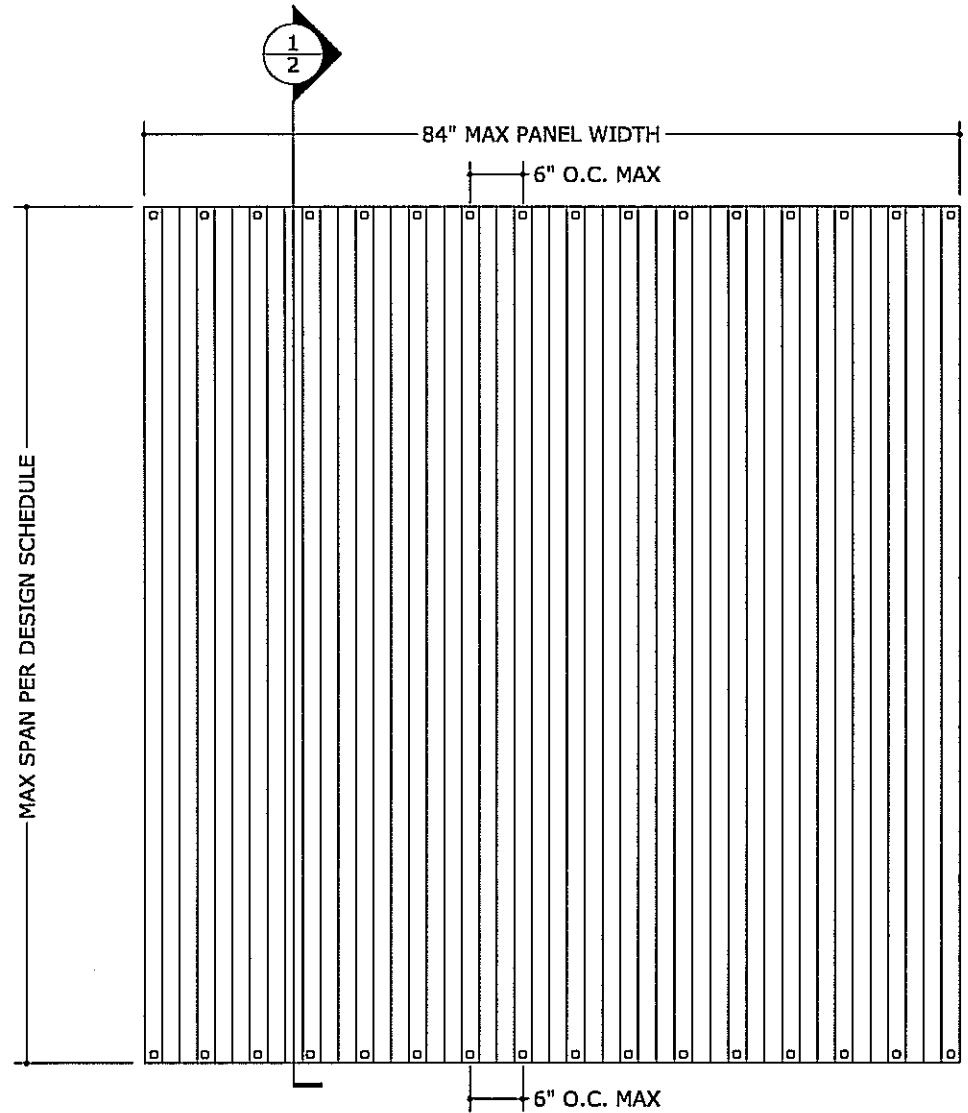


16MM MULTIWALL POLYCARBONATE STORM PANELS

FRANK L. BENNARD, P.E.
PE0046549

04/16/2008

ENGINEERING EXPRESS
160 SW 12th AVENUE, #106
DEERFIELD BEACH, FL 33442
Ph: (954) 354-0660 Fax: (954) 354-0443
WWW.ENGEXP.COM
CERT OF AUTH #885
A FRANK L. BENNARD, P.E., INC. INNOVATION



MAX SPAN SCHEDULE

DESIGN PRESSURE	ALLOWABLE SPAN
30 psf	119.3 in
35 psf	113.4 in
40 psf	108.4 in
45 psf	104.2 in
50 psf	100.7 in
55 psf	97.5 in
60 psf	94.7 in
65 psf	92.2 in
69.3 psf	90.3 in

GENERAL NOTES:

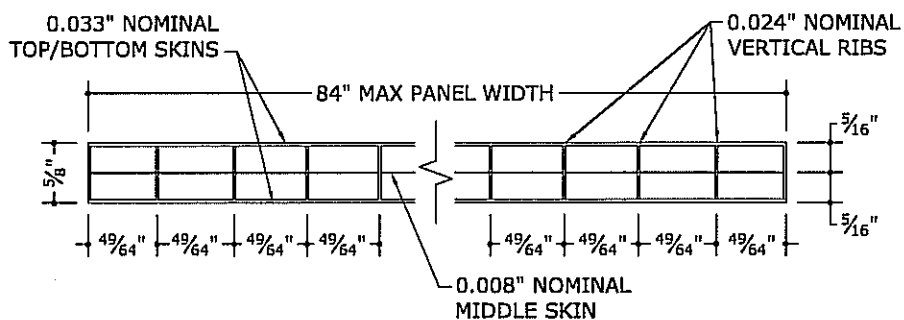
- 1) THIS SYSTEM HAS BEEN TESTED AND EVALUATED AS A LARGE MISSILE IMPACT PROTECTIVE SYSTEM IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2004 AND 2007 EDITIONS OF THE FLORIDA BUILDING CODE FOR USE OUTSIDE THE HIGH VELOCITY HURRICANE ZONE, PER ASTM STANDARDS E330, E1886, & E1996.
- 2) NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. WIND LOAD DURATION FACTOR Cd=1.6 HAS BEEN USED FOR WOOD ANCHOR DESIGN.
- 3) ALL POLYCARBONATE PANELS SHALL BE MANUFACTURED BY SABIC INNOVATIVE PLASTICS
- 4) STORM PANELS SHALL BE MADE FROM 100% LEXAN* LTH3T16 POLYCARBONATE SHEET.
- 5) PANELS SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER PANEL CONTAINING THE FOLLOWING:
SABIC INNOVATIVE PLASTICS
PITTSFIELD, MA
- 6) POSITIVE AND NEGATIVE DESIGN PRESSURES TO BE USED WITH THESE DRAWINGS SHALL BE DETERMINED BY OTHERS FOR SPECIFIC JOBS IN ACCORDANCE WITH THE GOVERNING CODE.
- 7) THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. IF SITE CONDITIONS DEVIATE FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS TO BE USED IN CONJUNCTION WITH THIS DOCUMENT.
- 8) PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND NEW SUPERIMPOSED LOADS.
- 9) ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, UNLESS NOTED OTHERWISE.
- 10) TOP & BOTTOM MOUNTING SECTION DETAILS SHOWN MAY BE INTERCHANGED AS FIELD CONDITIONS DICTATE. PANELS MAY BE MOUNTED VERTICALLY OR HORIZONTALLY AS APPLICABLE, EXCEPT WHEN INSTALLED WITH HOOK EXTRUSION.
- 11) ALL BOLTS & WASHERS SHALL BE ZINC COATED STEEL, GALVANIZED STEEL, OR STAINLESS STEEL WITH A MINIMUM TENSILE YIELD STRENGTH OF 60 KSI.

SPAN SCHEDULE NOTES:

1. SPANS SHOWN IN "MAX SPAN SCHEDULE" ABOVE ARE MAXIMUM ALLOWABLE SPANS AT EACH RESPECTIVE DESIGN PRESSURE. THIS SCHEDULE MAY BE USED FOR ALL PANELS MOUNTED WITH ANY COMBINATION OF EXTRUSIONS OR DIRECTLY TO HOST STRUCTURE.
2. TABLE ABOVE IS VALID FOR PANELS MOUNTED HORIZONTALLY OR VERTICALLY.
3. ONLY SINGLE PANELS APPROVED PER OPENING. PANELS MAY NOT BE OVERLAPPED OR INSTALLED ADJACENT TO EACH OTHER.
3. MINIMUM PANEL SIZE: 12"x12"

1 TYPICAL ELEVATION

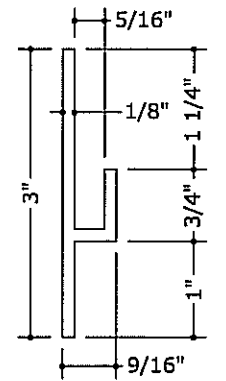
1 N.T.S.



1 STORM PANEL PROFILE

1 N.T.S. SECTION

NOTE: NOMINAL DIMENSIONS SHOWN



2 HOOK EXTRUSION

2 N.T.S. SECTION

*NOTE: TRADEMARK OF SABIC INNOVATIVE PLASTICS IP BY

SABIC INNOVATIVE PLASTICS
ONE PLASTICS AVENUE
PITTSFIELD, MA 01201
PHONE: (413) 448-7110

16MM MULTIWALL
POLYCARBONATE STORM PANEL
FLORIDA STATEWIDE APPROVAL

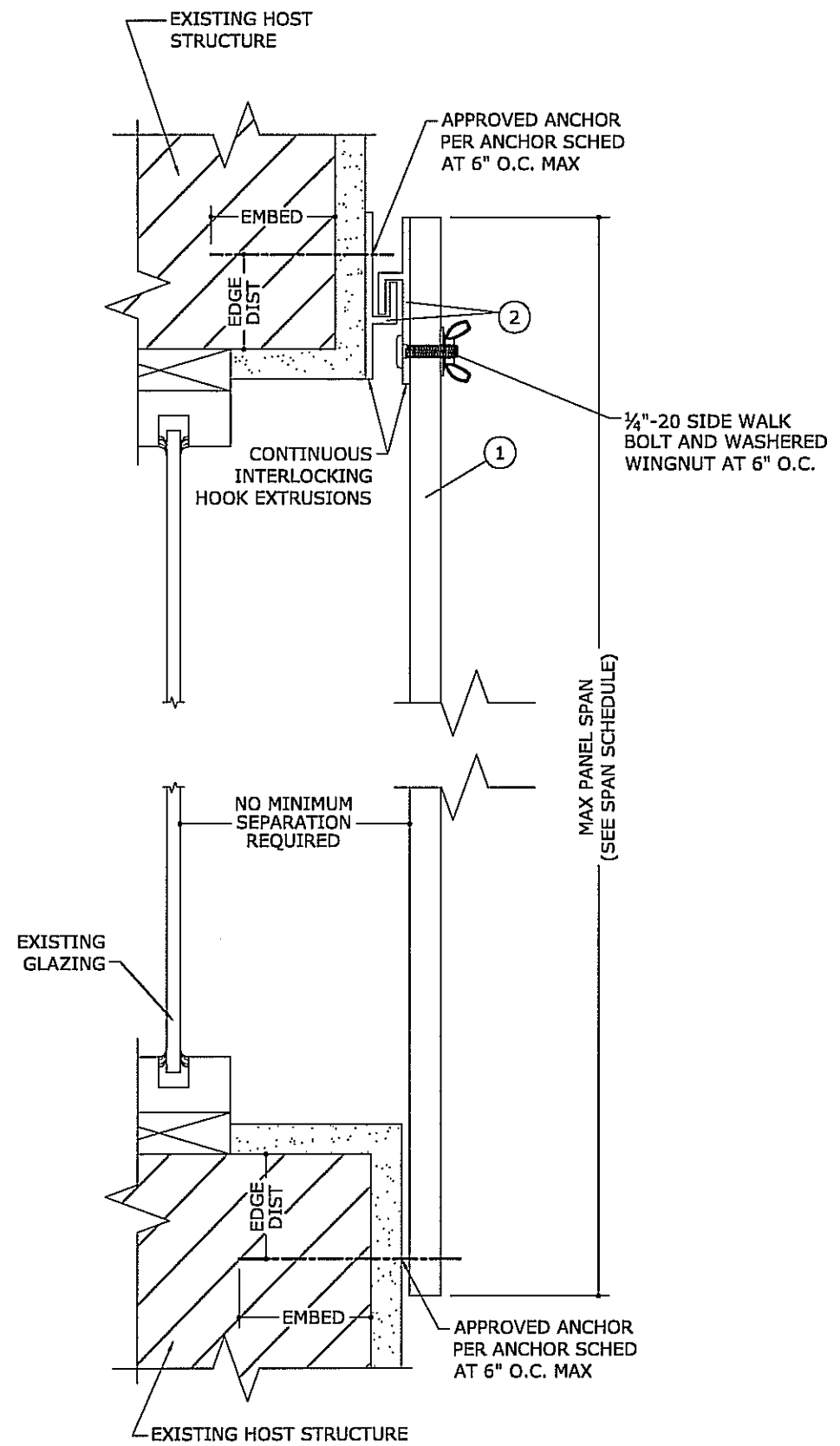
REMARKS	DRWN	CHKD	DATE
INIT ISSUE	RGB	CL	03/31/08

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF THE CERTIFYING ENGINEER. ANY UNAUTHORIZED REPRODUCTION OR DISTRIBUTION OF THIS DOCUMENT IS STRICTLY PROHIBITED.

COPYRIGHT ENGINEERING EXPRESS
07-SIP-0001
SCALE: 01
PAGE DESCRIPTION:


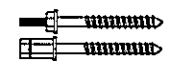


F:\01 Project Files\Sabic Innovative Plastics (SIP)\2007\07-SIP-0001 16mm Multiwall Polycarb Storm Panel (FSA)\07-SIP-0001_02a 16mm Multiwall Polycarb Storm Panel (FSA).dwg
rboardlet
04/16/2008 - 1:28pm

F:\01 Project Files\Sabic Innovative Plastics (SIP)\200707-SIP-0001 16mm Multiwall Polycarb Storm Panel (FSA).dwg
 04/16/2008 - 1:28pm
 rbarlett



1 DIRECT MOUNT
 2 4" = 1'-0" SECTION

ANCHOR SCHEDULE:

1/4" TAPCON (ELCO OR ITW) 	TO CONCRETE (3192psi MIN), HOLLOW BLOCK, OR WOOD (G=0.55 MIN) W/ 1-3/4" MIN EMBED
1/4" ELCO PANELMATE (MALE/FEMALE) 	TO CONCRETE OR HOLLOW BLOCK W/ 1-3/4" MIN EMBED
1/4-20 POWERS CALK-IN 	TO CONCRETE OR HOLLOW BLOCK W/ 7/8" MIN EMBED
1/4-20 ALL POINTS WOOD BRASS BUSHING 	TO WOOD (G=0.55 MIN) W/ 1-1/8" EMBED

ANCHOR NOTES:

- 1/4" TAPCONS MAY BE BY ITW OR BY ELCO. "ELCO PANELMATE" ANCHORS MAY BE PANELMATE MALE OR FEMALE, AS ILLUSTRATED.
- ENSURE MINIMUM 2-1/2" EDGE DISTANCE FOR ALL ANCHORS TO CONCRETE & TO HOLLOW BLOCK. EDGE DISTANCE OF 3/4" IS ACCEPTABLE FOR ANCHORS TO WOOD.
- MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCES EXCLUDE STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.
- WHERE ANCHORS FASTEN TO NARROW FACE OF STUD FRAMING, ANCHOR SHALL BE LOCATED IN CENTER OF NOMINAL 2x4 (MIN) WOOD STUD (i.e. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR ANCHORS TO WOOD FRAMING). WOOD STUD SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY.
- ANCHOR SCHEDULE APPLIES FOR ALL PRODUCTS CERTIFIED HEREIN, HOWEVER IT ONLY PROVIDES MAXIMUM ALLOWABLE ANCHOR SPACING. MAXIMUM AND MINIMUM ALLOWABLE SPANS AND RESPECTIVE PRESSURES INDICATED IN SPAN SCHEDULE(S) SHALL APPLY.
- MACHINE SCREWS SHALL HAVE MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFER HEAD ("SIDEWALK BOLT") U.N.O.

FRANK L. BENNARDO, P.E.
 # PE0046549

04/16/2008

ENGINEERING EXPRESS

160 SW 12th AVENUE, #106
 DEERFIELD BEACH, FL 33442
 PH: (954) 354-0660 FAX: (954) 354-0443
 WWW.ENGEXP.COM
 CERT OF AUTH #8886

A FRANK L. BENNARDO, P.E., INC. INNOVATION

SABIC INNOVATIVE PLASTICS

ONE PLASTICS AVENUE
 PITTSFIELD, MA 01201
 PHONE: (413) 448-7110

16MM MULTIWALL
 POLYCARBONATE STORM PANEL
 FLORIDA STATEWIDE APPROVAL

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	IRKB	CL	03/31/08

THIS DOCUMENT IS THE PROPERTY OF ENGINEERING EXPRESS AND SHALL NOT BE REPRODUCED IN WHOLE OR PART WITHOUT WRITTEN CONSENT OF THE CERTIFYING ENGINEER. ALTERATIONS, ADDITIONS, MODIFICATIONS, OR OTHER MARKINGS TO THIS DOCUMENT WILL BE PENALIZED AND WILL BE AT THE USER'S OWN RISK.

COPYRIGHT ENGINEERING EXPRESS

07-SIP-0001

SCALE: 01

PAGE DESCRIPTION: