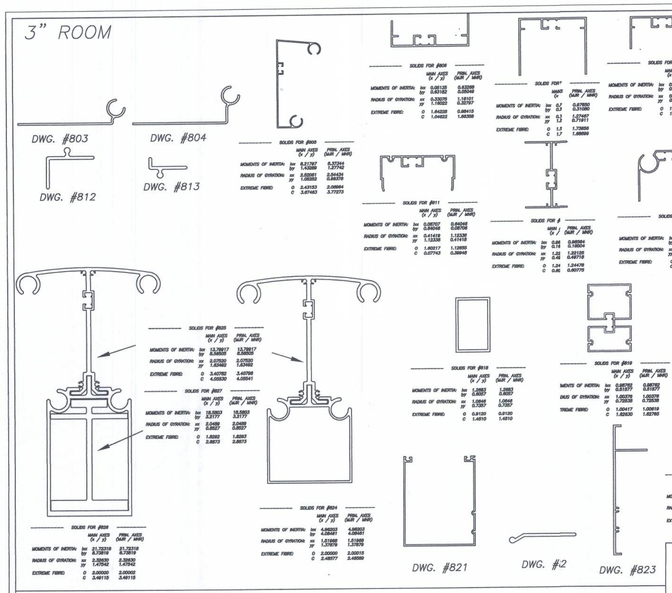
3" ROOM



2" ROOM

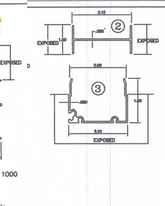
Number of component areas: 1000

Area = 0.272795 in^2

Centroid = 9.192458, 7.376196 in

Ixx =	0.020361 in^4
Ix'x' =	14.871007 in^4
Iyy =	0.170714 in^4
Iy'y' =	23.212474 in^4
Jz =	0.190535 in^4
Jz' =	38.083480 in^4
Pxy =	-0.000567 in^4
Px'y' =	18.496399 in^4
rxx =	0.273202 in
rx'x' =	7.383325 in
ryy =	0.789822 in
ry'y' =	9.224494 in
Imax =	0.170176 in^4
Imin =	0.020359 in^4

Principal axes angle of rotation = 0.000000
9.192458,7.376196
9.947868,7.376196
9.192458,8.131804
9.960366,7.363696
9.192458,8.144104
0.025000
0.000000
9.570162,7.376196
9.570162,7.376196



Number of component areas: 1000

Area = 0.596581 in^2

Centroid = 8.699478, 11.378232 in

Ixx =	0.356583 in^4
Ix'x' =	77.587132 in^4
Iyy =	0.392991 in^4
Iy'y' =	45.558735 in^4
Jz =	0.749154 in^4
Jz' =	123.140467 in^4
Pxy =	0.032074 in^4
Px'y' =	59.084444 in^4
rxx =	0.773098 in
rx'x' =	11.403681 in
ryy =	0.811214 in
ry'y' =	8.738787 in
Imax =	0.411364 in^4
Imin =	0.337790 in^4

Principal axes angle of rotation = 0.000000
6.967281,7.201289
6.007342,7.201289
6.967281,8.261349
6.967281,6.141229
4.967281,8.310099
0.037500
0.000000
5.512311,7.201289
5.512311,7.201289

Principal axes angle of rotation = 0.000000
8.699478,11.378232
8.678202,11.378232
8.699478,12.356957
9.703262,11.353173
8.699478,12.382016
0.050018
0.000000
9.188640,11.378232
9.188840,11.378232

NOTES

PGT 8900 & PGT 8901 MUST BE SCREWED TOGETHER WITH #8 x 3/4" SMS EVERY FOUR FROM EACH END 3" O.C. BOTH SIDES.

2" ROOM

Number of component areas: 1000

Area = 0.566080 in^2

Centroid = 20.371189, 13.074018 in

Ixx =	0.517419 in^4
Ix'x' =	97.256931 in^4
Iyy =	0.517419 in^4
Iy'y' =	235.400370 in^4
Jz =	1.034837 in^4
Jz' =	332.657301 in^4
Pxy =	-0.023451 in^4
Px'y' =	150.742501 in^4
rxx =	0.956053 in
rx'x' =	13.107546 in
ryy =	0.956053 in
ry'y' =	20.392227 in
Imax =	0.540669 in^4
Imin =	0.493958 in^4

Principal axes angle of rotation = 0.000000
20.371189,13.074018
22.017754,13.074018
20.371189,14.720583
22.054004,13.037768
20.371189,14.756833
0.072500
0.000000
21.194472,13.074018
21.194472,13.074018

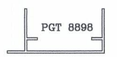
Number of component areas: 1000

Area = 0.355822 in^2

Centroid = 179.275344, 65.272325 in

Ixx =	0.049063 in^4
Ix'x' =	1519.861815 in^4
Iyy =	0.320715 in^4
Iy'y' =	1140.779547 in^4
Jz =	0.369778 in^4
Jz' =	1292.671162 in^4
Pxy =	0.012581 in^4
Px'y' =	413.744371 in^4
rxx =	0.371330 in
rx'x' =	65.356846 in
ryy =	0.949387 in
ry'y' =	179.053992 in
Imax =	0.321298 in^4
Imin =	0.048482 in^4

Principal axes angle of rotation = 0.000000
179.275344,65.272325
180.195010,65.272325
179.275344,66.191991
179.275344,64.352659
179.275344,66.207616
0.031250
0.000000
179.735177,65.272325
179.735177,65.272325



#8 X 1/2 TEK @ EA. 2" POST & 6" O.C. BOTH SIDES AS SHOWN

NOTE: IF EXT. #8902 & #901 ARE SCREWED TOGETHER AS PER INSTRUCTIONS OR WHEN EXT. #8902 IS USED AS CORNER POST.

ALL COMPOSITE PANELS CAN BE USED IN ANY OF THE FOLLOWING: ROOF-WALLS-FLOOR.

△ = L/80	10 P.S.F.	20 P.S.F.	25 P.S.F.	31 P.S.F.	40 P.S.F.	50 P.S.F.	60 P.S.F.	70 P.S.F.	80 P.S.F.	90 P.S.F.	100 P.S.F.
3 IN. 1# FOAM 0.019 AL.	15'	13'-11"	12'-6"	12'	11"	9'	8'-8"				
3 IN. 1# FOAM 0.024 AL.	16'	14'	13'-6"	13'	12'	8'	7'-6"				
3 IN. 2# FOAM 0.030 AL.	17'	16'-6"	16'	15'	14'	12'-4"	12'				
4 IN. 1# FOAM 0.024 AL.	19'-3"	16'-10"	16'-2"	15'-7"	14'-5"	12'-3"	12'-2"	10'-11"	9'-10"	8'-8"	7'-6"
4 IN. 2# FOAM 0.030 AL.	20'-5"	19'-10"	19'-2"	18'	16'-10"	14'-8"	14'-5"	13'-6"	12'-4"	11'-2"	9'-8"
6 IN. 2# FOAM 0.030 AL.	29'	28'	27'-6"	26'	24'-7"	19'-7"	19'	18'	16'-8"	15'	13'

△ = L/120											
3 IN. 1# FOAM 0.019 AL.	14'-8"	13'	12'-2"	12'	10"	8'-8"	8'-1"				
3 IN. 1# FOAM 0.024 AL.	15'	13'-4"	13'-1"	12'-2"	11'-1"	8'-11"	8'-1"				
3 IN. 2# FOAM 0.030 AL.	16'-7"	16'	15'	14'	12'	10'-1"	9'-10"				
4 IN. 1# FOAM 0.024 AL.	18'	16'-1"	15'-8"	14'-7"	13'	10'-8"	10'	8'-5"	6'-4"	4'-2"	2'-1"
4 IN. 2# FOAM 0.030 AL.	19'-11"	19'-2"	18'	16'-10"	14'-5"	10'-1"	9'-11"	9'	8'-8"	4'-6"	2'-2"
6 IN. 2# FOAM 0.030 AL.	28'-8"	27'-8"	26'-4"	24'-6"	21'	15'	14'-1"	12'	9'	6'	3'

△ = L/180											
3 IN. 1# FOAM 0.019 AL.	11'-8"	10'-5"	9'-8"	8'-11"	7'	4'	3'-10"				
3 IN. 1# FOAM 0.024 AL.	12'-8"	12'	10'-2"	9'-7"	7'-2"	4'-2"	4'-1"				
3 IN. 2# FOAM 0.030 AL.	14'-6"	14'	13'-1"	12'-5"	11'-8"	9'-2"	9'				
4 IN. 1# FOAM 0.024 AL.	16'-1"	14'-3"	13'-10"	12'-7"	11'-10"	9'-5"	9'-1"	7'-7"	5'-2"	2'-10"	1'-2"
4 IN. 2# FOAM 0.030 AL.	16'-9"	17'	15'-8"	14'-10"	14'	9'-10"	8'-10"	7'-1"	4'-10"	2'-1"	1'-1"
6 IN. 2# FOAM 0.030 AL.	24'-8"	23'	21'-8"	18'-6"	12'-6"	11'	9'-6"	6'-3"	3'-6"	1'-6"	
6 IN. 1# FOAM 0.030 AL.	21'-5"	21'-6"	20'	18'	15'-6"	10'	10'-11"	9'	6'	2'-10"	1'-2"

△ = L/240 PER B.O.C.A. SEC. 1604.5.5

3 IN. 1# FOAM 0.019 AL.	9'-8"	8'-10"	6'-2"	7'-7"	5'-11"	3'-5"	3'-5"				
3 IN. 1# FOAM 0.024 AL.	10'-9"	10'-2"	6'-8"	8'-2"	6'-1"	3'-5"	3'-5"				
3 IN. 2# FOAM 0.030 AL.	13'-8"	12'	11'-1"	10'-6"	10'	7'-8"	7'-6"				
4 IN. 1# FOAM 0.024 AL.	13'-7"	12'-3"	11'-1"	10'-8"	9'-4"	8'	7'-7"	6'-5"	4'-4"	2'-5"	1'-0"
4 IN. 2# FOAM 0.030 AL.	16'-3"	14'-4"	13'-4"	12'-7"	11'-8"	8'-4"	7'-6"	6'-0"	4'-2"	1'-7"	11"
6 IN. 2# FOAM 0.030 AL.	23'-8"	20'-9"	19'-5"	18'-3"	15'-8"	10'-7"	9'-3"	6'-1"	5'-6"	3'-0"	1'-3"
6 IN. 1# FOAM 0.030 AL.	21'-3"	18'-3"	17'	15'-3"	13'-2"	8'-5"	9'-3"	7'-6"	5'-1"	2'-4"	1'-0"

NOTES:

1.) CALCULATION TABLES INCLUDE A 33.3% INCREASE FOR SEISMIC AND WIND CONDITIONS.

2.) BOLTED CONNECTIONS
STEEL BOLTS USED WITH AL. STRUCTURES SHALL BE ALUMINIZED STEEL, ZINC GALVANIZED, ZINC PLATED, ELECTRO-GALVANIZED, OR STAINLESS STEEL IN ORDER TO PREVENT GALVANIC CORROSION THAT WILL RESULT FROM DIRECT CONTACT BETWEEN STEEL AND ALUMINUM.

3.) ALL DATA IS CALCULATED FOR EXPOSURE "C" AS DESCRIBED IN THE A.S.C.E. HANDBOOK (ANSI/ASCE 7-88).

4.) THESE PLANS ARE IN COMPLIANCE WITH THE 2001 EDITION OF THE FLORIDA BUILDING CODE.

WARNING: THESE CALCULATIONS AND TABLES ARE INTENDED AS MINIMUM GUIDELINES TO INSURE A PROPER INSTALLATION ANY VARIANCES MUST BE REVIEWED BY A REGISTERED PROFESSIONAL ENGINEER.

CONSTANTS:
E = MODULUS OF ELASTICITY OF MATERIAL.
S = ULTIMATE COMPRESSIVE STRENGTH.

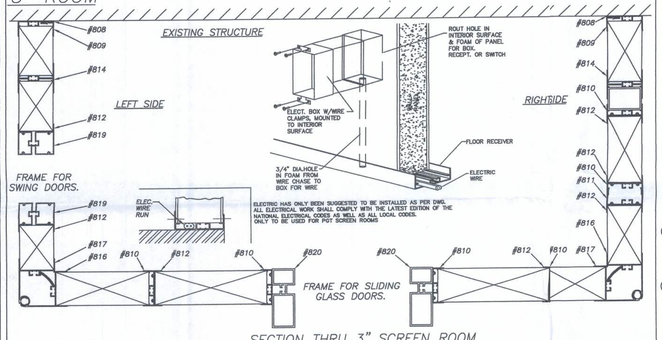
VARIABLES:
L = SPAN IN INCHES.
r = RADIUS OF GYRATION
I = MOMENT OF INERTIA
p = ULTIMATE UNIT LOAD

	K = 0.0001		K = 0.0001
SLENDERNESS RATIO =	30.8348	SLENDERNESS RATIO =	45.4948
p =	8712.23 P.S.I.	p =	7921.77 P.S.I.
p =	60.56 P.S.F.	p =	55.01 P.S.F.
	L = 36.000 IN.		L = 36.000 IN.
MOMENT OF INERTIA X-X	1.8840 IN.	MOMENT OF INERTIA X-X	0.4091 IN.
MOMENT OF INERTIA X-Y	1.8840 IN.	MOMENT OF INERTIA X-Y	0.3807 IN.
RADIUS OF GYRATION X-X	1.1748	RADIUS OF GYRATION X-X	0.8066
RADIUS OF GYRATION Y-Y	1.1748	RADIUS OF GYRATION Y-Y	0.7913

3 x 3 x .125 TUBE SPAN (VERTICAL HEIGHT)	P.S.F.	AF&BWCI & AF&BCI SPAN (VERTICAL HEIGHT)	P.S.F.
12.000	65.32	12.000	64.54
18.000	64.51	18.000	62.84
24.000	63.42	24.000	60.61
30.000	62.08	30.000	57.95
36.000	60.50	36.000	55.01
42.000	58.75	42.000	51.90
48.000	56.84	48.000	48.72
54.000	54.82	54.000	45.55
60.000	52.73	60.000	42.47
66.000	50.60	66.000	39.51
72.000	48.45	72.000	36.71
78.000	46.32	78.000	34.09
84.000	44.21	84.000	31.65
90.000	42.16	90.000	29.38
96.000	40.16	96.000	27.30
102.000	38.23	102.000	25.38
108.000	36.38	108.000	23.62
114.000	34.61	114.000	22.01
120.000	32.92	120.000	20.53

NOTES:
1 ALL READINGS TAKEN UNDER LOAD
2 UNIFORM LOAD PSF (POUNDS PER SQ. FT.)
3 ALL LENGTHS WERE A RESULT OF DIRECT TESTING AT M.T.L. OR BY USING TEST DATA IN CONJUNCTION WITH FINITE ANALYSIS CALCULATIONS.
4 DATA TO BE USED FOR PGT PANELS ONLY
5 FOAM ALSO REFERRED TO AS EPS
6 PANEL CONNECTION INCIDENTAL TO SPAN
7 FOR GREATER SPANS, CONTACT PGT

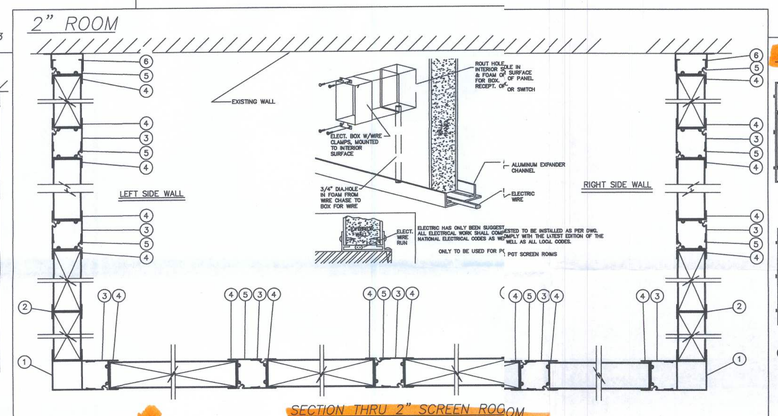
3" ROOM



ELECTRIC HAS ONLY BEEN SUGGESTED TO BE INSTALLED AS PER DWG. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODES AS WELL AS ALL LOCAL CODES. ONLY TO BE USED FOR PGT SCREEN ROOMS

SECTION THRU 3" SCREEN ROOM

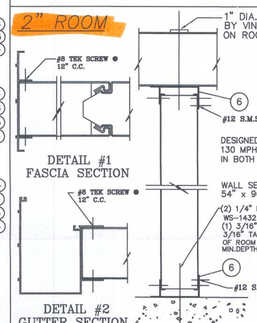
2" ROOM



ELECTRIC HAS ONLY BEEN SUGGESTED TO BE INSTALLED AS PER DWG. ALL ELECTRICAL WORK SHALL COMPLY WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODES AS WELL AS ALL LOCAL CODES. ONLY TO BE USED FOR PGT SCREEN ROOMS

SECTION THRU 2" SCREEN ROOM

2" ROOM



DETAIL #1 FASCIA SECTION

DETAIL #2 GUTTER SECTION

DETAIL #3 VERTICAL SECTION THRU SCREEN ROOM WALL

DESIGNED TO WITHSTAND UP TO 130 MPH PER FLORIDA BUILDING CODE IN BOTH UPLIFT AND LATERALLY

WALL SECTIONS NOT TO EXCEED 54" x 96"

(2) 1/4" DIA. REDHEAD WEDGE ANCHORS WS-1432 @ 6" C.C.
(1) 3/16" TAPCON BTWN. COLUMNS.
3/16" TAPCONS @ 24" C.C. ON SIDES OF ROOM AND (2) AT COLUMNS.
MIN.DEPTH INTO CONCRETE SLAB MUST BE 1.5"

ALL COMPOSITE PANELS CAN BE USED IN ANY OF THE FOLLOWING: ROOF-WALLS-FLOOR.

48" x 3 5/8" E.P.S. & 6 5/8" E.P.S. WITH (2) 15/32 O.S.B. LAMINATES

48" x 3 5/8" E.P.S. WITH (2) 15/32 O.S.B. LAMINATES CLEAR SPAN LENGTH

△ = L/240	10 P.S.F.	15 P.S.F.	20 P.S.F.	25 P.S.F.	30 P.S.F.	35 P.S.F.	40 P.S.F.	45 P.S.F.	50 P.S.F.	55 P.S.F.	60 P.S.F.	65 P.S.F.	70 P.S.F.	75 P.S.F.	80 P.S.F.	85 P.S.F.	90 P.S.F.	95 P.S.F.	100 P.S.F.
3.625" 1# FOAM 2 EA. 15/32 OSB	12'-6"	12'-0"	11'-9"	11'-0"	10'-6"	10'-0"	9'-8"	9'-4"	9'-0"	8'-8"	8'-4"	8'-0"							

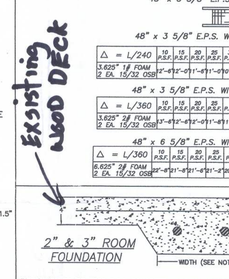
48" x 3 5/8" E.P.S. WITH (2) 15/32 O.S.B. LAMINATES CLEAR SPAN LENGTH

△ = L/360	10 P.S.F.	15 P.S.F.	20 P.S.F.	25 P.S.F.	30 P.S.F.	35 P.S.F.	40 P.S.F.	45 P.S.F.	50 P.S.F.	55 P.S.F.	60 P.S.F.	65 P.S.F.	70 P.S.F.	75 P.S.F.	80 P.S.F.	85 P.S.F.	90 P.S.F.	95 P.S.F.	100 P.S.F.
3.625" 2# FOAM 2 EA. 15/32 OSB	13'-8"	13'-2"	12'-8"	12'-2"	11'-8"	11'-4"	11'-0"	10'-8"	10'-5"	10'-2"	9'-10"	9'-7"	9'-4"	9'-2"	8'-10"	8'-8"	8'-6"	8'-4"	8'-2"

48" x 6 5/8" E.P.S. WITH (2) 15/32 O.S.B. LAMINATES CLEAR SPAN LENGTH

△ = L/360	10 P.S.F.	15 P.S.F.	20 P.S.F.	25 P.S.F.	30 P.S.F.	35 P.S.F.	40 P.S.F.	45 P.S.F.	50 P.S.F.	55 P.S.F.	60 P.S.F.	65 P.S.F.	70 P.S.F.	75 P.S.F.	80 P.S.F.	85 P.S.F.	90 P.S.F.	95 P.S.F.	100 P.S.F.
6.625" 2# FOAM 2 EA. 15/32 OSB	22'-4"	21'-7"	21'-1"	20'-7"	20'-1"	19'-7"	19'-2"	18'-9"	18'-4"	18'-0"	17'-7"	17'-3"	16'-8"	16'-5"	16'-2"	15'-9"	15'-6"	15'-3"	15'-0"

Existing Wood Deck



2" & 3" ROOM FOUNDATION

FOUNDATION TO BE 2500 P.S.I. CONCRETE, HAVE AN APPROVED VAPOR BARRIER, (2) #5 REBAR, AND A MINIMUM OF 6x6x #10 WIRE MESH ON A VEGETATION FREE SOIL BASE. REMOVE AND REPLACE ALL DELETEROUS MATERIAL WITH GRANULAR FILL COMPOSED OF 95% PROCTOR.
SCREEN ROOMS WITH NO FOAM PANELS: MUST HAVE A MINIMUM SLAB OF 3 1/2" THICK WITH AN 8"D x 12"W FOOTER.
GLASS OR SCREEN ROOMS WITH FOAM PANELS: MUST HAVE A MINIMUM SLAB OF 4" THICK WITH AN 18"D x 16"W FOOTER. TOP OF SLAB TO BE 6" ABOVE GRADE AND BOTTOM OF FOOTER TO BE 12" BELOW GRADE.

NOTE: ALL LOCAL, STATE AND NATIONAL CODES MUST BE IN COMPLIANCE.

SURFACE BURNING CHARACTERISTICS OF PGT COMPOSITE PANEL

	1" Max.	2" Max.	3" Max.	4" Max.
Flame Spread	10‡	10‡‡	15‡‡‡	15‡‡‡
Fuel Contributed	— Non Determinable			
Smoke Developed	130‡	130‡‡	130‡‡‡	130‡‡‡

‡ Installed in a thickness, or stored in an effective thickness, as indicated, for a density of 1.0 lb/ft³.

‡ Flame spread and smoke developed recorded while material remained in the original test position.Ignition of molten residue on the furnace floor resulted in flame travel equivalent to calculated flame spread classification of 15 and smoke developed classification of over 200.

‡‡ Flame spread and smoke developed recorded while material remained in the original test position. Ignition of molten residue on the furnace floor resulted in flame travel equivalent to calculated flame spread classification of 70 and smoke developed classification of over 450.

‡‡‡ Flame spread and smoke developed recorded while material remained in the original test position. Ignition of molten residue on the furnace floor resulted in flame travel equivalent to calculated flame spread classification of 85 and smoke developed classification of over 450.

Typical "U" Values Roof Systems

DECK TYPE	EPS OR EPS/COMPOSITE C FACTOR .10	.05	.03
METAL DECKS	.090	.047	.029
POURED GYPSUM (2 1/2)	.077	.043	.028
LIGHTWEIGHT CONCRETE (2")	.072	.042	.027
STRUCTURAL CONCRETE (4")	.087	.048	.029
WOOD (NOMINAL 1")	.083	.045	.029

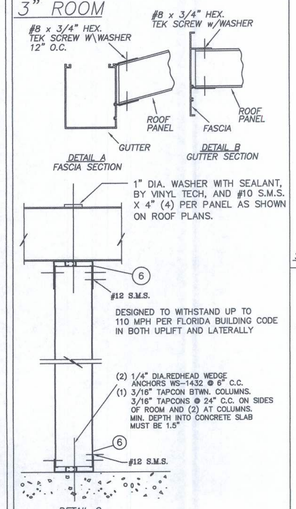
NOTE: CALCULATIONS BASED ON ASHRAE HANDBOOK PROCEDURES AND ASSUME WINTER HEAT FLOW CONDITIONS.

THERMAL EFFICIENCY EPS ROOF INSULATION

THICKNESS	R VALUE	C FACTOR
2"	8.3	.12
3 1/2"	10.4	.10
4"	12.5	.08
5"	14.6	.07
6"	16.6	.06
8"	20.8	.05
8"	25.0	.04
8"	33.2	.03

NOTE: VALUES BASED ON THERMAL CONDUCTIVITY FOR OF 0.24 AT A 75° MEAN TOTAL TEMPERATURE FOR NOMINAL 1.0 PCF DENSITY EPS.

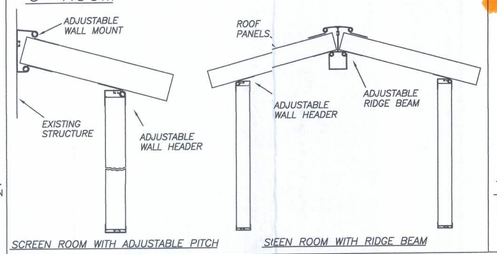
3" ROOM



DETAIL C VERTICAL SECTION THRU SCREEN ROOM WALL.

DESIGNED TO WITHSTAND UP TO 110 MPH PER FLORIDA BUILDING CODE IN BOTH UPLIFT AND LATERALLY

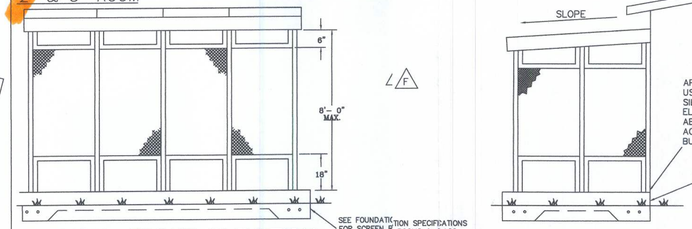
3" ROOM



SCREEN ROOM WITH ADJUSTABLE PITCH

SCREEN ROOM WITH RIDGE BEAM

2" & 3" ROOM



SEE FOUNDATION SPECIFICATIONS FOR SCREEN ROOMS & GLASS ENCLOSURES ABOVE RIGHT

TYPICAL FRONT ELEVATION

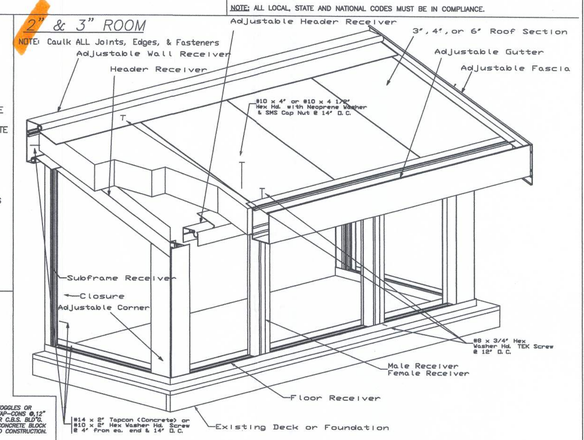
APPROVED CAULKING MUST BE USED AS SEALANT BETWEEN SILL EXTRUSION AND CONCRETE ELEVATION OR DISTANCE ABOVE GRADE TO BE IN ACCORDANCE WITH LOCAL BUILDING CODES

SEE FOUNDATION SPECIFICATIONS FOR SCREEN ROOMS & GLASS ENCLOSURES ABOVE RIGHT

TYPICAL SIDE ELEVATION

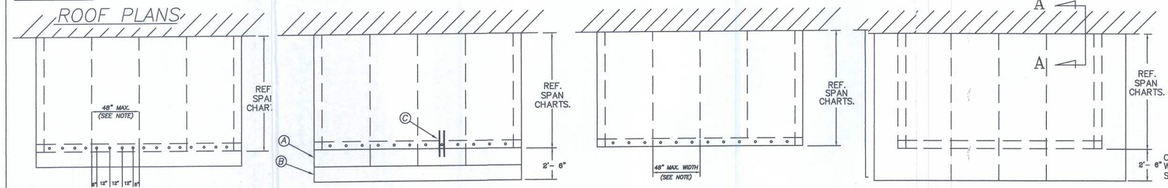
2" & 3" ROOM

NOTE: Caulk ALL Joints, Edges, & Fasteners



3" ROOM

ROOF PLANS



1 GUTTER FLAT TO WALL AT FRONT FASCIA FLAT TO WALL AT SIDES

2 GUTTER 2'-6" AT FRONT FASCIA FLAT AT SIDES (SEE DETAILS)

3 FASCIA FLAT ALONG FRONT AND SIDES.

NOTE: WHEN USING TOTAL ROOM PACKAGE MAXIMUM PANEL WIDTH IS 48".

4 FASCIA OVERHANG 2'-6" AT FRONT AND 1'-6" EACH SIDE.

SECTION A-A 2" ROOM

Revisions: "F" REMOVE PRODUCT BOOK REF. FROM FRONT ELEVATION	Tolerances Unless Noted: Fractions: ± 1/64 Decimal .00 ± .01 Decimal .000 ±.005 Angular: ± 1°	THE INFORMATION, DESIGN OR DATA CONTAINED HERIN IS THE EXCLUSIVE PROPERTY OF PGT INDUSTRIES AND CONSIDERED CONFIDENTIAL AND PROPRIETARY NO PORTION OF THIS DOCUMENT MAY BE USED OR REPRODUCED IN ANY FORM WITHOUT THE EXPRESSED WRITTEN PERMISSION OF PGT INDUSTRIES.			PGT INDUSTRIES P.O. BOX 1529 NOKOMIS, FL 34274
Material:	Series/Model: SCREEN ROOM				
Revsd By: F.K. Date: 4/4/03 Chkd By: WS Date: 6/20/00	Description: 2" AND 3" NATURESCAPE ROOM				
Drawn By: R.S. Date: 3/8/95	PGT NO: VENDOR NO: Scale: NTS Sheet: 1 of 1 Drawing No. VT1692-FBC Rev: F				

This is a vinyl window Room, No Glass.

C F.K. 4/8/02 CHG'D SHT 1 OF 1 & DESIGNED FOR SPEED NOTE (2) PLACES PER BOB CLARK

D F.K. 9/9/02 CHG'D DESIGN SPEED FOR 2" ROOM ONLY TO 130MPH

E F.K. 2/17/03 - UPGRADED SLAB AND FOOTER REQUIREMENTS TO FBC

F F.K. 4/4/03 - REMOVE BOOK REF. FROM FRONT WALL ELEVATION