



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

Palram Americas, Inc.
9735 Commerce Circle
Kutztown, PA 19530

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: Polycarbonate Storm Panel Shutter

APPROVAL DOCUMENT: Drawing No. **07-093**, titled " Stormlite Hurricane Panels ", sheets 1 through 4 of 4, prepared by EngCo, Inc., dated March 31, 2007, signed and sealed by Pedro De Figueiredo, P.E., on August 28, 2007 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
 09/27/2007

NOA No. 07-0606.10
Expiration Date: 09/27/2012
Approval Date: 09/27/2007
 Page 1

Palram Americas, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 07-093, titled " Stormlite Hurricane Panels ", sheets 1 through 4 of 4, prepared by EngCo, Inc., dated March 31, 2007, signed and sealed by Pedro De Figueiredo, P.E., on August 28, 2007.*

B. TESTS

1. *Test reports on 1)Uniform Static Air Pressure Test, Loading per TAS 202-94
2) Cyclic Wind Pressure Loading per TAS 203-94
3) Large Missile Impact Test per TAS 201-94
along with marked-up drawings and installation diagram of a polycarbonate Storm Panel Shutter, prepared by Architectural Testing, Test Report No. 68910.01-109-18, dated 02/26/2007, signed and sealed by Michael D. Stremmel, P.E.*
2. *Test reports on 1)Uniform Static Air Pressure Test, Loading per TAS 202-94
2) Cyclic Wind Pressure Loading per TAS 203-94
3) Large Missile Impact Test per TAS 201-94
along with marked-up drawings and installation diagram of a polycarbonate Storm Panel Shutter, prepared by Architectural Testing, Test Report No. 68911.01-109-18, dated 02/26/2007, signed and sealed by Michael D. Stremmel, P.E.*

C. CALCULATIONS

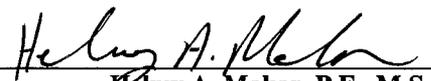
1. *Comparative Analysis and Anchor Calculations, 17 sheets, prepared by EngCo, Inc., dated 04/26/2007, signed and sealed by Pedro De Figueiredo, P.E.*

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. 07-0606.10
Expiration Date: 09/27/2012
Approval Date: 09/27/2007

GENERAL NOTES:

1- THIS PRODUCT IS DESIGNED AND TESTED (TAS 201, 202, 203) IN ACCORDANCE WITH THE THE FLORIDA BUILDING CODE 2004 EDITION, 2006 SUPPLEMENT. PRODUCT CAN BE USED WHERE CODE IS APPLICABLE INCLUDING THE HIGH VELOCITY HURRICANE ZONE (HVHZ).

2- LABEL INFORMATION SHALL CONTAIN:

STORMLITE HURRICANE PANEL
PALRAM AMERICAS, INC - KUTZTOWN, PA
MIAMI-DADE COUNTY PRODUCT CONTROL APPROVED.

3- MATERIAL:

3.1 - STORM PANELS SHALL BE MADE OF MULTI-WALL POLYCARBONATE. POLYCARBONATE SHALL BE AN APPROVED PLASTIC IN COMPLIANCE WITH FLORIDA BUILDING, WITH MIAMI-DADE NOA# 05-0907.03 OR LATEST REVISION.

3.2 - ALL ALUMINUM EXTRUSIONS SHALL BE 6063-T5 OR AS INDICATED IN THIS SET OF DRAWINGS.

4- ANCHORS SHALL BE AS SHOWN ON THIS APPROVAL. ANCHOR EMBEDMENT TO BASE MATERIAL SHALL BE BEYOND WALL DRESSING.

5- A LICENSED ENGINEER OR ARCHITECT SHALL PROVIDE A SITE SPECIFIC WIND LOAD FOR A PROJECT AS PER ASCE 7-02 OR LATEST. THE CONTRACTOR, ENGINEER OR ARCHITECT SHALL VERIFY THE ADEQUACY OF THIS PRODUCT WITH THE PROJECT WIND LOADS.

6- THE CONTRACTOR MUST VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE IN SUSTAINING THE SHUTTER IMPOSED LOADS.

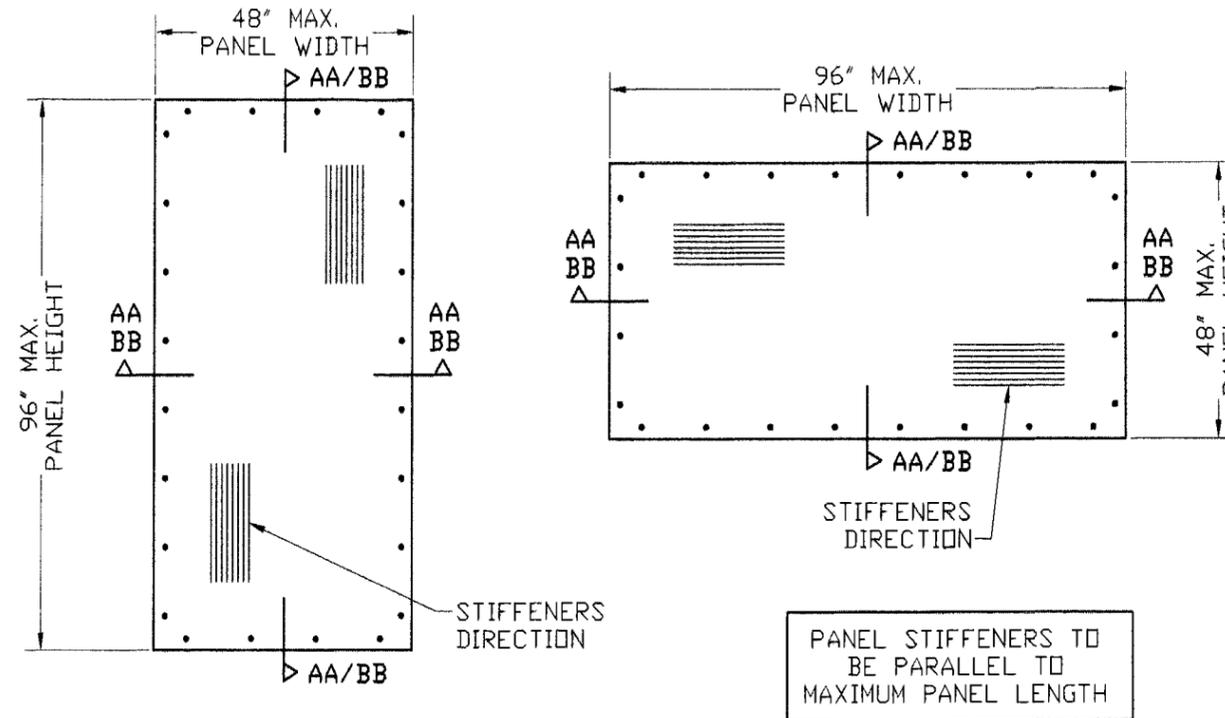
7- MATERIALS, INCLUDING BUT NOT LIMITED TO STEEL/ METAL SCREWS, THAT COME INTO CONTACT WITH OTHER DISSIMILAR MATERIALS SHALL MEET THE REQUIREMENTS OF 2004 FBC SECTION 2003.8.4.

8- 33 1/3% INCREASE IN ALLOWABLE STRESS HAS NOT BEEN USED IN THE DESIGN OF THIS PRODUCT. ANCHORS INTO WOOD WERE DESIGNED WITH 1.6 LOAD DURATION.

INDEX:

- SHEET 1 - GENERAL NOTES & TYPICAL ELEVATIONS, ALLOWABLE DESIGN PRESSURES.
- SHEET 2 - STORMLITE STANDARD PANEL SECTION AA
- SHEET 3 - STORMLITE XL PANEL SECTION BB
- SHEET 4 - ANCHOR SCHEDULE AND ANCHOR SPACING TABLE.

TYPICAL ELEVATION
PANELS CAN BE INSTALLED VERTICALLY OR HORIZONTALLY USING APPLICABLE ANCHORING DETAILS



NOTE: ONLY THE LABELED SIDE OF THE PANEL IS UV PROTECTED AND THIS SIDE SHOULD FACE OUTWARDS

ALLOWABLE DESIGNED PRESSURE:		
PANEL TYPE	MAXIMUM PANEL SIZE (in)	PRESSURE (psf)
STANDARD	48 x 96	+60, -60 PSF
XL	48 x 96	+45, -60 PSF
XL	40 x 96	+60, -60 PSF



PALRAM AMERICAS, INC.
9735 COMMERCE CIRCLE
KUTZTOWN, PA 19530
TEL: (610) 285-9918
TEL: (800) 999-9459
FAX: (610) 285-2859
WWW.PALRAMAMERICAS.COM

PRODUCT:
STORMLITE HURRICANE PANELS

Engineering:
EngCo Inc.

CA 8116
6971 W. Sunrise Blvd. 104
Plantation, Fl. 33313
Tel.: (954) 585-0304
Fax: (954) 585-0305

(Signature)
AUG 28 2007

Pedro De Figueiredo, PE
PE 52609

DRAFTING:
PK DRAFTING & MORE

Date: 3/31/07
Scale: NA
Design by: PPMF

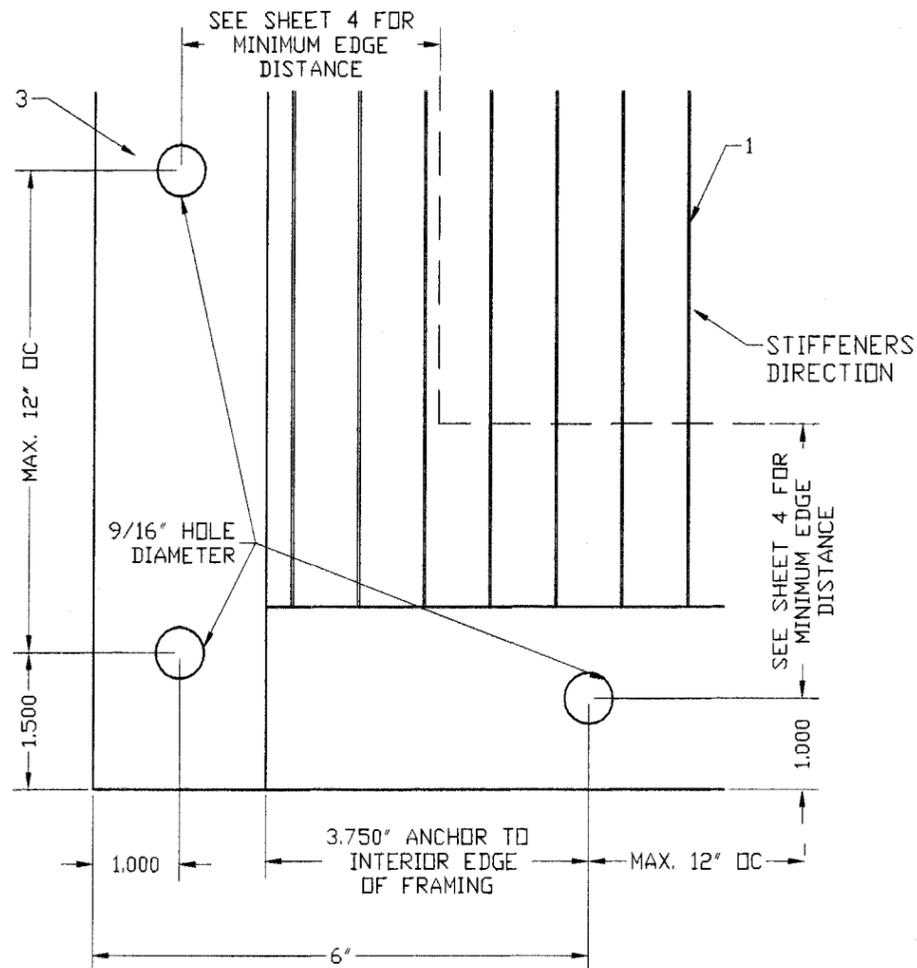
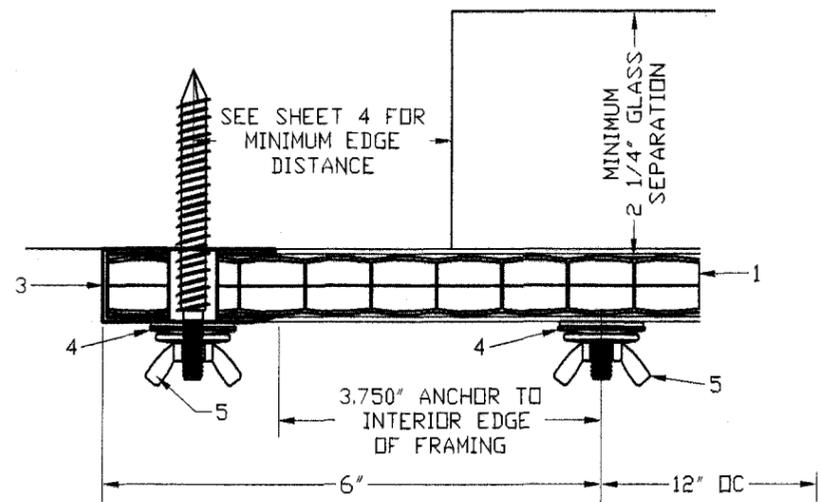
PRODUCT CONTROL DIVISION:

Approved as complying with the Florida Building Code
Date: 09/27/2007
NOA# 07-0606-10
Miami Dade Product Control Division
By: *(Signature)*

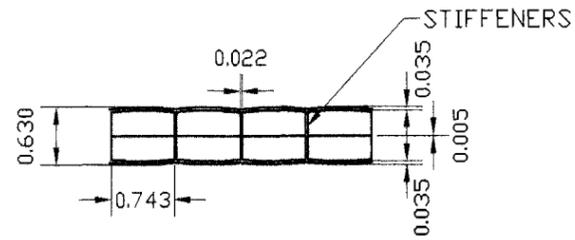
Drawing Number
07-093

Sheet
1 of 4

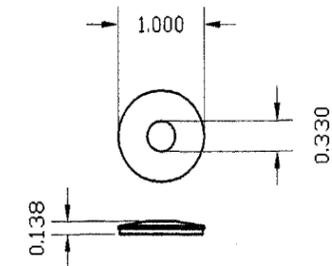
PANEL WALL INSTALLATION
STORMLITE STANDARD PANEL
SECTION AA



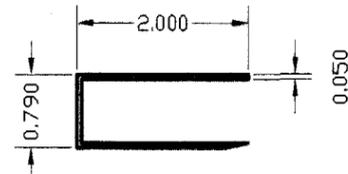
PANEL COMPONENTS



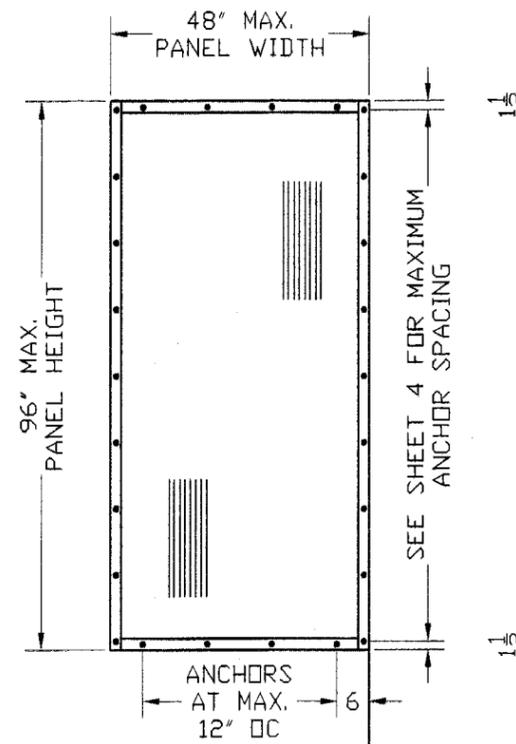
1- STORMLITE STANDARD PANEL
POLYCARBONATE



4- 1" E. P. D. M. BACKED WASHER



3- ALUMINUM FRAMING
APPLICABLE FOR USE WITH
STORMLITE STANDARD PANEL
6063-T5 EXTRUDED ALUMINUM



PALRAM AMERICAS, INC.
9735 COMMERCE CIRCLE
KUTZTOWN, PA 19530
TEL: (610) 285-9918
TEL: (800) 999-9459
FAX: (610) 285-2859
WWW.PALRAMAMERICAS.COM

PRODUCT:
**STORMLITE
HURRICANE
PANELS**

Engineering:
EngCo Inc.

CA 8116
6971 W. Sunrise Blvd. 104
Plantation, Fl. 33313
Tel.: (954) 585-0304
Fax: (954) 585-0305

AUG 28 2007

Pedro De Figueiredo, PE
PE 52609

DRAFTING:
PK DRAFTING & MORE

Date: 3/31/07
Scale: NA
Design by: PPMF

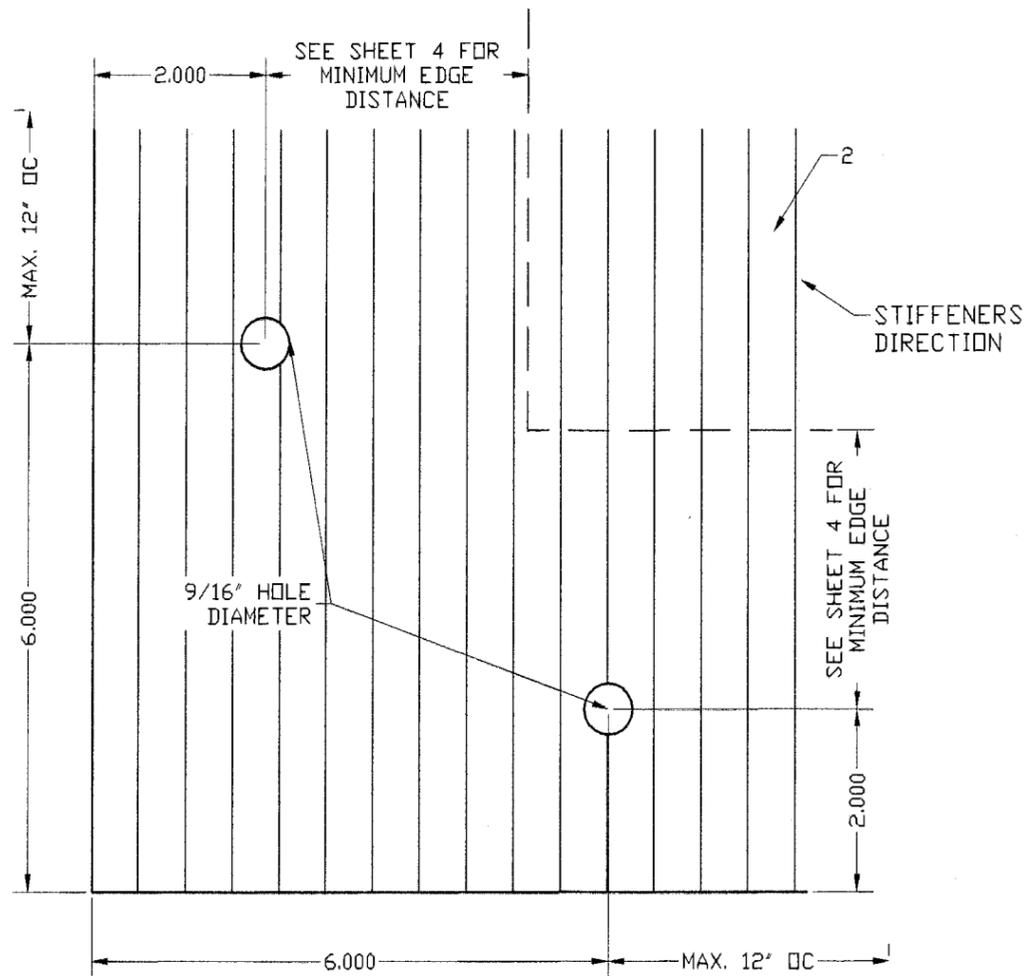
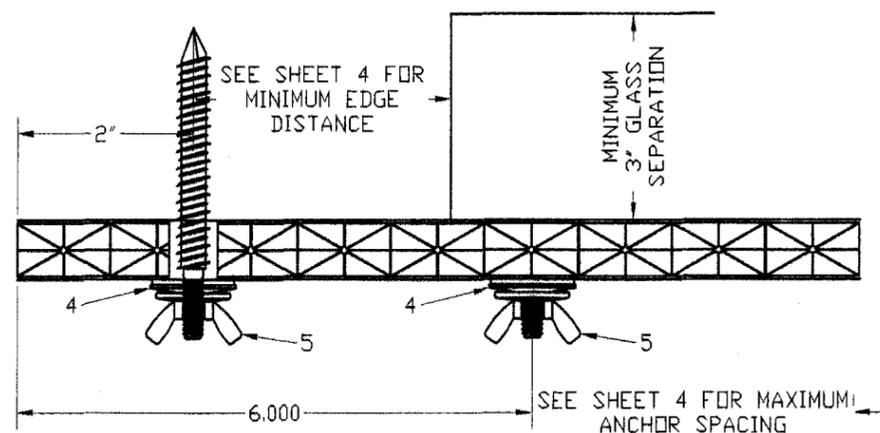
PRODUCT CONTROL DIVISION:

Approved as complying with the
Florida Building Code
Date: 09/27/2007
NOA# 07-0606-10
Miami Dade Product Control
Division
By: *Helmy Adhikari*

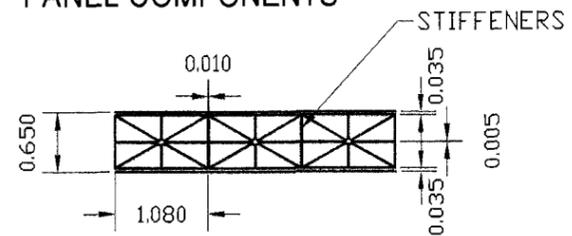
Drawing Number
07-093

Sheet
2 of 4

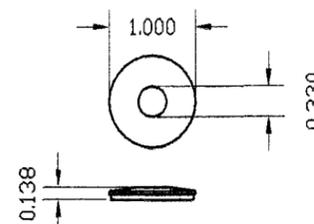
PANEL WALL INSTALLATION
STORMLITE XL PANEL
SECTION BB



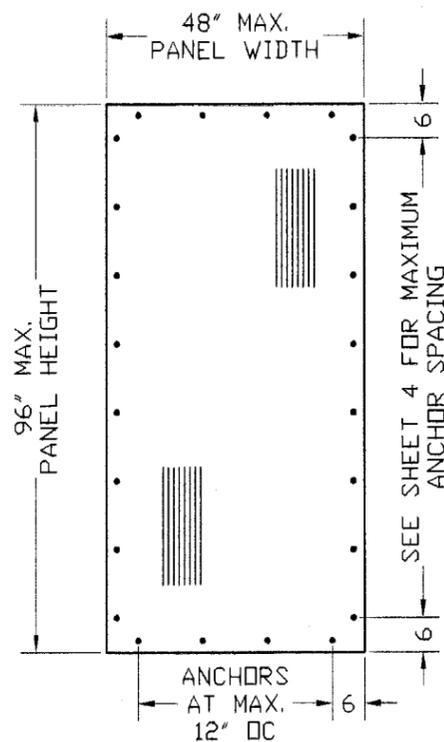
PANEL COMPONENTS



2- STORMLITE XL PANEL
POLYCARBONATE



4- 1" E. P. D. M. BACKED WASHER



PALRAM

PALRAM AMERICAS, INC.
9735 COMMERCE CIRCLE
KUTZTOWN, PA 19530
TEL: (610) 285-9918
TEL: (800) 999-9459
FAX: (610) 285-2859
WWW.PALRAMAMERICAS.COM

PRODUCT:
**STORMLITE
HURRICANE
PANELS**

Engineering:
EngCo Inc.

CA 8116
6971 W. Sunrise Blvd. 104
Plantation, FL 33313
Tel.: (954) 585-0304
Fax: (954) 585-0305

[Signature]
AUG 28 2007

Pedro De Figueiredo, PE
PE 52609

DRAFTING:
PK DRAFTING & MORE

Date: 3/31/07
Scale: NA
Design by: PPMF

PRODUCT CONTROL DIVISION:

Approved as complying with the
Florida Building Code
Date: 09/27/2007
NOA# 07-0606-10
Miami Dade Product Control
Division
By: *[Signature]*

Drawing Number
07-093

Sheet
3 of 4



PALRAM AMERICAS, INC.
 9735 COMMERCE CIRCLE
 KUTZTOWN, PA 19530
 TEL: (610) 285-9918
 TEL: (800) 999-9459
 FAX: (610) 285-2859
 WWW.PALRAMAMERICAS.COM

PRODUCT:
**STORMLITE
 HURRICANE
 PANELS**

Engineering:
EngCo Inc.

CA 8116
 6971 W. Sunrise Blvd. 104
 Plantation, Fl. 33313
 Tel.: (954) 585-0304
 Fax: (954) 585-0305



AUG 28 2007

Pedro De Figueiredo, PE
 PE 52609

DRAFTING:
PK DRAFTING & MORE

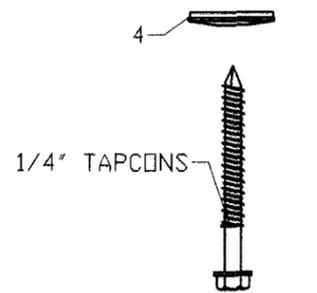
Date: 3/31/07
 Scale: NA
 Design by: PPMF

PRODUCT CONTROL DIVISION:

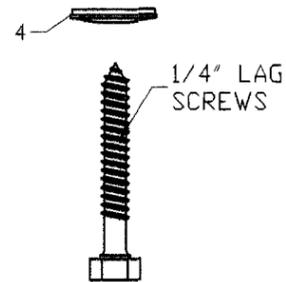
Approved as complying with the
 Florida Building Code
 Date: 09/27/2007
 NOA# 07-0606-10
 Miami Dade Product Control
 Division
 By: *Helmy A. Helmy*

Drawing Number
 07-093

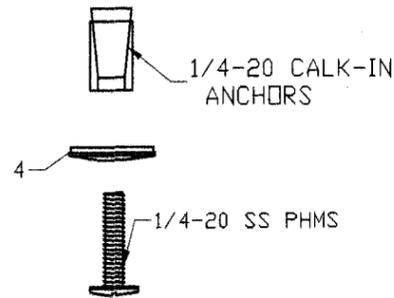
Sheet
 4 of 4



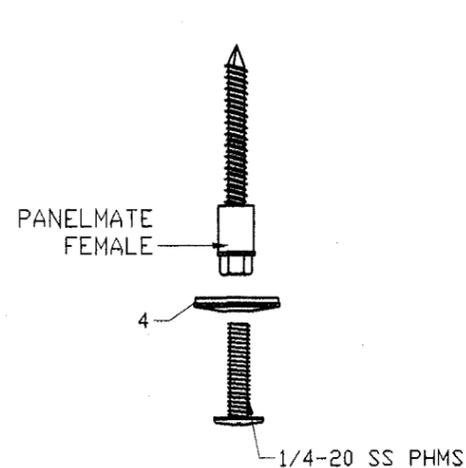
A, A1, A2
 1/4" TAPCON BY ELCO



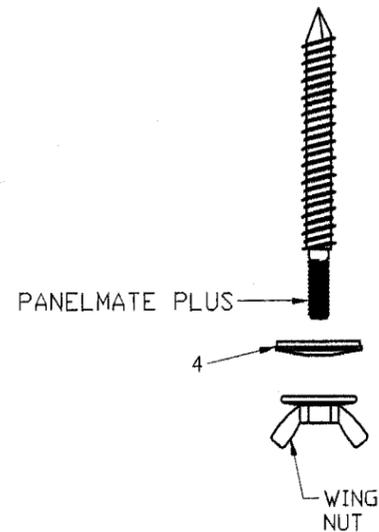
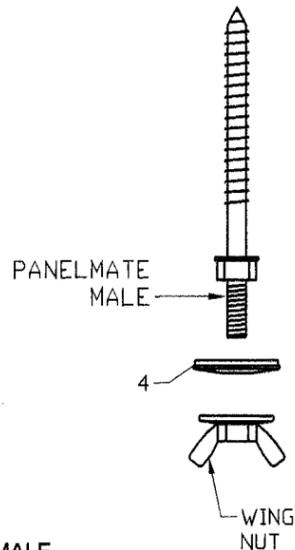
Alternate A2
 1/4"X2 1/2" LAG SCREWS



B- 1/4-20 MASONRY ANCHOR
 CALKIN BY POWERS



C- MALE/FEMALE
 PANELMATE BY ELCO



C- PANELMATE PLUS BY ELCO

ANCHOR SCHEDULE:

ANCHOR TYPE	DESCRIPTION	Embed.	Edge Dist	ANCHOR SPACING
A	1/4" Tapcons by Elco into Concrete (fc' =2700psi)	1 3/4"	2 1/2"	12
A1	1/4" Tapcons by Elco into CMU	1 1/4"	2 1/2"	12
A2	1/4" Tapcons into Wood (SG)=.55)	1 1/2"	7/8"	12
B	1/4-20 Powers Calk-in into Concrete (fc' =3000psi)	7/8"	3"	12
B1	1/4-20 Powers Calk-in into CMU	7/8"	3 3/4"	10
C	1/4" Male/Fem. Panelmate into CMU	1 1/4"	2 1/2"	12
C1	1/4" Male/Fem. Panelmate into Concrete (fc' =3350psi)	1 3/4"	2 1/2"	12
C2	1/4" Male/Fem. Panelmate into Wood (SG)=.55)	1 7/8"	3/4"	12
D	1/4" Panelmate Plus into Concrete (fc' =3350psi)	2"	2 1/2"	12
D1	1/4" Panelmate Plus into CMU	1 1/4"	2 1/2"	12
D2	1/4" Panelmate Plus into Wood (SG)=.55)	2 3/8"	3/4"	12