

DATE07/11/2007

Columbia County Building Permit

This Permit Expires One Year From the Date of Issue

PERMIT000026013

APPLICANTCRAIG TIMBERLAKE

PHONE352-472-6850

ADDRESS25370NW 8TH PLACE

NEWBERRYFL32669

OWNERPHILLIP MOSES JR

PHONE755-2848

ADDRESS383SW SWEETBREEZE DRIVE

LAKE CITYFL32024

CONTRACTORTIMBERLAKE ALUMINUM

PHONE352-472-6850

LOCATION OF PROPERTY

HWY 90, L INTO CYPRESS LAKE, 4TH LOT ON RIGHT

TYPE DEVELOPMENT

POOL ENCLOSURE

ESTIMATED COST OF CONSTRUCTION

7991.00

HEATED FLOOR AREA

TOTAL AREA

HEIGHT

STORIES

FOUNDATION

WALLS

ROOF PITCH

FLOOR

LAND USE & ZONING

RSF-2

MAX. HEIGHT

35

Minimum Set Back Requirments:

STREET-FRONT

25.00

REAR

15.00

SIDE

10.00

NO. EX.D.U.

1

FLOOD ZONE

NA

DEVELOPMENT PERMIT NO.

PARCEL ID

33-3S-16-02434-004

SUBDIVISION

CYPRESS LAKE

LOT

4

BLOCK

A

PHASE

UNIT

TOTAL ACRES

0.94

SCC056711

Culvert Permit No.

Culvert Waiver

Contractor's License Number

Applicant/Owner/Contractor

EXISTING

X07-0271

CS

JH

N

Driveway Connection

Septic Tank Number

LU & Zoning checked by

Approved for Issuance

New Resident

COMMENTS:

OVER EXISTING POOL, NOC ON FILE

Check # or Cash

1507

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power

Foundation

Monolithic

date/app. by

date/app. by

date/app. by

Under slab rough-in plumbing

Slab

Sheathing/Nailing

date/app. by

date/app. by

date/app. by

Framing

Rough-in plumbing above slab and below wood floor

date/app. by

date/app. by

Electrical rough-in

Heat & Air Duct

Peri. beam (Lintel)

date/app. by

date/app. by

date/app. by

Permanent power

C.O. Final

Culvert

date/app. by

date/app. by

date/app. by

M/H tie downs, blocking, electricity and plumbing

Pool

date/app. by

date/app. by

Reconnection

Pump pole

Utility Pole

date/app. by

date/app. by

date/app. by

M/H Pole

Travel Trailer

Re-roof

date/app. by

date/app. by

date/app. by

BUILDING PERMIT FEE \$

40.00

CERTIFICATION FEE \$

0.00

SURCHARGE FEE \$

0.00

MISC. FEES \$

0.00

ZONING CERT. FEE \$

50.00

FIRE FEE \$

0.00

WASTE FEE \$

FLOOD DEVELOPMENT FEE \$

FLOOD ZONE FEE \$

CULVERT FEE \$

TOTAL FEE

90.00

INSPECTORS OFFICE

CLERKS OFFICE

NOTICE: IN ADDITION TO THE REQUIREMENTS OF THIS PERMIT, THERE MAY BE ADDITIONAL RESTRICTIONS APPLICABLE TO THIS PROPERTY THAT MAY BE FOUND IN THE PUBLIC RECORDS OF THIS COUNTY. AND THERE MAY BE ADDITIONAL PERMITS REQUIRED FROM OTHER GOVERNMENTAL ENTITIES SUCH AS WATER MANAGEMENT DISTRICTS, STATE AGENCIES, OR FEDERAL AGENCIES.

"WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT MAY RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR AN ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT."

This Permit Must Be Prominently Posted on Premises During Construction

PLEASE NOTIFY THE COLUMBIA COUNTY BUILDING DEPARTMENT AT LEAST 24 HOURS IN ADVANCE OF EACH INSPECTION, IN ORDER THAT IT MAY BE MADE WITHOUT DELAY OR INCONVIENCE, PHONE 758-1008. THIS PERMIT IS NOT VALID UNLESS THE WORK AUTHORIZED BY IT IS COMMENCED WITHIN 6 MONTHS AFTER ISSUANCE.

The Issuance of this Permit Does Not Waive Compliance by Permittee with Deed Restrictions.

Talked to
Craig on
7-9-07
UH

Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0706-93 Date Received 6/29/07 By CF Permit # 26013
Application Approved by - Zoning Official CS/CH Date 7/6/07 Plans Examiner OK JTH Date 7-6-07
Flood Zone N/A Development Permit — Zoning RSF2 Land Use Plan Map Category R-LD
Comments POOL-28883 NOC on file 1507

Applicants Name Craig Timberlake Timberlake Aluminum Cons. Phone 352-472-6850
Address 25370 NW 8th Place Newberry, FL 32669
Owners Name Philip & Sarah Moses Phone 386-755-2848
911 Address 383 SW Sweetbreeze Dr. Lake City, FL
Contractors Name Timberlake Aluminum Construction Phone 352-472-6850
Address 25370 NW 8th Place Newberry, FL 32669
Fee Simple Owner Name & Address N/A
Bonding Co. Name & Address N/A
Architect/Engineer Name & Address Lawrence E. Bennett P.O. Box 214368 South Daytona, FL 32121
Mortgage Lenders Name & Address N/A

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy

Property ID Number 33-35-16-02434-004 Estimated Cost of Construction \$7991.00

Subdivision Name Sweetbreeze Lot 4 Block A Unit — Phase —

Driving Directions South on N Hernando St. toward E. Orange St.

(R) onto US-90 / E Duval (4.9 miles) (L) onto SW Sweetbreeze Dr.

Type of Construction Pool Enclosure of existing pool Number of Existing Dwellings on Property —

Total Acreage .941 Lot Size — Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 60' Side 30' Side 40' Rear 60'

Total Building Height — Number of Stories — Heated Floor Area — Roof Pitch —

Application is hereby made to obtain a permit to do work and installations as indicated. I certify that no work or installation has commenced prior to the issuance of a permit and that all work be performed to meet the standards of all laws regulating construction in this jurisdiction.

OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

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Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me
this — day of — 20—

Personally known — or Produced Identification —

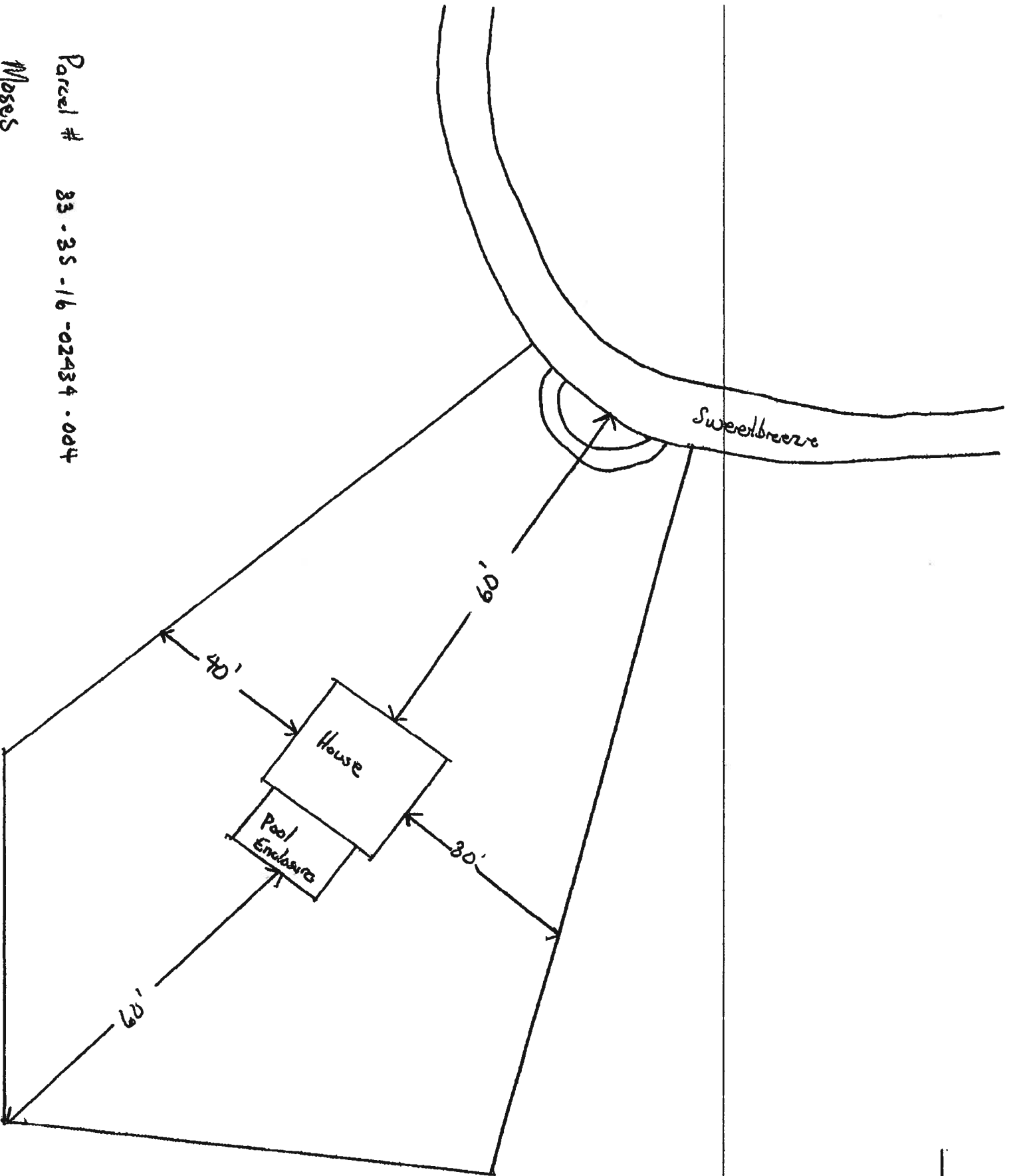
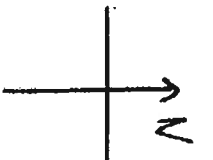
Craig Timberlake
Contractor Signature
Contractors License Number SCC 056711
Competency Card Number —
NOTARY STAMP/SEAL RAYMOND M. DREWNOWSKI
Comm# DD0881685
Expires 6/4/2011
Florida Notary Assn., Inc.
—
Notary Signature

@ CAM112M01	S	CamaUSA Appraisal System		Columbia County
6/29/2007 10:23		Legal Description Maintenance	42500	Land 001 *
Year T Property		Sel		AG 000
2007 R 33-3S-16-02434-004		...	189379	Bldg 001
383 SWEETBREEZE DR SW			6802	Xfea 003
MOSES PHILIP J JR & SARAI C			238681	TOTAL B

1	LOT 4 BLOCK A CYPRESS LAKE S/D	ORB 755-054, DIV 943-2542,	2
3	949-810, WD 1095-1716		4
5			6
7			8
9			10
11			12
13			14
15			16
17			18
19			20
21			22
23			24
25			26
27			28

Mnt 9/20/2006 THRESA

F1=Task F3=Exit F4=Prompt F10=GoTo PgUp/PgDn F24=More



Parcel # 83-35-16-02434-004
Moses

Notice of Commencement

State Of Florida

County of Columbia

Inst: 200712014493 Date: 6/29/2007 Time: 11:01 AM
27 DC, P. DeWitt Cason, Columbia County Page 1 of 1

1. Description of Property Residential
2. Parcel ID# 33-35-16 62434-001
3. General Description of Improvement: Screen Enclosure
4. Owner Name and Address: Philip & Sarai Moses
383 SW Sweetbreeze Dr Lake City FL 32055
5. Interest in Property: Owner 100%
6. Fee Simple Titleholder(if other than owner): None
7. Contractor Name: Timberlake Aluminum
8. Surety: None
9. Lender: _____ (If you have a loan and payment(draws) will be made from the lender--- the name must be listed.)
10. Person in the State of Florida designated to receive notices or other documents that may be served as provided by Florida Statutes 713.13(1) (a) (7).
NONE
- In addition to himself, owner designates : NONE to receive a copy of the Leinor's notice as provided by the Florida Statutes 713.131b
12. Expiration Notice: Notice of Commencement (expires 1 year from the date of recording)
13. Prepared by: Peeler Pools, Inc. for Timberlake Aluminum
14. Return to: Peeler Pools, Inc 9878 S. US Hwy 441 Lake City, FL 32025

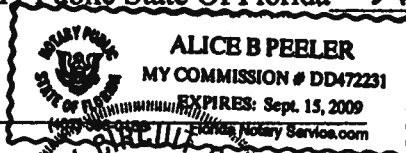
Owner Name (Print) Sarai Moses Owner Name Signature Sarai Moses

Sworn to and subscribed before me this 6th day of June, 2007

Personally Known X Produced ID _____ Did/ Did not take Oath _____

Notary's Name Alice B Peeler Notary Public State Of Florida Alice B Peeler

Commission Expiry and Number _____



STATE OF FLORIDA, COUNTY OF COLUMBIA
I HEREBY CERTIFY, that the above and foregoing
is a true copy of the original filed in this office.
R. DEWITT CASON, CLERK OF COURTS

By Aaron Feagles
Deputy Clerk

Date 06-29-2007



Timberlake Aluminum Construction, Inc.

25370 NW 8TH PLACE
NEWBERRY, FL 32669
(352) 472-6850
1-800-976-9890
FAX (352) 472-6855

TO:
RE LETTER OF AUTHORIZATION

THIS LETTER AUTHORIZES CRAIG TIMBERLAKE TO SIGN ALL APPLICABLE
FORMS AND AFFIDAVITS NECESSARY FOR OBTAINING PERMITS OR RENEWAL OF
LICENSE FOR BONNIE L JORDAN SCC 056711.


BONNIE L JORDAN

SWORN TO AND SUBSCRIBED BEFORE ME THIS 3rd DAY OF May 2007

NOTARY PUBLIC
AFFIX SEAL





Jennifer R. Smith
My Commission DD288641
Expires February 08, 2008



CRAIG TIMBERLAKE, President
HARVEY STOKES, Sales

Timberlake

Aluminum Construction, Inc.

Don't clean it - screen it!

License # SCC056711

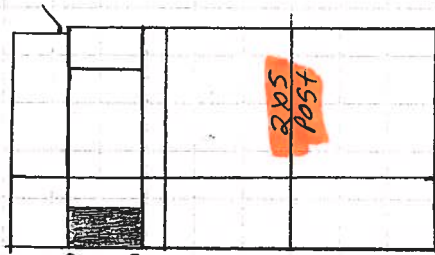
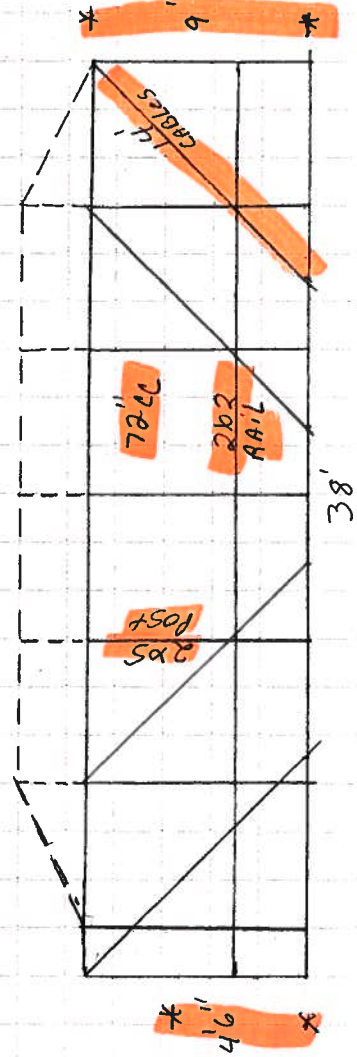
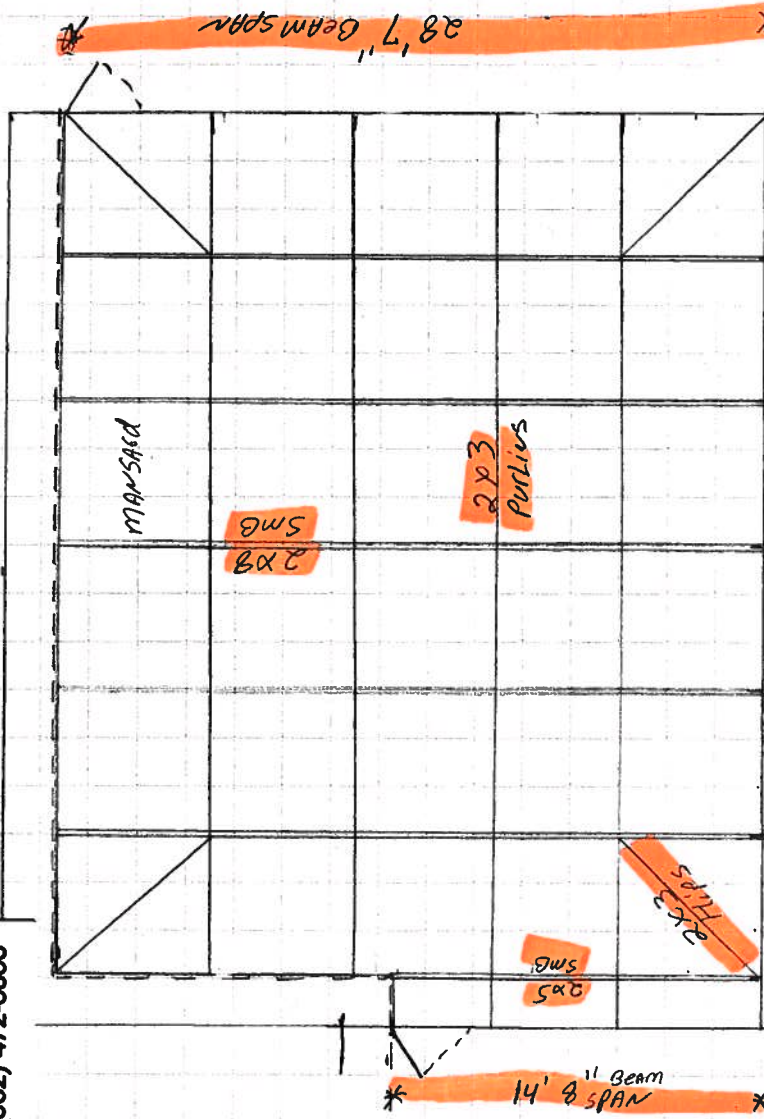
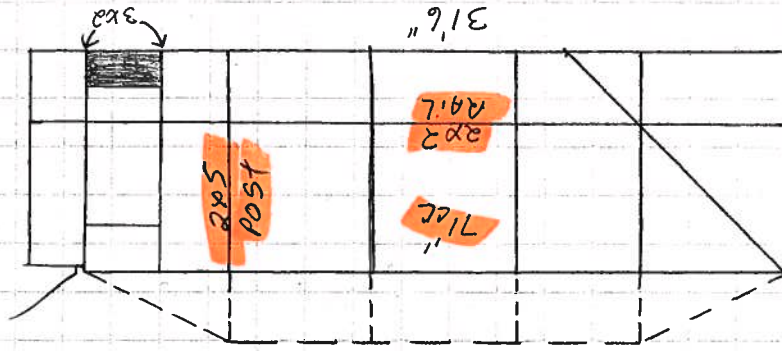
Toll Free 1-800-976-9890

Phone (352) 472-6850

Fax (352) 472-6855

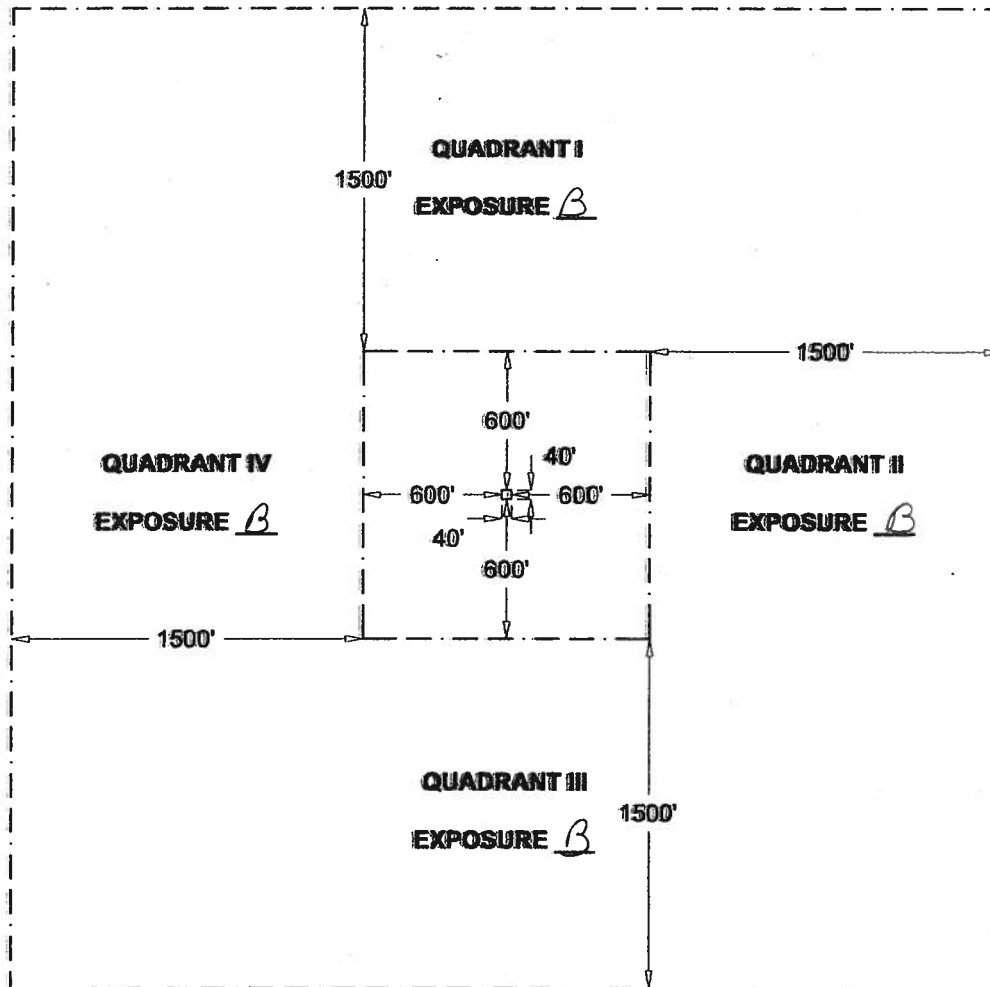
25370 NW 8th Place
Newberry, Florida 32669

MOSE/Peeler Pools # 119
383 SW Sweet Breeze Dr
LAKE CITY, FL



FILE COPY

SITE EXPOSURE EVALUATION FORM



NOTE: ZONES ARE MEASURED FROM STRUCTURE OUTWARD

SITE

SCALE: 1" = 800'

USING THE FOLLOWING CRITERIA, EVALUATE EACH QUADRANT AND MARK IT AS 'B', 'C', OR 'D' EXPOSURE. 'C' OR 'D' EXPOSURE IN ANY QUADRANT MAKE THE SITE THAT EXPOSURE.

EXPOSURE C: 1. OPEN TERRAIN FOR MORE THAN 1,500 FEET IN ANY QUADRANT.

2. ANY 'C' EXPOSURE FOR GREATER THAN 600 FEET IN ANY QUADRANT.

3. NO SHORT TERM CHANGES IN 'B', 2 YEARS BEFORE SITE EVALUATION AND BUILD OUT WITHIN 3 YEARS, SITE WILL BE 'B'.

4. FLAT, OPEN COUNTRY, GRASSLANDS, PONDS AND OCEAN OR SHORELINES IN ANY QUADRANT FOR GREATER THAN 1,500 FEET.

EXPOSURE D: FLAT, UNOBSTRUCTED AREAS THAT ARE 1,500 FT INLAND FROM THE SHORE LINE AND ARE EXPOSED TO WIND FLOWING OVER WATER FOR A DISTANCE OF AT LEAST 1 MILE.

SITE IS EXPOSURE: B EVALUATED BY: Craig Timberlake DATE: 6-19-07

SIGNATURE: Craig Timberlake LICENSE #: SCC 056711

Design Check List for Pool Enclosures (Page 1 of 4)

I. Design Statement:

These plans have been designed in accordance with the Aluminum Structures Design Manual by Lawrence E. Bennett and are in compliance with the 2004 Florida Building Code Edition with 2006 Supplements, Chapter 20, AS35 and The 2005 Aluminum Design Manual Part I-A & II-A; Exposure 'B' ☐ or 'C' ☐ or 'D' ☐; Importance Factor 0.87 for 100 MPH and 0.77 for 110 MPH and higher; Negative I.P.C. 0.00; _____ MPH Wind Zone for 3 second wind gust; Basic Wind Pressure _____; Design pressures are _____ PSF for roofs & _____ PSF for walls. (see page 1ii for wind loads and design pressures) A 300 PLF point load is also considered for screen roof members.

Notes: Wind velocity zones and exposure category is determined by local code. Design pressures and conversion multipliers are on page 1-ii.

II. Host Structure Adequacy Statement:

I have inspected and verify that the host structure is in good repair and attachments made to the structure will be solid.

Craig Timberlake Phone: 472-6850
Contractor / Authorized Rep* Name (please print)

Craig Timberlake Date: 6-19-07
Contractor / Authorized Rep* Signature

Mose / 383 SE Sweet Breeze Dr Lake City
Job Name & Address

Note: If the total of beam span & upright height exceeds 50' or upright height exceeds 16', site specific engineering is required.

III. Building Permit Application Package contains the following:

- | | Yes | No |
|--|-------------------------------------|--------------------------|
| A. Project name & address on plans | ☒ | ☐ |
| B. Site plan or survey with enclosure location | ☒ | ☐ |
| C. Contractor's / Designer's name, address, phone number, & signature on plans | ☒ | ☐ |
| D. Site exposure form completed | ☒ | ☐ |
| E. Enclosure layout drawing @ 1/8" or 1/10" scale with the following: | ☒ | ☐ |
| 1. Plan view with host structure, enclosure length, projection from host structure, and all dimensions | ☒ | ☐ |
| 2. Front and side elevation views with all dimensions & heights | ☒ | ☐ |
| Note:
All mansard wall drawings shall include mansard panel at the top of the wall. | | |
| 3. Beam location (show in plan & elevation view) & size (Table 1.1 & 1.6) | ☒ | ☐ |

Roof frame member allowable span conversions from 120 MPH wind zone, 'B' Exposure to _____ MPH wind zone and / or ☐ 'C' or ☐ 'D' Exposure for load width of _____:

Note: Conversion factors do not apply to members subject to point load (P).

Look up span in appropriate 120 MPH span table and apply the following formula:

$$\begin{array}{c} \text{Span} \\ \text{@ 120 MPH} \end{array} \quad \begin{array}{c} \text{Required Converted} \\ \text{Span / Height} \end{array}$$
$$\frac{\text{Wind Zone Multiplier (see page 1ii)}}{\text{Exposure Multiplier (see page 1ii)}} \times \text{Span} = \text{Required Converted Span / Height}$$

0 (b or d) x 0 (b or d) x 0 (b or d) = 0

- | | | |
|--|-------------------------------------|-------------------------------------|
| 4. Upright location (show in plan & elevation view) & size (Table 1.3 & 1.6) | ☒ | ☐ |
| 5. Chair rail & girt size, length, & spacing (Table 1.4) | ☒ | ☐ |
| 6. Eave rail size, length, spacing and stitching of (Table 1.2) | ☐ | ☒ |

* Must have attended Engineer's Continuing Education Class within the past two years.

b-1
FILE COPY

Design Check List for Pool Enclosures (Page 2 of 4)

Wall frame member allowable span conversions from 120 MPH wind zone, "B" Exposure to 0.00 MPH wind zone and / or ☐ "C" or ☐ "D" Exposure for load width of 1.00 :
Look up span in appropriate 120 MPH span table and apply the following formula:

$$\begin{array}{c} \text{Span / Height} \\ \text{@ 120 MPH} \\ \text{or } \underline{\hspace{1cm}} \text{ MPH} \end{array} \quad \begin{array}{c} \text{Wind Zone} \\ \text{Multiplier **} \end{array} \quad \begin{array}{c} \underline{0} \text{ (b or d)} \times \underline{1.00} \text{ (b or d)} \times \underline{0} \text{ (b or d)} = \underline{0} \end{array} \quad \begin{array}{c} \text{Required Converted} \\ \text{Span / Height} \end{array}$$

$\text{Exposure Multiplier (see page 1ii)}$

	Yes	No
7. Enclosure roof diagonal bracing in plan view	☒	☐
8. Knee braces length, location, & size (Table 1.7)	☐	☒
9. Wall cables or K-bracing sizes shown in wall views	☒	☐
IV. Highlight details from the Aluminum Structures Design Manual:	Yes	No
A. Beam & purlin tables with size, thickness, spacing, & spans / lengths (Tables 1.1 & 1.2 or 1.9.1 & 1.9.2)	☒	☐
B. Upright & girt tables with size, thickness, spacing, & spans / lengths (Tables 1.3 & 1.4)	☒	☐
C. Table 1.6 with beam & upright combination	☒	☐
D. Connection details to be use such as:		
1. Beam to upright	☒	☐
2. Beam to wall	☒	☐
3. Beam to beam	☒	☐
4. Chair rail, purlins, & knee braces	☒	☐
5. Extruded gutter connections	☒	☐
6. Angle to deck and / or sole plate	☒	☐
7. Anchors go through pavers into concrete	☒	☐
8. Minimum footing and / or knee wall details	☒	☐
9. Cable or K- brace details Section 1	☒	☐

Wall area calculations for cables:

W = wall width, H = wall height, R = rise

W1 = width @ top of mansard, W2 = width @ top of wall

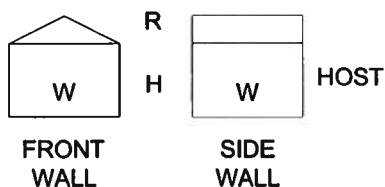
E. Select footing from examples in manual.

Example 1: Flat Roof

$$\begin{array}{l} \text{Front wall @ eave: } \frac{\text{ft.} \times \text{ft.}}{W \quad H} = \frac{0.00 \text{ ft.}^2}{\text{ft.}} @ 100\% = 0.00 \text{ ft.}^2 \\ \text{Largest side wall: } \frac{\text{ft.} \times \text{ft.}}{W \quad H} = \frac{0.00 \text{ ft.}^2}{\text{ft.}} @ 50\% = 0.00 \text{ ft.}^2 \\ \text{Total area / (233 ft.}^2 \text{ / cable for 3/32") = } 0 \text{ cable pairs} \\ \text{or} \\ \text{Total area / (445 ft.}^2 \text{ / cable for 1/8") = } 0 \text{ cable pairs} \\ \text{Side wall cable calculation: } \frac{0.00 \text{ ft.}^2}{\text{ft.}} @ 100\% = 0.00 \text{ ft.}^2 \\ \text{Side wall area / (233 ft.}^2 \text{ / cable for 3/32") = } 0 \text{ cable(s)} \\ \text{or} \\ \text{Side wall area / (445 ft.}^2 \text{ / cable for 1/8") = } 0 \text{ cable(s)} \end{array}$$

TOTAL = 0.00 ft.²

Design Check List for Pool Enclosures (Page 3 of 4)



Example 2: Gable Roof

Front wall @ eave: $\frac{W}{ft.} \times \frac{H}{ft.} = 0.00 \text{ ft.}^2 @ 100\% = 0.00 \text{ ft.}^2$

Front gable rise: $\frac{R}{ft.} \times \frac{1}{2} \left(\frac{W}{ft.} \right) = \frac{0.00 \text{ ft.}^2}{b} @ 100\% = 0.00 \text{ ft.}^2$

Largest side wall: $\frac{W}{ft.} \times \frac{H}{ft.} = \frac{0.00 \text{ ft.}^2}{c} @ 50\% = 0.00 \text{ ft.}^2$

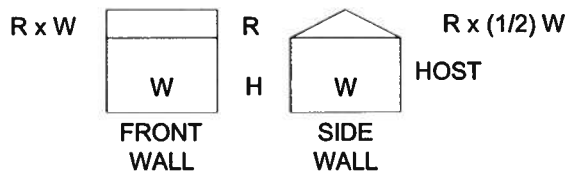
Largest side gable rise: $\frac{R}{ft.} \times \frac{1}{2} \left(\frac{W}{ft.} \right) = \frac{0.00 \text{ ft.}^2}{d} @ 50\% = 0.00 \text{ ft.}^2$

TOTAL = 0.00 ft.²

Total area / (233 ft.² / cable for 3/32") = 0 cable pairs
or
Total area / (445 ft.² / cable for 1/8") = 0 cable pairs

Side wall cable calculation: $\frac{0.00 \text{ ft.}^2}{c} + \frac{0.00 \text{ ft.}^2}{d} = 0.00 \text{ ft.}^2 @ 100\% = 0.00 \text{ ft.}^2$

Side wall area / (233 ft.² / cable for 3/32") = 0 cable(s)
or
Side wall area / (445 ft.² / cable for 1/8") = 0 cable(s)



Example 3: Transverse Gable Roof

Front wall @ eave: $\frac{W}{ft.} \times \frac{H}{ft.} = 0.00 \text{ ft.}^2 @ 100\% = 0.00 \text{ ft.}^2$

Front gable rise: $\frac{R}{ft.} \times \frac{1}{2} \left(\frac{W}{ft.} \right) = \frac{0.00 \text{ ft.}^2}{b} @ 100\% = 0.00 \text{ ft.}^2$

Largest side wall: $\frac{W}{ft.} \times \frac{H}{ft.} = \frac{0.00 \text{ ft.}^2}{c} @ 50\% = 0.00 \text{ ft.}^2$

Largest side gable rise: $\frac{R}{ft.} \times \frac{1}{2} \left(\frac{W}{ft.} \right) = \frac{0.00 \text{ ft.}^2}{d} @ 50\% = 0.00 \text{ ft.}^2$

TOTAL = 0.00 ft.²

Total area / (233 ft.² / cable for 3/32") = 0 cable pairs
or
Total area / (445 ft.² / cable for 1/8") = 0 cable pairs

Side wall cable calculation: $\frac{0.00 \text{ ft.}^2}{c} + \frac{0.00 \text{ ft.}^2}{d} = 0.00 \text{ ft.}^2 @ 100\% = 0.00 \text{ ft.}^2$

Side wall area / (233 ft.² / cable for 3/32") = 0 cable(s)
or
Side wall area / (445 ft.² / cable for 1/8") = 0 cable(s)

Design Check List for Pool Enclosures (Page 4 of 4)

Example 4: Mansard Roof

Front wall @ eave: $\frac{38 \text{ ft.}}{W} \times \frac{9 \text{ ft.}}{H} = \frac{342 \text{ ft.}^2}{a} @ 100\% = 342 \text{ ft.}^2$
 Front mansard rise: $\frac{3 \text{ ft.}}{R} \times \frac{1}{2}(\frac{38 \text{ ft.}}{W1} + \frac{26 \text{ ft.}}{W2}) = \frac{96 \text{ ft.}^2}{b} @ 100\% = 96 \text{ ft.}^2$
 Largest side wall: $\frac{31\frac{1}{6} \text{ ft.}}{W} \times \frac{9 \text{ ft.}}{H} = \frac{283.5 \text{ ft.}^2}{c} @ 50\% = 141.75 \text{ ft.}^2$
 Largest side mansard rise: $\frac{3 \text{ ft.}}{R} \times \frac{1}{2}(\frac{31\frac{1}{6} \text{ ft.}}{W1} + \frac{19.5 \text{ ft.}}{W2}) = \frac{76.5 \text{ ft.}^2}{d} @ 50\% = 38.25 \text{ ft.}^2$
 TOTAL = 618 ft.²
 Total area / (233 ft.² / cable for 3/32") = 0 cable pairs
 or
 Total area / (445 ft.² / cable for 1/8") = 2 cable pairs
 Side wall cable calculation: $\frac{283.5 \text{ ft.}^2}{c} + \frac{76.5 \text{ ft.}^2}{d} = \frac{360 \text{ ft.}^2}{e} @ 100\% = 360 \text{ ft.}^2$
 Side wall area / (233 ft.² / cable for 3/32") = 0 cable(s)
 or
 Side wall area / (445 ft.² / cable for 1/8") = 1 cable(s)

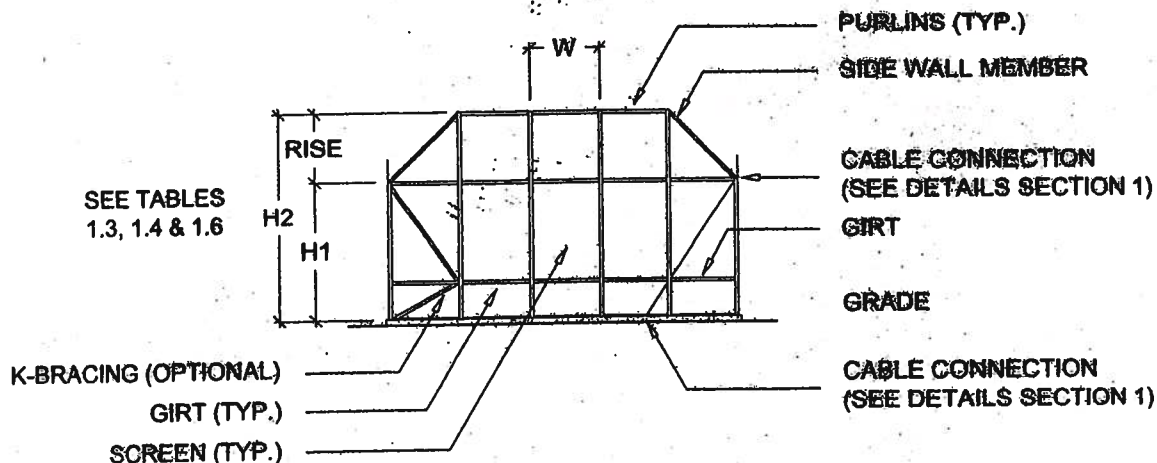
Example 5: Dome Roof

Front dome wall @ eave: $\frac{\text{ft.}}{W} \times \frac{\text{ft.}}{H} = \frac{0.00 \text{ ft.}^2}{a} @ 100\% = 0.00 \text{ ft.}^2$
 Front dome rise: $\frac{\text{ft.}}{R} \times \frac{1}{2}(\frac{\text{ft.}}{W}) = \frac{0.00 \text{ ft.}^2}{b} @ 100\% = 0.00 \text{ ft.}^2$
 Largest side wall: $\frac{\text{ft.}}{W} \times \frac{\text{ft.}}{H} = \frac{0.00 \text{ ft.}^2}{c} @ 50\% = 0.00 \text{ ft.}^2$
 Largest side dome rise: $\frac{\text{ft.}}{R} \times \frac{\text{ft.}}{W} = \frac{0.00 \text{ ft.}^2}{d} @ 50\% = 0.00 \text{ ft.}^2$
 TOTAL = 0.00 ft.²
 Total area / (233 ft.² / cable for 3/32") = 0 cable pairs
 or
 Total area / (445 ft.² / cable for 1/8") = 0 cable pairs
 Side wall cable calculation: $\frac{0.00 \text{ ft.}^2}{c} + \frac{0.00 \text{ ft.}^2}{d} = \frac{0.00 \text{ ft.}^2}{e} @ 100\% = 0.00 \text{ ft.}^2$
 Side wall area / (233 ft.² / cable for 3/32") = 0 cable(s)
 or
 Side wall area / (445 ft.² / cable for 1/8") = 0 cable(s)

Notes:

SECTION 1

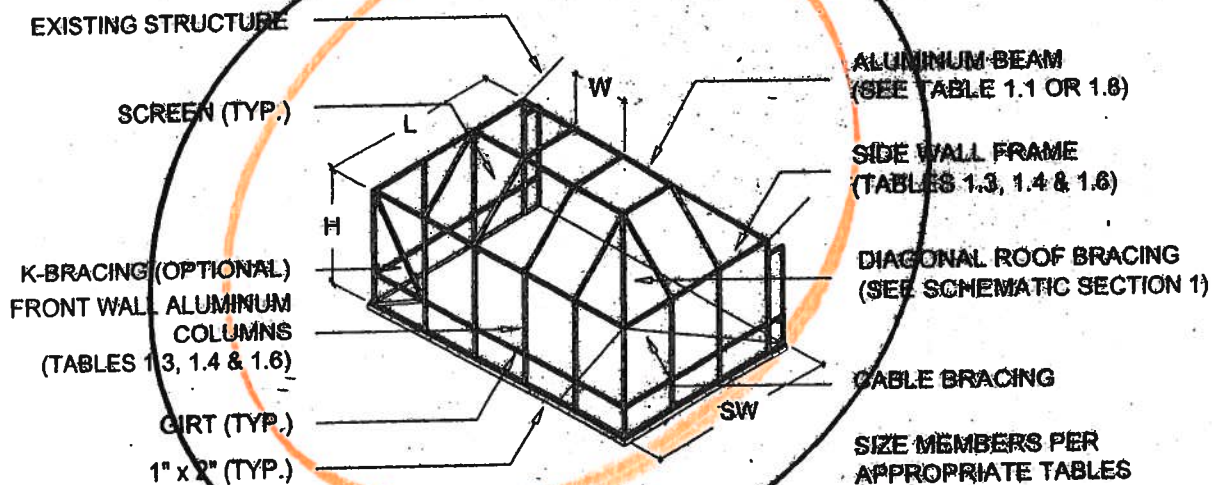
SCREENED ENCLOSURES



NOTE: USE H2 FOR CABLE AREA CALCULATION

TYPICAL MANSARD ROOF - FRONT WALL ELEVATION

SCALE: N.T.S.



TYPICAL MANSARD ROOF - ISOMETRIC

SCALE: N.T.S.

CONNECTION DETAILS AND NOTES ARE FOUND IN THE SUBSEQUENT PAGES.

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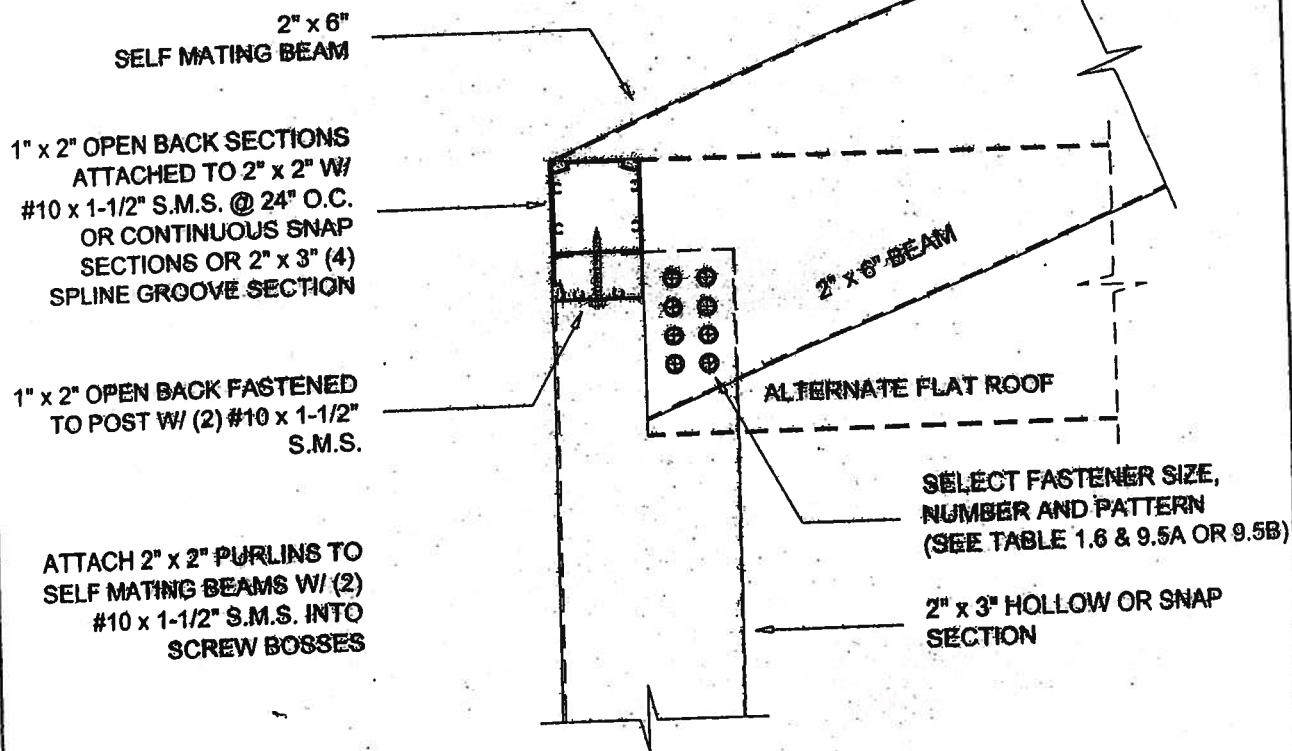
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SCREENED ENCLOSURES

SECTION 1

MINIMUM POST SIZES
REQUIRED FOR EACH BEAM
SIZE (SEE TABLE 1.6)

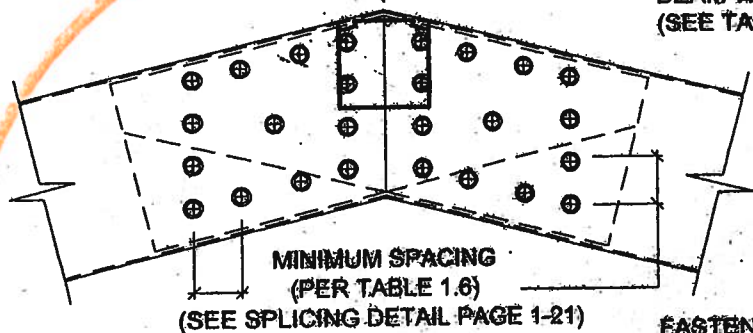


SLOPING BEAM TO UPRIGHT CONNECTION DETAIL (PARTIAL LAP)
SCALE: 3" = 1'-0"

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2" x 2" PURLINS ATTACHED
TO BEAM W/ MIN.
(3) #10 x 1-1/2" S.M.S.

CUT 2" x 4", 2" x 5", OR 2" x 6"
BEAMS TO SLIDE OVER EACH
OTHER 2" x 7" & LARGER
PROVIDE GUSSET PLATE
(INSIDE OR OUTSIDE BEAM)
SAME WALL THICKNESS AS
BEAM WALLS OR LARGER
(SEE TABLE 1.6)

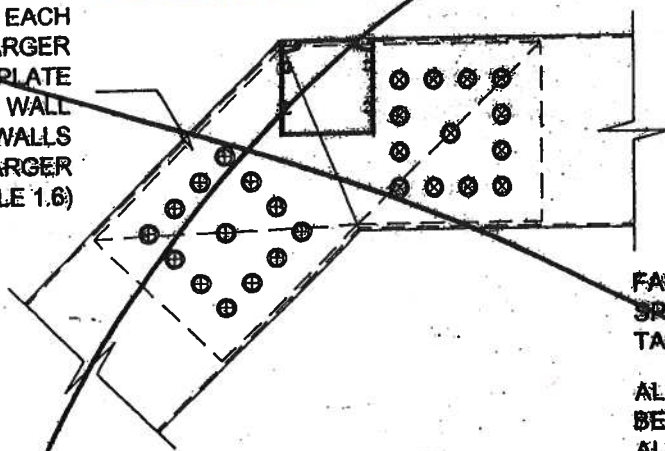


FASTENER SIZE, NUMBER AND
SPACING PER PAGE 1-20(SEE
TABLE 1.6)

**ALTERNATE SIDE PLATE CONNECTION DETAIL
GUSSET PLATE MOUNTED INTERNALLY**

SCALE: 3" = 1'-0"

CUT 2" x 4", 2" x 5", OR 2" x 6"
BEAMS TO SLIDE OVER EACH
OTHER 2" x 7" & LARGER
PROVIDE GUSSET PLATE
(INSIDE BEAM) SAME WALL
THICKNESS AS BEAM WALLS
OR LARGER
(SEE TABLE 1.6)



FASTENER SIZE, NUMBER AND
SPACING PER PAGE 1-20(SEE
TABLE 1.6)

ALL GUSSET PLATES SHALL
BE A MINIMUM OF 5052 H-32
ALLOY OR HAVE AN ULTIMATE
YIELD STRENGTH OF 30 KSI

**ALTERNATE SIDE PLATE CONNECTION DETAIL - MANSARD ROOF
GUSSET PLATE MOUNTED INTERNALLY**

SCALE: 3" = 1'-0"

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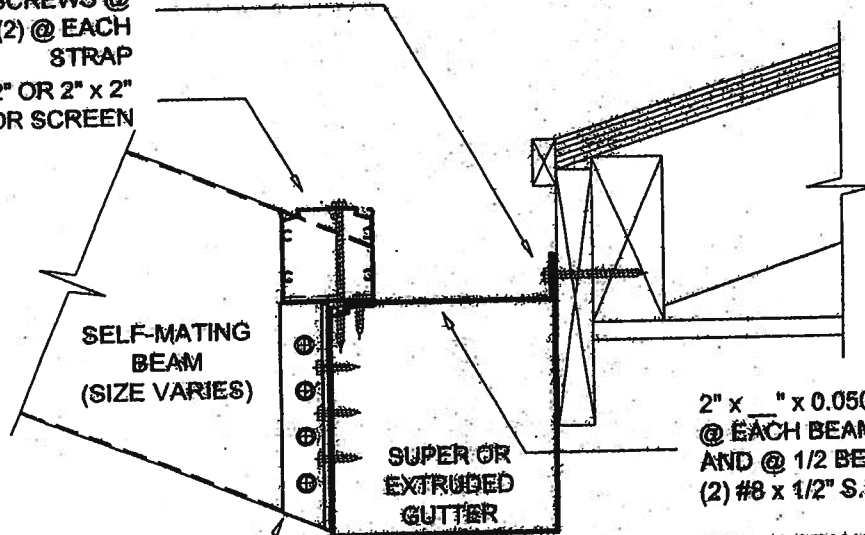
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1/4" x 2" LAG SCREWS @ 24"
O.C. OR #10 x 2" SCREWS @
12" O.C. MIN. AND (2) @ EACH
STRAP
OPTIONAL 1" x 2" OR 2" x 2"
FOR SCREEN



2" x 4" x 0.050" STRAP
@ EACH BEAM CONNECTION
AND @ 1/2 BEAM SPACING W/
(2) #8 x 1/2" S.M.S. PER STRAP

MAX. DISTANCE FROM FASCIA
TO HOST STRUCTURE WALL
(SEE TABLE 1.11)

ANGLE, INTERIOR OR
EXTERIOR RECEIVING
CHANNEL (SEE SECTION 9)

**ALTERNATE SELF MATING BEAM CONNECTION
TO SUPER OR EXTRUDED GUTTER**

SCALE: 3" = 1'-0"

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SECTION 1

SCREENED ENCLOSURES

PANELS / ELEMENTS
UNBRACED BY HOST
STRUCTURE TO BE BRACED
BY DIAGONALS IN
PERIMETER PANELS (MIN.)
ELEMENTS BRACED BY HOST
STRUCTURE CONNECTION
BEAMS AND / OR PURLINS

HOST STRUCTURE

○ ELEMENTS BRACED BY
DIAGONALS

--- ALTERNATE BRACING
PATTERN, CORNER BRACES
STILL REQUIRED

CABLE OR
K-BRACING
(IN WALLS)

TYPICAL LAYOUT
BEAMS OR PURLINS

EXAMPLE OF ALTERNATING
BRACE POSITION

TYPICAL LAYOUT
BEAMS OR PURLINS

CABLE OR
K-BRACING
(IN WALLS)

CABLE OR
K-BRACING
(IN WALLS)

EACH DIAGONAL TO BE
FASTENED EACH END W/ (2)
EACH #10 S.M.S. (MIN.)

ADDITIONAL ROOF BRACING IS
REQUIRED FOR ALL SIDE
WALLS LARGER THAN 4
PANELS. NUMBER OF PANELS
SHOULD BE EVEN TO PERMIT
POSITION OF BRACES
ALTERNATING

2 x 2 (MIN) ROOF DIAGONAL,
MEET WALL AT WALL BRACING
AT CORNERS (TYP.)

(POOL ENCLOSURE SCREEN ROOF MAY BE FLAT, GABLE, MANSARD, DOME, OR HIP)

POOL ENCLOSURE DIAGONAL BRACING - SCHEMATIC PLAN VIEW

SCALE: 3/8" = 1'-0"

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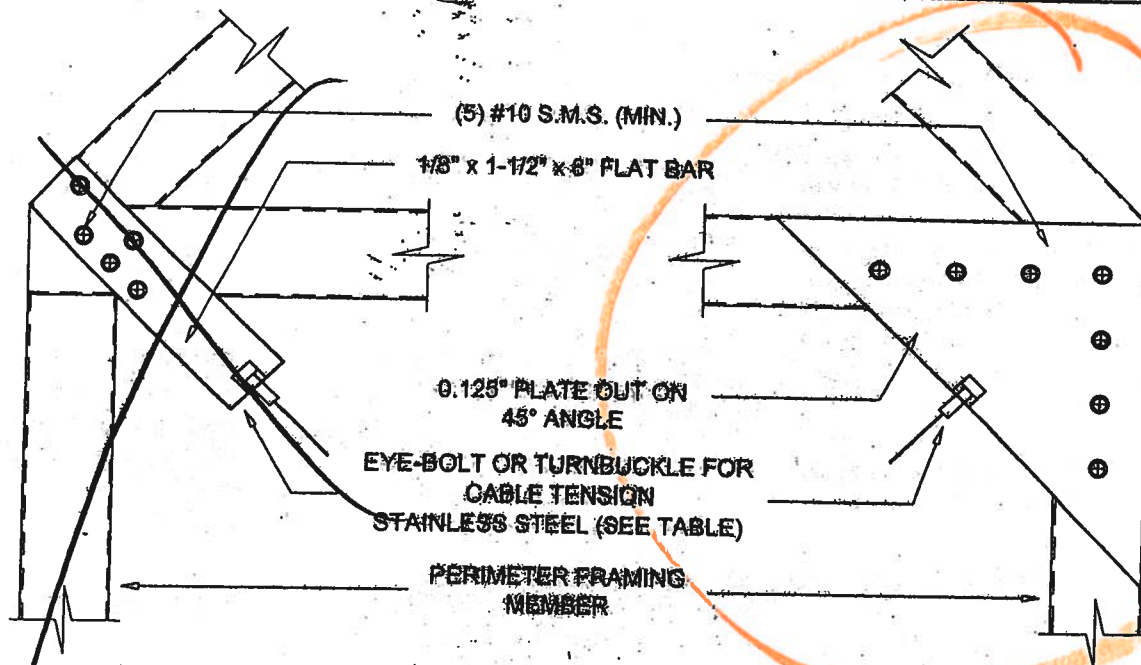
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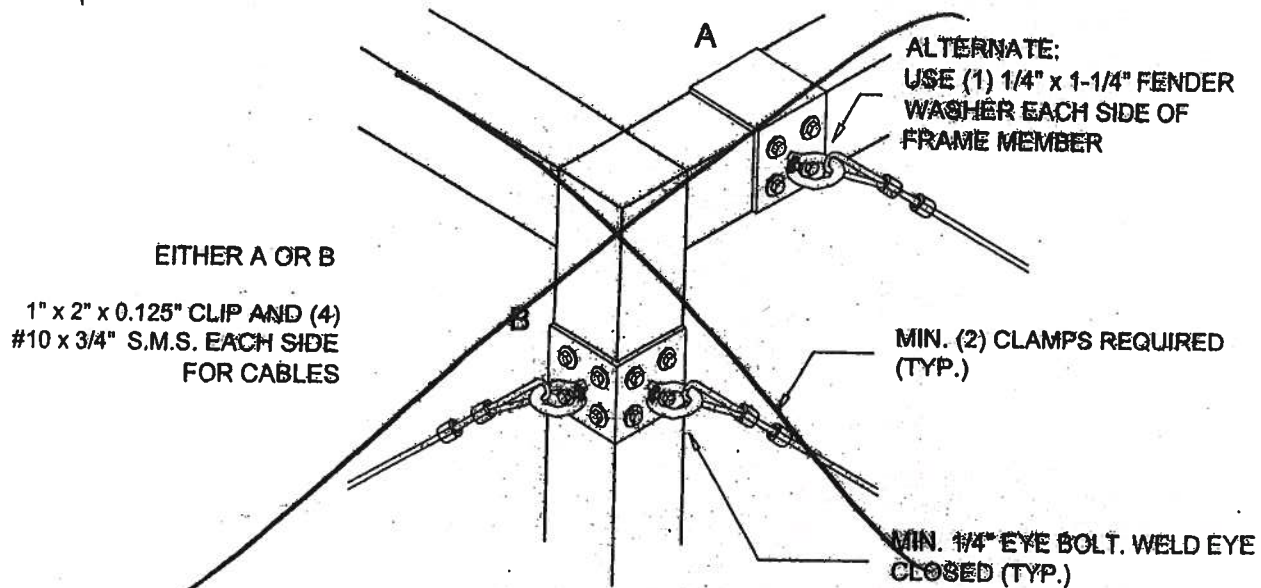
SCREENED ENCLOSURES

SECTION 1



TYPICAL CABLE CONNECTIONS AT CORNER - DETAIL 1

SCALE: 3" = 1'-0"



ALTERNATE TOP CORNER OF CABLE CONNECTION - DETAIL 1A

SCALE: 3" = 1'-0"

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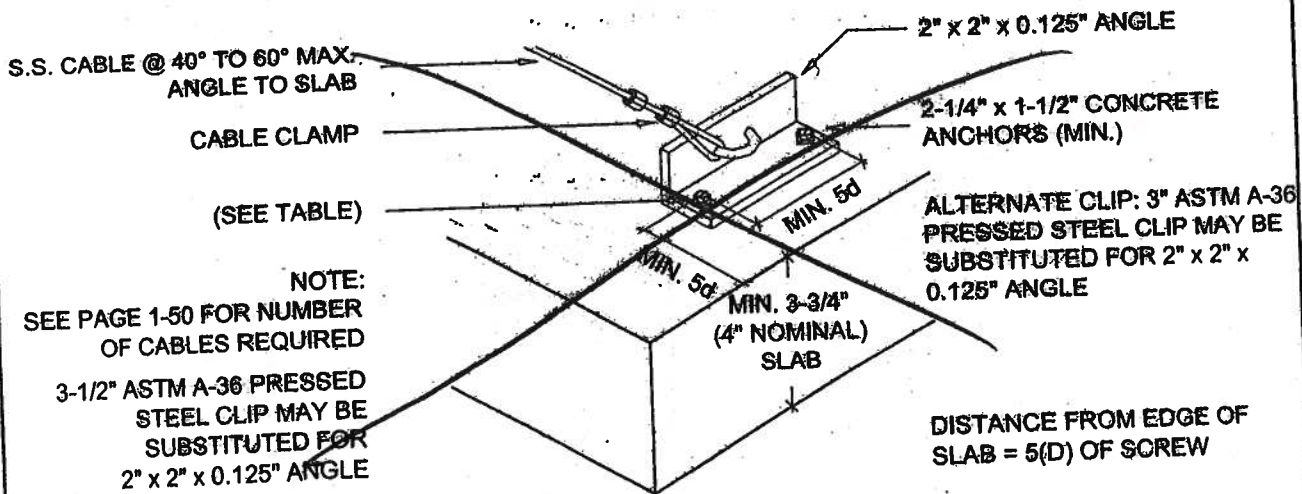
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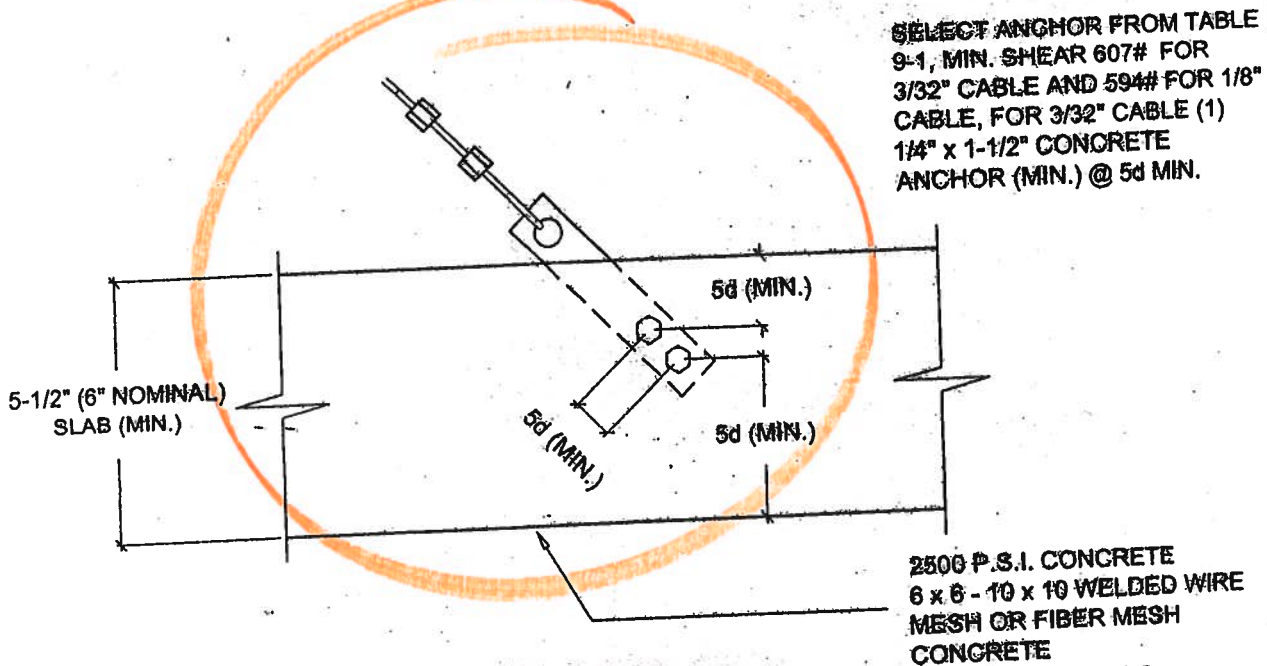
SCREENED ENCLOSURES

SECTION 1



ALTERNATE CABLE CONNECTION AT SLAB DETAIL - DETAIL 2B

SCALE: 3" = 1'-0"



ALTERNATE CABLE CONNECTIONS AT FOUNDATION - DETAIL 2C

SCALE: 3" = 1'-0"

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SECTION 1

SCREENED ENCLOSURES

PURLINS ANCHORED W/
CLIPS OR #10 SCREWS
THROUGH PURLINS INTO
SCREW BOSSSES

EAVE RAILS SHALL BE
STITCHED W/ #10 x 1-1/2" SMS
@ 6" FROM EACH END AND 24"
OC MAX.

FRONT AND SIDE BOTTOM
RAILS ATTACHED TO
CONCRETE W/ 1/4" x 2-1/4"
CONCRETE / MASONRY
ANCHORS @ PRIMARY &
SECONDARY ANGLES OR @ 6"
FROM EACH POST AND 24"
O.C. MAX. AND WALLS MIN. 1"
FROM EDGE OF CONCRETE

GIRTS ANCHORED W/ CLIPS
OR THROUGH #10 SCREWS
INTO SCREW BOSSSES

1" x 2" OR 1" x 3"

PURLIN & CHAIR RAIL DETAIL

SCALE: 3" = 1'-0"

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PAGE

1-58

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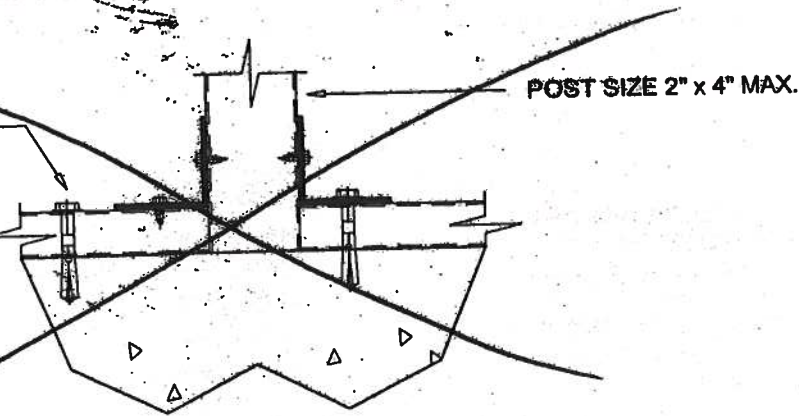
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SCREENED ENCLOSURES

SECTION 1

1" x 2" EXTRUSION ANCHOR
TO CONCRETE W/ CONCRETE
ANCHORS OR THRU PRIMARY
ANGLE 6" MAX. EACH SIDE OF
EACH POST AND @
24" O.C. MAX.
SELECT CONCRETE ANCHORS
FROM SECTION 9

MIN. 3-1/2" SLAB 2500 P.S.I.
CONCRETE 6 x 6 - 10 x 10
WELDED WIRE MESH OR
FIBER MESH CONCRETE

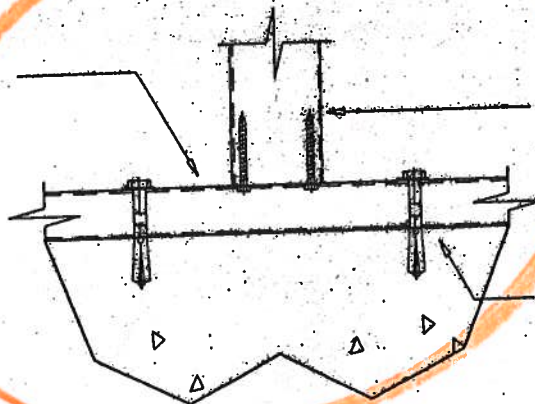


SIDE WALL POST TO PLATE TO CONCRETE DETAIL

SCALE: 3" = 1'-0"

1" x 2" EXTRUSION ANCHOR
TO CONC. W/ CONC. ANCH. 6"
MAX. EA. SIDE OF EA. POST
AND @ 24" O.C. MAX. SELECT
CONCRETE ANCHORS FROM
SECTION 9

MIN. 3-1/2" SLAB 2500 P.S.I.
CONC. 6 x 6 - 10 x 10 W.W.M.
OR FIBER MESH CONC.



2" x 2", 2" x 3" OR 2" x 4"
HOLLOW SECTION
(SEE TABLES)

MIN. (3) #10 x 1-1/2" S.M.S. INTO
SCREW BOSSSES

MASONRY ANCHOR @ 6" EA.
SIDE OF POST AND @ 24" O.C.
MAX. SELECT CONCRETE
ANCHORS FROM SECTION 9

SIDE WALL HOLLOW POST TO BASE DETAIL

SCALE: 3" = 1'-0"

POOL ENCLOSURE UPRIGHT TO DECK ANCHOR REQUIREMENTS

General Notes and Specifications:

1. The uplift load on a pool enclosure upright is calculated as 1/2 the beam span x the beam spacing x the screen load of 7# / Sq. Ft.

EXAMPLE:

FOR A 2" x 6" BEAM WITH A SPAN OF 28' AND A BEAM & UPRIGHT SPACING
OF 7' USE: $1/2 \times 17'-11" \times 7' \times 10\# / \text{Sq. Ft.} = 627.2\# \text{ UPLIFT}$

- Table 1.6 of this manual uses the worst case loads for all cases.
- In all cases there must be a primary anchor within 6" of each side of the upright.
- For attachment to wood deck (min. 2" nominal thickness) use wood anchors with details shown above (min. 1-3/8" embedment).

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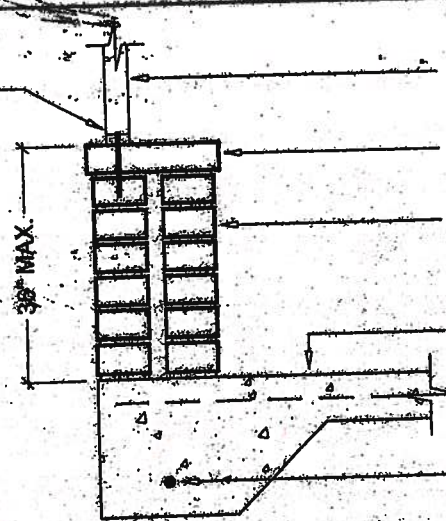
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SCREENED ENCLOSURES

SECTION 1

1/4" x 6" RAWL TAPPER
THROUGH 1" x 2" AND
ROWLOCK INTO FIRST
COURSE OF BRICKS

ALTERNATE CONNECTION OF
SCREENED ENCLOSURE FOR
BRICK OR OTHER NON-
STRUCTURAL KNEE WALL
1" WIDE x 0.063" THICK STRAP
@ EACH POST FROM POST TO
FOOTING W/ (2) #10 x 3/4"
S.M.S. STRAP TO POST AND
(1) 1/4" x 1-3/4" CONCRETE
ANCHOR TO SLAB OR
FOOTING



ALUMINUM FRAME SCREEN
WALL

CAP BRICK

BRICK KNEEWALL TYPE 'S'
MORTAR REQUIRED FOR
LOAD BEARING BRICK WALL

4" (NOMINAL) PATIO
CONCRETE SLAB (SEE NOTES
CONCERNING FIBER MESH)

(3) #30 BARS OR (1)
#50 BAR W/ 2-1/2" COVER
(TYP.)

BRICK KNEEWALL AND FOUNDATION FOR SCREEN WALLS

SCALE: 3/4" = 1'-0"

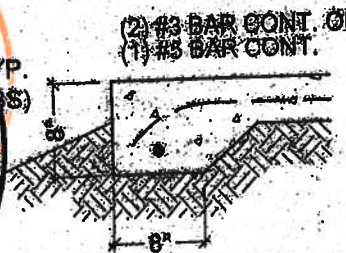
Existing SLAB

1" PER FT. MAX. FOR
2'-0" MIN.
BEFORE SLOPE

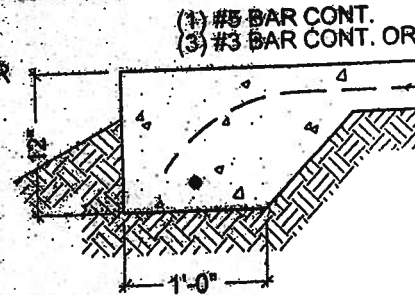
3-1/2" (TYP.
ALL SLABS)



TYPE I
FLAT SLOPE / NO FOOTING
0'-2" / 12"



TYPE II
MODERATE SLOPE FOOTING
2' / 12" - 1'-10"



TYPE III
STEEP SLOPE FOOTING
> 1'-10"

Notes for all foundation types:

1. The foundations shown are based on a minimum soil bearing pressure of 1,500 PSF. Bearing capacity of soil shall be verified prior to placing slab by field soil test (soil penetrometer) or a soil testing lab.
2. The slab / foundation shall be cleared of debris, roots and compacted prior to placement of concrete.
3. No footing is required except when addressing erosion until the slab is required under the load bearing wall beams exceeds the span per table on page 1-69, then a type II slab is required under the load bearing wall only unless the side wall exceeds 16' in height or the enclosure is in a "C" exposure category in which case a type II footing is required.
4. Monolithic slabs and footings shall be minimum 2,500 psi concrete with 6 x 6 - 10 x 10 welded wire mesh or crack control fiber mesh; Fibermesh® Mesh, InForce™ e3™ (Formerly Fibermesh MD) per manufacturer's specification may be used in lieu of wire mesh. All slabs / footings shall be allowed to cure for 7 days before installing anchors.
5. If local codes require a minimum footing use Type II footing or footing section required by local code. Local codes govern.

SLAB-FOOTING DETAILS

SCALE: 3/4" = 1'-0"

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SCREENED ENCLOSURES

Table 1.1 120

Allowable Spans for Primary Screen Roof Frame Members

Aluminum Alloy 6063 T-6

For Wind Zones up to 120 M.P.H., Exposure "B" and Latitudes Below 36° 30' 00" North (Jacksonville, FL)

Uniform Load = 4 #/SF, a Point Load of 300 #/SF over (1) linear ft. is also considered

Hollow Sections	Tributary Load Width "W" = Beam Spacing									
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
	Allowable Span "L" / Point Load (P) or Uniform Load (U), bending (b), deflection (d)									
2" x 2" x 0.044"	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb
2" x 2" x 0.050"	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb
2" x 2" x 0.050"	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb
2" x 3" x 0.045"	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb
2" x 4" x 0.050"	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb
2" x 5" x 0.062"	20'-5"	Pb	20'-5"	Pb	20'-5"	Pb	20'-5"	Pb	20'-5"	Pb
Self Mating Sections	Tributary Load Width "W" = Beam Spacing									
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
	Allowable Span "L" / Point Load (P) or Uniform Load (U), bending (b), deflection (d)									
2" x 4" x 0.044 x 0.100"	11'-5"	Pd	11'-5"	Pd	11'-5"	Pd	11'-5"	Pd	11'-5"	Pd
2" x 5" x 0.050 x 0.100"	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd
2" x 6" x 0.050 x 0.120"	20'-4"	Pd	20'-4"	Pd	20'-4"	Pd	20'-4"	Pd	20'-4"	Pd
2" x 7" x 0.055 x 0.120"	24'-9"	Pd	24'-9"	Pd	24'-9"	Pd	24'-9"	Pd	24'-9"	Pd
2" x 8" x 0.072 x 0.224"	34'-2"	Pd	34'-2"	Pd	34'-2"	Pd	34'-2"	Pd	34'-2"	Pd
2" x 9" x 0.072 x 0.224"	39'-3"	Pd	39'-3"	Pd	39'-3"	Pd	39'-3"	Pd	39'-3"	Pd
2" x 9" x 0.082 x 0.310"	42'-5"	Ud	42'-5"	Ud	42'-5"	Ud	42'-5"	Ud	42'-5"	Ud
2" x 10" x 0.092 x 0.360"	49'-3"	Ud	49'-3"	Ud	49'-3"	Ud	49'-3"	Ud	49'-3"	Ud
Snap Sections	Tributary Load Width "W" = Beam Spacing									
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"	10'-0"	11'-0"	12'-0"
	Allowable Span "L" / Point Load (P) or Uniform Load (U), bending (b), deflection (d)									
2" x 2" x 0.044"	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd
2" x 3" x 0.045"	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd
2" x 4" x 0.045"	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd
2" x 6" x 0.062"	22'-2"	Pd	22'-2"	Pd	22'-2"	Pd	22'-2"	Pd	22'-2"	Pd
2" x 7" x 0.062"	26'-8"	Pd	26'-8"	Pd	26'-8"	Pd	26'-8"	Pd	26'-8"	Pd

Note:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. The structures designed using this section shall be limited to a maximum combined span and upright height of 50' and a maximum upright height of 16'. Structures larger than these limits shall have site specific engineering.
3. Span is measured from center of beam and upright connection to center of beam and upright connection.
4. Above spans do not include length of knee brace. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
5. Tables are based on a maximum wall height of 16' including a 4' max. mansard or gable. Other conditions may offer better spans w/ enclosure site specific engineering.
6. Spans may be interpolated.
7. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

Example: Max. "L" for 2" x 4" x 0.050" hollow section with "W" = 5'-0" = 9'-1"

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SCREENED ENCLOSURES

SECTION 1

Table 1.2 120 Allowable Spans for Secondary Screen Roof Frame Members
Aluminum Alloy 6063 T-6

For Wind Zones up to 120 M.P.H., Exposure "B", and Latitudes Below 30°-30°-00" North (Jacksonville, FL)

Uniform Load = 4 #/SF, a Point Load of 300 #/SF over (1) linear ft. is also considered

A. Sections Fastened To Beams With Clips

Hollow Sections		Tributary Load Width W = Point Spacing														
		3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-6"		
		Allowable Span L / Point Load (P) or Uniform Load (U), Bending (B), Deflection (D)														
2" x 2" x 0.044"	4'-5"	Pb	4'-6"	Pb	4'-5"	Pb	4'-6"	Pb	4'-5"	Pb	4'-6"	Pb	4'-5"	Pb	4'-6"	Pb
2" x 3" x 0.050"	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb	5'-2"	Pb
2" x 2" x 0.050"	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd
3" x 2" x 0.045"	5'-3"	Pb	5'-3"	Pb	5'-3"	Pb	5'-3"	Pb	5'-3"	Pb	5'-3"	Pb	5'-3"	Pb	5'-3"	Pb
3" x 2" x 0.070"	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd	7'-8"	Pd
2" x 3" x 0.045"	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd
2" x 4" x 0.050"	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb
2" x 5" x 0.062"	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd

2" x 5" x 0.062	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'	14'
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B. Sections Fastened Through Beam Webs Into Steel Beams

B. Sections Fastened Through Beam Webs Into Solid Concrete														
Hollow Sections	Tributary Load Width "W" = Point Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-6"	
	Allowable Span "L" / Point Load (P) or Uniform Load (U), Bending (B), Deflection (d)													
2" x 3" x 0.050"	11'-6"	Pb	11'-6"	Pb	12'-5"	Pb	11'-4"	Ud	10'-1"	Ud	10'-5"	Ud	10'-3"	Ud
2" x 4" x 0.050"	13'-8"	Pb	13'-8"	Pb	13'-8"	Pb	13'-4"	Pb	12'-8"	Pb	13'-8"	Pb	13'-8"	Pb
2" x 5" x 0.062"	22'-4"	Pd	22'-4"	Pd	22'-4"	Pd	21'-7"	Ud	20'-1"	Ud	20'-4"	Ud	19'-7"	Ud
Snap Sections	Tributary Load Width "W" = Point Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-6"	
	Allowable Span "L" / Point Load (P) or Uniform Load (U), Bending (B), Deflection (d)													
2" x 2" x 0.044"	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb	4'-4"	Pb

Notes:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. Span is measured from center of beam and upright connection to brace or wall connection.
3. Tables are based on a maximum wall height of 16' including a 4' max. mansard or gable. Other conditions may offer better spans w/ enclosure site specific engineering.
4. Spans may be interpolated.
5. 2" x 4" & 2" x 5" Hollow Girts shall be connected w/ an internal or external 1-1/2" x 1-1/2" x 0.044" angle.
6. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-i.

CHECK TABLE 1.6 FOR MINIMUM UPRIGHT SIZE FOR BEAMS.

Example: Max. "L" for 2" x 4" x 0.050" hollow section fastened to beam with clips with "W" = 5'-6" = 9'-1"

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SECTION 1

SCREENED ENCLOSURES

Table 1.3 110 Allowable Post / Upright Heights for Primary Screen Wall Frame Members
Aluminum Alloy 6063 T-6

For 3 second wind gust at a velocity of 110 MPH, Exposure "B" or an applied load of 13 #/sq. ft.

Hollow Sections	Tributary Load Width "W" = Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height "H" / bending (b), deflection (d)						
2" x 2" x 0.044"	7'-5" d	6'-5" b	5'-8" b	5'-1" b	4'-6" b	4'-3" b	3'-11" b
2" x 2" x 0.050"	7'-10" d	7'-1" b	6'-9" b	5'-8" b	5'-2" b	4'-9" b	4'-5" b
2" x 2" x 0.050"	8'-11" d	8'-2" d	7'-10" d	7'-2" b	6'-7" b	6'-1" b	5'-9" b
2" x 3" x 0.045"	8'-4" d	7'-7" d	7'-8" d	6'-11" b	6'-5" b	5'-11" b	5'-6" b
2" x 4" x 0.050"	11'-2" b	9'-7" b	8'-8" b	7'-8" b	7'-1" b	6'-7" b	6'-1" b
2" x 5" x 0.062"	17'-3" b	14'-10" b	13'-2" b	11'-11" b	11'-6" b	10'-3" b	9'-7" b

Self Mating Sections	Tributary Load Width "W" = Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height "H" / bending (b), deflection (d)						
2" x 4" x 0.044 x 0.100"	11'-11" d	10'-10" d	10'-0" d	9'-5" b	8'-8" b	8'-0" b	7'-8" b
2" x 5" x 0.050 x 0.100"	14'-9" d	13'-5" d	12'-8" d	11'-7" b	10'-8" b	9'-11" b	9'-4" b
2" x 6" x 0.050 x 0.120"	17'-3" d	15'-8" d	14'-4" b	12'-1" b	12'-0" b	11'-3" b	10'-8" b
2" x 7" x 0.055 x 0.120"	19'-8" d	17'-8" b	15'-7" b	14'-2" b	13'-8" b	12'-2" b	11'-5" b
2" x 8" x 0.072 x 0.224"	24'-4" d	22'-1" d	20'-8" d	19'-4" d	18'-4" d	17'-8" d	16'-10" d
2" x 9" x 0.072 x 0.224"	26'-8" d	24'-0" d	22'-8" d	21'-2" d	20'-1" d	18'-3" d	18'-2" b
2" x 9" x 0.082 x 0.316"	28'-8" d	26'-0" d	24'-2" d	22'-8" d	21'-7" d	20'-8" d	19'-10" d
2" x 10" x 0.092 x 0.369"	33'-3" d	30'-3" d	28'-1" d	26'-5" d	25'-1" d	23'-11" d	23'-1" d

Snap Sections	Tributary Load Width "W" = Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height "H" / bending (b), deflection (d)						
2" x 2" x 0.044"	6'-7" d	5'-11" d	5'-7" d	5'-4" d	4'-10" b	4'-8" b	4'-1" b
2" x 3" x 0.045"	8'-10" d	8'-1" d	7'-8" d	6'-11" b	6'-3" b	5'-9" b	5'-3" b
2" x 4" x 0.045"	11'-2" d	10'-2" d	9'-2" d	8'-2" b	7'-8" b	6'-9" b	6'-2" b
2" x 5" x 0.062"	18'-3" d	16'-7" d	15'-8" d	14'-8" d	13'-9" d	13'-2" d	12'-8" d
2" x 7" x 0.062"	20'-7" d	18'-9" d	17'-5" d	16'-4" d	15'-7" d	14'-10" d	14'-2" b

Notes:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. Using screen panel width "W" select upright length "H".
3. Above heights do not include length of knee brace. Add vertical distance from upright to center of brace to beam connection to the above spans for total beam spans.
4. Site specific engineering required for pool enclosures over 30' in clear roof height.
5. Height is to be measured from center of beam and upright connection to base of wall connection.
6. Chair rails of 2" x 2" x 0.044" min. and set @ 36" in height are required to be fastened at guard rails provided they are attached with min. (3) #10 x 1-1/2" S.M.S. into the screw bases and do not exceed 8'-0" in span.
7. Max. beam size for 2" x 5" is 2" x 7" x 0.055" x 0.120"
8. Spans may be interpolated.
9. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

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SECTION 1

SCREENED ENCLOSURES

Table 1.4 110 Allowable Post / Girt / Chair Rail Spans, Header Spans & Upright Heights for Secondary Screen Wall Frame Members

Aluminum Alloy 6063 T-6

For 3 second wind gust at a velocity of 110 MPH, Exposure "B" or an applied load of 13 psf sq. ft.

A. Sections As Horizontals Fastened To Posts With Clips

Hollow Sections	Tributary Load Width "W" = Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height "H" or Span "L" / bending (b), deflection (d)						
2" x 2" x 0.044"	7'-5" d	6'-8" b	5'-8" b	5'-4" b	4'-6" b	4'-3" b	3'-11" b
2" x 2" x 0.050"	7'-10" d	7'-1" b	6'-3" b	5'-8" b	5'-2" b	4'-9" b	4'-5" b
2" x 2" x 0.059"	8'-11" d	8'-2" b	7'-10" b	7'-1" b	6'-7" b	6'-1" b	5'-9" b
3" x 2" x 0.045"	8'-4" d	7'-4" b	6'-6" b	5'-10" b	5'-4" b	4'-11" b	4'-7" b
3" x 2" x 0.070"	9'-5" d	8'-5" b	7'-9" b	7'-0" b	6'-5" b	5'-11" b	5'-7" b
2" x 3" x 0.045"	8'-4" d	7'-7" b	7'-9" b	6'-11" b	6'-3" b	5'-11" b	5'-6" b
2" x 4" x 0.050"	11'-2" b	9'-7" b	8'-8" b	7'-9" b	7'-1" b	6'-7" b	6'-3" b
2" x 5" x 0.062"	17'-3" b	14'-10" b	13'-2" b	11'-11" b	11'-0" b	10'-3" b	9'-7" b

Snap Sections	Tributary Load Width "W" = Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height "H" or Span "L" / bending (b), deflection (d)						
2" x 2" x 0.044"	6'-7" d	5'-11" b	5'-7" b	5'-3" b	4'-10" b	4'-5" b	4'-1" b

B. Sections As Horizontals Fastened To Posts Through Side Into Screw Bosses

Hollow Sections	Tributary Load Width "W" = Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height "H" or Span "L" / bending (b), deflection (d)						
3" x 2" x 0.045"	9'-7" b	8'-3" b	7'-3" b	6'-5" b	5'-11" b	5'-6" b	5'-1" b
3" x 2" x 0.070"	11'-5" b	9'-10" b	8'-8" b	7'-10" b	7'-2" b	6'-8" b	6'-3" b
2" x 3" x 0.045"	11'-2" d	9'-9" b	8'-8" b	7'-10" b	7'-2" b	6'-8" b	6'-2" b
2" x 4" x 0.050"	12'-6" b	10'-9" b	9'-8" b	8'-7" b	7'-11" b	7'-4" b	6'-10" b
2" x 5" x 0.062"	19'-8" b	16'-4" b	14'-8" b	13'-5" b	12'-4" b	11'-6" b	10'-9" b

Snap Sections	Tributary Load Width "W" = Upright Spacing						
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"
	Allowable Height "H" or Span "L" / bending (b), deflection (d)						
2" x 2" x 0.044"	8'-10" d	7'-8" b	6'-9" b	6'-0" b	5'-5" b	4'-11" b	4'-7" b

Note:

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
2. Using screen panel width "W" select girt lengths.
3. Site specific engineering required for pool enclosures over 30' in mean roof height.
4. Span/height is to be measured from center of beam and upright connection to fascia or wall connection.
5. Chair rails of 2" x 2" x 0.044" min. and set @ 36" in height are designed to be residential guardrails provided they are attached with min. (3) #10 x 1-1/2" s.m.s. into the screw bosses and do not exceed 8'-0" o.c.
6. Girt spacing shall not exceed 6'-8".
7. Max. beam size for 2" x 5" is 2" x 7" x 0.055" x 0.120"
8. 2" x 4" & 2" x 5" hollow girts shall be connected w/ an internal or external 1-1/2" x 1-1/2" x 0.044" angle.
9. Spans/heights may be interpolated.
10. To convert spans/heights to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

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SCREENED ENCLOSURES

SECTION 1

Table 1.3.2 120 Allowable Spans for Miscellaneous Framing Beams as Supporting Screen Roof Frame Members
One End of Beam Attached to Host Structure
for Areas in Wind Zones up to 120 M.P.H., Exposure "B" and Latitudes Below 30°-30'-00" North (Jacksonville, FL)
Uniform Load = 4 #/SF, a Point Load of 300 #SF over (1) linear ft. is also considered, Aluminum Alloy 6063 T-6

Single Self-Mating Beams	Tributary Load Width									
	10'-0"	14'-0"	18'-0"	22'-0"	26'-0"	30'-0"	34'-0"	38'-0"	42'-0"	46'-0"
2" x 4" x 0.044" x 0.100"	11'-3"	10'-9"	9'-5"	8'-7"	7'-10"	6'-4"	5'-11"	4'-8"	3'-5"	2'-0"
2" x 6" x 0.050" x 0.100"	15'-1"	13'-8"	11'-10"	10'-8"	9'-10"	8'-2"	6'-11"	5'-8"	4'-5"	3'-0"
2" x 8" x 0.050" x 0.120"	17'-5"	15'-1"	13'-4"	12'-0"	11'-1"	9'-8"	8'-5"	7'-5"	6'-1"	5'-0"
2" x 7" x 0.055" x 0.120"	19'-5"	16'-5"	14'-6"	13'-1"	12'-1"	10'-4"	9'-11"	8'-4"	7'-11"	6'-8"
2" x 8" x 0.072" x 0.124"	24'-11"	21'-11"	19'-11"	17'-5"	16'-8"	15'-11"	14'-4"	13'-0"	11'-8"	10'-4"
2" x 9" x 0.072" x 0.124"	27'-5"	23'-5"	21'-1"	19'-2"	17'-11"	16'-10"	15'-1"	14'-5"	13'-10"	12'-8"
2" x 9" x 0.082" x 0.130"	29'-2"	25'-2"	22'-1"	20'-4"	18'-2"	17'-1"	15'-8"	14'-5"	13'-10"	12'-8"
2" x 10" x 0.092" x 0.130"	34'-2"	30'-2"	27'-1"	24'-8"	22'-4"	20'-11"	18'-5"	17'-9"	16'-11"	15'-8"
Double Self-Mating Beams	10'-0"	14'-0"	18'-0"	22'-0"	26'-0"	30'-0"	34'-0"	38'-0"	42'-0"	46'-0"
	10'-0"	14'-0"	18'-0"	22'-0"	26'-0"	30'-0"	34'-0"	38'-0"	42'-0"	46'-0"
2" x 6" x 0.072" x 0.224"	31'-5"	27'-5"	24'-11"	22'-8"	20'-4"	18'-1"	16'-10"	15'-1"	13'-10"	12'-8"
2" x 8" x 0.072" x 0.224"	34'-5"	30'-5"	27'-1"	24'-8"	22'-4"	20'-11"	18'-5"	17'-9"	16'-11"	15'-8"
2" x 9" x 0.082" x 0.308"	36'-5"	32'-5"	29'-1"	26'-8"	24'-4"	22'-1"	20'-11"	18'-5"	17'-9"	16'-11"
2" x 10" x 0.092" x 0.308"	43'-0"	39'-0"	35'-6"	32'-4"	29'-1"	26'-8"	24'-4"	22'-1"	20'-11"	18'-5"

Note:

1. It is recommended that the engineer be consulted on any carrier beam that spans more than 50'
2. Span is measured from center of connection to fascia or wall connection.
3. Above spans do not include length of knee braces. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
4. Spans may be interpolated.
5. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-1.
6. Example: The Maximum "L" for a 2" x 4" x 0.044" x 0.100" Single Self-Mating Beam with Tributary Load Width = 22'-0" is 8'-7"

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SECTION 1

SCREENED ENCLOSURES

Table 1.6 Minimum Upright Sizes and Number of Screws for Connection of Roof Beams To Wall Uprights or Beam Splicing

Beam/Upright or Post	Upright or Post/Beam	Minimum Pull-in, Girt & Knee Brace Size	Notes	Minimum Number of Screws*			Beam Splicing Screw at 24" OC
				#8 x 7"	#10 x 7"	#12 x 7"	
2 x 4 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	8	6	4	#10
2 x 5 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	8	6	4	#8
2 x 6 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	10	8	6	#12
2 x 7 SMB	2 x 4 SMB or H	2" x 3" x 0.044"	Full Lap	12	12	10	#12
2 x 8 SMB	2 x 5 SMB or H	2" x 3" x 0.044"	Full Lap	16	14	12	#14
2 x 9 SMB	2 x 6 SMB	2" x 3" x 0.045"	Full Lap	18	16	14	#14"
2 x 9 SMB	2 x 7 SMB	2" x 4" x 0.050"	Full Lap	20	18	16	#14"
2 x 10 SMB	2 x 8 SMB	2" x 5" x 0.050"	Full Lap	20	18	16	#14"

Screw Size	Minimum Distance and Spacing of Screws		Gusset Plate Thickness	
	Edge To Center	Center To Center	Beam Size	Thickness
#8	5/16"	5/8"	2" x 7" x 0.055" x 0.125"	0.063"
#10	3/8"	3/4"	2" x 8" x 0.072" x 0.224"	0.125"
#12	1/2"	1"	2" x 9" x 0.072" x 0.224"	0.125"
#14 or 1/4"	3/4"	1-1/2"	2" x 9" x 0.082" x 0.305"	0.180"
5/16"	7/8"	1-3/4"	2" x 10" x 0.092" x 0.385"	0.250"
3/8"	1"	2"		

* 0.082" wall thickness, 0.240" flange thickness

** (1) Splicing screw at 16" O.C. max.

Connection Example:

2" x 7" beam & 2" x 5" at beam & gusset plate, (14) #8 x 1/2" sms & upright & gusset plate
(14) #8 x 1/2" sms ea. side of beam & upright.

Note:

1. Connection of 2" x 6" to 2" x 4" shall use a full lap cut or 1215" gusset plate.
2. For beam splice connections the number of screws shown is the total for each splice with 1/2 the screws on each side of the cut.
3. The number of screws is based on the maximum allowable moment of the beam.
4. The number of deck anchors is based on RAIN, R. Tappan allowable load data for 2,500 psi concrete and / or equal anchors may be used. The number shown is the total use 1/2 per side.
5. Hollow splice connections can be made provided the connection is approved by the engineer.
6. If a larger than minimum upright is used the number of screws is the same for each splice with 1/2 the screws on each side of the cut.
7. The side wall upright shall have a minimum beam size as shown above, i.e., a 2" x 4" upright shall have a 2" x 3" beam.
8. For minimum girt size read upright size as a beam and pull-in size is minimum girt size. (i.e. 2" x 9" x 0.072" x 0.224" s.m.b. w/ 2" x 6" x 0.050 x 0.120" s.m.b. upright requires a 2" x 3" x 0.045" girt / chair rail.)

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