSTRATES.
4. MINIMUM EDGE DISTANCE AND EMBEDMENT EXCLUDE WALL FINISHES INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.
5. INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.
6. FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.
7. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.
8. INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
 A. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.53.
 B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3323 PSI. (PANELMATE), 3295 PSI (TAPCON SG).
 C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).



ELEVATION / ANCHOR LAYOUT
(EXTERIOR ELEVATION)

TABLE OF CONTENTS		
SHEET	REVISION	SHEET DESCRIPTION
1	A	ELEVATION, ANCHOR LAYOUT, AND NOTES
2	A	VERTICAL SECTIONS, PANEL DETAILS, COMPONENTS, B.O.M.

DESIGN PRESSURE RATING	IMPACT RATING	MINIMUM SEPARATION FROM GLASS
+/- 50 PSF	LARGE AND SMALL MISSILE IMPACT	3"

APPROVED BY:		DATE:		AS REQUESTED BY	10/02/07	CB	BY
				MIAMI-DADE			
				DESCRIPTION			

LIGHTS OF AMERICA
611 REYES DRIVE
WALNUT CA. 91789

TITLE: CLEAR LEXAN CORRUGATED HURRICANE SHUTTERS
ELEVATION, ANCHOR LAYOUT, AND NOTES

DRAWN BY: KJH DATE: 6/13/07
SCALE: N.T.S. DRAWING NO.: LTAM0002
REV: SHEET: 1 OF 2

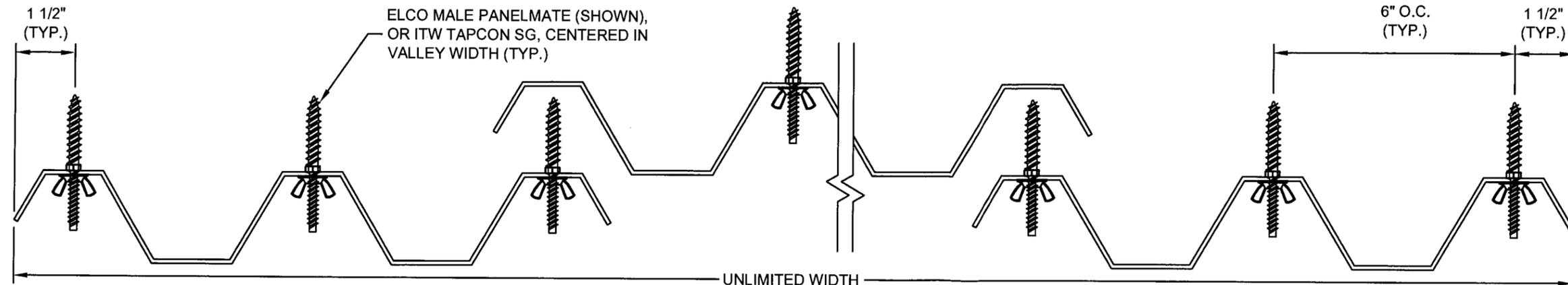
PTC
PTC, LLC
Phone 321.690.1789 Fax 321.690.1789

Marlon S. Hampton
Florida P. E. No. 55863

Marlon S. Hampton
10/2/07

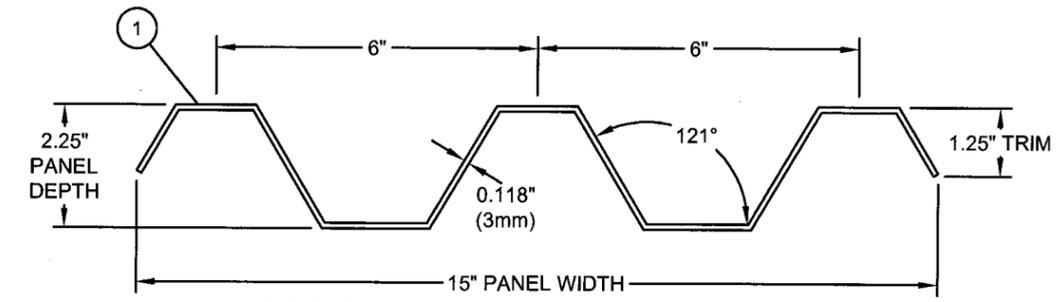
PTC, LLC
1535 Cogswell Street, Suite C25
Rockledge, Florida 32955
FBPE Certificate of Authorization NO. 25935

Approved as complying with the
Florida Building Code
Date: 11/22/2007
NOA# 07-0621-05
Miami Dade Product Control
Division
By: *Healy A. Healy*



TYPICAL PANEL ASSEMBLY DETAIL

DIRECT MOUNT INSTALLATION
TOP VIEW

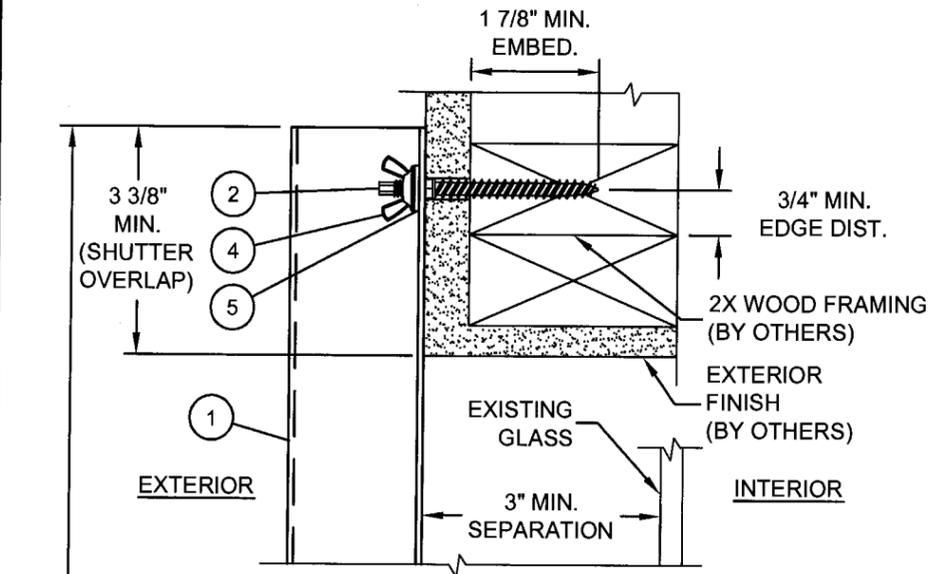


CORRUGATED PANEL DETAIL

MATERIAL: LEXAN 9034 PER GE N.O.A. 03-1210.04

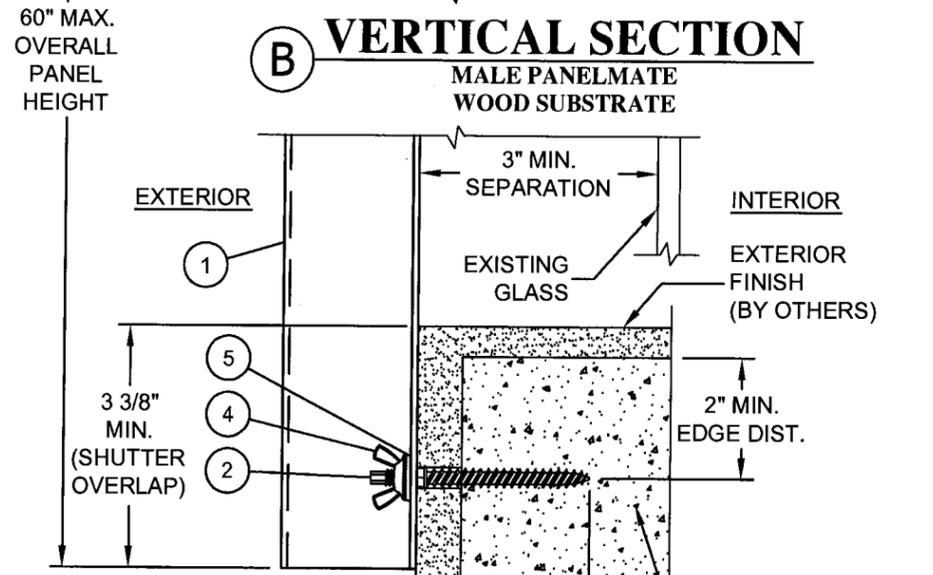
COMPONENTS

- 2 1/4" MALE ELCO PANELMATE (INSTALLATION ANCHOR)
- 3 1/4" ITW TAPCON SG (INSTALLATION ANCHOR)
- 4 1/4"- 20 ZAMAC NICKEL PLATED WASHERED WINGNUT
- 5 3/4" O.D. X 1/4" I.D. X 1/8" THICK BONDED NEOPRENE WASHER WITH RUBBER GASKET (MUST BE USED UNDER WINGNUT AT ALL INSTALLATION ANCHOR CONNECTIONS).



B VERTICAL SECTION

MALE PANELMATE
WOOD SUBSTRATE



C VERTICAL SECTION

TAPCON SG
CONCRETE / MASONRY SUBSTRATE

BILL OF MATERIALS

ITEM #	PART #	QUANTITY	DESCRIPTION	MATERIAL	MANUFACTURER
1	----	AS REQ'D	CLEAR 3MM CORRUGATED PANEL	GE LEXAN RESIN 103-112 (SHEET 9034)	LIGHTS OF AMERICA
2	----	AS REQ'D	1/4" MALE PANELMATE (INSTALLATION ANCHOR)	CARBON STEEL	ELCO
3	----	AS REQ'D	1/4" ITW TAPCON SG (INSTALLATION ANCHOR)	CARBON STEEL	ITW
4	----	AS REQ'D	1/4"- 20 ZAMAC NICKEL PLATED WASHERED WINGNUT	CARBON STEEL	PURCHASE
5	----	AS REQ'D	3/4" O.D. X 1/4" I.D. X 1/8" THICK WASHER	CARBON STEEL W/ BONDED NEOPRENE	PURCHASE

APPROVED BY:	DATE:
AS REQUESTED BY MIAMI-DADE	10/02/07
DESCRIPTION	DATE
REV	BY

LIGHTS OF AMERICA 611 REYES DRIVE WALNUT CA. 91789	DATE: 6/13/07
TITLE: CLEAR LEXAN CORRUGATED HURRICANE SHUTTERS VERTICAL SECTIONS, PANEL DETAILS, COMPONENTS, B.O.M.	DRAWING NO.: LTAM0002
PREPARED BY: KJH	SHEET: 2 OF 2
SCALE: N.T.S.	
REV:	

PREPARED BY:
PTC
PTC, LLC
Phone 321.660.1788 Fax 321.660.1786

Marion S. Hampton
Florida P. E. No. 55963
Marion S. Hampton
10/2/07
PTC, LLC
1535 Cogswell Street, Suite C25
Rockledge, Florida 32955
FBPE Certificate of Authorization NO. 25935

Approved as complying with the
Florida Building Code
Date: 11/22/2007
NO. 07-0621.05
Miami Dade Product Control
Division
By: *Helena Alcala*