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**Product Approval**  
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OFFICE OF THE SECRETARY

FL #	FL6417-R5														
Application Type	Revision														
Code Version	2017														
Application Status	Approved														
Comments															
Archived	<input type="checkbox"/>														
Product Manufacturer	Transparent Protection Systems, Inc.														
Address/Phone/Email	633 Dunksferry Road Bensalem, PA 19020 (215) 638-0800 Ext 203 craig.hampton@polymerindustries.com														
Authorized Signature	Frank Bennardo frank@engineeringexpress.com														
Technical Representative															
Address/Phone/Email															
Quality Assurance Representative															
Address/Phone/Email															
Category	Shutters														
Subcategory	Storm Panels														
Compliance Method	Evaluation Report from a Florida Registered Architect or a Licensed Florida Professional Engineer <input type="checkbox"/> Evaluation Report - Hardcopy Received														
Florida Engineer or Architect Name who developed the Evaluation Report	Frank L. Bennardo, P.E.														
Florida License	PE-0046549														
Quality Assurance Entity	National Accreditation and Management Institute														
Quality Assurance Contract Expiration Date	12/31/2020														
Validated By	Troy Bishop, P.E. <input checked="" type="checkbox"/> Validation Checklist - Hardcopy Received														
Certificate of Independence	<a href="#">FL6417 R5 COI Indep.pdf</a>														
Referenced Standard and Year (of Standard)	<table border="0"> <thead> <tr> <th><u>Standard</u></th> <th><u>Year</u></th> </tr> </thead> <tbody> <tr> <td>ASTM D635</td> <td>1998</td> </tr> <tr> <td>ASTM E1886</td> <td>2002</td> </tr> <tr> <td>ASTM E1886</td> <td>2005</td> </tr> <tr> <td>ASTM E1996</td> <td>2002</td> </tr> <tr> <td>ASTM E1996</td> <td>2005</td> </tr> <tr> <td>ASTM E330</td> <td>2002</td> </tr> </tbody> </table>	<u>Standard</u>	<u>Year</u>	ASTM D635	1998	ASTM E1886	2002	ASTM E1886	2005	ASTM E1996	2002	ASTM E1996	2005	ASTM E330	2002
<u>Standard</u>	<u>Year</u>														
ASTM D635	1998														
ASTM E1886	2002														
ASTM E1886	2005														
ASTM E1996	2002														
ASTM E1996	2005														
ASTM E330	2002														

Equivalence of Product Standards  
Certified By

Florida Licensed Professional Engineer or Architect  
[FL6417 R5 Equiv Equiv.pdf](#)

Sections from the Code

Product Approval Method Method 1 Option D

Date Submitted 08/14/2017  
Date Validated 08/16/2017  
Date Pending FBC Approval 08/20/2017  
Date Approved 10/10/2017

**Summary of Products**

FL #	Model, Number or Name	Description
6417.1	ClearGuard Non-HVHZ Panels	ClearGuard Polycarbonate Storm Panels (Non-HVHZ Product)
<b>Limits of Use</b> Approved for use in HVHZ: No Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: N/A Other: See engineering drawings for design limitations (allowable spans, mounting conditions, anchor options, etc.)		<b>Installation Instructions</b> <a href="#">FL6417 R5 II Dwg.pdf</a> Verified By: Frank L. Bennardo, P.E. PE0046549 Created by Independent Third Party: Yes <b>Evaluation Reports</b> <a href="#">FL6417 R5 AE Eval.pdf</a> Created by Independent Third Party: Yes

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Product Approval Accepts:

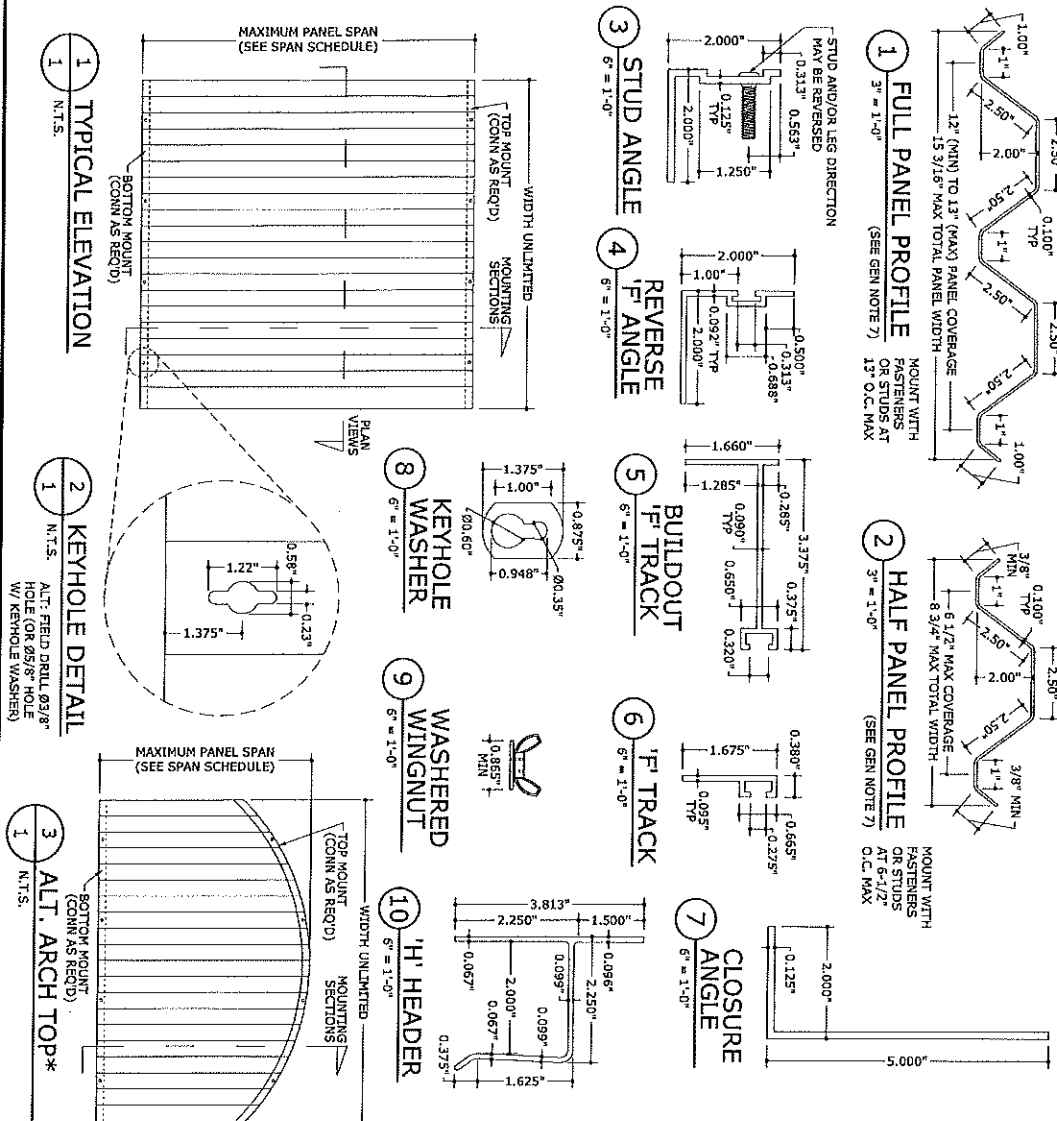


Credit Card  
**Safe**





# POLYCARBONATE STORM PANELS (Non-HVHZ)



### GENERAL NOTES:

- THIS SYSTEM HAS BEEN TESTED AND EVALUATED AS A LARGE MISSILE IMPACT PROTECTION SYSTEM FOR USE WITH THE REQUIREMENTS OF THE FLORIDA BUILDING CODE SIXTH EDITION (2017) STANDARDS OR INTERNATIONAL BUILDING/RESIDENTIAL CODE PER ASSESSMENT E30, E386, & E1996. PANELS ARE APPROVED FOR USE IN FLORIDA OUTSIDE THE HIGH VELOCITY HURRICANE ZONE, OR THROUGHOUT OTHER AREAS GOVERNED BY THE LOCAL GOVERNMENT.
- POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED BY OTHERS ON A JOB-SPECIFIC BASIS IN ACCORDANCE WITH THE GOVERNING CODE, SITE-SPECIFIC PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7-10 OR EQUAL TO THE POSITIVE AND NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.
- DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR.
- THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE THE CONDITIONS OF THE SPECIFIC SITE. AT THE RESPECTIVE ARCHITECT/ARCHITECT FIRM, PREPARE SITE SPECIFIC DOCUMENTS TO BE USED IN CONNECTION WITH THIS DOCUMENT.
- THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS IS OUTSIDE THE SCOPE OF THIS CERTIFICATION AND SHALL BE DETERMINED BY OTHERS.
- CLEAR POLYCARBONATE STORM PANELS (FULL HALF & DOUBLE-WIDE) MAY VARY IN COVERAGE WIDTH UP TO THE RESPECTIVE MANUFACTURER. PANELS SHALL BE MOUNTED WITH FASTENERS OR STUDS AT MAXIMUM SPACING SHOWN FOR EACH PROFILE.
- MANUFACTURER'S INSTRUCTIONS SHALL BE MANUFACTURED BY TRANSPARENT PROTECTION SYSTEMS, INC.
- THIS PRODUCT APPROVAL IS FOR THE USE OF CLEAR POLYCARBONATE PANELS ONLY. ALL POLYCARBONATE PANELS SHALL BE MANUFACTURED WITH THICKNESS 0.100" (±0.010") AND SHALL BE MANUFACTURED FROM 100% SYNTHETIC THERMOPLASTIC POLYMER RESIN (UV STABILIZED). TYPICAL FLUOROPOLYMER LASTS POLYMER TENSILE STRENGTH IS 8-9,908 KSI. ALL EXTRUSIONS SHALL BE 6063-T5 ALUMINUM. HOLE SIZE IS 1/8" DIA. 10) ALL PANELS SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER PANEL, CONTAINING THE FOLLOWING: TRANSPARENT PROTECTION SYSTEMS, INC. BENSLEEN, PENNSYLVANIA PRODUCT APPROVAL NUMBER
- STORM PANELS HAVE BEEN DESIGNED AND TESTED TO THE MAXIMUM SPANS AND CORRESPONDING LOADS SHOWN HEREIN. REFERENCE CONSTRUCTION TESTING CORPORATION (CTC OF MIAMI, FL) TEST REPORTS (HT OF RESEARCH #204-009-LEASTEN, AS WELL AS HURRICANE TEST LAB #0239-0312-06, #0238-0111-05, & #0238-0107-05, #0239-1013-07, 13) TOP & BOTTOM MOUNTING SECTIONS MAY BE INTERCHANGED AS FIELD CONDITIONS DICTATE. PANELS MAY BE MOUNTED VERTICALLY OR HORIZONTALLY AS APPLICABLE.
- USE OF KEYHOLE WASHERS IS OPTIONAL IN CONJUNCTION WITH ANY MOUNTING METHOD. HOLES MAY BE FIELD DRILLED AT Ø3/8" (OR Ø5/8" WITH KEYHOLE WASHER) IN THE PANELS. WASHERED WINGNUTS SHALL HAVE Ø5/8" MINIMUM WASHER DIAMETER.
- ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI.
- THE HURD-CUT EXPRESS STORM PANEL DETAILS ARE INTENDED TO ALLOW THE POSSIBILITY OF USING OTHER TYPES OF DRILLING, TRAINING, ETC. ENGINEERING EXPERTS AND TRANSPARENT PROTECTION SYSTEMS DO NOT ASSUME ANY RESPONSIBILITY OR LIABILITY ASSOCIATED WITH USE OF THIS INSTALLATION AND OR ITS APPLICATIONS.

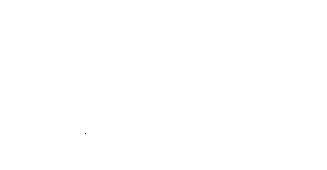
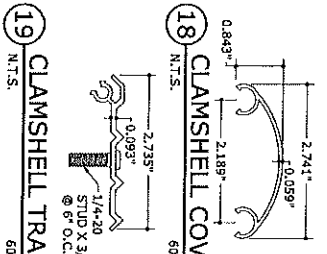
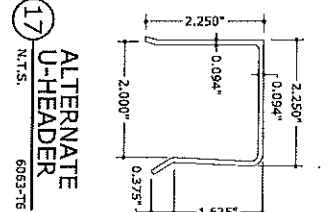
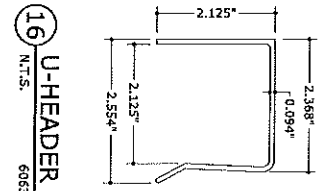
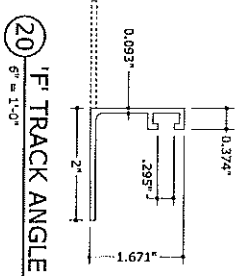
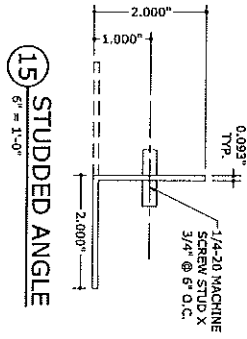
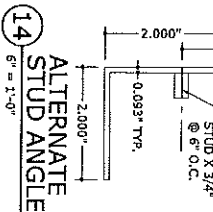
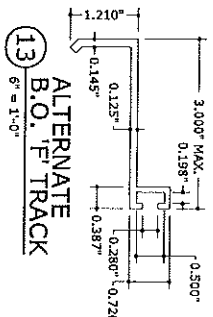
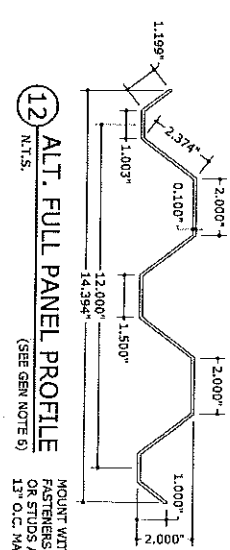
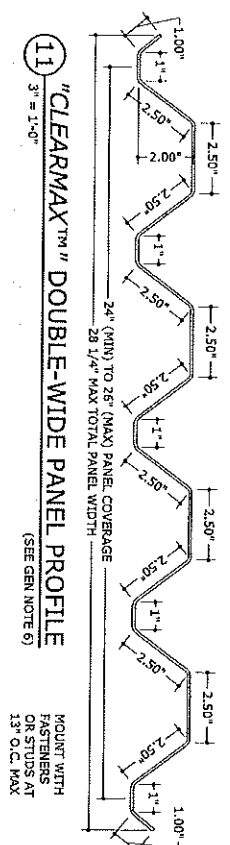
\*NOTE: FOR ALTERNATE ARCH TOP INSTALLATIONS, THE TOP TRACK OR U-HEADER SHALL BE CUT INTO 6" MINIMUM ADJACENT SEGMENTS. EACH SEGMENT SHALL HAVE ANCHORS SPACED PER THE ANCHOR SCHEDULE WITH A MINIMUM OF (2) ANCHORS PER SEGMENT. ANCHORS SHALL BE 1-1/2" MIN FROM ENDS OF EACH SEGMENT AND SPACED 3" MINIMUM FROM ADJACENT ANCHORS. FOR STUDDED TRACKS ONLY, THERE SHALL BE A MINIMUM OF (1) STUD PER SEGMENT PASTERED TO THE STORM PANEL. STUDS SHALL BE LOCATED 2" MINIMUM FROM ENDS OF EACH SEGMENT.

DATE	BY	CHKD	DATE
08/10/2017	CL	FLB	8/17/2014
08/10/2017	CL	FLB	6/05/2005
08/10/2017	KL	CL	12/29/2008
08/10/2017	EFF	TR	12/12/2011
08/10/2017	TRN	TR	11/15/2011
08/10/2017	TRN	TRN	04/04/2017

REMARKS  
15-2494  
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P: (561) 354-6660 F: (561) 354-0041  
E: HELLO@ENGINEERINGEXPRESS.COM  
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CERT OF AUTH #3885

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Bensalem, PA 19020  
CLEARGUARD POLYCARBONATE STORM PANELS  
FOR USE OUTSIDE THE HVHZ  
FLORIDA STATEWIDE APPROVAL FL6417.1

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CERT OF AUTH #3885  
08/10/2017



MAXIMUM PANEL SPAN SCHEDULE (POSITIVE CONN.)

MAXIMUM PANEL SPAN SCHEDULE (W/ 'H' HEADER)

LOAD (psf)	MAX SPAN (ft)
38	12'-0"
40	11'-5"
45	10'-1"
50	9'-1"
55	8'-3"
60	7'-0"
65	7'-0"
70	6'-7"
75	6'-1"
80	5'-9"
90	5'-1"
100	4'-7"
110	4'-2"
120	3'-10"

LOAD (psf)	MAX SPAN (ft)
17.3	8'-7"
24.2	7'-5"
34.6	7'-0"
41.6	6'-0"
55.4	5'-0"
104	4'-0"

MAXIMUM SPAN SCHEDULE NOTES:

- SPAN SCHEDULES IN "MAX PANEL" SPAN SCHEDULES ARE THE MAXIMUM ALLOWABLE SPAN AT EACH RESPECTIVE DESIGN PRESSURE.
- THE "POSITIVE CONNECTION" SPAN SCHEDULE MAY BE USED FOR PANELS INSTALLED ON A CLAMHELL COVER OR CLAMHELL TRACK.
- FOR THE MAXIMUM ALLOWABLE SPAN SCHEDULES TO BE USED, THE PANELS MUST BE INSTALLED ON A CLAMHELL COVER OR CLAMHELL TRACK WITH A POSITIVE CONNECTION - I.E. ALL INSTALLATIONS WHICH DO NOT INCLUDE AN "H" OR "U" HEADER.
- THE "WITH 'H' OR 'U' HEADER" SPAN SCHEDULE SHALL BE USED FOR ALL INSTALLATIONS WHICH INCLUDE A "U" HEADER.
- FOR THE "WITH 'H' OR 'U' HEADER" SPAN SCHEDULE SHALL BE USED FOR ALL INSTALLATIONS WHICH INCLUDE A "U" HEADER.
- FOR THE "WITH 'H' OR 'U' HEADER" SPAN SCHEDULE SHALL BE USED FOR ALL INSTALLATIONS WHICH INCLUDE A "U" HEADER.
- FOR THE "WITH 'H' OR 'U' HEADER" SPAN SCHEDULE SHALL BE USED FOR ALL INSTALLATIONS WHICH INCLUDE A "U" HEADER.
- FOR THE "WITH 'H' OR 'U' HEADER" SPAN SCHEDULE SHALL BE USED FOR ALL INSTALLATIONS WHICH INCLUDE A "U" HEADER.
- FOR THE "WITH 'H' OR 'U' HEADER" SPAN SCHEDULE SHALL BE USED FOR ALL INSTALLATIONS WHICH INCLUDE A "U" HEADER.
- FOR THE "WITH 'H' OR 'U' HEADER" SPAN SCHEDULE SHALL BE USED FOR ALL INSTALLATIONS WHICH INCLUDE A "U" HEADER.

PROFESSIONAL ENGINEER  
 STATE OF FLORIDA  
 NO. PED0006649  
 FRANK L. BERNARD, P.E.  
 08/20/2017

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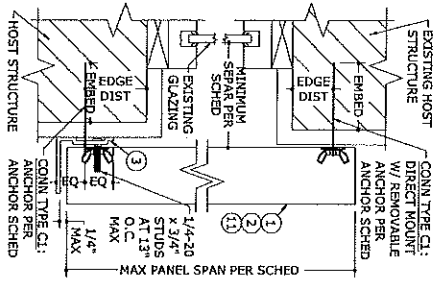
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 633 Dunksferry Road  
 Bensalem, PA 19020  
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 FOR USE OUTSIDE THE HVHZ  
 FLORIDA STATEWIDE APPROVAL FL6417.1

REVISION	DATE	BY	CHKD	DATE
DRWN	08/17/14	FLB	FLB	08/17/14
CHKD	08/20/15	FLB	FLB	08/20/15
2004 FBC	12/22/05	KL	KL	12/22/05
2007 FBC REV (6A-TPS 0003)	12/12/11	EFT	KL	12/12/11
2012 FBC REVISIONS	05/11/15	USL	USL	05/11/15
FBC UPDATE 2014	05/11/15	USL	USL	05/11/15
15-2494				

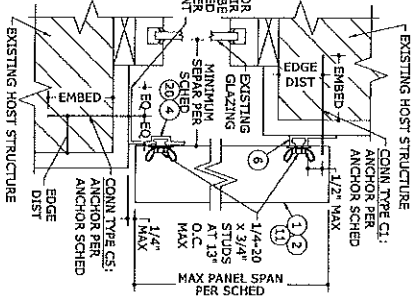
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 2. ANY REVISIONS TO THIS DRAWING MUST BE MADE IN WRITING AND APPROVED BY FRANK L. BERNARD & ASSOCIATES, P.C. OR ITS AUTHORIZED REPRESENTATIVE.  
 3. THE USER OF THIS DRAWING SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS FROM THE APPROPRIATE AGENCIES.  
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SCALE: AS SHOWN  
 15-2494

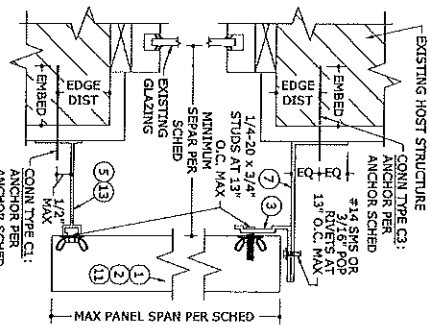
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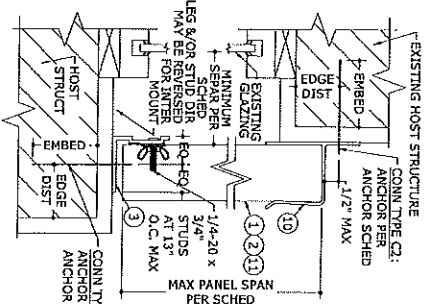
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3 3" = 1'-0"  
VERT SECTION



2 MOUNTING SECTION  
3 3" = 1'-0"  
VERT SECTION



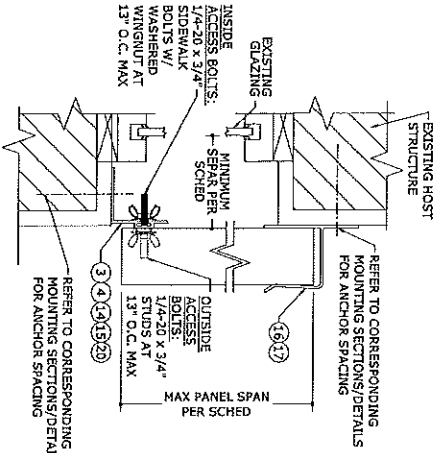
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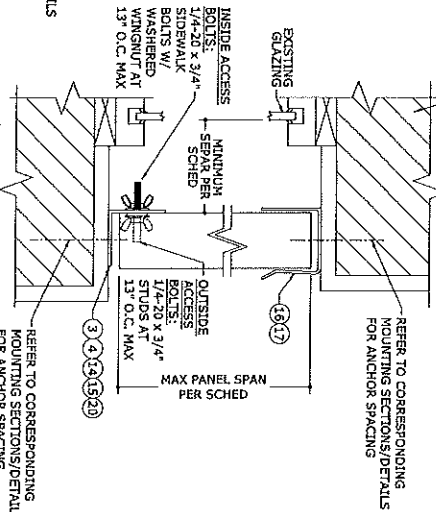
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HURRI-OUT™ EGRESS STORM PANEL DETAILS\*

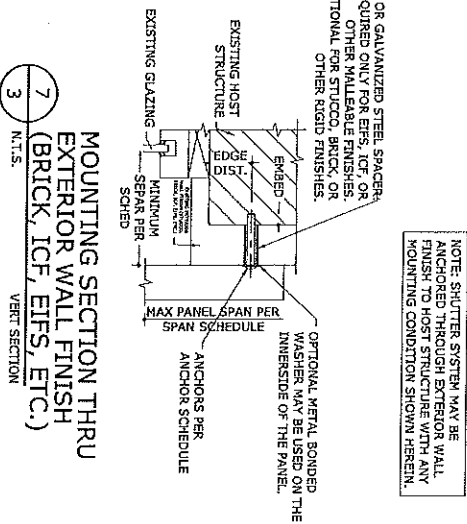
(\*NOTE: SEE GENERAL NOTE #15)



5 MOUNTING SECTION  
3 N.T.S.  
VERT SECTION



6 MOUNTING SECTION  
3 N.T.S.  
VERT SECTION



7 MOUNTING SECTION THRU EXTERIOR WALL FINISH (BRICK, ICF, EIFS, ETC.)  
3 N.T.S.  
VERT SECTION

NOTE: SHUTTER SYSTEM MAY BE ANCHORED THROUGH EXTERIOR WALL FINISH TO HOST STRUCTURE WITH ANY MOUNTING CONDITION SHOWN HEREIN.

ALUMINUM OR GALVANIZED STEEL SPACER:  
• REQUIRED ONLY FOR EIFS, ICF, OR OTHER FINISHABLE FINISHES.  
• OPTIONAL OTHER RIGID FINISHES.

DRWN	CHKD	DATE
CL	FLB	8/17/04
CL	FLB	8/5/05
CL	KL	12/29/06
EFT	KL	12/12/11
BN	SC	07/17/15
TSB	BN	08/17

REMARKS  
08/10/2017  
15-2494  
COMPONENT FINISH: BRICK/ICF/EIFS  
SCALE: AS SHOWN  
DATE: 08/10/2017

3

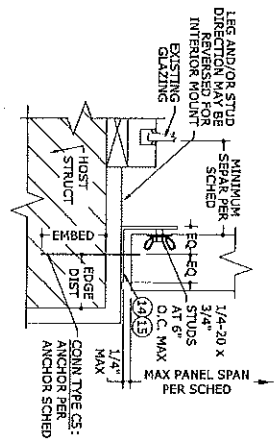
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633 Dunksberry Road  
Bensalem, PA 19020

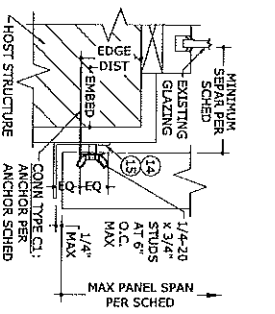
CLEARGUARD POLYCARBONATE STORM PANELS  
FOR USE OUTSIDE THE HVHZ  
FLORIDA STATEWIDE APPROVAL FL6417.1

**EX ENGINEERING EXPRESS**  
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ENGINEERINGEXPRESS.COM  
CERT OF AUTH: #9865

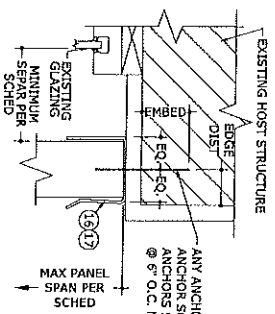
STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
FRANK L. BERNARD, P.E.  
No. PE0046549  
08/10/2017



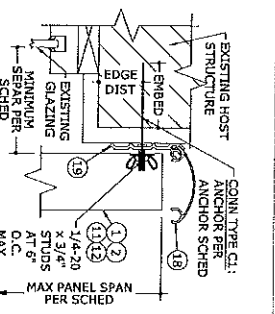
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VERT SECTION  
3" = 1'-0"



2 MOUNTING SECTION  
VERT SECTION  
3" = 1'-0"



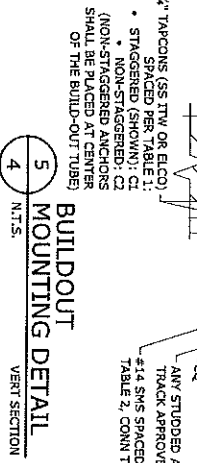
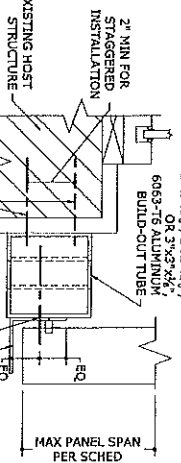
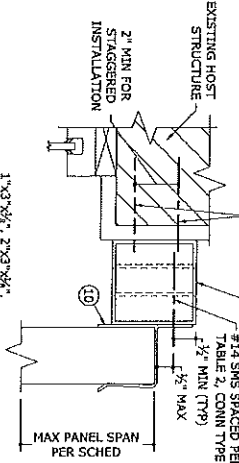
3 MOUNTING SECTION  
VERT SECTION  
N.T.S.



4 MOUNTING SECTION  
VERT SECTION  
N.T.S.

**BUILDOUT MOUNTING DETAILS**

1/4" TAPCONS (SS TIV OR ELCO)  
SPACED (SHOW): C1  
NON-STAGGERED: C2  
(NON-STAGGERED ANCHORS SHALL BE PLACED AT CENTER OF THE BUILD-OUT TUBE)



5 BUILDOUT MOUNTING DETAIL  
VERT SECTION  
N.T.S.

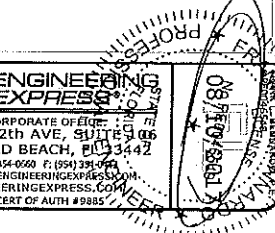
**TABLE 1\*: BUILDOUT ONLY**

HOST STRUCTURE	Span Up		Span Up		Span Up	
	LOAD (psf)	CONN TYPE	LOAD (psf)	CONN TYPE	LOAD (psf)	CONN TYPE
WOOD	30	13.0"	13.0"	13.0"	13.0"	13.0"
	47	13.0"	13.0"	13.0"	13.0"	13.0"
	54	13.0"	13.0"	13.0"	13.0"	13.0"
	120	13.0"	13.0"	13.0"	13.0"	13.0"
HOLLOW BLOCK	30	13.0"	13.0"	13.0"	13.0"	13.0"
	47	13.0"	13.0"	13.0"	13.0"	13.0"
	54	13.0"	13.0"	13.0"	13.0"	13.0"
	120	13.0"	13.0"	13.0"	13.0"	13.0"
CONCRETE	30	13.0"	13.0"	13.0"	13.0"	13.0"
	47	13.0"	13.0"	13.0"	13.0"	13.0"
	54	13.0"	13.0"	13.0"	13.0"	13.0"
	120	13.0"	13.0"	13.0"	13.0"	13.0"

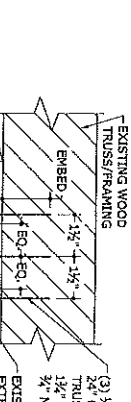
**TABLE 2\*: BUILDOUT ONLY**

LOAD (psf)	Span Up		Span Up		Span Up	
	CONN TYPE	CONN TYPE	CONN TYPE	CONN TYPE	CONN TYPE	CONN TYPE
30	C1	C1	C1	C1	C1	C1
47	C1	C1	C1	C1	C1	C1
54	C1	C1	C1	C1	C1	C1
120	C1	C1	C1	C1	C1	C1

NOTES:  
1. TABLE 1 AND 2 APPLY ONLY TO BUILDOUT MOUNTING DETAIL (7/3).  
2. TAPCONS SHALL BE INSTALLED WITH THE FOLLOWING MINIMUM EMBEDMENT:  
• TO CONCRETE: 1 1/2" MIN  
• TO WOOD: 1 1/2" MIN  
3. REFER TO SPT 6 FOR ADDITIONAL ANCHOR INSTALLATION CONDITIONS MAY BE USED INDEPENDENTLY OF ONE ANCHOR AND IN CONJUNCTION WITH OTHER MOUNTING CONDITIONS/DETAILS DERIVED HEREIN.



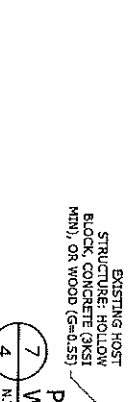
6 WOOD TRUSS MOUNT DETAIL  
VERT SECTION  
N.T.S.



7 PASS THRU WINDOW DETAIL  
VERT SECTION  
N.T.S.

**TABLE 3:**

1/4" TIV SS TAPCONS WITH 1/2" MIN EMBED	1/2" ALL POINTS SOLID-SET WITH 1/2" MIN EMBED	CONC	CHU	12" O.C.	8" O.C.	12" O.C.	11" O.C.	12" O.C.
CONC	CHU	CONC	CHU	12" O.C.	11" O.C.	12" O.C.	12" O.C.	12" O.C.



EXISTING PASS THRU WINDOW DETAIL (WOOD, GRANITE, MARBLE, ETC.)  
N.T.S.

REMARKS	DRWN	CHKD	DATE
ORG ISSUE	CL	FLB	5/17/04
2007 FBC REV	CL	FLB	5/5/05
2007 FBC REV (08-TPS-0028)	KL	CL	12/26/06
2010 FBC REVISIONS	EFT	KL	12/12/11
2012 FBC UPDATE	RS	FLB	5/15/15
2017 FBC UPDATE	TSB	RSW	8/24/17

SCALE: 1/5" = 1'-0"

15-2494

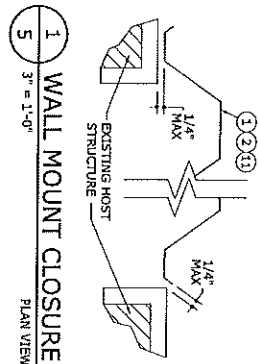
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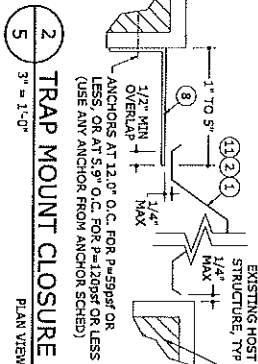
CLEARGUARD POLYCARBONATE STORM PANELS  
FOR USE OUTSIDE THE HVHZ  
FLORIDA STATEWIDE APPROVAL FL6417.1

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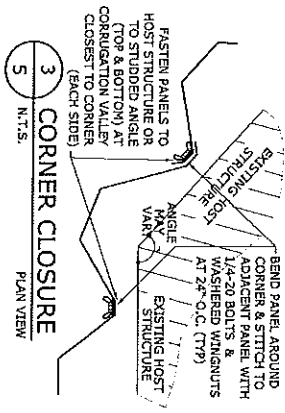
**CLOSURE DETAILS**



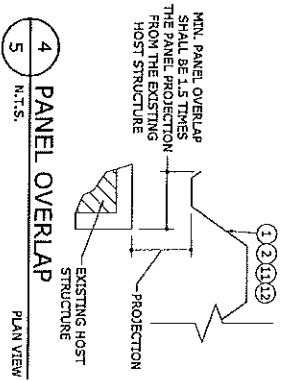
**1 WALL MOUNT CLOSURE**  
3" = 1'-0"  
PLAN VIEW



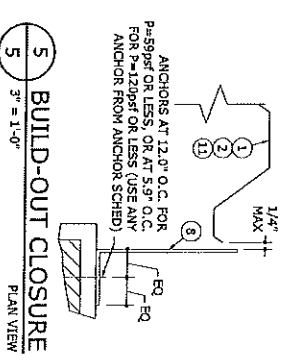
**2 TRAP MOUNT CLOSURE**  
3" = 1'-0"  
PLAN VIEW



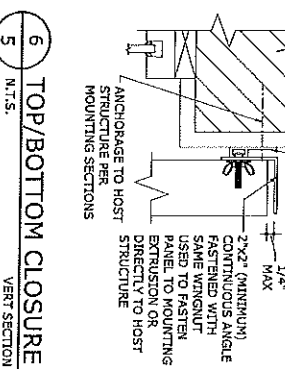
**3 CORNER CLOSURE**  
N.T.S.  
PLAN VIEW



**4 PANEL OVERLAP**  
N.T.S.  
PLAN VIEW



**5 BUILD-OUT CLOSURE**  
3" = 1'-0"  
PLAN VIEW



**6 TOP/BOTTOM CLOSURE**  
N.T.S.  
VERT SECTION

**MINIMUM SPAN SCHEDULE**  
ONE (1) CLOSURE AT TOP OR BOTTOM

TOP OR BOTTOM WITH CLOSURE	DIRECT MOUNT	STUD ANGLE (WALL MOUNT)	"F" TRACK	REVERSE "F" ANGLE	B.O. 2x5 + STUD ANGLE	"H" HEADER
STUD ANGLE (WALL MOUNT)	32"	30"	33"	30"	30"	30"
REVERSE "F" ANGLE	32"	30"	33"	30"	30"	30"
B.O. 2x5 + STUD ANGLE	32"	30"	33"	30"	30"	30"
"H" HEADER	32"	30"	33"	30"	30"	30"
STUD ANGLE (TRAP MOUNT)	32"	30"	33"	30"	30"	30"

**MINIMUM SPAN SCHEDULE**  
NO TOP/BOTTOM CLOSURES

TOP MOUNT	DIRECT MOUNT	STUD ANGLE (WALL MOUNT)	"F" TRACK	REVERSE "F" ANGLE	B.O. 2x5 + STUD ANGLE	"H" HEADER
STUD ANGLE (WALL MOUNT)	32"	30"	33"	30"	30"	30"
REVERSE "F" ANGLE	32"	30"	33"	30"	30"	30"
B.O. 2x5 + STUD ANGLE	32"	30"	33"	30"	30"	30"
"H" HEADER	32"	30"	33"	30"	30"	30"
STUD ANGLE (TRAP MOUNT)	32"	30"	33"	30"	30"	30"

**MINIMUM SPAN SCHEDULE NOTES:**

- SPANS SHOWN ABOVE ARE MINIMUM ALLOWABLE SPANS BASED ON ANY COMBINATION OF MOUNTING CONDITIONS AT TOP OR BOTTOM. PANEL LENGTHS LESS THAN THOSE NOTED IN TABLES ABOVE ARE NOT ACCEPTABLE.
- NO SEPARATION FROM GLASS IS REQUIRED WHEN PANEL LENGTH IS GREATER THAN THAT NOTED FOR ABOVE.
- SIDE CLOSURES REQUIRED IF GAP BETWEEN PANEL AND STRUCTURE EXCEEDS DISTANCE SHOWN IN HORIZONTAL SECTION DETAILS (REF. DETAILS 6/3, 7/3 AND 9/3).
- TABLES ABOVE ARE VALID FOR PANELS MOUNTED HORIZONTALLY OR VERTICALLY.
- TOP/BOTTOM CLOSURES MAY CONSIST OF NON-STRUCTURAL 28ga (0.018" MIN) GALV STEEL OR 0.022" MIN SHEET ALUMINUM OR ALLOY 6063-T52 OR FOR BERTH/PERFORMANCE DETAILS HEREIN FOR BERTH/PERFORMANCE DETAILS HEREIN.
- STORM PANELS MAY BE INSTALLED WITH A 12" MINIMUM SPAN WHEN INSTALLED WITH A CLOSURE ANGLE AT BOTH TOP AND BOTTOM.

STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
FRANK L. BERNARD, P.E.  
LICENSE NO. 980046649  
08/10/2017

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DATE	CHKD	DRWN	REMARKS
8/17/04	FLB	CL	0503 ISSUE
8/05/05	FLB	CL	2004 FBC
12/28/08	KL	KL	2007 FBC REV 08-TPS-0208
12/12/11	KL	EFT	2010 FBC REVISIONS
5/11/15	RYM	RYM	REPLACED BY 2014
8/10/17	RYM	RYM	2017 FBC UPDATE

15-2494  
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**POSITIVE CONNECTION  
MINIMUM GLASS  
SEPARATION SCHEDULE**

LOAD (PSF)	SPAN LESS THAN	MINIMUM SEPARATION AT OR ABOVE GRADE	MINIMUM SEPARATION AT ELEVATION > 30' ABOVE GRADE
40	4'-0"	7'-3"	1'-8 1/2"
38	7'-0"	7'-3"	4'-3 1/2"
36	12'-0"	8'-7 1/2"	8'-7 1/2"
34	4'-0"	7'-3"	1'-8 1/2"
32	7'-0"	7'-3"	4'-3 1/2"
30	11'-5"	8'-3 1/2"	8'-3 1/2"
28	4'-0"	7'-3"	1'-8 1/2"
26	10'-1 1/2"	7'-3"	7'-3 1/2"
24	4'-0"	7'-3"	1'-8 1/2"
22	7'-0"	7'-3"	4'-3 1/2"
20	9'-1 1/2"	7'-3"	5'-4 1/2"
18	4'-0"	7'-3"	2'-0 1/2"
16	7'-0"	7'-3"	6'-3 1/2"
14	4'-0"	7'-3"	2'-0 1/2"
12	6'-7"	7'-3"	6'-3 1/2"
10	3'-10"	7'-3"	2'-4"

**H-HEADER  
MINIMUM GLASS  
SEPARATION SCHEDULE**

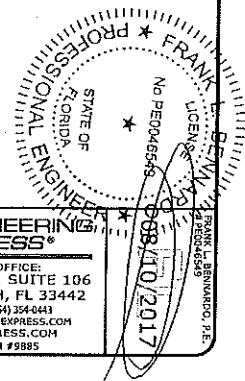
SPAN LESS THAN	MINIMUM SEPARATION AT OR ABOVE GRADE	MINIMUM SEPARATION AT ELEVATION > 30' ABOVE GRADE
8'-7"	8'-6 1/2"	7'-1 1/2"
7'-9"	8'-6 1/2"	6'-6 1/2"
7'-0"	8'-6 1/2"	5'-9 1/2"
6'-0"	8'-6 1/2"	4'-9 1/2"
5'-0"	8'-6 1/2"	4'-1 1/2"
4'-0"	8'-6 1/2"	3'-5 1/2"

**U-HEADER  
MINIMUM GLASS  
SEPARATION SCHEDULE**

SPAN LESS THAN	MINIMUM SEPARATION AT OR ABOVE GRADE	MINIMUM SEPARATION AT ELEVATION > 30' ABOVE GRADE
6'-3"	3'-8 1/2"	3'-2 1/2"
5'-3"	3'-8 1/2"	2'-8 1/2"
4'-4"	3'-8 1/2"	2'-4"

**GLASS SEPARATION  
SCHEDULE NOTES:**

1. GLASS SEPARATION SCHEDULE PROVIDES MINIMUM SEPARATION DISTANCE REQUIRED BETWEEN EXTERIOR PANEL GLAZING (OR OTHER PRODUCT BEING INSTALLED) AND INTERIOR FACE OF INSTALLED STORM PANEL BREAK PAGE.
2. SEPARATION DISTANCE PER THIS SCHEDULE IS REQUIRED FOR USE WITH POSITIVE LOADS ONLY.
3. SEPARATION FROM GLASS IS REQUIRED ONLY WHEN INSTALLED WITHIN ASTM WIND ZONE 4 AND ESSENTIAL FACILITIES.



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REMARKS	DRWN	CHKD	DATE
2004 FBC	CL	FLB	8/17/04
2007 FBC REV 08-TPS 002	KL	CL	12/29/08
2010 FBC REVISIONS	EFT	KL	12/12/11
FBC UPDATE 2014	RAN	COL	5/1/14
2017 FBC UPDATE	TSB	FRWN	8/04/17

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PAGE DESCRIPTION:  
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