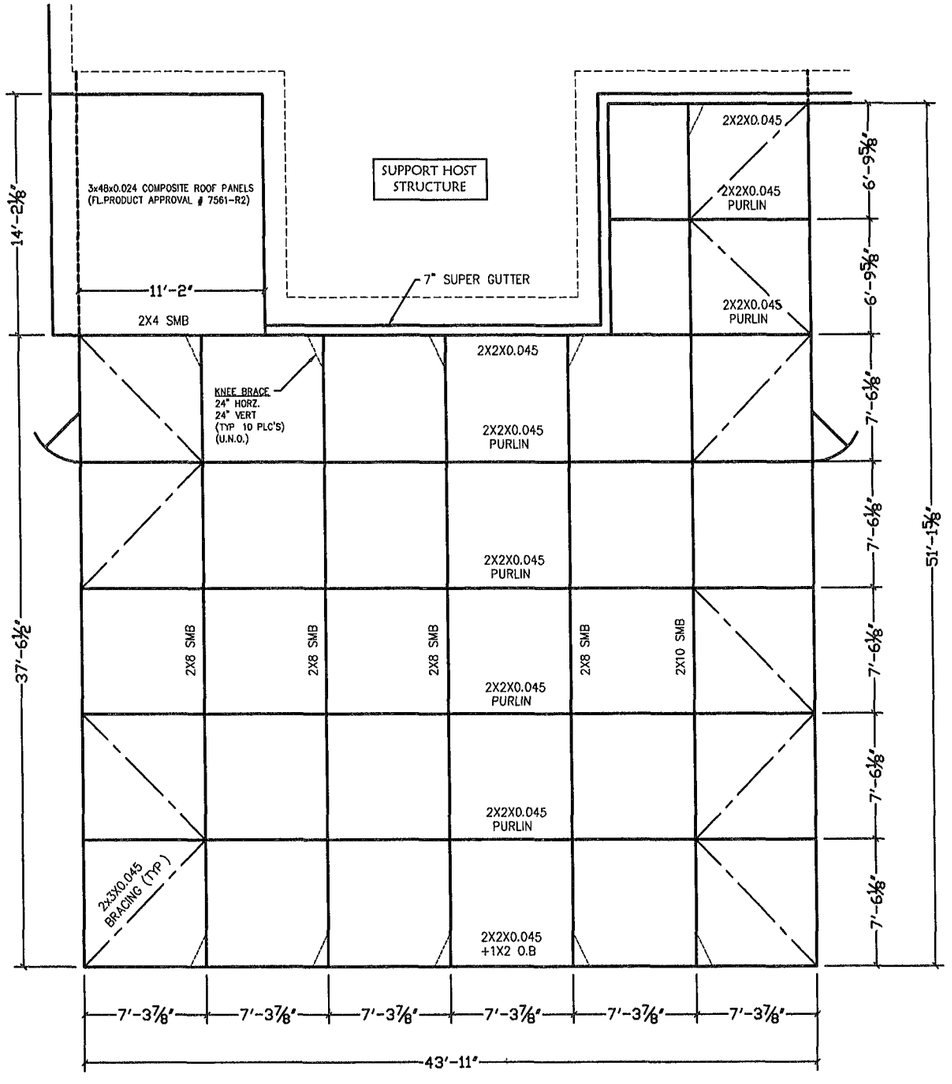


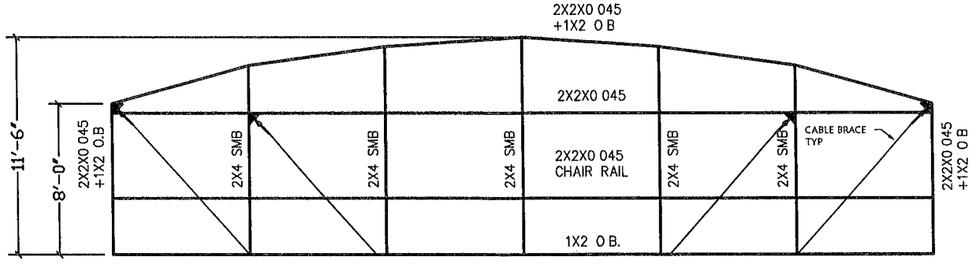
POOL ENCLOSURE PLAN

13521
Charles Henderson
281 S.W Huntington Glen
Lake City, FL 32024

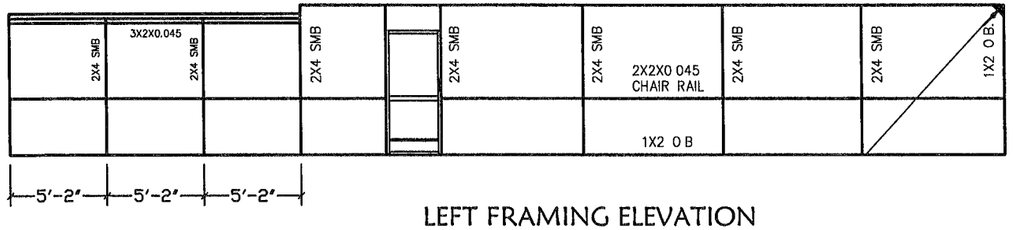
SCREEN AREA 1971 SQ.FT

COLUMBIA COUNTY BUILDING DEPARTMENT
Received
Compliance
PLANS EXAMINER

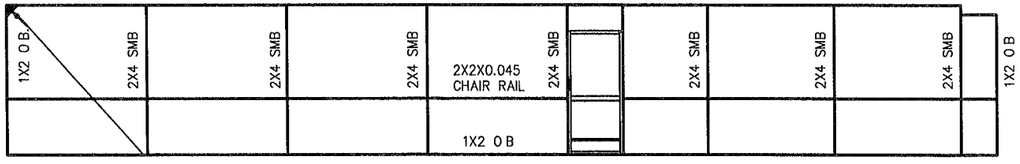
Florida Pool Enclosures 922 Hickory St. Altamonte Springs, FL 407-260-2800 fax 407-260-6411	Job # 13521 Project Address: Charles Henderson 281 S.W. Huntington Glen Lake City, FL 32024	tax district: date: 09/17/13 scale: NTS prepaired by: Allen Thompson	**Structural Concepts & Design, LLC**	The locations of doors are incidental to the design. Girts remain the same throughout the design unless otherwise noted. Dimensions are to center of walls and members. Length given for knee braces represents horizontal and vertical displacements.



FRONT FRAMING ELEVATION



LEFT FRAMING ELEVATION



RIGHT FRAMING ELEVATION

Florida Pool Enclosures
922 Hickory St.
Altamonte Springs, FL
407-260-2800
fax 407-260-6411

Job # 13521

Project Address:
Charles Henderson
281 S.W. Huntington Glen
Lake City, FL 32024

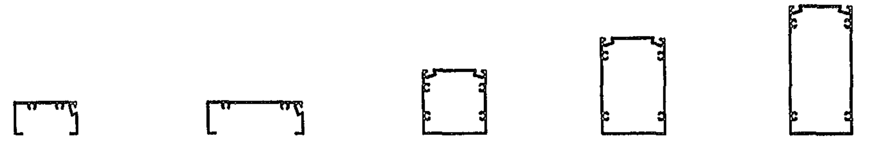
tax district:

date: 09/17/13 scale: NTS

prepaired by: Allen Thompson

Structural Concepts & Design, LLC

The locations of doors are incidental to the design.
Girts remain the same throughout the design unless otherwise noted.
Dimensions are to center of walls and members.
Length given for knee braces represents horizontal and vertical displacements.



1x2 O.B (1x2x0.044 OPEN BACK) AL 6005-T5

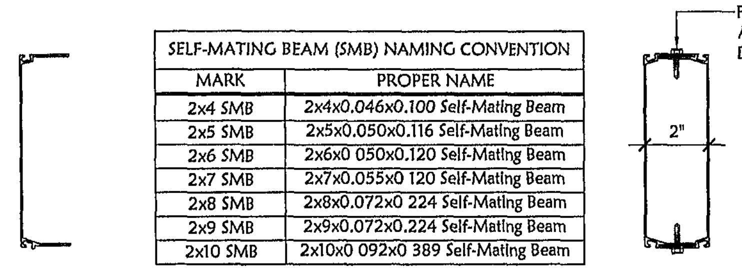
1x3 O B. (1x3x0.044 OPEN BACK) AL 6005-T5

2x2 H. (2x2x0.044 HOLLOW) AL 6005-T5

2x3 H. (2x3x0.044 HOLLOW) AL 6005-T5

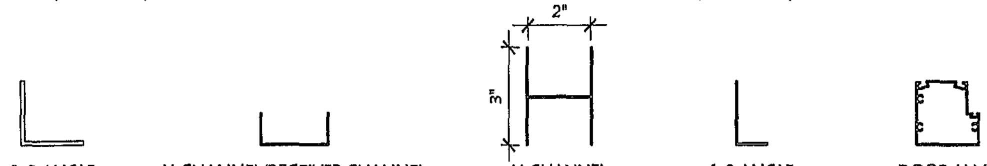
2x4 H. (2x4x0.044 HOLLOW) AL 6005-T5

SELF-MATING BEAM (SMB) NAMING CONVENTION	
MARK	PROPER NAME
2x4 SMB	2x4x0.046x0.100 Self-Mating Beam
2x5 SMB	2x5x0.050x0.116 Self-Mating Beam
2x6 SMB	2x6x0 050x0.120 Self-Mating Beam
2x7 SMB	2x7x0.055x0 120 Self-Mating Beam
2x8 SMB	2x8x0.072x0 224 Self-Mating Beam
2x9 SMB	2x9x0.072x0.224 Self-Mating Beam
2x10 SMB	2x10x0 092x0 389 Self-Mating Beam



SELF-MATING BEAM HALF-SHELL (AL 6005-T5)

SELF-MATING BEAM ATTACHMENT (AL 6005-T5)



2x2 ANGLE (2x2x0.125 ANGLE) AL 6005-T5

U-CHANNEL/RECEIVER CHANNEL (1x2x0 055 U-CHANNEL) AL 6005-T5

H-CHANNEL (2x3x0.062 H-CHANNEL) AL 6005-T5

1x2 ANGLE (1x2x0.062 ANGLE) AL 6005-T5

DOOR JAMB (2x2x0 046 DOOR JAMB) AL 6005-T5

1 / S-1.0 Aluminum Self-Mating Beam (SMB) Naming Convention

SCALE. 3' = 1'-0'

COLUMN SCHEDULE (EXPOSURE 'B")									
TRIBUTARY WIDTH	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	8 0
COLUMN MEMBER TYPE	EFFECTIVE HEIGHT (FT.)								
2x2 H	6.2	5.8	5 5	5 1	4.8	4.6	4.2	3.9	3.3
2x3 H	8 1	7 8	7.3	6.9	6 7	6.4	6 1	5 9	5.5
2x4 H	9 0	8.7	8.2	7.8	7.4	7 0	6.8	6.1	5 8
2x4 SMB	13 9	13 1	12.4	11.8	11 3	10.9	10.5	10 1	9.8
2x5 SMB	17 2	16.2	15 3	14.6	14.0	13 5	13.0	12.5	12.1
2x6 SMB	19.6	18.5	17.6	16.7	16.0	15.4	14.8	14.3	13 9
2x7 SMB	22 0	20.7	19 7	18 8	18.0	17 3	16 6	16.1	15 5
2x8 SMB	30 3	28.9	27.4	26.1	25.0	24.0	23.2	22.4	21 7
2x9 SMB	36.0	34.6	33.2	31.6	30 3	29 1	28.0	27 1	26 2
2x10 SMB	41 5	39 9	38 5	37.0	35.4	34.0	32.6	31 7	30.7
2x5 TFB	18 2	17 1	16.3	15.5	14.8	14.2	13 7	13 3	12 8
2x7 TFB	24.2	22 8	21.6	20.6	19 7	18 9	18.2	17.6	17 1
2x9 TFB	32.8	30.9	29.3	27 9	26.7	25.7	24.8	23.9	23.2

NOTES:
1 THIS TABLE APPLIES TO BEARING & NON-BEARING WALLS FOR HORIZONTAL WIND LOADS IN DESIGN.
2. HEIGHTS MAY BE INTERPOLATED BUT NOT EXTRAPOLATED.

PURLIN SCHEDULE (EXPOSURE "B")									
TRIBUTARY WIDTH	4.0	4.5	5.0	5.5	6.0	6 5	7.0	7 5	8.0
MEMBER	EFFECTIVE SPAN (FT.)								
2x2x0.044	8.0	8.0	8.0	8.0	8.0	8 0	7.9	7 7	7 5
2x3x0.050	13 7	13 1	12.8	12.4	12.0	11 7	11.4	11.1	10.8
2x3x0.060	15 3	14.7	14.3	13 8	13.4	12 9	12.4	11 9	11.4
2x4x0.050	17.0	17 3	16.8	16.1	15.8	15 1	14.4	13 7	13.0

NOTES:
1 SPANS MAY BE INTERPOLATED BUT NOT EXTRAPOLATED.

CARRY BEAM SCHEDULE FOR SCREEN ENCLOSURE ROOFS (EXPOSURE "B")										
TRIBUTARY WIDTH	8.0	12.0	20.0	24.0	30.0	34.0	40.0	44.0	48.0	52.0
COLUMN MEMBER TYPE	EFFECTIVE SPAN (FT.)									
2x4 SMB	16.4	14.1	11.7	10 9	9 6	9 1	8.4	8.0	7 7	7 3
2x5 SMB	20.1	17.4	14.7	13 7	12.3	11.5	10.7	10.2	9.8	9 3
2x6 SMB	22.4	20.4	17 2	15.8	14.1	13.2	12.2	11.7	11.2	10.7
2x7 SMB	25.4	23.4	19.5	18 3	16.4	15 3	14.2	13 5	12 9	12.4
2x8 SMB	31.6	28.7	24.1	22.7	20.9	19.6	18.2	17.3	16.5	15 9
2x9 SMB	34.3	31 6	26.6	25.0	22 7	21 3	19 7	18 8	18 1	17.3
2x10 SMB	42 7	39.3	33.0	31.0	28.6	27.5	25.9	24.7	23.6	22.7
2x5 TFB	24.1	22 2	18.5	17.4	15 6	14.5	13 5	12 8	12 3	11.8
2x7 TFB	30.0	27 3	22.9	21.6	19.9	18.6	17.3	16.4	15 7	15 1
2x9 TFB	36.3	33.4	28 1	26.4	24.3	23.4	22 0	21.0	20 1	19 3

NOTES:
1 SPANS MAY BE INTERPOLATED BUT NOT EXTRAPOLATED.

CHAIR RAIL SCHEDULE (EXPOSURE "B")					
TRIBUTARY WIDTH	4.0	5 0	6 0	7.0	8.0
MEMBER	EFFECTIVE SPAN (FT.)				
2x2x0.045	8.5	7 8	7.6	7.1	6.8
2x3x0.050	11.0	10.4	9.7	9 1	8 7
2x3x0.060	12 7	11.8	11 1	10.6	10.1
2x4x0.050	13.6	12 7	11 7	11 2	10.5
2x5x0.050	15.0	13.4	12 2	11.3	10.6

BEAM SCHEDULE (EXPOSURE B")					
TRIBUTARY WIDTH	4.0	5.0	6.0	7.0	8.0
BEAM MEMBER TYPE	EFFECTIVE SPAN (FT.)				
2x4 SMB	20.4	18.9	17.3	16.0	14.9
2x5 SMB	27.3	24.4	22.3	20.6	19.3
2x6 SMB	31 8	28 9	26.4	24.4	22 8
2x7 SMB	36.2	33 3	30.4	28.1	26.3
2x8 SMB	47 1	43 7	41.2	39.1	37 3
2x9 SMB	55 9	51.9	48 8	46.4	44.4
2x10 SMB	60 0	59 9	56 4	53 5	51 2
2x5 TFB	28.5	26.0	23 7	22.0	20.5
2x7 TFB	38.5	35 7	33.4	30.9	28 9
2x9 TFB	51 1	47 5	44.7	42.4	40 6

NOTES:
1 SPANS MAY BE INTERPOLATED BUT NOT EXTRAPOLATED.
2. FOR ANYTHING SMALL THAN A 2X4 (I.E. A 2X2 OF 2X3) USE THE PURLIN TABLE TO DETERMINE SPANS.

KNEE BRACE SCHEDULE (EXPOSURE "B")		
SIZE	LENGTH	QTY PER FLANGE
2x2x0.044	UP TO 2'	2
2x3x0.050	2' TO 4'	3
2x4x0.050	4' TO 6'	4
2x4x0.048 x 0.100 SMB	6' TO 7'	4
2x6x0.050 x 0.120 SMB	7' TO 8'	6

NOTES:

1 BEAM MEMBER SIZE IS CHOSEN BY THE SPAN BETWEEN THE KNEE BRACES, TYPICALLY (U.N.O.)

2 IF THERE ARE NO KNEE BRACES THEN THE SPAN IS CHOSEN BY THE DISTANCE OF THE BEAM LENGTH MINUS HALF THE DEPTH OF EACH UPRIGHT (i.e. BEAM LENGTH (HALF DEPTH OF UPRIGHT 1 + HALF DEPTH OF UPRIGHT 2).

3 KNEE BRACE LENGTH SHALL NOT EXCEED WHAT IS GIVEN IN THE KNEE BRACE SCHEDULE (i.e. 8' IN HORIZONTAL OR VERTICAL DISTANCE) UNLESS THE SITE-SPECIFIC LAYOUT HAS BEEN APPROVED AND SEALED BY A LICENSED PROFESSIONAL ENGINEER.

4. UPRIGHT MEMBER SIZE IS CHOSEN BY THE SPAN FROM THE GROUND TO THE BOTTOM OF THE KNEE BRACE

5. CHAIR RAILS THAT ARE ATTACHED TO UPRIGHTS THROUGH THE WEB OF THE UPRIGHT INTO EVERY AVAILABLE SCREW BOSS OF THE CHAIR RAIL, MAY BE USED AS GUARD RAILS IN SCREEN ENCLOSURES PROVIDED THAT THEY ARE SET AT A HEIGHT OF BETWEEN 18' & 48' AND THAT THEY SPAN NO GREATER THAN WHAT THE CHAIR RAIL SCHEDULE' IDENTIFIES FOR EACH RESPECTIVE MEMBER.

- THE SPAN TABLES SHOWN ARE CALCULATED FOR WIND EXPOSURE 'B' TYPE TERRAIN. IF EXPOSURE "C" IS REQUIRED, THEN MULTIPLY THE FIGURES IN THE TABLE BY *0.82*

General Structural Notes

GENERAL DRAWING NOTES

- DO NOT SCALE DRAWINGS, USE DIMENSIONS PROVIDED, TYPICALLY IN THE CASE OF DIMENSIONAL CONFLICT, ARCHITECTURAL DIMENSIONS GOVERN OVER STRUCTURAL DIMENSIONS, TYPICALLY
- CONTRACTOR SHALL COORDINATE THE STRUCTURAL DOCUMENTS w/ THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, & CIVIL DOCUMENTS. SC&D SHALL BE NOTIFIED IN WRITING OF ANY DISCREPANCY OR OMISSION.
- THE STRUCTURE IS STABLE ONLY IN IT'S COMPLETED FORM. TEMPORARY SUPPORTS REQUIRED FOR STABILITY DURING ALL INTERMEDIATE STAGES OF CONSTRUCTION SHALL BE DESIGNED, FURNISHED, & INSTALLED BY THE CONTRACTOR, TYPICALLY

00200 BUILDING CODES:

- FLORIDA BUILDING CODE - 2010 EDITION
- ASCE/SEI 7-10· MINIMUM DESIGN LOADS FOR BUILDINGS & OTHER STRUCTURES

00500 STRUCTURAL DESIGN CRITERIA

THE STRUCTURE HAS BEEN DESIGNED IN ACCORD WITH THE BUILDING CODE AND/OR MORE RESTRICTIVE REQUIREMENTS FOR LOADS AS GIVEN BELOW UNLESS SPECIFIC AREAS OF THE DRAWING SPECIFICALLY CALL FOR DIFFERENT LOADING CRITERIA.

GRAVITY LOADING IS TO BE UNIFORM (U N.O.)
- ROOFS 20 PSF (REDUCIBLE)

WIND LOADING PER FLORIDA BUILDING CODE & ASCE/SEI 7
- BASIC ULTIMATE WIND SPEED (V_{ULT}) = 160 MPH (3 SECOND GUST)
- BASIC NOMINAL WIND SPEED (V_{ASD}) = 124 MPH (3 SECOND GUST)
- EXPOSURE CATEGORY = "B"
- RISK CATEGORY = 'II
- INTERNAL PRESSURE COEFFICIENTS = N/A (OPEN STRUCTURE)
- COMPONENT & CLADDING PRESSURES = ±18.6 PSF (NOMINAL)

SCREEN FRAME WALL w/ GUARDRAIL.
- GUARDRAIL. 20 LB/FT UNIFORM LOAD IN ANY DIRECTION or 200 LB CONCENTRATED LOAD (WHICHEVER IS GREATER)

01051 DRAWING DIMENSIONS AND COORDINATION.

DIMENSIONAL INFORMATION, PRICING, ALL DETAILS AND CONSTRUCTION SHALL BE BASED ON THE ENTIRE SET OF CONTRACT DOCUMENTS. COORDINATE THE REQUIREMENTS OF ALL PROFESSIONALS. USE INFORMATION FROM APPROVED SHOP DRAWINGS TO SUPPLEMENT CONTRACT DOCUMENTS WHERE NECESSARY REPORT ANY DISCREPANCIES TO THE ARCHITECT PRIOR TO PROCEEDING.

01100 SCOPE OF SERVICE.

STRUCTURAL CONCEPTS & DESIGN, LLC AS THE STRUCTURAL ENGINEER OF RECORD HAS DESIGNED AND IS RESPONSIBLE FOR ONLY THE SPECIFIC STRUCTURAL COMPONENTS SHOWN IN THIS SET OF STRUCTURAL CONSTRUCTION DOCUMENTS IF A SPECIALTY ENGINEER, AS DEFINED BY THE DEPARTMENT OF PROFESSIONAL REGULATION, IS REQUIRED, HIS SERVICES MUST COMPLY WITH THE SCOPE OF SERVICES AS OUTLINED IN THE PROJECT CONSTRUCTION DOCUMENTS

02000 FOUNDATIONS:

GEOTECHNICAL DATA AND RECOMMENDATIONS HAVE BEEN NOT BEEN PROVIDED AT THE TIME THESE DRAWINGS WERE ISSUED. BASED ON SIMILAR PROJECTS IN THE AREA, THE FOLLOWING FOUNDATION SYSTEM WILL BE USED·

- SHALLOW FOOTINGS w/ ALLOWABLE BEARING = 2,000 PSF* (* TO BE VERIFIED BY GEOTECHNICAL ENGINEER PRIOR TO CONSTRUCTION)

02200 EARTHWORK:

CONTRACTOR SHALL DEWATER SITE AS NECESSARY, SO THAT ALL CONCRETE CAN BE PLACED IN THE DRY ALL BACKFILL SHALL BE ACCOMPLISHED USING MATERIAL CONSISTING OF CRUSHED STONE AND/OR MATERIAL APPROVED BY THE GEOTECHNICAL ENGINEER. THE BACKFILL SHALL BE COMPACTED TO 95% OF MAXIMUM DENSITY AS DETERMINED BY ASTM D-1557 NO BACKFILL MATERIAL SHALL BE PLACED AGAINST WALLS WHICH DO NOT HAVE PERMANENT FLOORS AT THE TOP AND BOTTOM WITHOUT PROVISIONS FOR ADEQUATE TEMPORARY BRACING OF THOSE WALLS. PROVIDE ADEQUATE EXCAVATION BRACING IN ACCORD WITH GEOTECHNICAL ENGINEER RECOMMENDATIONS TO MAINTAIN EXISTING FOOTINGS, UTILITIES, AND OTHER IMPROVEMENTS IN A SAFE CONDITION.

03100 FORMWORK:

CONTRACTOR SHALL DESIGN AND ERECT FORMWORK IN STRICT COMPLIANCE WITH ACI 347 SEE TYPICAL DETAILS FOR CAMBER REQUIREMENTS CONTRACTOR SHALL COORDINATE ALL OPENINGS AS REQUIRED FOR OTHER TRADES OPENINGS WHERE SHOWN ON THE STRUCTURAL DRAWINGS ARE TO IDENTIFY DESIGN INTENT ONLY THE SPECIFIC DIMENSIONS AND LOCATIONS SHALL BE FURNISHED OR CONFIRMED BY THE TRADE REQUIRING THE OPENING. PROVIDE CHAMFERS AT ALL CORNERS IN CONCRETE MEMBERS EXPOSED TO VIEW FORMWORK TO REMAIN IN PLACE UNTIL CONCRETE HAS ATTAINED ENOUGH STRENGTH TO SUPPORT ALL DEAD LOADS PLUS A MINIMUM OF 50 PSF OF ADDITIONAL CONSTRUCTION LOAD SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

03200 CONCRETE REINFORCEMENT.

WORK SHALL BE IN ACCORD WITH ACI 318-02, ACI 318R-02, ACI 315-99, ACI 318-02, CRSI "MANUAL OF STANDARD PRACTICE" 2001, CRSI "PLACING REINFORCING BARS" 1997, WIRE REINFORCEMENT INSTITUTE 'MANUAL OF STANDARD PRACTICE-STRUCTURAL WELDED WIRE REINFORCEMENT", 2001 BARS SHALL CONFORM TO ASTM SPECIFICATION A615(S1), GRADE 60, WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 CONCRETE COVER REQUIRED AS FOLLOWS

A. CAST AGAINST AND EXPOSED TO EARTH. 3"
B FORMED, EXPOSED TO EARTH OR WEATHER. 2 (#6 & LARGER) 1½" (#5 & SMALLER)
C SLABS AND WALLS
NO EARTH OR WEATHER EXPOSURE ¾" (#11 & SMALLER)
3 HOUR FIRE RATING AND LESS ¾"

LAP SPLICE LENGTHS SHALL BE AS FOLLOWS:
1 ALL LAP SPLICES SHALL BE TENSION CLASS "B' UNLESS OTHER LAP CONDITIONS ARE SPECIFICALLY SHOWN ON THE DRAWINGS.
2 SPLICE LENGTHS SHALL BE SHOWN ON SHOP DRAWINGS.
3. USE GENERAL HOOK BAR DEVELOPMENT LENGTHS UNLESS SPECIAL CONFINEMENT CONDITIONS ARE SATISFIED IN ACCORDANCE WITH ACI 318

03300 CAST IN-PLACE CONCRETE.

TO BE MIXED AND PLACED IN ACCORDANCE WITH ACI 301-99 ALL REINFORCED CONCRETE TO HAVE 28 DAY COMPRESSIVE STRENGTHS AS FOLLOWS. (ALL STRUCTURAL ELEMENTS SHALL BE F'c = 4,000 PSI UNLESS NOTED OTHERWISE).

- SLABS F'c = 3,000 PSI
- FOUNDATIONS: F'c = 3,000 PSI

03600 GROUT:

GROUTING IS CLASSIFIED AS "PRECISION GROUTING' FOR SUPPORT OF OPERATING MACHINE BASES, EQUIPMENT SUBJECT TO THERMAL MOVEMENT, AND BASE PLATES, BEARING PLATES, AND EXPANSION BEARINGS EXCEEDING 8 IN LEAST DIMENSION ALL OTHER GROUTING MAY BE "ORDINARY GROUTING" METALLIC AGGREGATE GROUT MAY BE USED ONLY IN INTERIOR APPLICATIONS NOT EXPOSED TO VIEW IN FINISHED BUILDING AREAS. USE ORDINARY CEMENT GROUT ONLY WHERE SPECIFICALLY NOTED AS "CEMENT GROUT" ON DETAILS. USE NON-SHRINK GROUT FOR ALL OTHER LOCATIONS. PRECISION GROUT SHALL CONFORM TO CRD-C621-80 WHEN MIXED TO FLUID CONSISTENCY OF 22 TO 25 SECONDS (FLOW CONE METHOD, CRD-C611-80) REQUIRED 28 DAY STRENGTHS SHALL BE AS FOLLOWS:

- CEMENT GROUT 1,800 PSI
- NON-SHRINK GROUT· 5,000 PSI
- PRECISION GROUT 6,500 PSI

04220 CONCRETE UNIT MASONRY

ALL MASONRY CONSTRUCTION TO BE IN ACCORDANCE WITH "SPECIFICATION FOR CONCRETE MASONRY CONSTRUCTION', ACI 530.1-02 AND ALL APPLICABLE LOCAL BUILDING CODE PROVISIONS ALL MASONRY WALLS TO BE CONSTRUCTED ENTIRELY OF UNITS CONFORMING TO ASTM C 90, AND REINFORCED WITH #9 GAUGE LADDER TYPE HORIZONTAL MASONRY REINFORCING LOCATED AT 16' O.C. ALL MASONRY TO BE LAID IN TYPE "S' MORTAR (1,800 PSI ON THE JOB) WITH FULL HEAD AND BED JOINTS. ALL MASONRY CONSTRUCTION TO BE EITHER BOUND BY TIE BEAM, TIE COLUMN MEMBERS OR TIED TO FRAME WITH 16 GAUGE CONTINUOUS DOVETAIL SLOT AND 12 GAUGE DOVETAIL ANCHOR SPACED @ 16" O.C. (TOP AND TWO VERTICAL SIDES).

04230 REINFORCED UNIT MASONRY

ALL REINFORCED MASONRY CONSTRUCTION SHALL BE IN ACCORD WITH APPLICABLE PROVISIONS OF CONCRETE REINFORCEMENT, CAST-IN-PLACE CONCRETE, AND CONCRETE MASONRY VERTICAL REINFORCING SHALL ANCHOR INTO SUPPORTING CONCRETE MEMBERS A CLASS "B" LAP LENGTH PLUS 3" OR FULL DEPTH PLUS A STANDARD HOOK. LAPS WITHIN REINFORCED MASONRY SHALL BE 48 BAR DIAMETERS. CONTRACTOR SHALL COORDINATE PLACING OF DOWELS TO ACCOMMODATE MODULE OF MASONRY UNITS. ALL VERTICAL CELLS AND BEAMS WITH REINFORCING SHALL BE FILLED WITH COARSE GROUT CONSISTING OF 3,000 PSI CONCRETE WITH #8 COARSE AGGREGATE. USE HIGH-SLUMP (SUPERPLASTICIZED) WHERE HEIGHT OF LIFT EXCEEDS 5'-0" WHERE HEIGHT OF OPEN CELL EXCEEDS 5'-0', USE HIGH-LIFT GROUTING TECHNIQUE WHICH REQUIRES A CLEAN-OUT OPENING AT THE BOTTOM OF ALL CELLS. ALL WALLS TO BE REINFORCED WITH #5 BARS SPACED AT 48' O.C MAX. VERTICAL, TYP (U.N.O.)

STRUCTURAL CONCEPTS & DESIGN
Robert C. Scroggins, P.E.
FL Registration No. 56158

To the best of the Design Engineer's knowledge, the plans and specifications for this project comply with the applicable minimum building codes as determined by the local authority in accordance with the Florida Statutes.

REV	DATE	DESCRIPTION

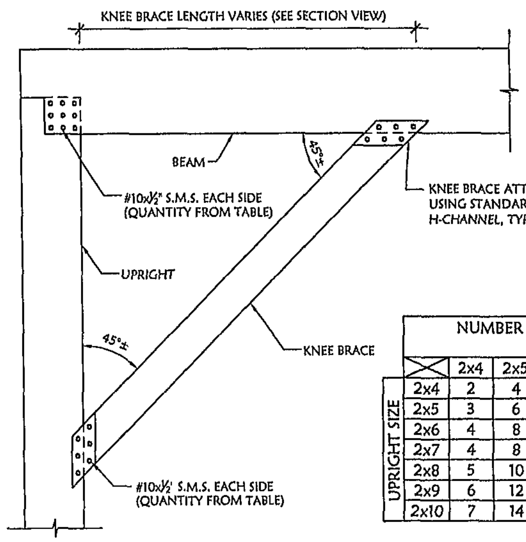
Client: Florida Pool Enclosures, Inc

Project: Residential Pool Screen Enclosure ______, Florida

Structural Notes & Connection Detail

/3521

Project No.	#13-002 11
Drawn By:	TLW
Checked By:	RCS
Approved By:	RCS
Date:	08/27/13
Sheet	S-1.0



NUMBER OF #10 S.M.S REQUIRED

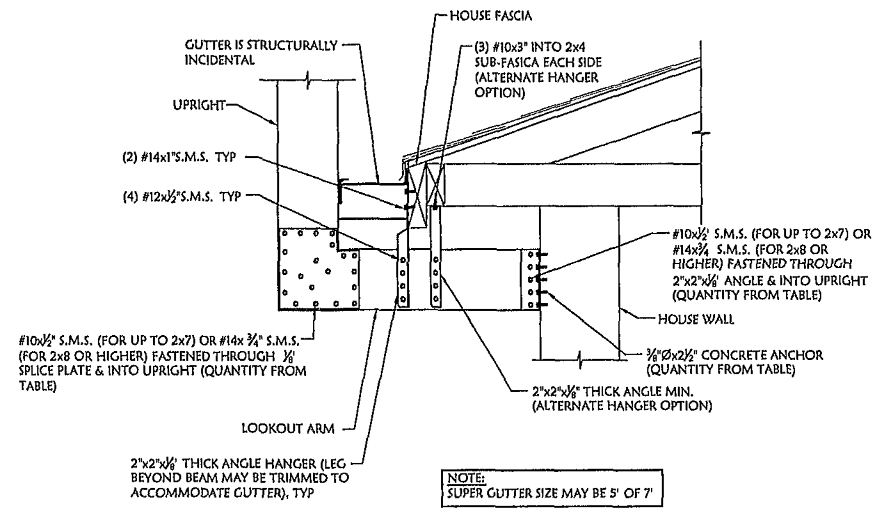
UPRIGHT SIZE \ BEAM SIZE	2x4	2x5	2x6	2x7	2x8	2x9	2x10
2x4	2	4	6	6	8	10	12
2x5	3	6	9	9	12	15	18
2x6	4	8	12	12	16	20	24
2x7	4	8	12	12	16	20	24
2x8	5	10	15	15	20	25	30
2x9	6	12	18	18	24	30	36
2x10	7	14	21	21	28	35	42

NUMBER OF #14 S.M.S REQUIRED

UPRIGHT SIZE \ BEAM SIZE	2x4	2x5	2x6	2x7	2x8	2x9	2x10
2x4	N/A	2	2	3	4	5	6
2x5	2	2	4	4	6	6	8
2x6	2	4	6	8	10	12	14
2x7	3	4	8	8	10	12	14
2x8	4	6	10	10	12	14	16
2x9	5	6	12	12	14	16	18
2x10	6	8	14	14	16	18	20

1 Typical Beam to Column Connection w/ Knee Brace

S-2.1 SCALE: 1½" = 1'-0"


HOUSE FASCIA
GUTTER IS STRUCTURALLY INCIDENTAL
(3) #10x3" INTO 2x4 SUB-FASICA EACH SIDE (ALTERNATE HANGER OPTION)
UPRIGHT
(2) #14x1"S.M.S. TYP
(4) #12x½"S.M.S. TYP
#10x½" S.M.S. (FOR UP TO 2x7) OR #14x¾ S.M.S. (FOR 2x8 OR HIGHER) FASTENED THROUGH 2"x2"x⅛" ANGLE & INTO UPRIGHT (QUANTITY FROM TABLE)
HOUSE WALL
#10x½" S.M.S. (FOR UP TO 2x7) OR #14x ¾" S.M.S. (FOR 2x8 OR HIGHER) FASTENED THROUGH ⅛" SPLICE PLATE & INTO UPRIGHT (QUANTITY FROM TABLE)
⅜"Øx2½" CONCRETE ANCHOR (QUANTITY FROM TABLE)
2"x2"x⅛" THICK ANGLE MIN. (ALTERNATE HANGER OPTION)
LOOKOUT ARM
2"x2"x⅛" THICK ANGLE HANGER (LEG BEYOND BEAM MAY BE TRIMMED TO ACCOMMODATE GUTTER), TYP

NOTE: SUPER GUTTER SIZE MAY BE 5' OF 7'

NUMBER OF GUSSET PLATE SCREWS

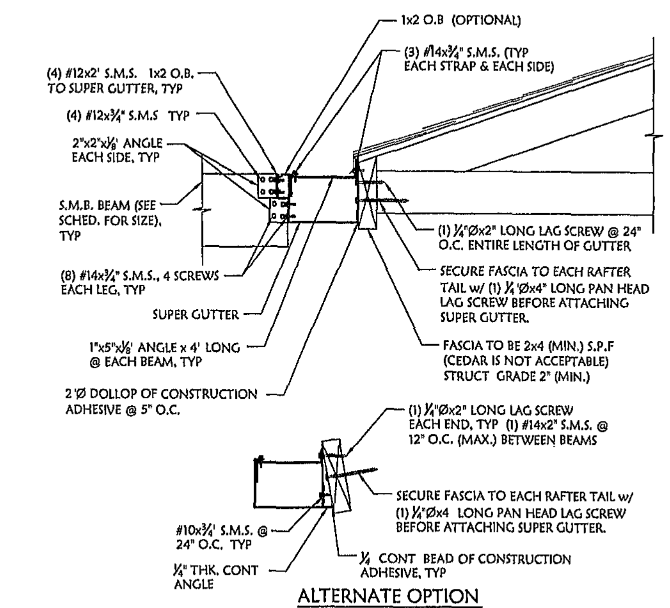
UPRIGHT SIZE	2x4	2x5	2x6	2x7	2x8	2x9	2x10
QTY OF SCREWS	16	18	20	24	26	30	30

NUMBER OF FASTENERS TO ANGLE CLIP

UPRIGHT SIZE	2x4	2x5	2x6	2x7	2x8	2x9	2x10
QTY OF SCREWS	3	4	5	6	7	8	9

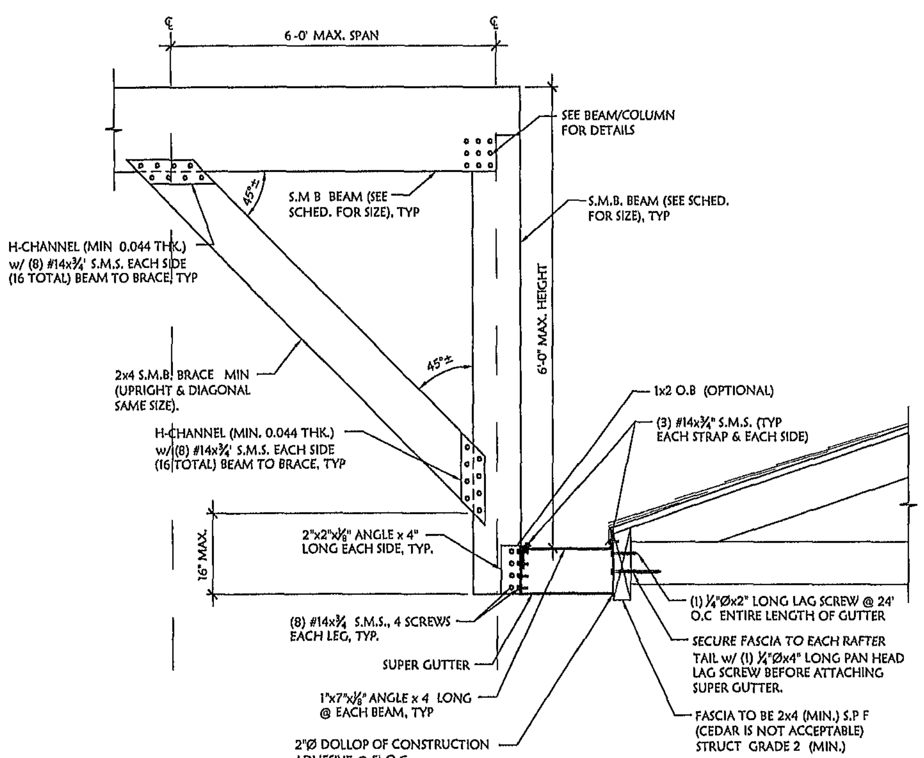
2 Lookout Arm Connection Detail

S-2.1 SCALE: 1½" = 1'-0"


1x2 O.B (OPTIONAL)
(4) #12x2' S.M.S. 1x2 O.B. TO SUPER GUTTER, TYP
(3) #14x¾" S.M.S. (TYP EACH STRAP & EACH SIDE)
(4) #12x¾" S.M.S TYP
2"x2"x⅛" ANGLE EACH SIDE, TYP
S.M.B. BEAM (SEE SCHED. FOR SIZE), TYP
(1) ¼"Øx2" LONG LAG SCREW @ 24" O.C. ENTIRE LENGTH OF GUTTER
(8) #14x¾" S.M.S., 4 SCREWS EACH LEG, TYP
SECURE FASCIA TO EACH RAFTER TAIL w/ (1) ¼"Øx4" LONG PAN HEAD LAG SCREW BEFORE ATTACHING SUPER GUTTER.
SUPER GUTTER
1"x5"x⅛" ANGLE x 4' LONG @ EACH BEAM, TYP
FASCIA TO BE 2x4 (MIN.) S.P.F (CEDAR IS NOT ACCEPTABLE) STRUCT GRADE 2" (MIN.)
2"Ø DOLLOP OF CONSTRUCTION ADHESIVE @ 5" O.C.
(1) ¼"Øx2" LONG LAG SCREW EACH END, TYP (1) #14x2" S.M.S. @ 12" O.C. (MAX.) BETWEEN BEAMS
SECURE FASCIA TO EACH RAFTER TAIL w/ (1) ¼"Øx4 LONG PAN HEAD LAG SCREW BEFORE ATTACHING SUPER GUTTER.
#10x¾' S.M.S. @ 24" O.C. TYP
⅛" THK. CONT ANGLE
¼ CONT BEAD OF CONSTRUCTION ADHESIVE, TYP
ALTERNATE OPTION

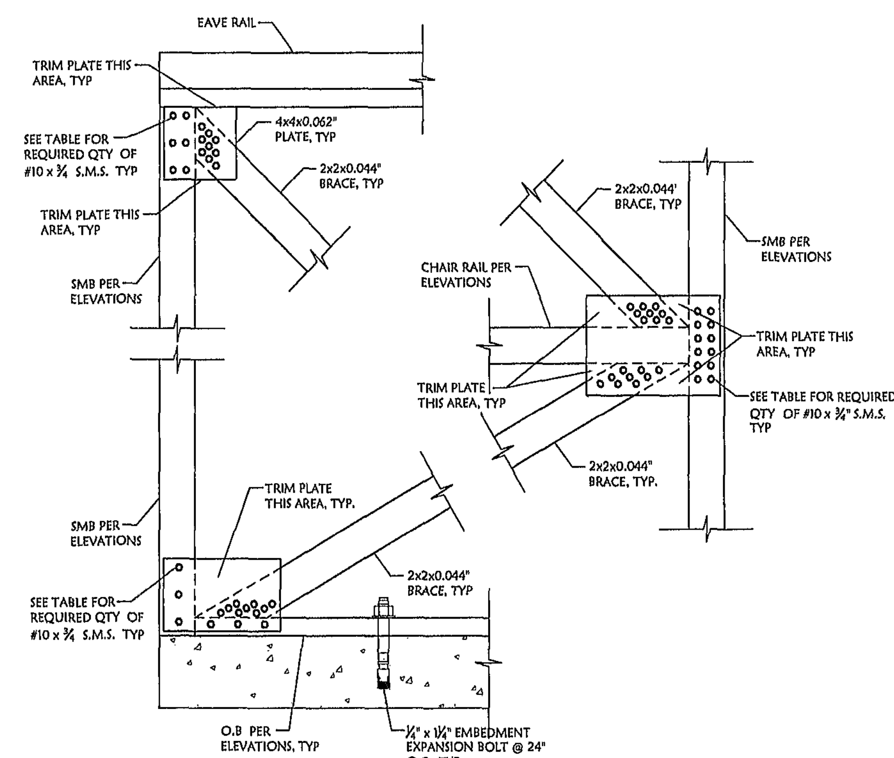
3 Roof Beam to Super Gutter Connection

S-2.1 SCALE: 1½" = 1'-0"


6-0' MAX. SPAN
SEE BEAM/COLUMN FOR DETAILS
S.M B BEAM (SEE SCHED. FOR SIZE), TYP
S.M.B. BEAM (SEE SCHED. FOR SIZE), TYP
H-CHANNEL (MIN 0.044 THK.) w/ (8) #14x¾' S.M.S. EACH SIDE (16 TOTAL) BEAM TO BRACE, TYP
6'-0" MAX. HEIGHT
2x4 S.M.B. BRACE MIN (UPRIGHT & DIAGONAL SAME SIZE).
45°±
1x2 O.B (OPTIONAL)
H-CHANNEL (MIN. 0.044 THK.) w/ (8) #14x¾' S.M.S. EACH SIDE (16 TOTAL) BEAM TO BRACE, TYP
(3) #14x¾" S.M.S. (TYP EACH STRAP & EACH SIDE)
2"x2"x⅛" ANGLE x 4" LONG EACH SIDE, TYP.
16" MAX.
(1) ¼"Øx2" LONG LAG SCREW @ 24" O.C ENTIRE LENGTH OF GUTTER
(8) #14x¾ S.M.S., 4 SCREWS EACH LEG, TYP.
SECURE FASCIA TO EACH RAFTER TAIL w/ (1) ¼"Øx4" LONG PAN HEAD LAG SCREW BEFORE ATTACHING SUPER GUTTER.
SUPER GUTTER
1"x7"x⅛" ANGLE x 4 LONG @ EACH BEAM, TYP
FASCIA TO BE 2x4 (MIN.) S.P F (CEDAR IS NOT ACCEPTABLE) STRUCT GRADE 2 (MIN.)
2"Ø DOLLOP OF CONSTRUCTION ADHESIVE @ 5' O.C.

4 Transom Upright to Super Gutter Connection Detail

S-2.1 SCALE: 1½" = 1'-0"


EAVE RAIL
TRIM PLATE THIS AREA, TYP
4x4x0.062" PLATE, TYP
SEE TABLE FOR REQUIRED QTY OF #10 x ¾ S.M.S. TYP
2x2x0.044" BRACE, TYP
TRIM PLATE THIS AREA, TYP
2x2x0.044' BRACE, TYP
SMB PER ELEVATIONS
CHAIR RAIL PER ELEVATIONS
TRIM PLATE THIS AREA, TYP
TRIM PLATE THIS AREA, TYP
SEE TABLE FOR REQUIRED QTY OF #10 x ¾" S.M.S. TYP
2x2x0.044" BRACE, TYP.
TRIM PLATE THIS AREA, TYP.
SMB PER ELEVATIONS
2x2x0.044" BRACE, TYP
SEE TABLE FOR REQUIRED QTY OF #10 x ¾ S.M.S. TYP
O.B PER ELEVATIONS, TYP
½" x 1½" EMBEDMENT EXPANSION BOLT @ 24" O.C. TYP

5 Typical K-Brace Connection Detail

S-2.1 SCALE: 1½" = 1'-0"

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FL Registration No. 56158

To the best of the Design Engineer's knowledge, the plans and specifications for this project comply with the applicable minimum building codes as determined by the local authority in accordance with the Florida Statutes.

REV	DATE	DESCRIPTION

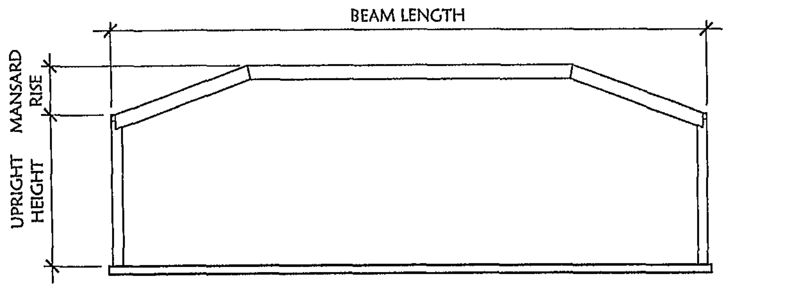
Client: Florida Pool Enclosures, Inc

Project: Residential Pool Screen Enclosure
________, Florida

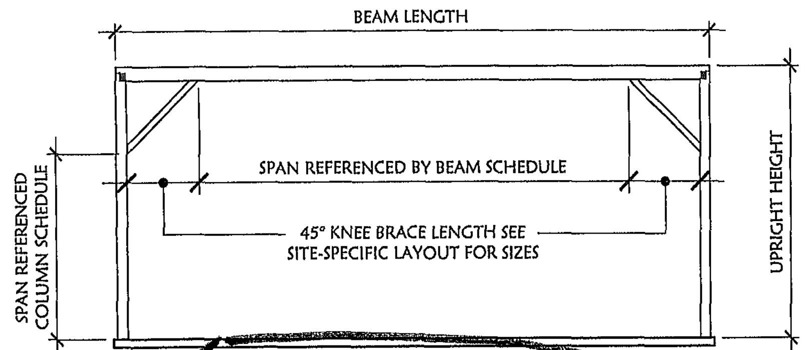
Structural Framing Sections & Details

Project No.	#13-002.11
Drawn By:	TLW
Checked By:	RCS
Approved By:	RCS
Date:	08/27/13

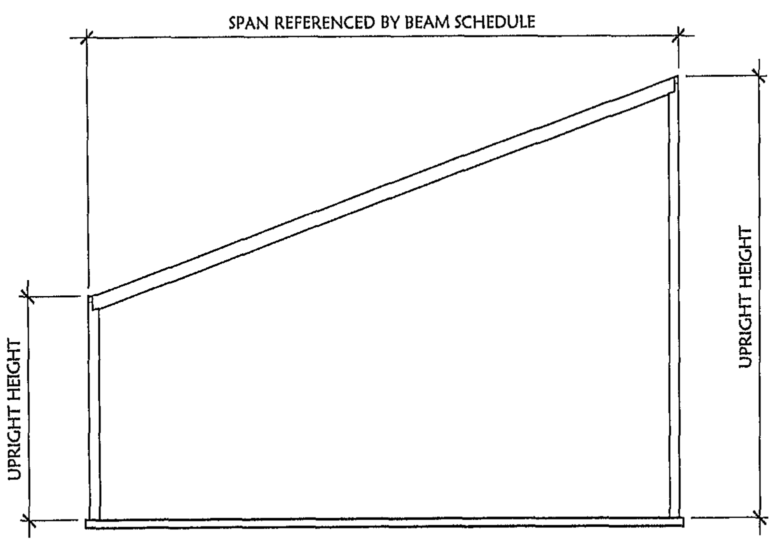
Sheet
S-2.1



MANSARD BEAM SPAN DEFINITION



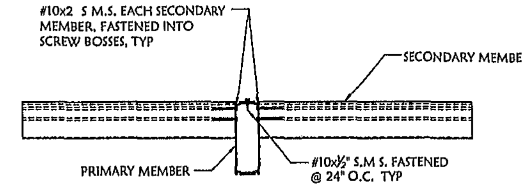
FLAT BEAM SPAN DEFINITION



SLOPED BEAM SPAN DEFINITION

1 Typical Beam Span Definitions

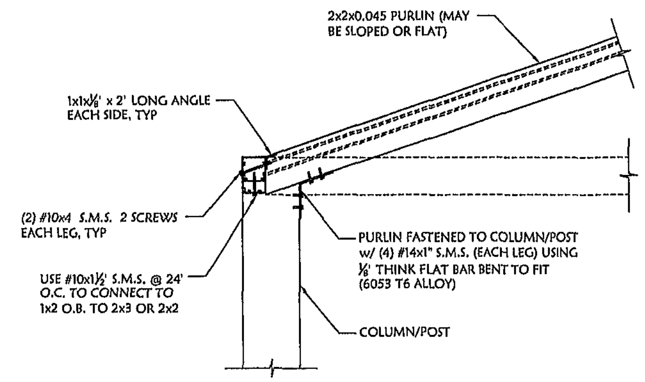
S-2.2 SCALE: ½" = 1'-0"



ELEVATION

2 Typical Secondary Member to Primary Member Connection

S-2.2 SCALE: 1½" = 1'-0"


2x2x0.045 PURLIN (MAY BE SLOPED OR FLAT)
1x1x⅛' x 2' LONG ANGLE EACH SIDE, TYP
(2) #10x4 S.M.S. 2 SCREWS EACH LEG, TYP
USE #10x1½' S.M.S. @ 24' O.C. TO CONNECT TO 1x2 O.B. TO 2x3 OR 2x2
PURLIN FASTENED TO COLUMN/POST w/ (4) #14x1" S.M.S. (EACH LEG) USING ⅛' THINK FLAT BAR BENT TO FIT (6053 T6 ALLOY)
COLUMN/POST

3 Typical Purlin to Sidewall Post/Column Connection Detail

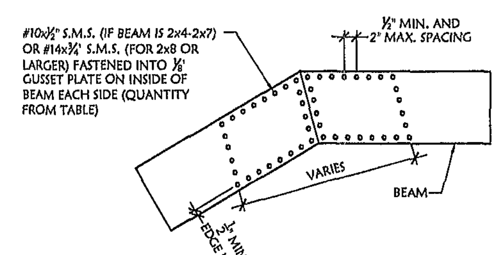
S-2.2 SCALE. 1½' = 1-0'

QUANTITY OF SCREWS REQUIRED

BEAM SIZE	# SCREWS
2x4-2x6	12
2x7	16
2x8	18
2x9	20
2x10	22

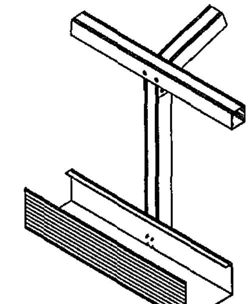
LENGTH OF SPLICE PLATE

BEAM SIZE	LENGTH
2x4	8 IN
2x5	10 IN
2x6	12 IN.
2x7	14 IN
2x8	16 IN
2x9	18 IN
2x10	18 IN

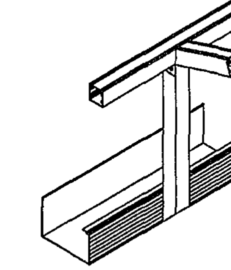


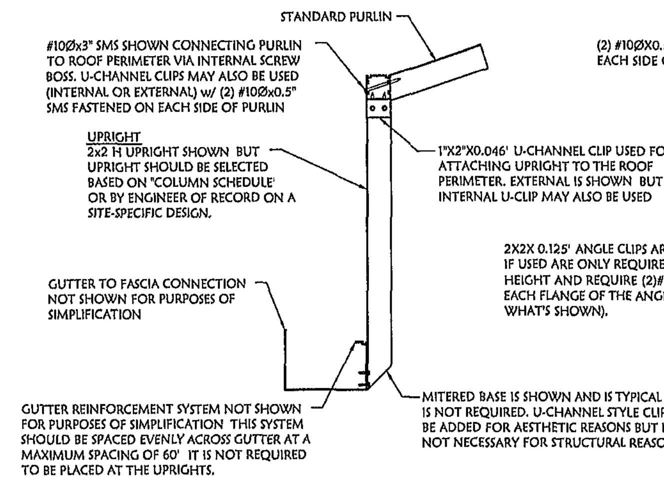
4 Mansard Beam Splice Detail

S-2.2 SCALE: 1½" = 1'-0"

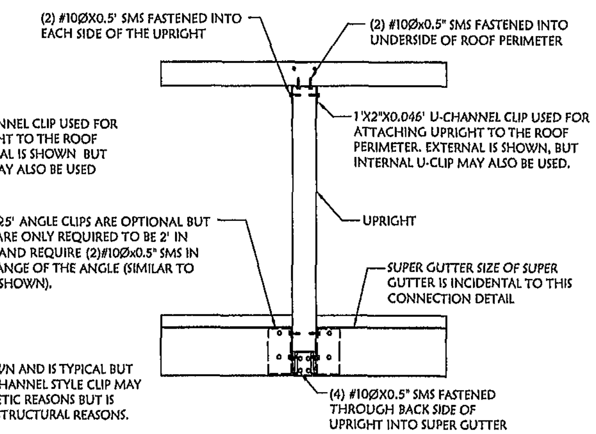


NOTES:
1. THIS CONNECTION IS ONLY GOOD FOR NON-LOAD BEARING TRANSOM WALLS THAT ARE 60' IN HEIGHT OR LESS FROM THE TOP LIP OF THE SUPER GUTTER.
2. THE UPRIGHT IS SHOWN LINING UP WITH A PURLIN IN THIS DETAIL. THIS IS TYPICALLY HOW IT'S INSTALLED, BUT IS NOT REQUIRED. THE UPRIGHTS NEED TO BE SPACED SUCH THAT THE SPAN BETWEEN THEM DOES NOT EXCEED WHAT THE ROOF PERIMETER MEMBER CAN SPAN ACCORDING TO THE 'BEAM SCHEDULE" TABLE
3. THIS TYPE OF CONNECTION IS USED TO BREAK UP THE SPAN OF THE ROOF PERIMETER MEMBER. IF THE ROOF PERIMETER MEMBER IS LARGE ENOUGH TO SUPPORT THE SPAN ON ITS OWN (I.E. A 2X4 SMB SPANNING A 12' DISTANCE) THEN THE UPRIGHT SUPPORTS ARE NOT NECESSARY AND THIS DETAIL IS NOT REQUIRED.




STANDARD PURLIN
#10Øx3" SMS SHOWN CONNECTING PURLIN TO ROOF PERIMETER VIA INTERNAL SCREW BOSS. U-CHANNEL CLIPS MAY ALSO BE USED (INTERNAL OR EXTERNAL) w/ (2) #10Øx0.5" SMS FASTENED ON EACH SIDE OF PURLIN
UPRIGHT
2x2 H UPRIGHT SHOWN BUT UPRIGHT SHOULD BE SELECTED BASED ON "COLUMN SCHEDULE' OR BY ENGINEER OF RECORD ON A SITE-SPECIFIC DESIGN.
1"X2"X0.046' U-CHANNEL CLIP USED FOR ATTACHING UPRIGHT TO THE ROOF PERIMETER. EXTERNAL IS SHOWN BUT INTERNAL U-CLIP MAY ALSO BE USED
GUTTER TO FASCIA CONNECTION NOT SHOWN FOR PURPOSES OF SIMPLIFICATION
GUTTER REINFORCEMENT SYSTEM NOT SHOWN FOR PURPOSES OF SIMPLIFICATION THIS SYSTEM SHOULD BE SPACED EVENLY ACROSS GUTTER AT A MAXIMUM SPACING OF 60' IT IS NOT REQUIRED TO BE PLACED AT THE UPRIGHTS.
MITERED BASE IS SHOWN AND IS TYPICAL BUT IS NOT REQUIRED. U-CHANNEL STYLE CLIP MAY BE ADDED FOR AESTHETIC REASONS BUT IS NOT NECESSARY FOR STRUCTURAL REASONS.

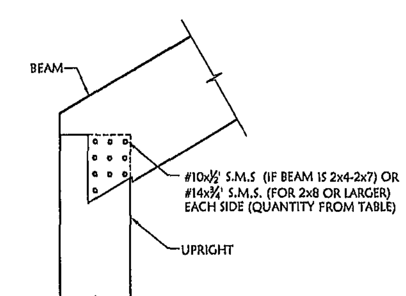
SIDE VIEW


(2) #10ØX0.5' SMS FASTENED INTO EACH SIDE OF THE UPRIGHT
(2) #10Øx0.5" SMS FASTENED INTO UNDERSIDE OF ROOF PERIMETER
1'X2"X0.046' U-CHANNEL CLIP USED FOR ATTACHING UPRIGHT TO THE ROOF PERIMETER. EXTERNAL IS SHOWN, BUT INTERNAL U-CLIP MAY ALSO BE USED.
2X2X 0.125' ANGLE CLIPS ARE OPTIONAL BUT IF USED ARE ONLY REQUIRED TO BE 2' IN HEIGHT AND REQUIRE (2)#10Øx0.5" SMS IN EACH FLANGE OF THE ANGLE (SIMILAR TO WHAT'S SHOWN).
UPRIGHT
SUPER GUTTER SIZE OF SUPER GUTTER IS INCIDENTAL TO THIS CONNECTION DETAIL
(4) #10ØX0.5" SMS FASTENED THROUGH BACK SIDE OF UPRIGHT INTO SUPER GUTTER

FRONT VIEW
(FROM INSIDE CAGE - WITHOUT PURLIN SHOWN)

5 NON-LOAD BEARING TRANSOM WALL CONNECTION

S-2.2 SCALE: 1½" = 1-0'



6 Mansard Beam to Upright Connection Detail

S-2.2 SCALE: 1½" = 1-0'

QUANTITY OF #10 FASTENERS REQUIRED

BEAM SIZE \ UPRIGHT SIZE	2x4	2x5	2x6	2x7	2x8	2x9	2x10
2x4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2x5	3	4	4	4	4	4	4
2x6	5	7	8	9	9	9	9
2x7	7	10	12	14	14	14	14
2x8	9	13	16	18	18	19	20
2x9	11	16	20	22	22	25	27
2x10	13	19	24	27	27	31	34

QUANTITY OF #14 FASTENERS REQUIRED

BEAM SIZE \ UPRIGHT SIZE	2x4	2x5	2x6	2x7	2x8	2x9	2x10
2x4	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2x5	3	3	3	3	3	3	3
2x6	5	6	6	7	6	6	7
2x7	7	9	9	11	10	12	12
2x8	7	10	9	12	11	13	14
2x9	9	13	12	15	15	17	19
2x10	11	16	16	19	19	22	25

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FL Registration No. 56158

To the best of the Design Engineer's knowledge, the plans and specifications for this project comply with the applicable minimum building codes as determined by the local authority in accordance with the Florida Statutes.

REV.	DATE	DESCRIPTION

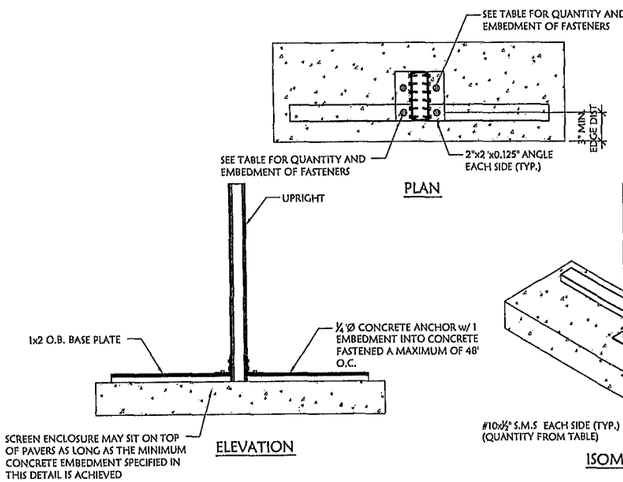
Client: Florida Pool Enclosures, Inc

Project: Residential Pool Screen Enclosure
________, Florida

Structural Framing Sections & Details

Project No.	#13-002 11
Drawn By:	TLW
Checked By:	RCS
Approved By:	RCS
Date:	08/27/13

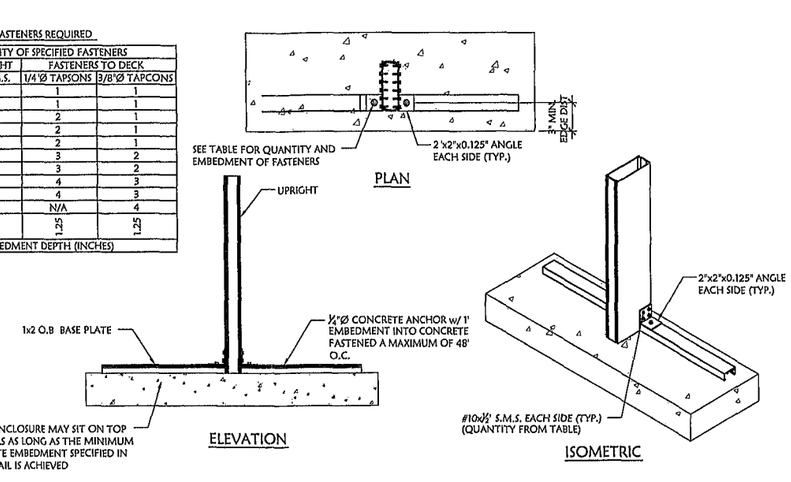
Sheet
S-2.2



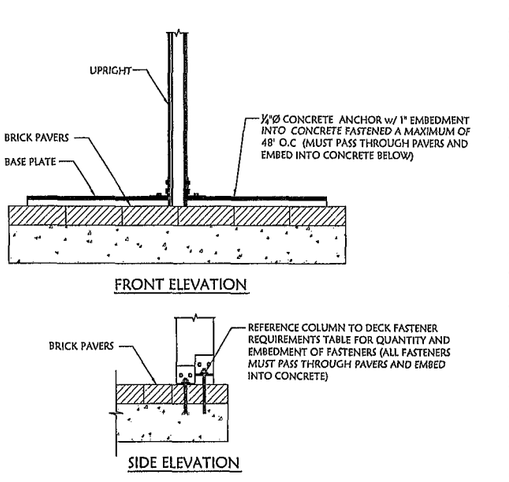
MAIN COLUMN UNDER BEAM CONNECTION

COLUMN TO DECK FASTENERS REQUIRED

	MIN. QUANTITY OF SPECIFIED FASTENERS			
	FASTENERS TO UPRIGHT		FASTENERS TO DECK	
UPRIGHT SIZE	#10 S.M.S.	#14 S.M.S.	1/4 Ø TAPSONS	3/8"Ø TAPCONS
2x2 H	2	2	1	1
2x3 H	3	2	1	1
2x4 H	4	4	2	1
2x4 S.M.B	4	4	2	1
2x5 S.M.B.	5	4	2	1
2x6 S.M.B.	6	4	3	2
2x7 S.M.B.	7	6	3	2
2x8 S.M.B.	N/A	8	4	3
2x9 S.M.B.	N/A	9	4	3
2x10 S.M.B.	N/A	10	N/A	4
	N/A	N/A	1.25	1.25
	MIN. EMBEDMENT DEPTH (INCHES)			



COLUMN @ SIDE WALL CONNECTION

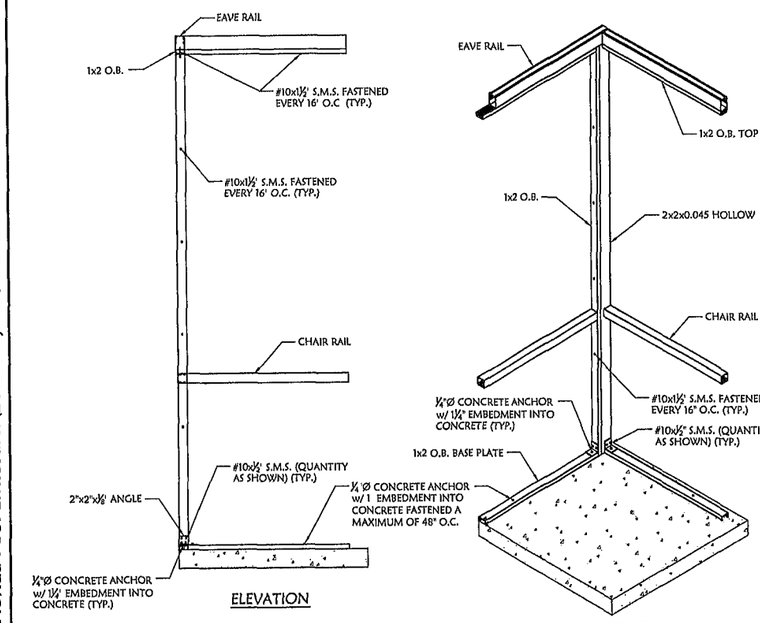


2 / S-2.3 Column Connection to Concrete Deck w/ Pavers

SCALE. 1½" = 1'-0"

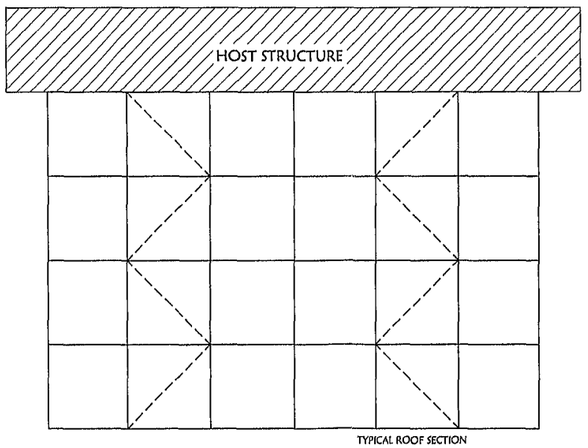
1 / S-2.3 Typical Column to Concrete Connection Details

SCALE. 1½" = 1'-0"



3 / S-2.3 Typical Front Wall to Side Wall Connections

N.T.S.

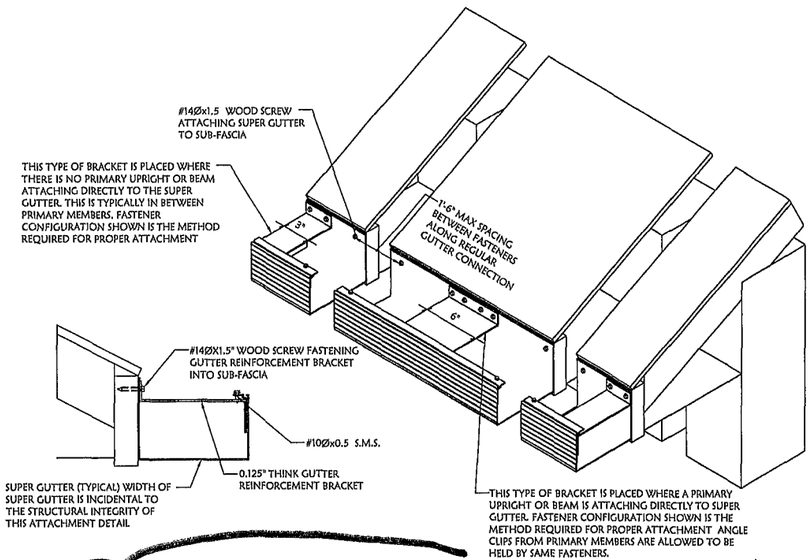


4 / S-2.3 Diagonal Roof Bracing Plan

N.T.S.

NOTES:

1 ROOF BRACING MAY BE PLACED IN EITHER THE FIRST OR SECOND ROOF SECTION ON EACH SIDE OF THE ENCLOSURE
2 THE ORIENTATION (I.e. DIRECTION) OF THE ROOF BRACING IS INCIDENTAL TO STRUCTURAL INTEGRITY
3 IF THERE ARE AN ODD NUMBER OF PANELS, A BRACE IN THE CENTER MAY BE OMITTED
4. ANY ENCLOSURE THAT IS BRACED ON MORE THAN ONE SIDE BY THE HOST STRUCTURE DOES NOT REQUIRE ROOF BRACING



5 / S-2.3 Typical Super Gutter Connection to Host Structure

SCALE 1½" = 1'-0"

NOTES:

1. FASCIA SHOWN IS A PLUMB CUT FASCIA. IF THE FASCIA IS SQUARE CUT (PERPENDICULAR TO THE ROOF PITCH) THEN THE SUPER GUTTER MAY HAVE SOMETHING BEHIND IT (I.E. "L-ANGLE' OR WOOD WEDGE) TO KEEP IT PLUMB. THIS COMPONENT IS INCIDENTAL TO THE STRUCTURAL INTENTION OF THIS DESIGN.
2. FOR A RUN OF SUPER GUTTER THAT NON-LOAD BEARING, THE MAX SPACING OF THE 3" REINFORCEMENT BRACKETS IS 60"
3. FOR A RUN OF SUPER GUTTER THAT HAS A STRUCTURAL OR LOAD BEARING COMPONENT ATTACHING TO IT AND THERE IS A CONTINUOUS LOAD ACROSS THE SUPER GUTTER WITHOUT PRIMARY LOAD POINTS (I.E. BEAM OR UPRIGHT) THEN THE MAXIMUM SPACING BETWEEN THE 3" REINFORCEMENT BRACKETS IS 48"
4. GUTTER MAY BE ATTACHED TO A CONVENTIONAL WOOD FRAMED WALL IN THE SAME MANNER THAT IS SHOWN IN THIS DETAIL. IF THE WALL IS A C.M.U THEN REPLACE THE #14Ø WOOD SCREWS WITH 0.25"ØX1.25" TAPCONS (OR EQUIVALENT). THIS CONNECTION SHALL ALSO REMAIN THE SAME FOR A SUPER GUTTER ATTACHING TO A CARRY BEAM WHERE THE WOOD LAG SCREWS ARE X 0.75' S.M.S. REPLACED BY #10Ø.
5 WHEN THE SUPER GUTTER IS BEING USED FOR STRUCTURAL PURPOSES (I E. STRUCTURAL SUPPORT MEMBERS ATTACH TO IT) THEN THE FASTENERS THAT ATTACH TO THE FASCIA MUST PENETRATE INTO THE SUB-FASCIA AT A MINIMUM OF 1 IN. EMBEDMENT

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Client: Florida Pool Enclosures, Inc

REV	DATE	DESCRIPTION

Project No. #13-002 11
Drawn By: TLW
Checked By: RCS
Approved By: RCS
Date: 08/27/13

Sheet S-2.3

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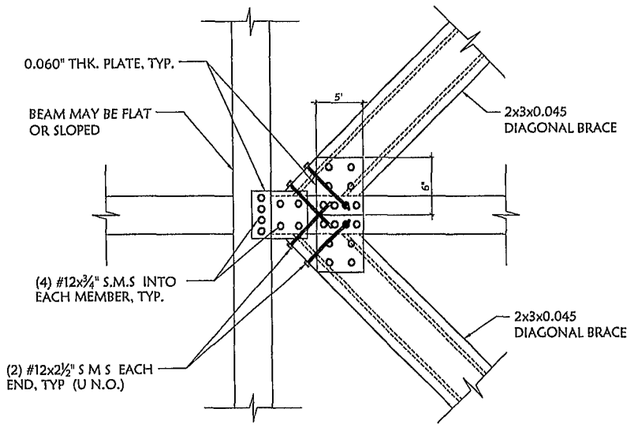
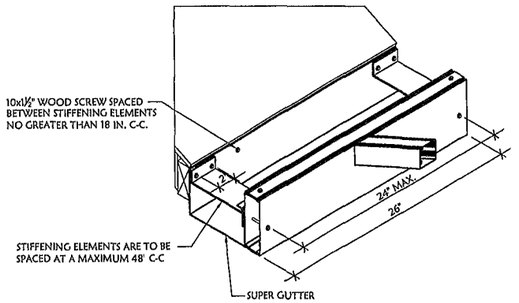


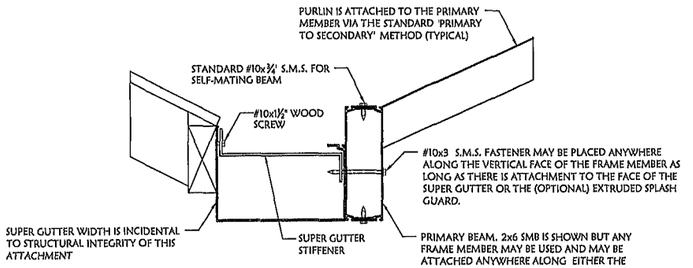
1 S-2.4 **Typical Roof Brace to Beam Connection Detail**

SCALE: 1½" = 1'-0"



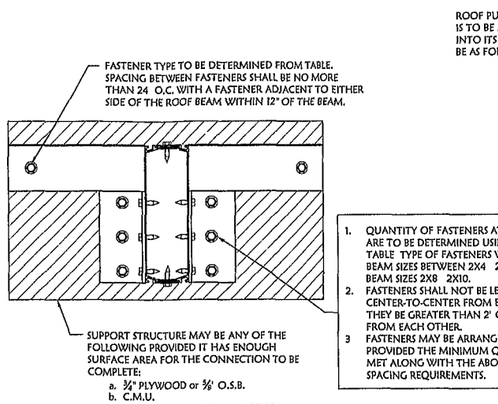
NOTES:

1. 2"x2"x0.125" ANGLE MAY BE USED IN LIEU OF (OR IN ADDITION TO) THE #10x3" S.M.S. ATTACHMENT AND MAY BE ON TOP OR BOTTOM OF THE ATTACHING FRAME MEMBER. THE SPACING AND TYPE OF FASTENERS WILL REMAIN THE SAME AS STATED IN THIS DETAIL. EACH FASTENER WILL BE ON THE SAME PLANE FOR EACH OPPOSING FACE (FLANGE) OF THE 2x2 ANGLE.
2. SUPER GUTTER IS SHOWN AS THE COMPONENT BEING FASTENED TO, BUT THIS DETAIL CAN BE USED IN THE CASE WHERE SUPER GUTTER IS SUBSTITUTED FOR A DIFFERENT ALUMINUM STRUCTURAL COMPONENT (I.E. SELF-MATING BEAM ETC.) PROVIDED THE PRIMARY STRUCTURAL COMPONENT IS SUPPORTED PROPERLY IN ACCORDANCE WITH THE DETAILS IN THE SEALED ENGINEERING PACKAGE.



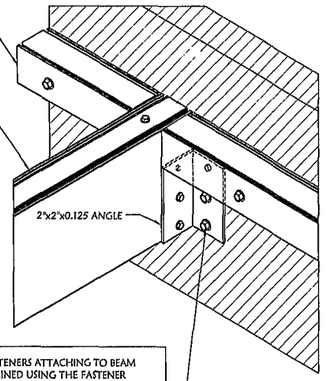
2 S-2.4 **Parallel Frame Member to Super Gutter Connection**

N T.S.



1. QUANTITY OF FASTENERS ATTACHING TO BEAM ARE TO BE DETERMINED USING THE FASTENER TABLE. TYPE OF FASTENERS WILL BE #10 S.M.S. FOR BEAM SIZES BETWEEN 2X4 2X7 & #14 S.M.S. FOR BEAM SIZES 2X8 2X10.
2. FASTENERS SHALL NOT BE LESS THAN 0.75" CENTER-TO-CENTER FROM EACH OTHER NOR SHALL THEY BE GREATER THAN 2' CENTER-TO-CENTER FROM EACH OTHER.
3 FASTENERS MAY BE ARRANGED IN ANY PATTERN PROVIDED THE MINIMUM QTY FROM THE TABLE IS MET ALONG WITH THE ABOVE MENTIONED SPACING REQUIREMENTS.

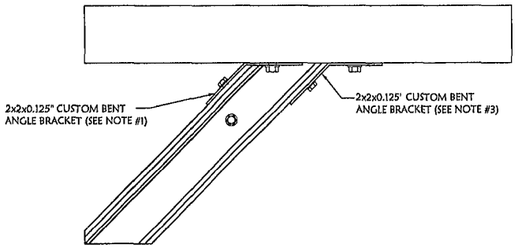
NOTE:
U-CHANNEL MAY BE USED IN LIEU OF 2x2 ANGLE CLIPS ON EITHER SIDE OF THE BEAM AS LONG AS THE THICKNESS OF THE U-CHANNEL BEING USED IS GREATER THAN OR EQUAL TO THE THICKNESS OF THE BEAM TO WHICH IT IS ATTACHING.



1. QUANTITY OF FASTENERS ATTACHING TO BEAM ARE TO BE DETERMINED USING THE FASTENER TABLE. TYPE OF FASTENERS WILL BE #10 S.M.S. FOR BEAM SIZES BETWEEN 2X4 2X7 & #14 S.M.S. FOR BEAM SIZES 2X8 2X10.
2. FASTENERS SHALL NOT BE LESS THAN 0.75" CENTER-TO-CENTER FROM EACH OTHER NOR SHALL THEY BE GREATER THAN 2" CENTER-TO-CENTER FROM EACH OTHER.
3. FASTENERS MAY BE ARRANGED IN ANY PATTERN PROVIDED THE MINIMUM QTY FROM THE TABLE IS MET ALONG WITH THE ABOVE MENTIONED SPACING REQUIREMENTS.

3 S-2.4 **Straight Beam to Support Structure Connection Detail**

N T.S.



4 S-2.4 **Angled Beam to Support Structure Connection Detail**

N T.S.

NOTES:

1. ACUTE SIDE OF BEAM MAY BE NOTCHED TO ALLOW FOR THE 2X2X0.125" CUSTOM BENT ANGLE BRACKET TO SLIDE IN BETWEEN THE BEAM AND SUPPORT STRUCTURE. THE FABRICATION METHOD TO ACHIEVE THIS WOULD BE TO SIMPLY ATTACH THE ANGLE BRACKET TO THE BEAM PRIOR TO INSTALLING THE BEAM HALF-SHELL, PROVIDED THE ACUTE SIDE OF THE BEAM IS INSTALLED FIRST THIS WOULD ALLOW FOR THE FASTENERS TO BE INSTALLED INTO THE SUPPORT STRUCTURE PRIOR TO THE INSTALLATION OF THE OBTUSE SIDE OF THE BEAM.
2. IF THE FABRICATION METHOD SHOWN HERE CANNOT BE ACHIEVED, THEN A SECONDARY 2x2x0.125" ANGLE MUST BE INSTALLED BENEATH THE BEAM TYPE AND QTY OF FASTENERS SHOULD REFERENCE THE ROW LABLED 2x2 H IN THE 'FASTENER REQUIREMENTS' TABLE.
3. A CUSTOM BENT 2x2x0.125 ANGLE MUST ALWAYS BE INSTALLED ON THE OBTUSE SIDE OF THE BEAM. 4) ALL OTHER NOTES AND SPECIFICATIONS FROM THE 'STRAIGHT BEAM TO SUPPORT STRUCTURE' DETAIL APPLY TO THIS DETAIL.

BEAM TO HOIST STRUCTURE FASTENER REQUIREMENTS

	MIN. QUANTITY OF SPECIFIED FASTENERS					
	FASTENERS TO BEAM		FASTENERS TO CMU		FASTENERS TO WOOD	
UPRIGHT SIZE	#10 S.M.S.	#14 S.M.S.	1/4 Ø TAPCONS	3/8"Ø TAPCONS	#10 WOOD SCREW	#14 WOOD SCREW
2x2 H	2	2	1	1	2	1
2x3 H	3	3	1	1	3	1
2x4 H	4	4	1	1	4	2
2x4 S.M.B.	4	4	1	1	4	2
2x5 S.M.B.	5	5	2	1	5	3
2x6 S.M.B.	6	6	3	2	6	4
2x7 S.M.B.	7	7	4	2	7	5
2x8 S.M.B.	8	8	4	3	8	6
2x9 S.M.B.	9	9	5	4	9	7
2x10 S.M.B.	10	10	6	5	10	8
	N/A	N/A	1.25	1.25	1.0	1.0
	MIN. EMBEDMENT DEPTH (INCHES)					

To the best of the Design Engineer's knowledge, the plans and specifications for this project comply with the applicable minimum building codes as determined by the local authority in accordance with the Florida Statutes.

Structural Framing Sections & Details

Project: Residential Pool Screen Enclosure , Florida

Client:

Florida Pool Enclosures, Inc
6501 WATERWAYS STREET • ORLANDO, FLORIDA 32809
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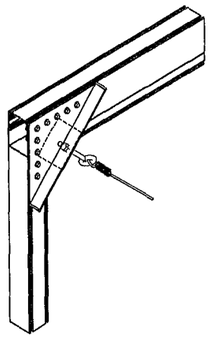
REV.	DATE	DESCRIPTION

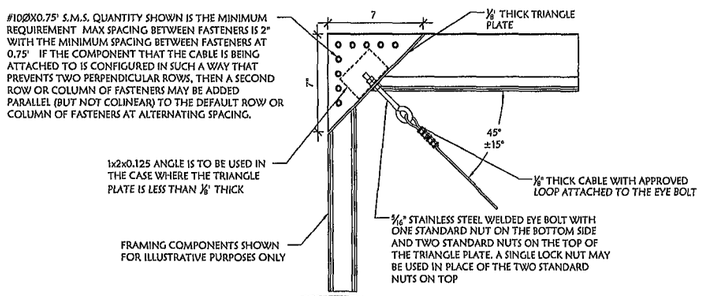
Project No. #13-002.11
Drawn By: TLW
Checked By: RCS
Approved By: RCS
Date: 08/27/13

Sheet S-2.4

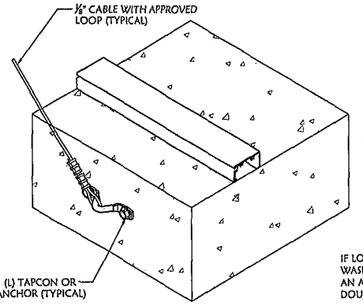
F:\Structural Server\Florida Pool Enclosures\2013 Projects\13-002 Residential Pool Screen Enclosures (FBC 2010) 008/27/13 TLW



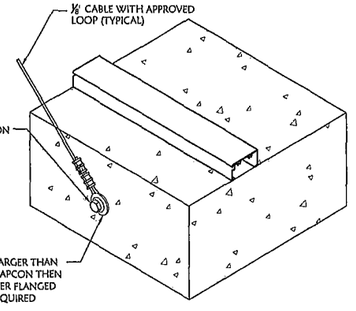
#10Ø X 0.75" S.M.S. QUANTITY SHOWN IS THE MINIMUM REQUIREMENT. MAX SPACING BETWEEN FASTENERS IS 2" WITH THE MINIMUM SPACING BETWEEN FASTENERS AT 0.75". IF THE COMPONENT THAT THE CABLE IS BEING ATTACHED TO IS CONFIGURED IN SUCH A WAY THAT PREVENTS TWO PERPENDICULAR ROWS, THEN A SECOND ROW OR COLUMN OF FASTENERS MAY BE ADDED PARALLEL (BUT NOT COLINEAR) TO THE DEFAULT ROW OR COLUMN OF FASTENERS AT ALTERNATING SPACING.



TRIANGLE PLATE TOP ATTACHMENT



CAMELBACK TO SIDE DECK



SINGLE CONCRETE FASTENER TO SIDE DECK

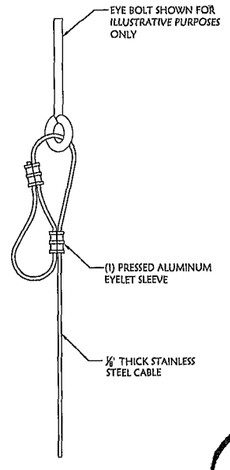
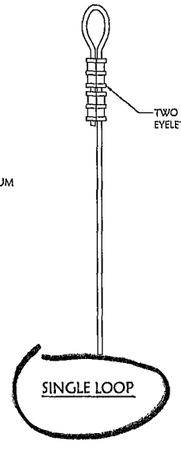
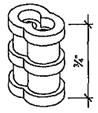


FIGURE 8 LOOP



SINGLE LOOP



PRESSED EYELET SLEEVE
(SHOWN AFTER BEING MECHANICALLY PRESSED)

CABLE CONNECTION NOTES:

1. TO DETERMINE THE QUANTITY OF CABLES NEEDED FOR A SCREEN WALL BRACED ON ONE SIDE BY A HOST STRUCTURE TAKE THE TOTAL SQUARE FOOTAGE OF THE BRACED WALL AND DIVIDE BY 250. ROUND THE CALCULATED VALUE TO THE CLOSEST WHOLE NUMBER AND SUBTRACT ONE. IT IS INTENDED TO NOT HAVE A CABLE ON A WALL THAT IS LESS THAN 250 S.F

   EXAMPLE: 430 S.F / 250 = 1.72 > ROUNDS TO 2 > 2-1 = 1 CABLE
   EXAMPLE: 230 S.F / 250 = 0.92 > ROUNDS TO 1 --> 1-1 = 0 CABLES

2. TO DETERMINE THE QUANTITY OF CABLES NEEDED FOR AN UNBRACED SCREEN WALL, TAKE THE TOTAL SQUARE FOOTAGE OF THE UNBRACED WALL AND DIVIDE BY 250. ROUND THE CALCULATED VALUE TO THE CLOSEST WHOLE NUMBER AND MULTIPLY BY 2. IT IS REQUIRED THAT AN UNBRACED SCREEN WALL HAVE AN EQUAL AMOUNT OF CABLES OPPOSING EACH OTHER.

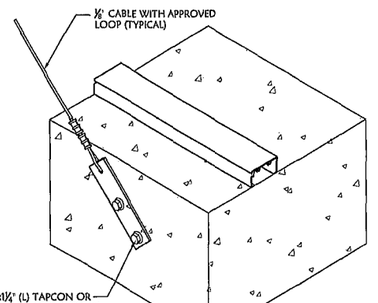
   EXAMPLE: 535 S.F / 250 = 2.14 > ROUNDS TO 2 --> 2*2 = 4 CABLES (2 PAIRS OF OPPOSING CABLES)
   EXAMPLE: 780 S.F / 250 = 3.12 --> ROUNDS TO 3 > 3*2 = 6 CABLES (3 PAIRS OF OPPOSING CABLES)

3. ANY ONE OF THE APPROVED CABLE-TO-DECK ATTACHMENTS SHOWN MAY BE USED. FIELD CONDITIONS WILL DICTATE THE TYPE OF ATTACHMENT USED AND MAY CHANGE DYNAMICALLY FROM THE ORIGINAL DESIGN INTENT. THIS HAS NO BEARING ON THE DESIGN OR THE STRUCTURAL INTEGRITY OF THE ENCLOSURE AND THEREFORE IS ALLOWED TO BE DONE, AS LONG AS ONE OF THE APPROVED ATTACHMENT DETAILS IS UTILIZED.

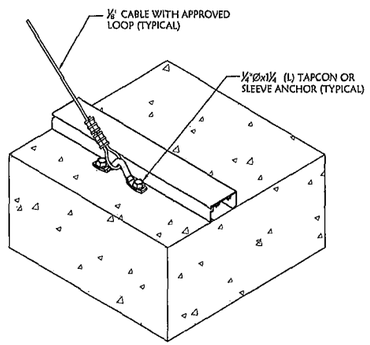
4. CABLES MAY ATTACH THROUGH PAVERS AS LONG AS THE MINIMUM CONCRETE EMBEDMENT OF 1 ¼" IS ACHIEVED BY USING A LONGER TAPCON

5. MINIMUM CONCRETE EDGE DISTANCE FOR ALL CONCRETE FASTENERS IS 2 ½"

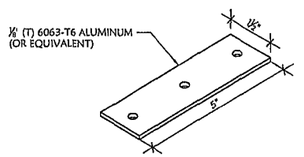
6. CABLES SHOULD BE AT A 45° ANGLE TO THE VERTICAL UPRIGHTS (±15°).



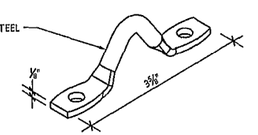
FLAT BAR TO SIDE OF DECK



CAMELBACK TO TOP OF DECK



FLAT BAR PLATE



CAMELBACK CLIP BRACKET

1 S-2.5 Typical Cable Attachment Details
N.T.S.

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FLORIDA C.O.A. NO. 27191

ROBERT C. SCROGGINS — LICENSE — No. 56158 — STATE OF FLORIDA — PROFESSIONAL ENGINEER
08/27/13
Robert C. Scroggins, P.E.
FL Registration No. 56158

Structural Framing
Sections & Details

Project: Residential Pool Screen Enclosure
, Florida

Client:
Florida Pool Enclosures, Inc
823 HICKORY STREET • ALTAMONTE SPRINGS, FL 32701
TEL 407.260.3800 • FAX 407.260.1441
www.FLORIDAPOOLENCLOSURES.com

REV.	DATE	DESCRIPTION

Project No.	#13-002.11
Drawn By:	TLW
Checked By:	RCS
Approved By:	RCS
Date:	08/27/13

Sheet
S-2.5

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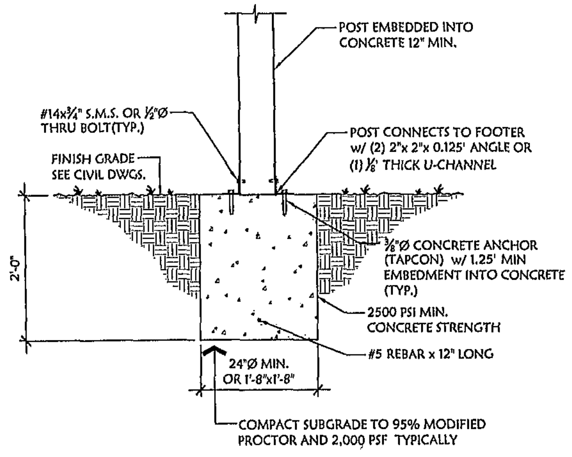
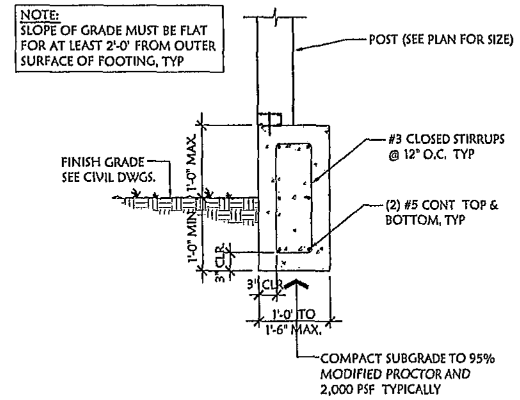

POST EMBEDDED INTO CONCRETE 12" MIN.
#14x¾" S.M.S. OR ½"Ø THRU BOLT(TYP.)
POST CONNECTS TO FOOTER w/ (2) 2"x 2"x 0.125" ANGLE OR (1) ⅛" THICK U-CHANNEL
FINISH GRADE SEE CIVIL DWGS.
⅜"Ø CONCRETE ANCHOR (TAPCON) w/ 1.25" MIN EMBEDMENT INTO CONCRETE (TYP.)
2500 PSI MIN. CONCRETE STRENGTH
#5 REBAR x 12" LONG
2'-0"
24"Ø MIN. OR 1'-8"x1'-8"
COMPACT SUBGRADE TO 95% MODIFIED PROCTOR AND 2,000 PSF TYPICALLY

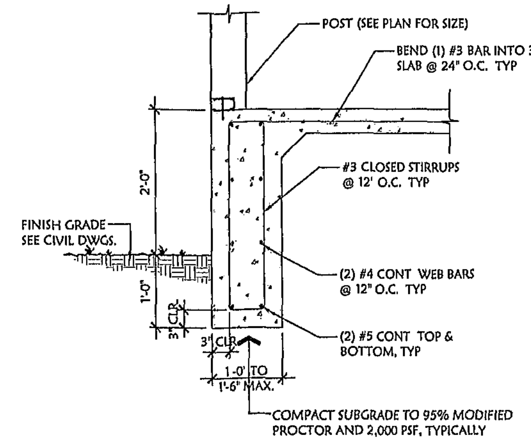
1 S-2.6 Typical Isolated Footing Detail

SCALE ¼" = 1-0"


NOTE:
SLOPE OF GRADE MUST BE FLAT FOR AT LEAST 2'-0" FROM OUTER SURFACE OF FOOTING, TYP
POST (SEE PLAN FOR SIZE)
FINISH GRADE SEE CIVIL DWGS.
#3 CLOSED STIRRUPS @ 12" O.C. TYP
(2) #5 CONT TOP & BOTTOM, TYP
1'-0" MAX.
1'-0" MIN.
3" CLR
1'-0" TO 1'-6" MAX.
COMPACT SUBGRADE TO 95% MODIFIED PROCTOR AND 2,000 PSF TYPICALLY

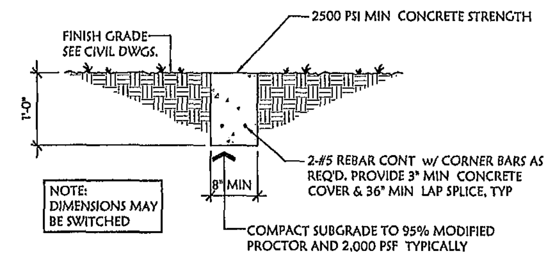
2 S-2.6 Retaining Wall Footing

SCALE ¼ = 1-0"



3 S-2.6 Retaining Wall Footing

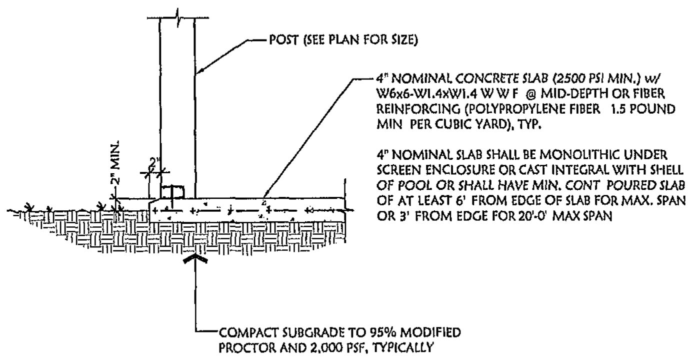
SCALE ¼" = 1-0"


2500 PSI MIN CONCRETE STRENGTH
FINISH GRADE SEE CIVIL DWGS.
1'-0"
2-#5 REBAR CONT w/ CORNER BARS AS REQ'D. PROVIDE 3" MIN CONCRETE COVER & 36" MIN LAP SPLICE, TYP
NOTE: DIMENSIONS MAY BE SWITCHED
8" MIN
COMPACT SUBGRADE TO 95% MODIFIED PROCTOR AND 2,000 PSF TYPICALLY

4 S-2.6 Typical Continuous Perimeter Footing Detail

SCALE ¼" = 1-0"

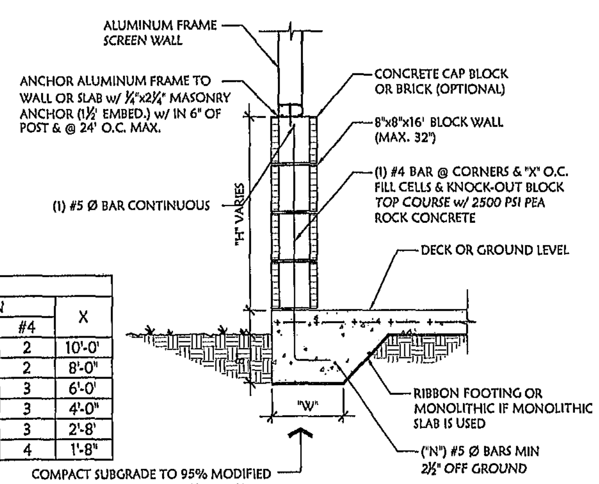
(MAX. POOL ENCLOSURE ROOF SPAN OF 50'-0"


POST (SEE PLAN FOR SIZE)
4" NOMINAL CONCRETE SLAB (2500 PSI MIN.) w/ W6x6-W1.4xW1.4 W W F @ MID-DEPTH OR FIBER REINFORCING (POLYPROPYLENE FIBER 1.5 POUND MIN PER CUBIC YARD), TYP.
4" NOMINAL SLAB SHALL BE MONOLITHIC UNDER SCREEN ENCLOSURE OR CAST INTEGRAL WITH SHELL OF POOL OR SHALL HAVE MIN. CONT POURED SLAB OF AT LEAST 6' FROM EDGE OF SLAB FOR MAX. SPAN OR 3' FROM EDGE FOR 20'-0" MAX SPAN
2" MIN.
COMPACT SUBGRADE TO 95% MODIFIED PROCTOR AND 2,000 PSF, TYPICALLY

5 S-2.6 Post to Concrete Slab Connection

SCALE ¼" = 1-0"

(MAX POOL ENCLOSURE ROOF SPAN OF 40'-0"

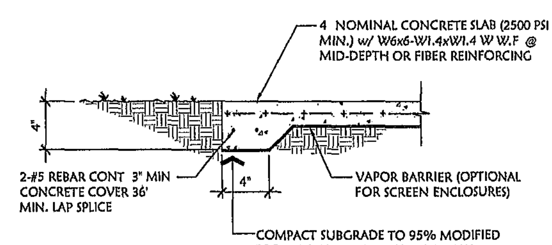

ALUMINUM FRAME SCREEN WALL
ANCHOR ALUMINUM FRAME TO WALL OR SLAB w/ ¼"x2¼" MASONRY ANCHOR (1½" EMBED.) w/ IN 6" OF POST & @ 24" O.C. MAX.
CONCRETE CAP BLOCK OR BRICK (OPTIONAL)
8"x8"x16" BLOCK WALL (MAX. 32")
(1) #4 BAR @ CORNERS & "X" O.C. FILL CELLS & KNOCK-OUT BLOCK TOP COURSE w/ 2500 PSI PEA ROCK CONCRETE
(1) #5 Ø BAR CONTINUOUS
"H" VARIES
DECK OR GROUND LEVEL
RIBBON FOOTING OR MONOLITHIC IF MONOLITHIC SLAB IS USED
"W"
("N") #5 Ø BARS MIN 2½" OFF GROUND
COMPACT SUBGRADE TO 95% MODIFIED PROCTOR AND 2,000 PSF, TYPICALLY

KNEE WALL TABLE

H	W	N #3	N #4	X
32"	12"	3	2	10'-0"
40"	12"	3	2	8'-0"
48"	18"	N/A	3	6'-0"
56"	18"	N/A	3	4'-0"
64"	24"	N/A	3	2'-8"
72"	30"	N/A	4	1'-8"

6 S-2.6 Knee Wall Footing For Screen Enclosures

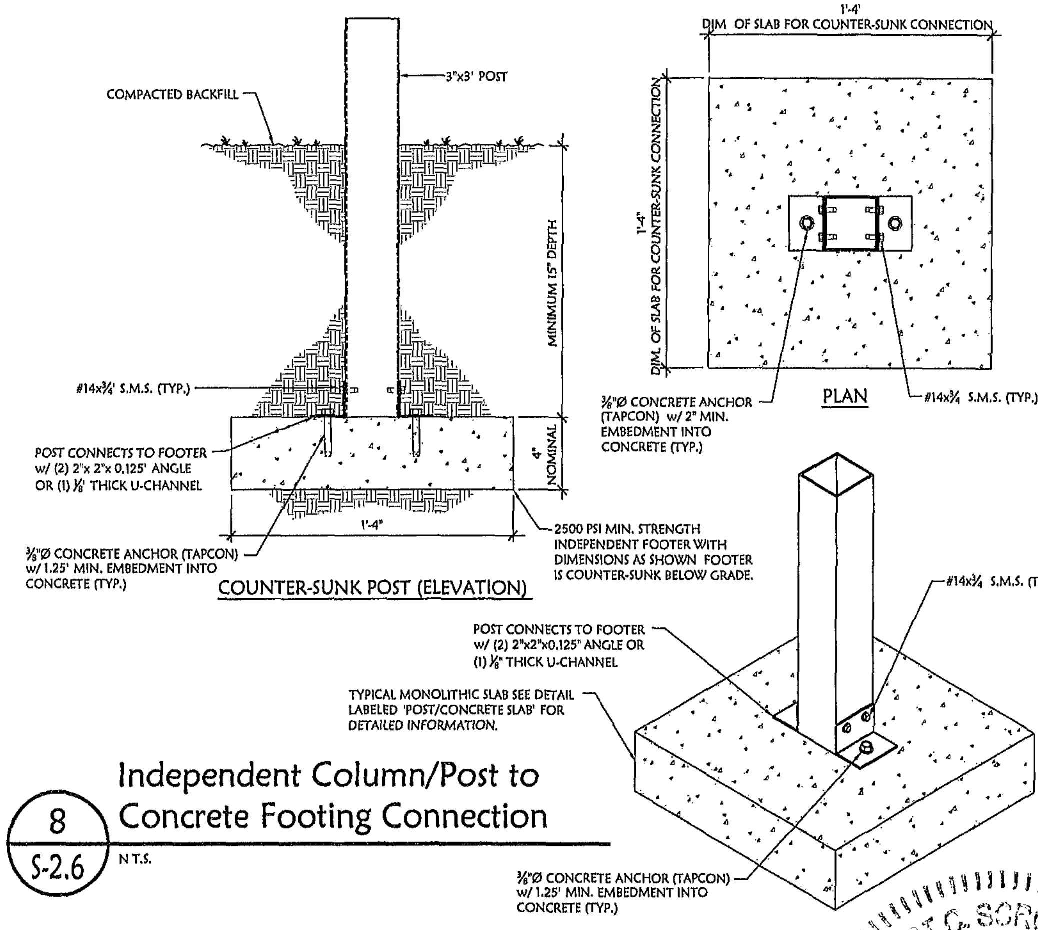
SCALE ¼ = 1'-0"


4 NOMINAL CONCRETE SLAB (2500 PSI MIN.) w/ W6x6-W1.4xW1.4 W W.F @ MID-DEPTH OR FIBER REINFORCING
4"
2-#5 REBAR CONT 3" MIN CONCRETE COVER 36" MIN. LAP SPLICE
VAPOR BARRIER (OPTIONAL FOR SCREEN ENCLOSURES)
COMPACT SUBGRADE TO 95% MODIFIED PROCTOR AND 2,000 PSF TYPICALLY

7 S-2.6 Typical Thickened Slab Footing

SCALE ¼" = 1'-0"

(MAX. POOL ENCLOSURE ROOF SPAN OF 50'-0"


COMPACTED BACKFILL
3"x3" POST
MINIMUM 15" DEPTH
#14x¾" S.M.S. (TYP.)
POST CONNECTS TO FOOTER w/ (2) 2"x 2"x 0.125" ANGLE OR (1) ⅛" THICK U-CHANNEL
⅜"Ø CONCRETE ANCHOR (TAPCON) w/1.25" MIN. EMBEDMENT INTO CONCRETE (TYP.)
4" NOMINAL
1'-4"
2500 PSI MIN. STRENGTH INDEPENDENT FOOTER WITH DIMENSIONS AS SHOWN FOOTER IS COUNTER-SUNK BELOW GRADE.
COUNTER-SUNK POST (ELEVATION)
DIM. OF SLAB FOR COUNTER-SUNK CONNECTION
⅜"Ø CONCRETE ANCHOR (TAPCON) w/ 2" MIN. EMBEDMENT INTO CONCRETE (TYP.)
PLAN
#14x¾ S.M.S. (TYP.)
POST CONNECTS TO FOOTER w/ (2) 2"x2"x0.125" ANGLE OR (1) ⅛" THICK U-CHANNEL
TYPICAL MONOLITHIC SLAB SEE DETAIL LABELED "POST/CONCRETE SLAB" FOR DETAILED INFORMATION.
⅜"Ø CONCRETE ANCHOR (TAPCON) w/ 1.25" MIN. EMBEDMENT INTO CONCRETE (TYP.)

8 S-2.6 Independent Column/Post to Concrete Footing Connection

N.T.S.

STRUCTURAL CONCEPTS & DESIGN

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Robert C. Scroggins, P.E.
FL Registration No. 56158

To the best of the Design Engineer's knowledge, the plans and specifications for this project comply with the applicable minimum building codes as determined by the local authority in accordance with the Florida Statutes.

REV.	DATE	DESCRIPTION

Client: Florida Pool Enclosures, Inc

Project: Residential Pool Screen Enclosure

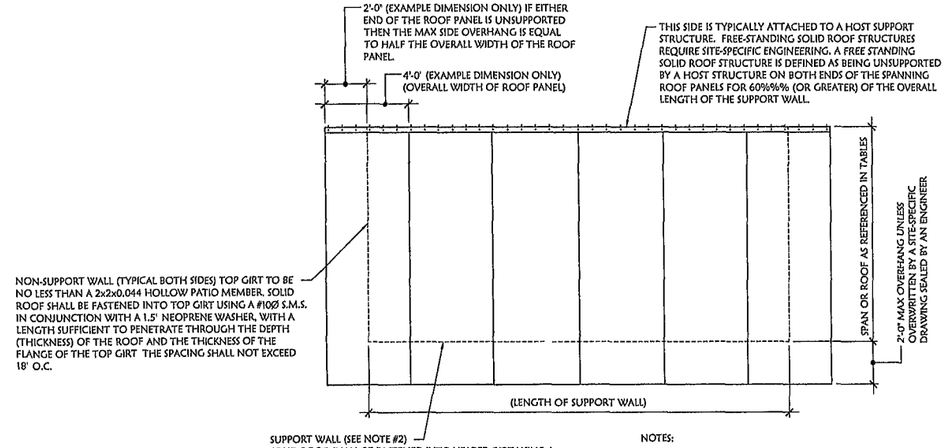
______, Florida

Structural Framing Sections & Details

Project No.	#13-002 11
Drawn By:	TLW
Checked By:	RCS
Approved By:	RCS
Date:	08/27/13

Sheet

S-2.6

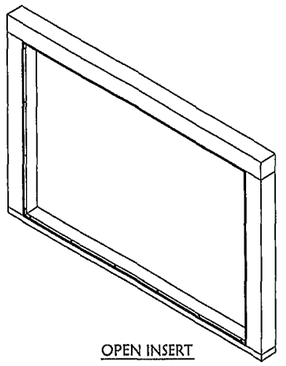


NOTES:

1. THE PLAN VIEW IN THIS DETAIL SHOWS AN ELITE COMPOSITE ROOF BUT THE SAME RULES APPLY TO AN ALUMINUM PAN ROOF UNLESS OTHERWISE NOTED.
2. THERE ARE TWO TYPES OF WALLS: SUPPORT WALLS AND NON-SUPPORT WALLS. THE SUPPORT WALL WILL CONSIST OF A HEADER GIRT SUPPORTING THE SOLID ROOF THAT CAN EITHER RUN CONTINUOUSLY ACROSS THE ENTIRE LENGTH OF THE WALL WITH INTERMITTENT SUPPORT FROM COLUMNS (SEE 'INDEPENDENT POST TO CARRY BEAM' DETAIL) OR BE BROKEN UP TO SPAN BETWEEN THE SUPPORT COLUMNS VIA BEING INTERNALLY FASTENED INTO SCREW BOSSES THROUGH THE WEB OF THE SUPPORT COLUMNS (SEE 'PRIMARY MEMBER TO SECONDARY MEMBER DETAIL) NON-SUPPORT WALLS (A.K.A SIDE WALLS) ARE NOT USED TO SUPPORT THE ROOF AND THEREFORE ARE NOT REQUIRED TO MAINTAIN A HEADER GIRT

1 S-2.7 Solid Aluminum Roof Panel Plan

N.T.S.



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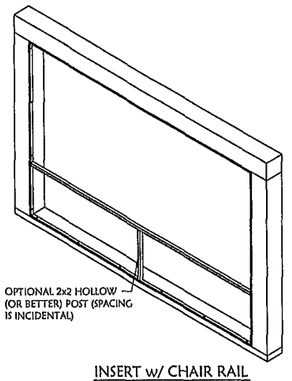
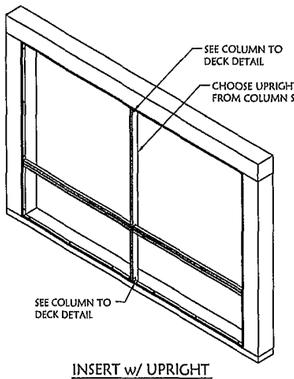


INSERT w/ CHAIR RAIL



INSERT w/ UPRIGHT

SCREEN INSERT NOTES:

1. INSERTS ARE FRAMED IN BY 1"x2" O.B. ½"x2" O.B OR 1"x3" O.B. MEMBERS
2. FRAMING MEMBERS ARE FASTENED TO A C.M.U USING 1/4"Ø CONCRETE ANCHOR w/ 1½ EMBEDMENT (MIN.).
3. FRAMING MEMBERS ARE FASTENED TO A WOOD FRAMED WALL USING A (MIN) #10 WOOD SCREW WITH A (MIN) 1" EMBEDMENT
4. FRAMING MEMBERS THAT ARE FASTENED TO AN ALUMINUM FRAMED MEMBER WILL USE A (MIN) #10 S.M.S.
5. FRAMING MEMBERS ARE FASTENED @ MAX. 36" O.C. REGARDLESS OF C.M.U. WOOD, OR TO ANOTHER ALUMINUM FRAME MEMBER.
6. THERE SHALL BE A FASTENER WITHIN 4" OF EVERY 90° CORNER OR UPRIGHT IN EITHER DIRECTION BUT NOT REQUIRED TO BE IN BOTH DIRECTIONS.
7. INSERTS MAY BE AS LARGE AS DESIRED, THE TYPE OF INSERT USED IS CHOSEN BY THE DESIGNER AND IS INCIDENTAL TO STRUCTURAL INTEGRITY

2 S-2.7 Screen Insert Framing Elevations

N.T.S.

ALUMINUM PAN (3" RISER) SPAN TABLE

WIND SPEED	PAN TYPE	3"x12"x0.024"	3"x12"x0.030"	3"x12"x0.050"
		EFFECTIVE SPAN (FT.)		
	V_{ULT} = 130	11.0	11 9	15.1
	V_{ULT} = 140	10.8	11 7	13 7
	V_{ULT} = 150	9.8	10.9	12.8
	V_{ULT} = 160	9 5	10.8	12.6
	V_{ULT} = 170	9 2	10.5	12 2

NOTE.

THE ELITE ROOF SPAN TABLES WERE PRODUCED IN ACCORDANCE WITH THE ALLOWABLE LOADS GIVEN IN THE FLORIDA PRODUCT APPROVAL OF THE ELITE ALUMINUM CORPORATION'S COMPOSITE ROOF PANEL. THE FLORIDA PRODUCT APPROVAL NUMBER FOR THIS ROOF PANEL PRODUCT IS FL-#7561-R1

CARRY BEAM/HEADER GIRT SCHEDULE FOR COMPOSITE ROOFS ONLY

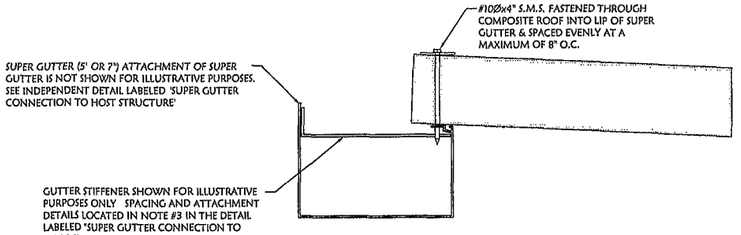
BEAM SIZE	COMP. ROOF SPAN	4	5	6	7	8	9	10	11	12	14	16	20
		EFFECTIVE SPAN (FT)											
	2x2 H	7.6	7 1	6.5	6.0	5 8	5.6	5.4	5.2	5.0	4.6	4.3	4.0
	2x3 H	10.7	9 9	9 1	8.4	8.2	7 8	7 5	7 3	6.9	6.4	6.0	5.6
	2x4 H	11.6	10.7	9 9	9 1	8 9	8.5	8.2	7 9	7.5	7.0	6.5	6.1
	2x5 H	14.4	13.4	12.5	12.0	11.4	11 1	10.6	10.3	9 9	9 1	8.6	8 1
	2x4 SMB	12.4	11.6	10.9	10.2	9 5	9.0	8.6	8.2	7.8	7 2	6.7	6.3
	2x5 SMB	15.4	13.2	13.5	12.5	11 7	11.0	10.5	10.0	9.5	8.9	8.3	7 8
	2x6 SMB	18.0	16.6	15 1	13 9	13.1	12.5	11 7	11 2	10.6	9 9	9.2	8.8
	2x7 SMB	20.1	17 9	16.4	15 2	14.1	13.4	12 7	12 1	11.6	10.7	10.0	9.4
	2x8 SMB	25 5	23.6	22 3	21.2	20.2	19.6	18.8	18.1	17.2	15 9	14.9	14.0
	2x9 SMB	28.0	25 9	24.5	23 3	22.1	21.0	19 8	18 9	18.0	16.8	15.6	14.8
	2x10 SMB	34.8	32.4	30.4	28 9	27 7	26.7	25 7	25.0	24.2	23.0	21 9	20.9

ELITE ALUMINUM CORPORATION COMPOSITE ROOF SPAN TABLE (#1 CORE DENSITY FOAM) [FLORIDA PRODUCT APPROVAL #FL7561-R1]

WIND SPEED & CATEGORY	ROOF & SKIN THICKNESS	3"x48"x0.024"	3"x48"x0.030"	4"x48"x0.024"	4"x48"x0.030"	6"x48"x0.024"	6"x48"x0.030"
	130 Exp. "B"	21'-1"	24'-9"	23'-1"	26'-7"	28'-7"	33'-3"
	140 Exp. "B", 130 Exp. "C"	19'-9"	22'-9'	21'-3"	24'-5"	26'-5"	30'-6
	150 Exp. "B", 140 Exp. "C"	18'-2'	21'-1"	19'-7"	22'-6"	24 -6'	28'-3
	160 Exp. "B , 150 Exp. "C"	15'-6"	19'-3	18'-2"	20'-10"	22'-6"	26'-8"
	170 Exp. "B", 160 Exp. "C"	12'-7'	15'-0"	14'-0"	16'-3"	17'-5"	20'-2"

ELITE ALUMINUM CORPORATION COMPOSITE ROOF SPAN TABLE (#2 CORE DENSITY FOAM) [FLORIDA PRODUCT APPROVAL #FL7561-R1]

WIND SPEED & CATEGORY	ROOF & SKIN THICKNESS	3'x48"x0.024"	3'x48"x0.030"	4"x48"x0.024"	4"x48"x0.030"	6"x48"x0.024	6"x48"x0.030"
	130 Exp. "B"	23'-1	27'-2"	25'-4	29'-3"	31'-6'	36'-4"
	140 Exp. "B", 130 Exp. "C	21'-2'	24'-11"	23'-4"	26'-11"	29'-0"	33'-5"
	150 Exp 'B", 140 Exp. "C"	19'-7"	23'-2'	21'-8"	25'-1"	28'-6"	31'-1"
	160 Exp. "B , 150 Exp. "C'	18'-1	21'-2"	19'-11"	22'-9'	24'-8'	28'-3'
	170 Exp. "B", 160 Exp. "C"	14'-0'	16'-3'	15'-3"	17'-8"	18'-3"	22'-1"



3 S-2.7 Composite Roof Panel to Top of Super Gutter Connection Detail

N.T.S.

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ROBERT C. SCROGGINS — No. 56158 — STATE OF FLORIDA — PROFESSIONAL ENGINEER — 08/27/13

Robert C. Scroggins, P.E.
FL Registration No. 56158

Structural Framing Sections & Details

Project: Residential Pool Screen Enclosure , Florida

Client:

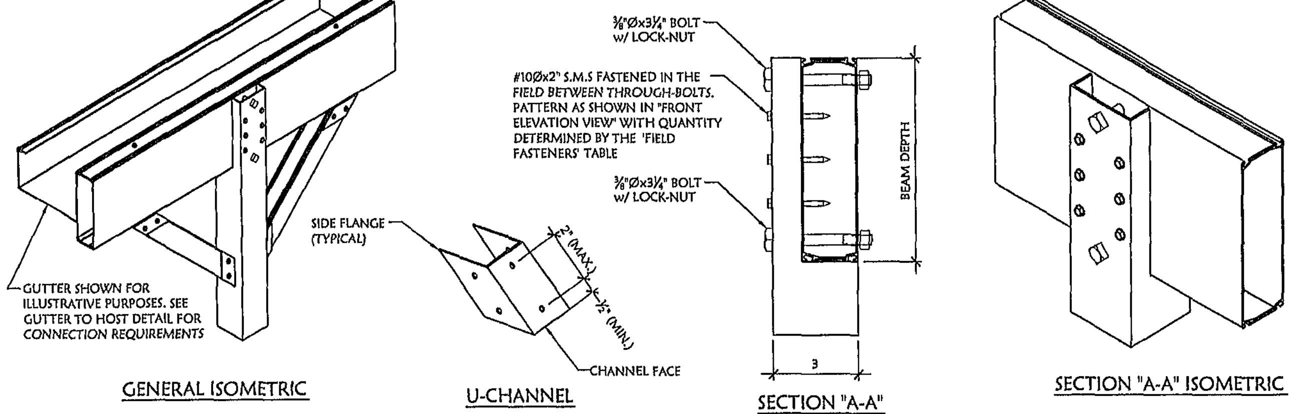
Florida Pool Enclosures, Inc
902 HICKORY STREET • ALTAMONTE SPRINGS, FL 32701
TEL 407/260-2080 • FAX 407/260-4411
www.FLORIDAPOOLENCLOSURES.com

REV.	DATE	DESCRIPTION

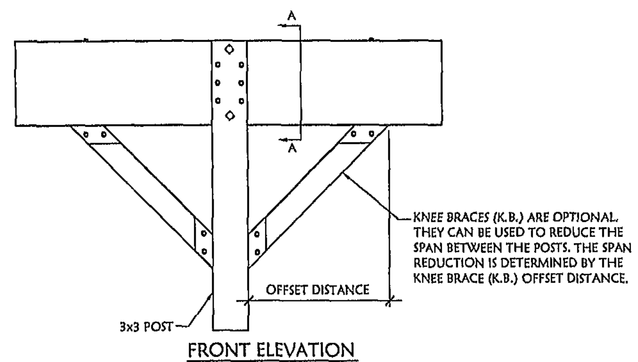
Project No. #13-002 11
Drawn By: TLW
Checked By: RCS
Approved By: RCS
Date: 08/27/13

Sheet S-2.7

F:\Structural Server\Florida Pool Enclosures\2013 Projects\13-002 Residential Pool Screen Enclosures (FBC 2010) 008/27/13 TLW


3/8"Øx3 3/4" BOLT w/ LOCK-NUT
#10Øx2" S.M.S FASTENED IN THE FIELD BETWEEN THROUGH-BOLTS. PATTERN AS SHOWN IN "FRONT ELEVATION VIEW" WITH QUANTITY DETERMINED BY THE 'FIELD FASTENERS' TABLE
3/8"Øx3 3/4" BOLT w/ LOCK-NUT
BEAM DEPTH
SIDE FLANGE (TYPICAL)
GUTTER SHOWN FOR ILLUSTRATIVE PURPOSES. SEE GUTTER TO HOST DETAIL FOR CONNECTION REQUIREMENTS
CHANNEL FACE
2" (MAX)
1/2" (MIN)
3
GENERAL ISOMETRIC
U-CHANNEL
SECTION "A-A"
SECTION "A-A" ISOMETRIC

FIELD FASTENERS	
BEAM SIZE	QTY OF FIELD FASTENERS
2x4	0
2x5	2
2x6	4
2x7	6
2x8	6
2x9	8
2x10	8



NOTES:

1 THE NOTCH IN THE 3X3 POST IS SHOWN AS A SIDE NOTCH BUT A CENTERED NOTCH IS ALSO ALLOWABLE. IN THAT CASE THE FIELD FASTENERS WOULD BE REQUIRED TO BE INSTALLED ON BOTH SIDES OF THE NOTCH AND THE THROUGH BOLTS WOULD BE REQUIRED TO PENETRATE BOTH SIDES OF THE NOTCH THROUGH THE BEAM.

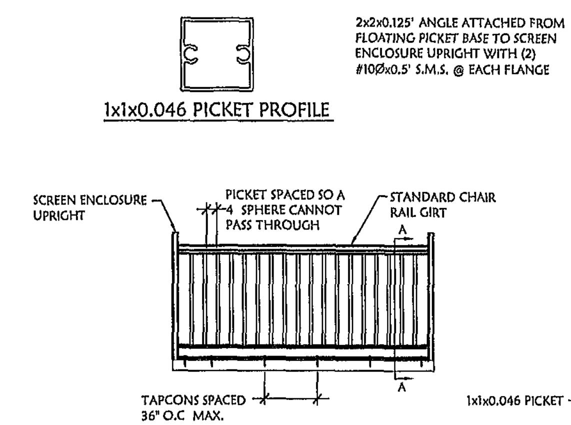
2. THE (OPTIONAL) KNEE BRACES ARE SHOWN BEING ATTACHED WITH U-CHANNEL BUT H-CHANNEL IS ALSO ACCEPTABLE. THE SIZE OF THE KNEE BRACE AND THE QUANTITY OF FASTENERS IS GIVEN IN THE 'KNEE BRACE SCHEDULE'

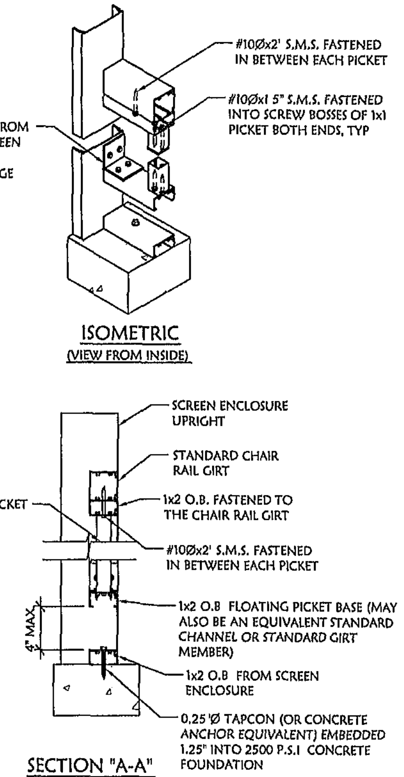
3 HEIGHT AND TYPE OF 3X3 POST IS DETERMINED BY THE APPROPRIATE TABLES CALLED 'COLUMN SCHEDULE FOR SOLID ROOF / SCREEN ENCLOSURE COMBO' IN THE EVENT THAT THERE IS NO SOLID ROOF OR NO SCREEN ENCLOSURE THEN TAKE THE MINIMUM SPAN GIVEN IN THE TABLE FOR THE NON-EXISTENT COMPONENT

KNEE BRACE SCHEDULE		
SIZE	LENGTH	QTY PER FLANGE
2x2x0.044	UP TO 2'-0"	2
2x3x0 050	2'-0" TO 4'-0"	3
2x4x0.050	4'-0" TO 6'-0"	4
2x4x0.048 x 0 100 SMB	6'-0" TO 7'-0'	4
2x6x0.050 x 0.120 SMB	7'-0' TO 8'-0"	6

1 Independent Column/Post to Beam Connection Detail

S-2.8 N.T.S.



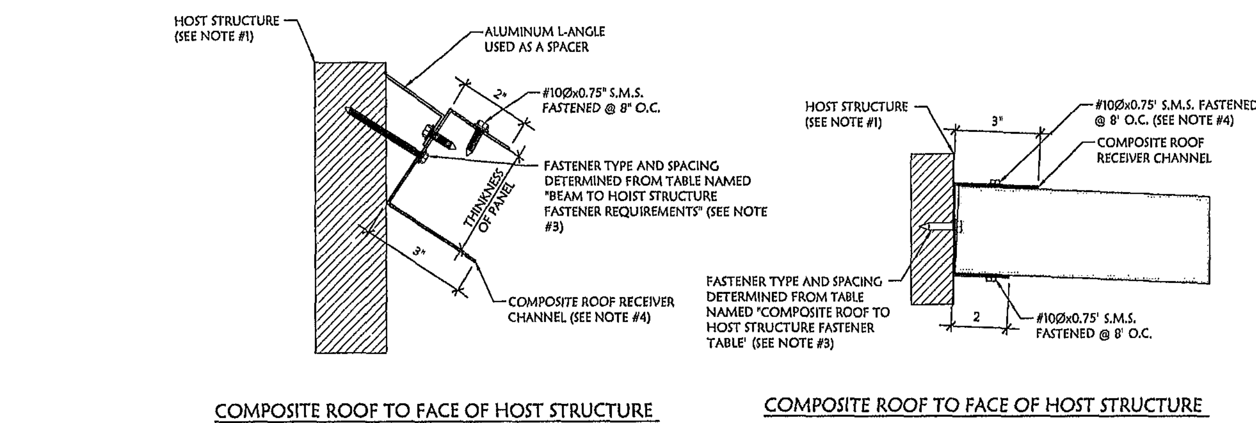

2x2x0.125" ANGLE ATTACHED FROM FLOATING PICKET BASE TO SCREEN ENCLOSURE UPRIGHT WITH (2) #10Øx0.5' S.M.S. @ EACH FLANGE
#10Øx2' S.M.S. FASTENED IN BETWEEN EACH PICKET
#10Øx1 5" S.M.S. FASTENED INTO SCREW BOSSES OF 1x1 PICKET BOTH ENDS, TYP
ISOMETRIC
(VIEW FROM INSIDE)
SCREEN ENCLOSURE UPRIGHT
STANDARD CHAIR RAIL GIRT
1x1x0.046 PICKET
1x2 O.B. FASTENED TO THE CHAIR RAIL GIRT
#10Øx2' S.M.S. FASTENED IN BETWEEN EACH PICKET
4" MAX
1x2 O.B FLOATING PICKET BASE (MAY ALSO BE AN EQUIVALENT STANDARD CHANNEL OR STANDARD GIRT MEMBER)
1x2 O.B FROM SCREEN ENCLOSURE
0.25"Ø TAPCON (OR CONCRETE ANCHOR EQUIVALENT) EMBEDDED 1.25" INTO 2500 P.S.I CONCRETE FOUNDATION
SECTION "A-A"

NOTES:

1. THIS METHOD MAY BE INCORPORATED INTO ANY ALUMINUM FRAMED SCREEN WALL (INCLUDING FRAMED IN OPENINGS IN A HOUSE).
2. THE SIZE OF THE CHAIR RAIL (A.K.A. GUARD RAIL) MAY BE CHOSEN FROM THE GIRT SCHEDULE.
3 BRICK PAVERS MAY BE UNDER THE 1x2 O.B SOLE PLATE AS LONG AS THE TAPCONS ATTACH TO THE CONCRETE FOOTER OR DECK UNDERNEATH THEM MEETING THE MINIMUM EMBEDMENT REQUIREMENTS OF 1 1/4'

2 Retro-fit Picket into Screen Wall Connection Detail (Floating Picket Base)

S-2.8 N.T.S.


HOST STRUCTURE (SEE NOTE #1)
ALUMINUM L-ANGLE USED AS A SPACER
#10Øx0.75" S.M.S. FASTENED @ 8" O.C.
FASTENER TYPE AND SPACING DETERMINED FROM TABLE NAMED "BEAM TO HOST STRUCTURE FASTENER REQUIREMENTS" (SEE NOTE #3)
THICKNESS OF PANEL
COMPOSITE ROOF RECEIVER CHANNEL (SEE NOTE #4)
COMPOSITE ROOF TO FACE OF HOST STRUCTURE
HOST STRUCTURE (SEE NOTE #1)
#10Øx0.75' S.M.S. FASTENED @ 8' O.C. (SEE NOTE #4)
COMPOSITE ROOF RECEIVER CHANNEL
FASTENER TYPE AND SPACING DETERMINED FROM TABLE NAMED "COMPOSITE ROOF TO HOST STRUCTURE FASTENER TABLE' (SEE NOTE #3)
#10Øx0.75' S.M.S. FASTENED @ 8' O.C.
COMPOSITE ROOF TO FACE OF HOST STRUCTURE

3 Composite Roof Panel to Host Structure Connection Detail

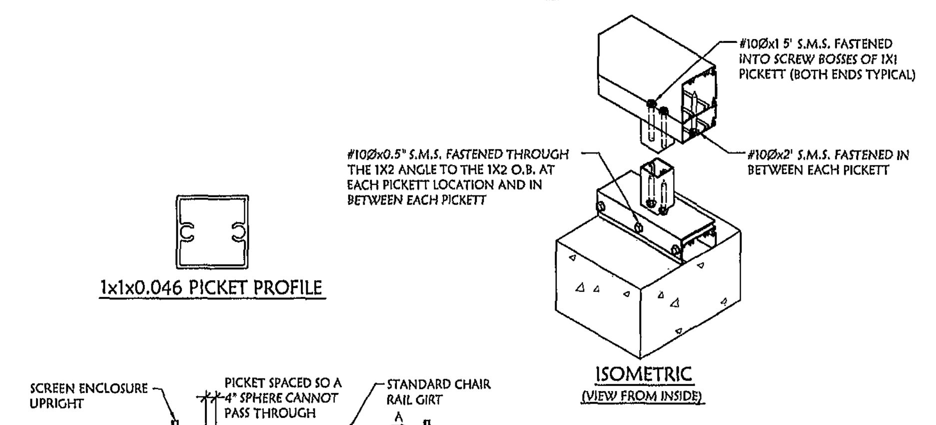
S-2.8 N.T.S.

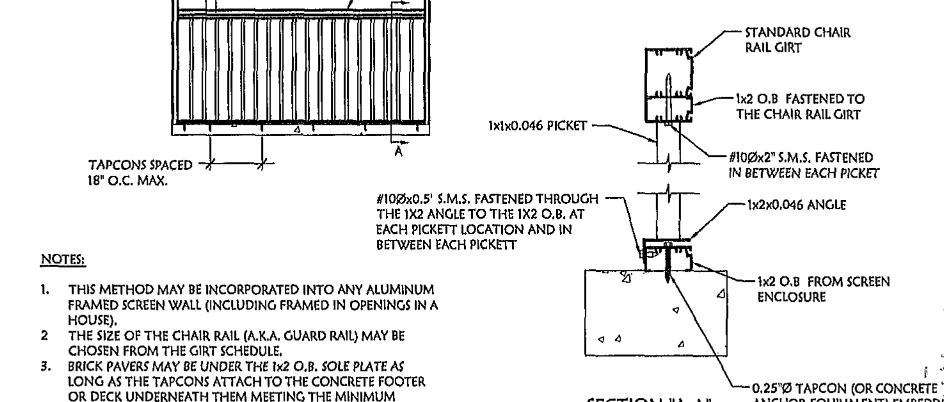
NOTES:

1 THE TERM HOST STRUCTURE IS USED SYNONYMOUSLY WITH ANY STRUCTURAL COMPONENT THAT THE COMPOSITE ROOF CAN ATTACH TO. THIS IS INCLUDING, BUT NOT LIMITED TO, THE FACE OF A CARRY BEAM, HOUSE FASCIA, HOUSE WALL, AND THE FACE OF SUPER GUTTER.
2. THE TYPE OF FASTENER THAT IS ATTACHING TO THE HOST STRUCTURE IS TO BE DETERMINED BY THE "COMPOSITE ROOF TO HOST STRUCTURE FASTENER REQUIREMENTS'
3. SHEET METAL SCREWS AND WOOD LAG SCREWS (ONLY) THAT ATTACH INTO THE HOST STRUCTURE THROUGH THE RECEIVER CHANNEL MUST CONTAIN A 1.5' WASHER. IF A WASHER IS NOT USED, THEN THE TYPE OF FASTENERS MENTIONED IN THIS NOTE ARE TO BE DOUBLED-UP THEY SHOULD BE INSTALLED IN A VERTICAL PATTERN, EVENLY SPACED BETWEEN THE TOP AND BOTTOM FLANGE OF THE RECEIVER CHANNEL.
4. THE FASTENERS THAT ATTACH THE COMPOSITE ROOF TO THE LONG FLANGE OF THE RECEIVER CHANNEL ARE ONLY REQUIRED WHERE THERE IS SUFFICIENT ROOM FOR INSTALLATION FOR EXAMPLE IF THE COMPOSITE ROOF IS INSTALLED UNDER A HOUSE OVERHANG TO THE HOUSE WALL, OR WHEN THE ROOF IS IN A STEEP PITCH AND THE BOTTOM IS INACCESSIBLE. SUFFICIENT ROOM IS DEFINED AS 24 OF SPACE BETWEEN THE TOP OF THE COMPOSITE ROOF AND THE BOTTOM OF THE OBJECT COVERING THAT AREA. ANYTHING LESS THAN THAT WOULD CONSTITUTE INSUFFICIENT ROOM AND THEREFORE NOT REQUIRE THAT THE TOP FLANGE OF THE RECEIVER CHANNEL BE FASTENED.

COMPOSITE ROOF TO HOST STRUCTURE FASTENER REQUIREMENTS

	MAXIMUM SPACING OF SPECIFIED FASTENERS (INCHES)					
	FASTENERS TO BEAM		FASTENERS TO CMU HOST		FASTENERS TO WOOD HOST	
ROOF THK.	#10 S.M.S	#14 S.M.S.	1/4"Ø TAPCONS	3/8"Ø TAPCONS	#10 WOOD SCREW	#14 WOOD SCREW
3"	8	12	18	24	8	12
4"	6	8	12	18	6	8
5	4	6	8	12	4	6
6"	4	6	8	12	4	6
	N/A	N/A	1.25	1.25	1.0	1.0
	MIN EMBEDMENT DEPTH (INCHES)					


1x1x0.046 PICKET PROFILE
#10Øx1 5' S.M.S. FASTENED INTO SCREW BOSSES OF 1X1 PICKETT (BOTH ENDS TYPICAL)
#10Øx0.5" S.M.S. FASTENED THROUGH THE 1X2 ANGLE TO THE 1X2 O.B. AT EACH PICKETT LOCATION AND IN BETWEEN EACH PICKETT
#10Øx2' S.M.S. FASTENED IN BETWEEN EACH PICKETT
ISOMETRIC
(VIEW FROM INSIDE)
SCREEN ENCLOSURE UPRIGHT
PICKET SPACED SO A 4" SPHERE CANNOT PASS THROUGH
STANDARD CHAIR RAIL GIRT
TAPCONS SPACED 18" O.C. MAX.


STANDARD CHAIR RAIL GIRT
1x1x0.046 PICKET
1x2 O.B FASTENED TO THE CHAIR RAIL GIRT
#10Øx2" S.M.S. FASTENED IN BETWEEN EACH PICKET
1x2x0.046 ANGLE
#10Øx0.5' S.M.S. FASTENED THROUGH THE 1X2 ANGLE TO THE 1X2 O.B. AT EACH PICKETT LOCATION AND IN BETWEEN EACH PICKETT
1x2 O.B FROM SCREEN ENCLOSURE
0.25"Ø TAPCON (OR CONCRETE ANCHOR EQUIVALENT) EMBEDDED 1.25" INTO 2500 P.S.I CONCRETE FOUNDATION
SECTION "A-A"

NOTES:

1. THIS METHOD MAY BE INCORPORATED INTO ANY ALUMINUM FRAMED SCREEN WALL (INCLUDING FRAMED IN OPENINGS IN A HOUSE).
2 THE SIZE OF THE CHAIR RAIL (A.K.A. GUARD RAIL) MAY BE CHOSEN FROM THE GIRT SCHEDULE.
3. BRICK PAVERS MAY BE UNDER THE 1x2 O.B. SOLE PLATE AS LONG AS THE TAPCONS ATTACH TO THE CONCRETE FOOTER OR DECK UNDERNEATH THEM MEETING THE MINIMUM EMBEDMENT REQUIREMENTS OF 1 1/4"

4 Retro-fit Picket into Screen Wall Connection Detail (1x2 Angle Base)

S-2.8 N.T.S.

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FLORIDA C.O.A. NO. 27191
ROBERT C. SCROGGINS LICENSE STATE OF FLORIDA PROFESSIONAL ENGINEER
08/27/13
Robert C. Scroggins, P E
FL Registration No. 56158

To the best of the Design Engineer's knowledge, the plans and specifications for this project comply with the applicable minimum building codes as determined by the local authority in accordance with the Florida Statutes.

REV.	DATE	DESCRIPTION

Client: Florida Pool Enclosures, Inc
922 HICKORY STREET • ALTAMONTE SPRINGS, FL 32701

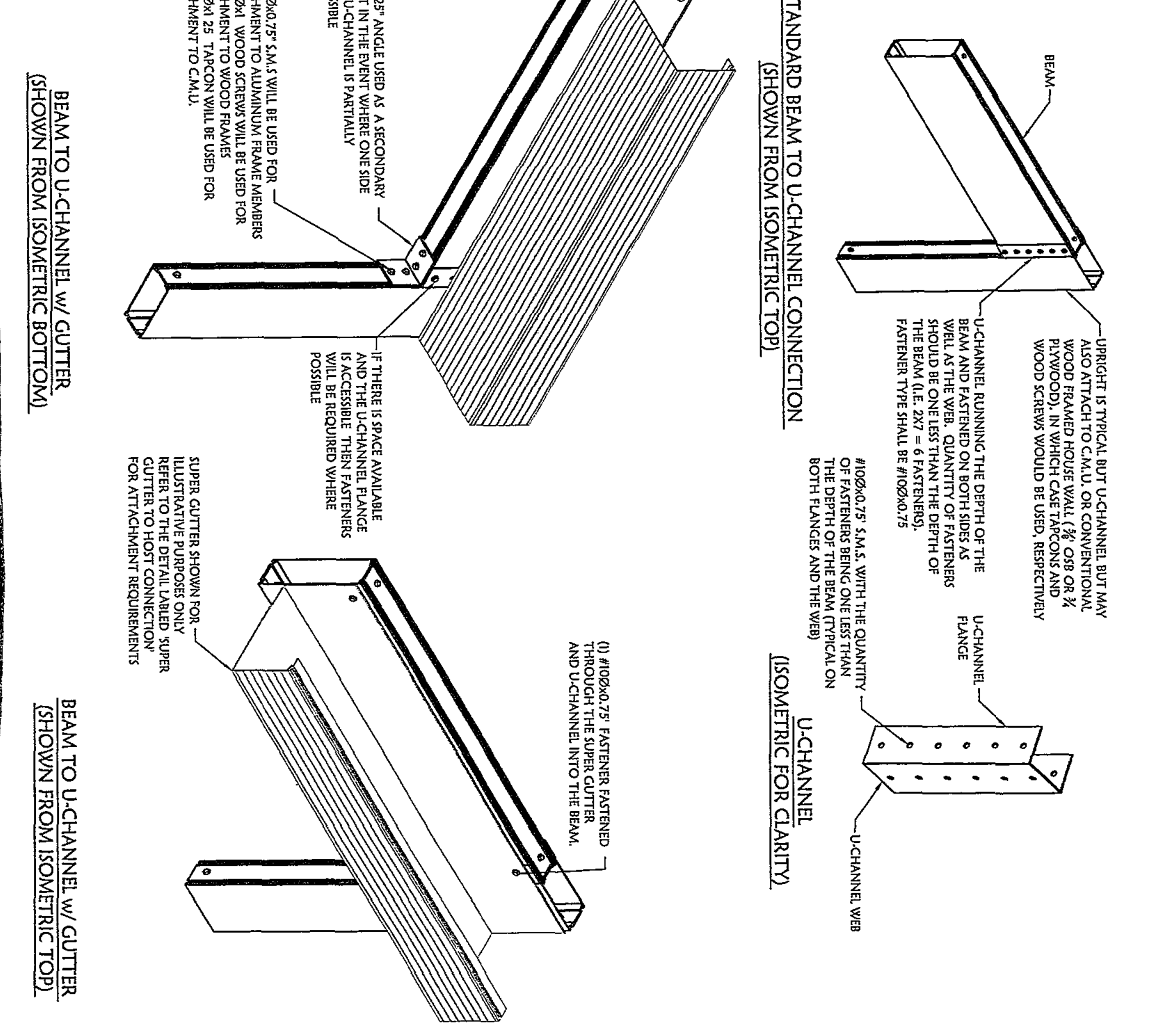
Project: Residential Pool Screen Enclosure
_______, Florida

Structural Framing Sections & Details

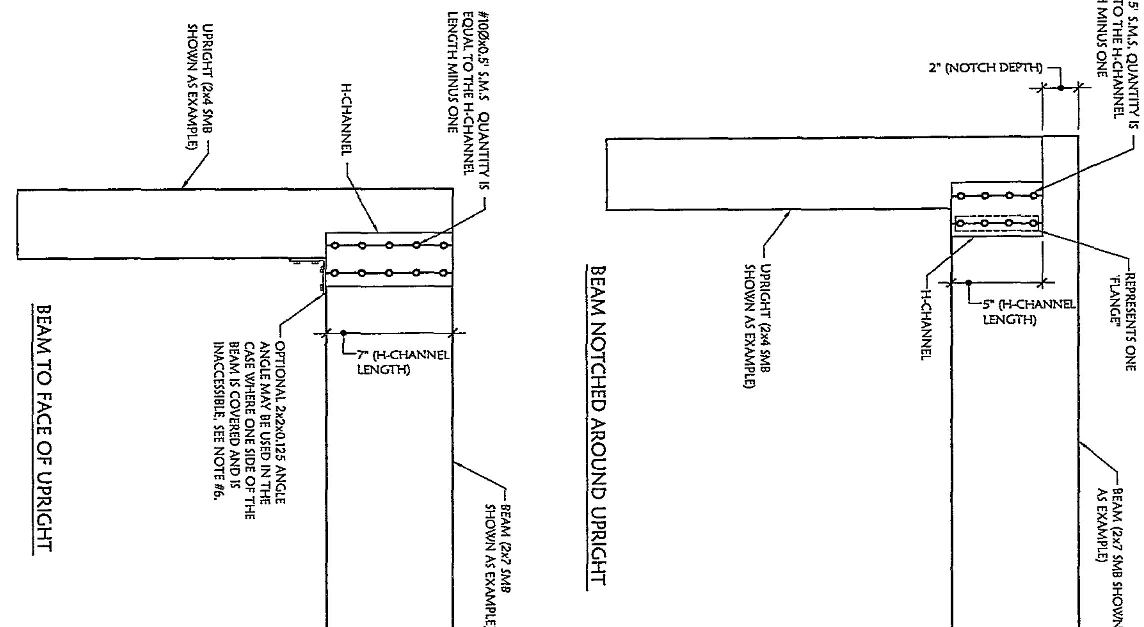
Project No.	#13-002 11
Drawn By:	TLW
Checked By:	RCS
Approved By:	RCS
Date:	08/27/13

Sheet

S-2.8


STANDARD BEAM TO U-CHANNEL CONNECTION
(SHOWN FROM ISOMETRIC TOP)
BEAM
UPRIGHT IS TYPICAL BUT U-CHANNEL BUT MAY ALSO ATTACH TO C.M.U. OR CONVENTIONAL WOOD FRAMED HOUSE WALL (¾" OSB OR ¾" PLYWOOD), IN WHICH CASE TAPCONS AND WOOD SCREWS WOULD BE USED, RESPECTIVELY
U-CHANNEL RUNNING THE DEPTH OF THE BEAM AND FASTENED ON BOTH SIDES AS WELL AS THE WEB. QUANTITY OF FASTENERS SHOULD BE ONE LESS THAN THE DEPTH OF THE BEAM (I.E. 2X7 = 6 FASTENERS). FASTENER TYPE SHALL BE #10Øx0.75
U-CHANNEL
(ISOMETRIC FOR CLARITY)
U-CHANNEL FLANGE
U-CHANNEL WEB
#10Øx0.75" S.M.S. WITH THE QUANTITY OF FASTENERS BEING ONE LESS THAN THE DEPTH OF THE BEAM (TYPICAL ON BOTH FLANGES AND THE WEB)
BEAM TO U-CHANNEL w/ GUTTER
(SHOWN FROM ISOMETRIC BOTTOM)
2X2X0.125" ANGLE USED AS A SECONDARY SUPPORT IN THE EVENT WHERE ONE SIDE OF THE U-CHANNEL IS PARTIALLY INACCESSIBLE
(2) #10Øx0.75" S.M.S WILL BE USED FOR ATTACHMENT TO ALUMINUM FRAME MEMBERS
(2) #10Øx1 WOOD SCREWS WILL BE USED FOR ATTACHMENT TO WOOD FRAMES
(1) #10Øx1 25 TAPCON WILL BE USED FOR ATTACHMENT TO C.M.U.
IF THERE IS SPACE AVAILABLE AND THE U-CHANNEL FLANGE IS ACCESSIBLE THEN FASTENERS WILL BE REQUIRED WHERE POSSIBLE
BEAM TO U-CHANNEL w/ GUTTER
(SHOWN FROM ISOMETRIC TOP)
SUPER GUTTER SHOWN FOR ILLUSTRATIVE PURPOSES ONLY. REFER TO THE DETAIL LABLED 'SUPER GUTTER TO HOST CONNECTION' FOR ATTACHMENT REQUIREMENTS
(1) #10Øx0.75" FASTENER FASTENED THROUGH THE SUPER GUTTER AND U-CHANNEL INTO THE BEAM.

1 Beam to U-Channel Connection Detail
S-2.9 N.T.S.


BEAM NOTCHED AROUND UPRIGHT
#10Øx0.5" S.M.S. QUANTITY IS EQUAL TO THE H-CHANNEL LENGTH MINUS ONE
2" (NOTCH DEPTH)
REPRESENTS ONE 'FLANGE'
5" (H-CHANNEL LENGTH)
H-CHANNEL
UPRIGHT (2x4 SMB SHOWN AS EXAMPLE)
BEAM (2x7 SMB SHOWN AS EXAMPLE)
BEAM TO FACE OF UPRIGHT
#10Øx0.5" S.M.S. QUANTITY IS EQUAL TO THE H-CHANNEL LENGTH MINUS ONE
H-CHANNEL
7" (H-CHANNEL LENGTH)
OPTIONAL 2x2x0.125 ANGLE ANGLE MAY BE USED IN THE CASE WHERE ONE SIDE OF THE BEAM IS COVERED AND IS INACCESSIBLE. SEE NOTE #6.
UPRIGHT (2x4 SMB SHOWN AS EXAMPLE)
BEAM (2x7 SMB SHOWN AS EXAMPLE)

NOTES: (Beam Notched Around Upright)

1. H-CHANNEL LENGTH WILL BE EQUAL TO THE BEAM LENGTH MINUS THE NOTCH DEPTH.
2. KNEE BRACES MAY BE USED IN ADDITION TO THIS CONNECTION BUT ARE OPTIONAL. FOR INFORMATION ABOUT A KNEE BRACE CONNECTION, PLEASE SEE THE DETAIL LABELED "KNEE BRACE CONNECTION'
3. QUANTITY OF SCREWS ON EACH FLANGE MUST BE EQUAL TO THE H-CHANNEL LENGTH MINUS ONE (AS SHOWN IN THE DETAIL).
4. FASTENERS IN H-CHANNEL MAY BE #14Øx0.5" ALSO.
5. ANY COMBINATION OF FRAME MEMBERS FOR THE UPRIGHT AND BEAM MAY BE USED PROVIDED THEY ARE IN THE BEAM SCHEDULE AND UPRIGHT SCHEDULE RESPECTIVELY
6. H-CHANNEL CONFIGURATION AND FRAME-NOTCH SHOWN IS IN A VERTICAL VECTOR WITH THE BEAM BEING NOTCHED. THE VECTOR MAY ALSO BE HORIZONTAL WITH THE UPRIGHT NOTCHED ONLY IF THE UPRIGHT DEPTH IS LARGER THAN THE BEAM DEPTH.
7. AN OPTIONAL 2x2x0.125 ANGLE MAY BE USED IN CASES WHERE ONE SIDE OF THE BEAM IS INACCESSIBLE. SEE NOTE #6 IN THE DETAIL BELOW LABELED "BEAM TO FACE OF UPRIGHT"

NOTES: (Beam to Face of Upright)

1. KNEE BRACES MAY BE USED IN ADDITION TO THIS CONNECTION BUT ARE OPTIONAL. FOR INFORMATION ABOUT A KNEE BRACE CONNECTION, PLEASE SEE THE DETAIL LABELED "KNEE BRACE CONNECTION'
2. QUANTITY OF SCREWS ON EACH FLANGE MUST BE EQUAL TO THE H-CHANNEL LENGTH MINUS ONE (AS SHOWN IN THE DETAIL).
3. FASTENERS IN H-CHANNEL MAY BE #14Øx0.5" ALSO
4. ANY COMBINATION OF FRAME MEMBERS FOR THE UPRIGHT AND BEAM MAY BE USED PROVIDED THEY ARE IN THE BEAM SCHEDULE AND UPRIGHT SCHEDULE RESPECTIVELY
5. THE CONFIGURATION SHOWN IS THE BEAM BUTTING INTO THE UPRIGHT WITH THE H-CHANNEL "LENGTH' BEING DRIVEN BY THE BEAM DEPTH. THIS CONFIGURATION MAY BE SWITCHED TO HAVE THE UPRIGHT BUTTING INTO THE BOTTOM OF THE BEAM AND THE H-CHANNEL "LENGTH' BEING DRIVEN BY THE UPRIGHT DEPTH.
6. THE 2x2x0.125 ANGLE IS USED IN LIEU OF ONE INACCESSIBLE SIDE OF BEAM. (2) #10Øx0.75 FASTENERS SHOULD BE USED ON EACH FLANGE OF THE ANGLE BRACKET. IF THE INACCESSIBLE SIDE IS ONLY PARTIALLY COVERED, THEN FASTENERS SHOULD BE INSTALLED WHERE POSSIBLE.

2 Beam to Upright (H-Channel) Connection Detail
S-2.9 N.T.S.

STRUCTURAL CONCEPTS & DESIGN
2989 WEST S.R. 434, SUITE 300 • LONGWOOD, FL 32779
FLORIDA C.O.A. NO. 2791
Robert C. Scroggins P.E.
FL Registration No. 56158
08/27/13

To the best of the Design Engineer's knowledge, the plans and specifications for this project comply with the applicable minimum building codes as determined by the local authority in accordance with the Florida Statutes.

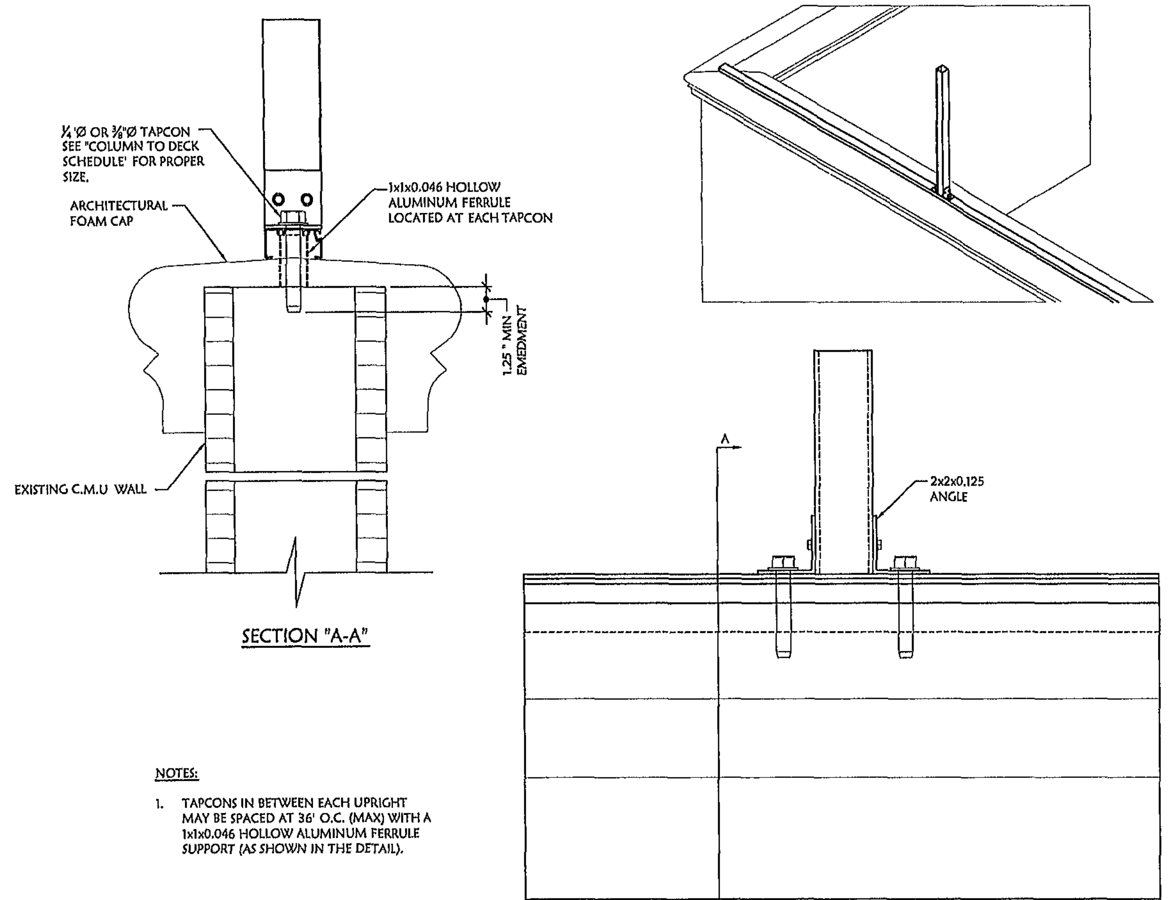
Project No.	#13-002.11	REV.	DATE	DESCRIPTION
Drawn By:	TLW			
Checked By:	RCS			
Approved By:	RCS			
Date:	08/27/13			

Sheet **S-2.9**

Client: Florida Pool Enclosures, Inc
922 HICKORY STREET • ALTAMONTE SPRINGS, FL 32701

Project: Residential Pool Screen Enclosure
__________________, Florida

Structural Framing Sections & Details

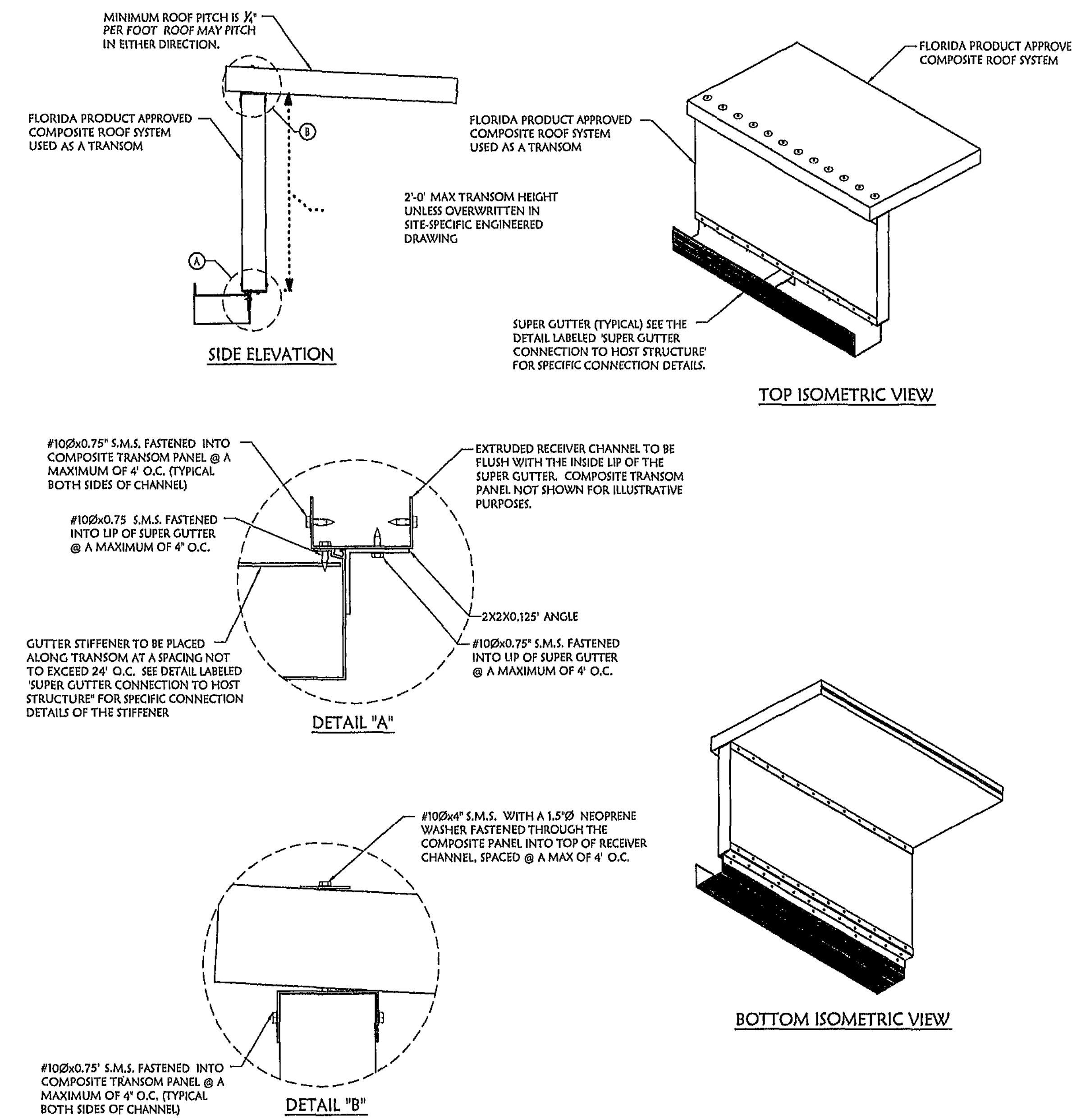


NOTES:

1. TAPCONS IN BETWEEN EACH UPRIGHT MAY BE SPACED AT 36" O.C. (MAX) WITH A 1x1x0.046 HOLLOW ALUMINUM FERRULE SUPPORT (AS SHOWN IN THE DETAIL).

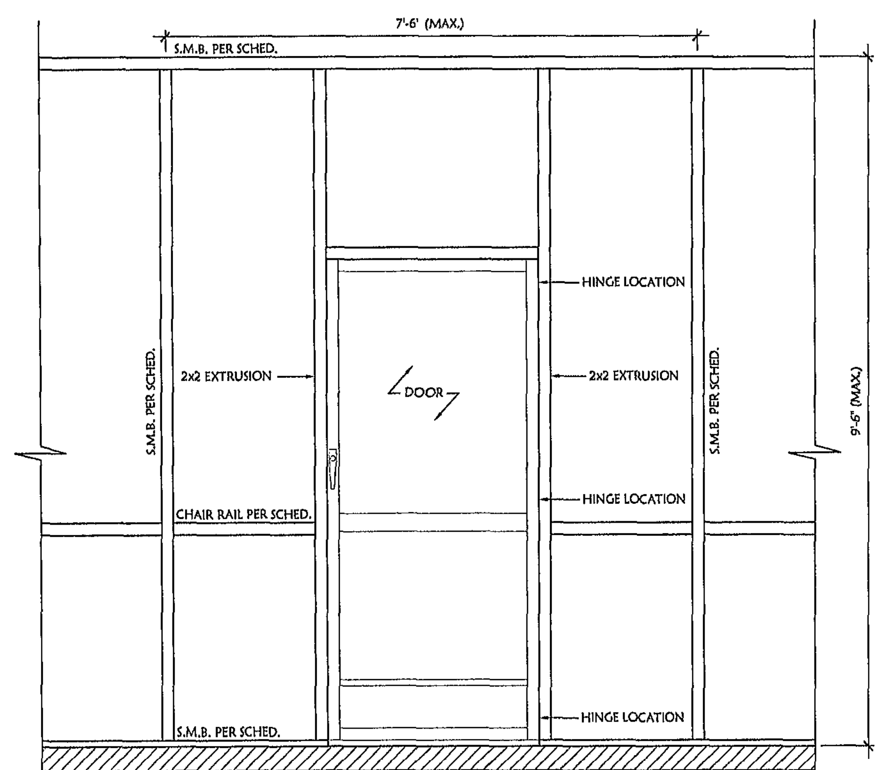
1 / S-2.10 — Screen Enclosure Base Attachment to Foam Capped CMU Wall

N.T.S.


MINIMUM ROOF PITCH IS ¼" PER FOOT ROOF MAY PITCH IN EITHER DIRECTION.
FLORIDA PRODUCT APPROVED COMPOSITE ROOF SYSTEM USED AS A TRANSOM
2'-0" MAX TRANSOM HEIGHT UNLESS OVERWRITTEN IN SITE-SPECIFIC ENGINEERED DRAWING
SIDE ELEVATION
FLORIDA PRODUCT APPROVED COMPOSITE ROOF SYSTEM
FLORIDA PRODUCT APPROVED COMPOSITE ROOF SYSTEM USED AS A TRANSOM
SUPER GUTTER (TYPICAL) SEE THE DETAIL LABELED 'SUPER GUTTER CONNECTION TO HOST STRUCTURE' FOR SPECIFIC CONNECTION DETAILS.
TOP ISOMETRIC VIEW
#10Øx0.75" S.M.S. FASTENED INTO COMPOSITE TRANSOM PANEL @ A MAXIMUM OF 4' O.C. (TYPICAL BOTH SIDES OF CHANNEL)
#10Øx0.75 S.M.S. FASTENED INTO LIP OF SUPER GUTTER @ A MAXIMUM OF 4" O.C.
GUTTER STIFFENER TO BE PLACED ALONG TRANSOM AT A SPACING NOT TO EXCEED 24' O.C. SEE DETAIL LABELED 'SUPER GUTTER CONNECTION TO HOST STRUCTURE' FOR SPECIFIC CONNECTION DETAILS OF THE STIFFENER
EXTRUDED RECEIVER CHANNEL TO BE FLUSH WITH THE INSIDE LIP OF THE SUPER GUTTER. COMPOSITE TRANSOM PANEL NOT SHOWN FOR ILLUSTRATIVE PURPOSES.
2X2X0.125' ANGLE
#10Øx0.75" S.M.S. FASTENED INTO LIP OF SUPER GUTTER @ A MAXIMUM OF 4' O.C.
DETAIL "A"
#10Øx4" S.M.S. WITH A 1.5"Ø NEOPRENE WASHER FASTENED THROUGH THE COMPOSITE PANEL INTO TOP OF RECEIVER CHANNEL, SPACED @ A MAX OF 4' O.C.
#10Øx0.75' S.M.S. FASTENED INTO COMPOSITE TRANSOM PANEL @ A MAXIMUM OF 4' O.C. (TYPICAL BOTH SIDES OF CHANNEL)
DETAIL "B"
BOTTOM ISOMETRIC VIEW

2 / S-2.10 — Composite Panel Transom Detail

N.T.S.



SCREEN DOOR FRAMING NOTES:

1. DOOR TO BE ATTACHED TO STRUCTURE w/ MIN. (2) HINGES.
2. EACH HINGE TO BE ATTACHED TO STRUCTURE w/ MIN. (4) #10x ¾" S.M.S.
3. EACH HINGE TO BE ATTACHED TO DOOR w/ MIN. (4) #10 x ¾" S.M.S.
4. BOTTOM HINGE TO BE MOUNTED BETWEEN 10' AND 20' FROM GROUND.
5. TOP HINGE TO BE MOUNTED BETWEEN 10' AND 20' FROM TOP OF DOOR.
6. IF DOOR LOCATION IS ADJACENT TO UPRIGHT A 1"x2"x0.044" MAY BE FASTENED TO UPRIGHT w/ #12x1" S.M.S. @ 12" O.C. AND WITHIN 3" FROM END OF UPRIGHT

3 / S-2.10 — Typical Screen Door Framing Elevation Detail

N.T.S.

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FLORIDA C.O.A. NO. 27191
Robert C. Scroggins, P.E
FL Registration No. 56158
08/27/13

To the best of the Design Engineer's knowledge, the plans and specifications for this project comply with the applicable minimum building codes as determined by the local authority in accordance with the Florida Statutes.

REV.	DATE	DESCRIPTION

Client: Florida Pool Enclosures, Inc

Project: Residential Pool Screen Enclosure
________, Florida

Structural Framing Sections & Details

Project No.	#13-002 11
Drawn By:	TLW
Checked By:	RCS
Approved By:	RCS
Date:	08/27/13

Sheet

S-2.10

3x3x0.060 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	20.0	19.8	19.6	19.4	19.2	19.0	18.8	18.6	18.4	18.2
10	19.6	19.4	19.2	19.0	18.8	18.6	18.4	18.2	18.0	17.8
12	19.2	19.0	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.4
14	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.4	17.2	17.0
16	18.4	18.2	18.0	17.8	17.6	17.4	17.2	17.0	16.8	16.6
18	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1
20	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7
22	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5	15.3
24	16.7	16.5	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9
26	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7	14.5
	COMPOSITE ROOF SPAN OF 6'-0'									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

3x3x0.060 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	18.9	18.7	18.5	18.3	18.1	17.9	17.7	17.5	17.3	17.1
10	18.2	18.0	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.4
12	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7
14	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0
16	16.2	16.0	15.8	15.6	15.4	15.2	15.0	14.8	14.6	14.4
18	15.5	15.3	15.1	14.9	14.7	14.5	14.3	14.1	13.9	13.7
20	14.8	14.6	14.4	14.2	14.0	13.8	13.6	13.4	13.2	13.0
22	14.1	13.9	13.7	13.5	13.3	13.1	12.9	12.7	12.5	12.3
24	13.4	13.2	13.0	12.8	12.6	12.4	12.2	12.0	11.8	11.6
26	12.7	12.5	12.3	12.1	11.9	11.7	11.5	11.3	11.1	10.9
	COMPOSITE ROOF SPAN OF 10'-0'									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

CARRY BEAM SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
MEMBER TYPE	EFFECTIVE SPAN (FT.)									
2x4 SMB	10.1	9.4	8.8	8.4	8.0	7.7	7.3	6.8	6.2	5.9
2x5 SMB	12.5	11.6	11.0	10.4	9.9	9.5	9.0	8.2	7.7	7.1
2x6 SMB	17.4	16.7	16.4	15.9	15.5	15.1	14.9	14.5	13.8	12.9
2x7 SMB	19.3	18.6	17.9	17.4	17.2	16.7	16.4	15.9	15.5	14.8
2x8 SMB	23.6	23.1	22.5	21.9	21.2	20.9	20.5	20.1	19.4	18.9
2x9 SMB	25.0	24.3	24.0	23.5	22.8	22.0	21.6	21.1	20.5	19.7
2x10 SMB	31.9	31.0	30.3	29.7	29.3	28.7	27.9	27.2	26.4	25.9
2x5 TFB	18.3	17.5	17.1	16.6	16.2	15.8	15.4	14.8	14.5	13.8
2x7 TFB	21.7	21.0	20.5	20.0	19.4	19.1	18.5	18.0	17.5	17.0
2x9 TFB	27.7	26.8	26.1	25.5	25.1	24.6	24.0	23.4	22.7	22.4
	COMPOSITE ROOF SPAN OF 6'-0'									

CARRY BEAM SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
MEMBER TYPE	EFFECTIVE SPAN (FT.)									
2x4 SMB	7.9	7.4	6.9	6.6	6.3	6.1	5.8	5.3	4.9	4.6
2x5 SMB	9.9	9.2	8.6	8.2	7.8	7.5	7.1	8.5	6.1	5.8
2x6 SMB	13.7	13.2	12.9	12.5	12.2	11.9	11.7	11.4	10.9	10.1
2x7 SMB	15.2	14.7	14.1	13.7	13.5	13.2	12.9	12.5	12.2	11.7
2x8 SMB	18.6	18.2	17.7	17.3	16.7	16.5	16.1	15.8	15.3	14.9
2x9 SMB	19.7	19.1	18.9	18.5	18.0	17.4	17.0	16.6	16.1	15.5
2x10 SMB	25.1	24.4	23.9	23.4	23.1	22.6	22.0	21.4	20.8	20.4
2x5 TFB	14.4	13.8	13.4	13.1	12.7	12.5	12.1	11.7	11.4	10.9
2x7 TFB	17.1	16.6	16.1	15.8	15.3	15.0	14.6	14.2	13.8	13.4
2x9 TFB	21.8	21.1	20.6	20.1	19.8	19.4	18.9	18.4	17.9	17.6
	COMPOSITE ROOF SPAN OF 14'-0"									

3x3x0.060 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	17.8	17.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0
10	16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0
12	15.9	15.7	15.5	15.3	15.1	14.9	14.7	14.5	14.3	14.1
14	14.9	14.7	14.5	14.3	14.1	13.9	13.7	13.5	13.3	13.1
16	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.6	12.4	12.2
18	13.0	12.8	12.6	12.4	12.2	12.0	11.8	11.6	11.4	11.2
20	12.0	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.4	10.2
22	11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.3
24	10.1	9.9	9.7	9.5	9.3	9.1	8.9	8.7	8.5	8.3
26	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.7	7.5	7.3
	COMPOSITE ROOF SPAN OF 14'-0'									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

3x3x0.060 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	16.7	16.5	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9
10	15.5	15.3	15.1	14.9	14.7	14.5	14.3	14.1	13.9	13.7
12	14.2	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.6	12.4
14	13.0	12.8	12.6	12.4	12.2	12.0	11.8	11.6	11.4	11.2
16	11.7	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9
18	10.5	10.3	10.1	9.9	9.7	9.5	9.3	9.1	8.9	8.7
20	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.7	7.5
22	8.0	7.8	7.6	7.4	7.2	7.0	6.8	6.6	6.4	6.2
24	6.8	6.6	6.4	6.2	6.0	5.8	5.6	5.4	5.2	5.0
26	5.6	5.4	5.2	5.0	4.8	4.6	4.4	4.2	4.0	3.7
	COMPOSITE ROOF SPAN OF 18'-0"									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

CARRY BEAM SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
MEMBER TYPE	EFFECTIVE SPAN (FT.)									
2x4 SMB	8.9	8.3	7.8	7.4	7.1	6.8	6.5	6.0	5.5	5.5
2x5 SMB	11.1	10.3	9.7	9.2	8.8	8.4	8.0	7.3	6.8	6.3
2x6 SMB	15.4	14.8	14.5	14.1	13.7	13.4	13.2	12.8	12.2	11.4
2x7 SMB	17.1	16.5	15.8	15.4	15.2	14.8	14.5	14.1	13.7	13.1
2x8 SMB	20.9	20.4	19.9	19.4	18.8	18.5	18.1	17.8	17.2	16.7
2x9 SMB	22.1	21.5	21.2	20.8	20.2	19.5	19.1	18.7	18.1	17.4
2x10 SMB	28.2	27.4	26.8	26.3	25.9	25.4	24.7	24.1	23.4	22.9
2x5 TFB	16.2	15.5	15.1	14.7	14.3	14.0	13.6	13.1	12.8	12.2
2x7 TFB	19.2	18.6	18.1	17.7	17.2	16.9	16.4	15.9	15.5	15.0
2x9 TFB	24.5	23.7	23.1	22.6	22.2	21.8	21.2	20.7	20.1	19.8
	COMPOSITE ROOF SPAN OF 10'-0'									

CARRY BEAM SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
MEMBER TYPE	EFFECTIVE SPAN (FT.)									
2x4 SMB	7.0	6.6	6.2	5.8	5.6	5.4	5.1	4.7	4.3	4.1
2x5 SMB	8.8	8.1	7.7	7.3	7.0	6.6	6.3	5.8	5.4	5.0
2x6 SMB	12.2	11.7	11.5	11.1	10.8	10.6	10.4	10.1	9.6	9.0
2x7 SMB	13.5	13.0	12.5	12.2	12.0	11.7	11.5	11.1	10.8	10.3
2x8 SMB	16.5	16.1	15.7	15.3	14.9	14.6	14.3	14.1	13.6	13.2
2x9 SMB	17.5	17.0	16.7	16.4	16.0	15.4	15.1	14.8	14.3	13.7
2x10 SMB	22.3	21.6	21.2	20.8	20.5	20.1	19.5	19.0	18.5	18.1
2x5 TFB	12.8	12.2	11.9	11.6	11.3	11.1	10.7	10.3	10.1	9.6
2x7 TFB	15.2	14.7	14.3	14.0	13.6	13.4	13.0	12.6	12.2	11.9
2x9 TFB	19.4	18.7	18.2	17.9	17.5	17.2	16.7	16.4	15.9	15.6
	COMPOSITE ROOF SPAN OF 18'-0"									

3x3x0.092 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	20.9	20.7	20.6	20.5	20.3	20.2	20.1	19.9	19.8	19.7
10	20.6	20.5	20.3	20.2	20.1	19.9	19.8	19.7	19.5	19.4
12	20.3	20.2	20.0	19.9	19.8	19.7	19.5	19.4	19.3	19.1
14	20.0	19.9	19.8	19.6	19.5	19.4	19.2	19.1	19.0	18.9
16	19.8	19.6	19.5	19.4	19.2	19.1	19.0	19.8	19.7	19.6
18	19.5	19.4	19.2	19.1	19.0	18.8	18.7	18.6	18.4	18.3
20	19.2	19.1	19.0	18.8	18.7	18.6	18.4	18.3	18.2	18.0
22	19.0	18.8	18.7	18.6	18.4	18.3	18.2	18.0	17.9	17.8
24	18.7	18.5	18.4	18.3	18.2	18.0	17.9	17.8	17.6	17.5
26	18.4	18.3	18.1	18.0	17.9	17.8	17.7	17.6	17.4	17.2
	COMPOSITE ROOF SPAN OF 6'-0"									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

3x3x0.092 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	20.1	20.0	19.9	19.7	19.6	19.5	19.3	19.2	19.1	18.9
10	19.7	19.5	19.4	19.3	19.1	19.0	18.9	18.8	18.6	18.5
12	19.2	19.1	19.0	18.8	18.7	18.6	18.4	18.3	18.2	18.0
14	18.8	18.6	18.5	18.4	18.2	18.1	18.0	17.8	17.7	17.6
16	18.3	18.2	18.1	17.9	17.8	17.7	17.5	17.4	17.3	17.1
18	17.9	17.7	17.6	17.5	17.3	17.2	17.1	16.9	16.8	16.7
20	17.4	17.3	17.1	17.0	16.9	16.8	16.6	16.5	16.4	16.2
22	17.0	16.8	16.7	16.6	16.4	16.3	16.2	16.0	15.9	15.8
24	16.5	16.4	16.2	16.1	16.0	15.8	15.7	15.6	15.5	15.3
26	16.1	15.9	15.8	15.7	15.5	15.4	15.3	15.1	15.0	14.9
	COMPOSITE ROOF SPAN OF 10'-0"									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

NOTES

1 ALL ALUMINUM FRAME MEMBER TABLES SHOWN ARE CALCULATED FOR EXPOSURE "B" TYPE TERRAIN IF EXPOSURE "C IS REQUIRED, THEN MULTIPLY THE FIGURES IN THE TABLE BY 0.82

3x3x0.092 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	19.4	19.3	19.1	19.0	18.9	18.7	18.6	18.5	18.4	18.2
10	18.8	18.6	18.5	18.4	18.2	18.1	18.0	17.8	17.7	17.6
12	18.1	18.0	17.9	17.7	17.6	17.5	17.3	17.2	17.1	17.0
14	17.5	17.4	17.2	17.1	17.0	16.8	16.7	16.6	16.5	16.3
16	16.9	16.7	16.6	16.5	16.3	16.2	16.1	15.9	15.8	15.7
18	16.2	16.1	16.0	15.8	15.7	15.6	15.4	15.3	15.2	15.1
20	15.6	15.5	15.3	15.2	15.1	14.9	14.8	14.7	14.5	14.4
22	15.0	14.8	14.7	14.6	14.4	14.3	14.2	14.0	13.9	13.8
24	14.3	14.2	14.1	13.9	13.8	13.7	13.5	13.4	13.3	13.1
26	13.7	13.6	13.4	13.3	13.2	13.0	12.9	12.8	12.6	12.5
	COMPOSITE ROOF SPAN OF 14'-0"									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

3x3x0.092 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	18.7	18.5	18.4	18.3	18.2	18.0	17.9	17.8	17.6	17.5
10	17.9	17.7	17.6	17.5	17.3	17.2	17.1	16.9	16.8	16.7
12	17.1	16.9	16.8	16.7	16.5	16.4	16.3	16.1	16.0	15.9
14	16.2	16.1	16.0	15.8	15.7	15.6	15.4	15.3	15.2	15.1
16	15.4	15.3	15.2	15.0	14.9	14.8	14.6	14.5	14.4	14.2
18	14.6	14.5	14.3	14.2	14.1	13.9	13.8	13.7	13.6	13.4
20	13.8	13.7	13.5	13.4	13.3	13.1	13.0	12.9	12.7	12.6
22	13.0	12.8	12.7	12.6	12.5	12.3	12.2	12.1	11.9	11.8
24	12.2	12.0	11.9	11.8	11.6	11.5	11.4	11.2	11.1	11.0
26	11.3	11.2	11.1	11.0	10.8	10.7	10.6	10.4	10.3	10.2
	COMPOSITE ROOF SPAN OF 18'-0"									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

3x3x0.125 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	20.7	20.6	20.5	20.4	20.3	20.2	20.1	20.0	19.9	19.8
10	20.4	20.3	20.2	20.1	20.0	19.9	19.8	19.7	19.6	19.5
12	20.0	19.9	19.8	19.7	19.6	19.5	19.4	19.3	19.2	19.1
14	19.7	19.6	19.5	19.4	19.3	19.2	19.1	19.0	18.9	18.8
16	19.4	19.3	19.2	19.1	19.0	18.9	18.8	18.7	18.6	18.5
18	19.0	18.9	18.8	18.7	18.6	18.5	18.4	18.3	18.2	18.1
20	18.7	18.6	18.5	18.4	18.3	18.2	18.1	18.0	17.9	17.8
22	18.3	18.2	18.1	18.0	17.9	17.8	17.7	17.6	17.5	17.4
24	18.0	17.9	17.8	17.7	17.6	17.5	17.4	17.3	17.2	17.1
26	17.7	17.6	17.5	17.4	17.3	17.2	17.1	17.0	16.9	16.8
	COMPOSITE ROOF SPAN OF 10'-0'									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

4x4x0.125 COLUMN SCHEDULE FOR SOLID ROOF/SCREEN ENCLOSURE COMBO

SCREEN ROOF TRIBUTARY WIDTH (FT.)	8	10	12	14	16	18	20	22	24	26
COL. TRIBUTARY WIDTH SPACING (FT.)	MAXIMUM HEIGHT (FT.)									
8	21.2	21.1	21.0	20.9	20.9	20.8	20.7	20.7	20.6	20.5
10	20.9	20.8	20.8	20.7	2.06	20.5	20.5	20.4	20.3	20.3
12	20.7	20.6	20.5	20.4	20.4	20.3	20.2	20.1	20.1	20.0
14	20.4	20.3	20.3	20.2	20.1	20.0	20.0	19.9	19.8	19.7
16	20.2	20.1	20.0	19.9	19.9	19.8	19.7	19.6	19.6	19.5
18	19.9	19.8	19.8	19.7	19.6	19.5	19.5	19.4	19.3	19.2
20	19.7	19.6	19.5	19.4	19.4	19.3	19.2	19.1	19.1	19.0
22	19.4	19.3	19.3	19.2	19.1	19.0	19.0	18.9	18.8	18.7
24	19.1	19.1	19.0	18.9	18.9	18.8	18.7	18.6	18.6	18.5
26	18.9	18.8	18.8	18.7	18.6	18.5	18.5	18.4	18.3	18.2
	COMPOSITE ROOF SPAN OF 10'-0"									

HEIGHTS MAY BE INTERPOLATED, BUT NOT EXTRAPOLATED

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Robert C. Scroggins, P E
FL Registration No. 56158
08/27/13

To the best of the Design Engineer's knowledge, the plans and specifications for this project comply with the applicable minimum building codes as determined by the local authority in accordance with the Florida Statutes.

REV.	DATE	DESCRIPTION

Project No. #13-002 11
Drawn By: TLW
Checked By: RCS
Approved By: RCS
Date: 08/27/13

Client: Florida Pool Enclosures, Inc

Project: Residential Pool Screen Enclosure
_______________, Florida

Structural Column/Beam Schedules for Solid Roof

Sheet
S-2.11