Columbia County Building Permit Application

For Office Use Only Application # 0712-47 Date Received 12/4/07 By GT Permit # 26530

Zoning Official CH Date 12/7/07 Flood Zone N/A FEMA Map # _____ Zoning A-3

Land Use A-3 Elevation _____ MFE _____ River _____ Plans Examiner OK.TH Date 12-7-07

Comments _____

☑ NOC ☑ EH ☑ Deed or PA ☑ Site Plan ☐ State Road Info ☐ Parent Parcel # _____

☐ Dev Permit # _____ ☐ In Floodway ☐ Letter of Authorization from Contractor

☐ Unincorporated area ☐ Incorporated area ☐ Town of Fort White ☐ Town of Fort White Compliance letter

Septic Permit No. _____ Fax 352-472-6855

Name Authorized Person Signing Permit ~~Carl R. Helms~~ Larry Cole Phone 352-472-6855

Address 25370 NW 8th Place Newberry FL 32669

Owners Name George Mortensen Phone 516-318-6487

911 Address 250 SW Vargus Way Ft. White FL 32038

Contractors Name Carl R. Helms Timberlake Aluminum 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 Bennett PO Box 214368 S. Daytona, FL 32121

Mortgage Lenders Name & Address N/A

Circle the correct power company – FL Power & Light – Clay Elec. – Suwannee Valley Elec. – Progress Energy

Property ID Number 27-6S-16-08951-105 Estimated Cost of Construction 10,250.00

Subdivision Name Foxwood Lot 5 Block / Unit / Phase 1

Driving Directions ~~US-27 N,~~ ~~SR-47~~ SR-47, TL ~~Right~~ on SW Jeanlea Place, Left on SW Evelio Ct. 3rd lot on left

Number of Existing Dwellings on Property 1

Construction of Screen Enclosure over existing pool Total Acreage 5 Lot Size _____

Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height 12'

Actual Distance of Structure from Property Lines - Front 1013' Side 128' Side ~~135.7~~ 124 Rear ~~509'~~ 487'

Number of Stories 1 Heated Floor Area 0 Total Floor Area 1265 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.

WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE OF COMMENCMENT MAY RESULT IN YOU PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT WITH YOUR LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTICE OF COMMENCEMENT.

FLORIDA'S CONSTRUCTION LIEN LAW: Protect Yourself and Your Investment
According to Florida Law, those who work on your property or provide materials, and are not paid-in-full, have a right to enforce their claim for payment against your property. This claim is known as a construction lien. If your contractor fails to pay subcontractors or material suppliers or neglects to make other legally required payments, the people who are owed money may look to your property for payment, even if you have paid your contractor in full. This means if a lien is filed against your property, it could be sold against your will to pay for labor, materials or other services which your contractor may have failed to pay.

NOTICE OF RESPONSIBILITY TO BUILDING PERMITEE:
YOU ARE HEREBY NOTIFIED as the recipient of a building permit from Columbia County, Florida, you will be held responsible to the County for any damage to sidewalks and/or road curbs and gutters, concrete features and structures, together with damage to drainage facilities, removal of sod, major changes to lot grades that result in ponding of water, or other damage to roadway and other public infrastructure facilities caused by you or your contractor, subcontractors, agents or representatives in the construction and/or improvement of the building and lot for which this permit is issued. No certificate of occupancy will be issued until all corrective work to these public infrastructures and facilities has been corrected.

OWNERS CERTIFICATION: 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. I further understand the above written responsibilities in Columbia County for obtaining this Building Permit.

_____
Owners Signature

CONTRACTORS AFFIDAVIT: By my signature I understand and agree that I have informed and provided this written statement to the owner of all the above written responsibilities in Columbia County for obtaining this Building Permit.

_____
Contractor's Signature (Permitee)

Contractor's License Number SCC056710
Columbia County
Competency Card Number _____

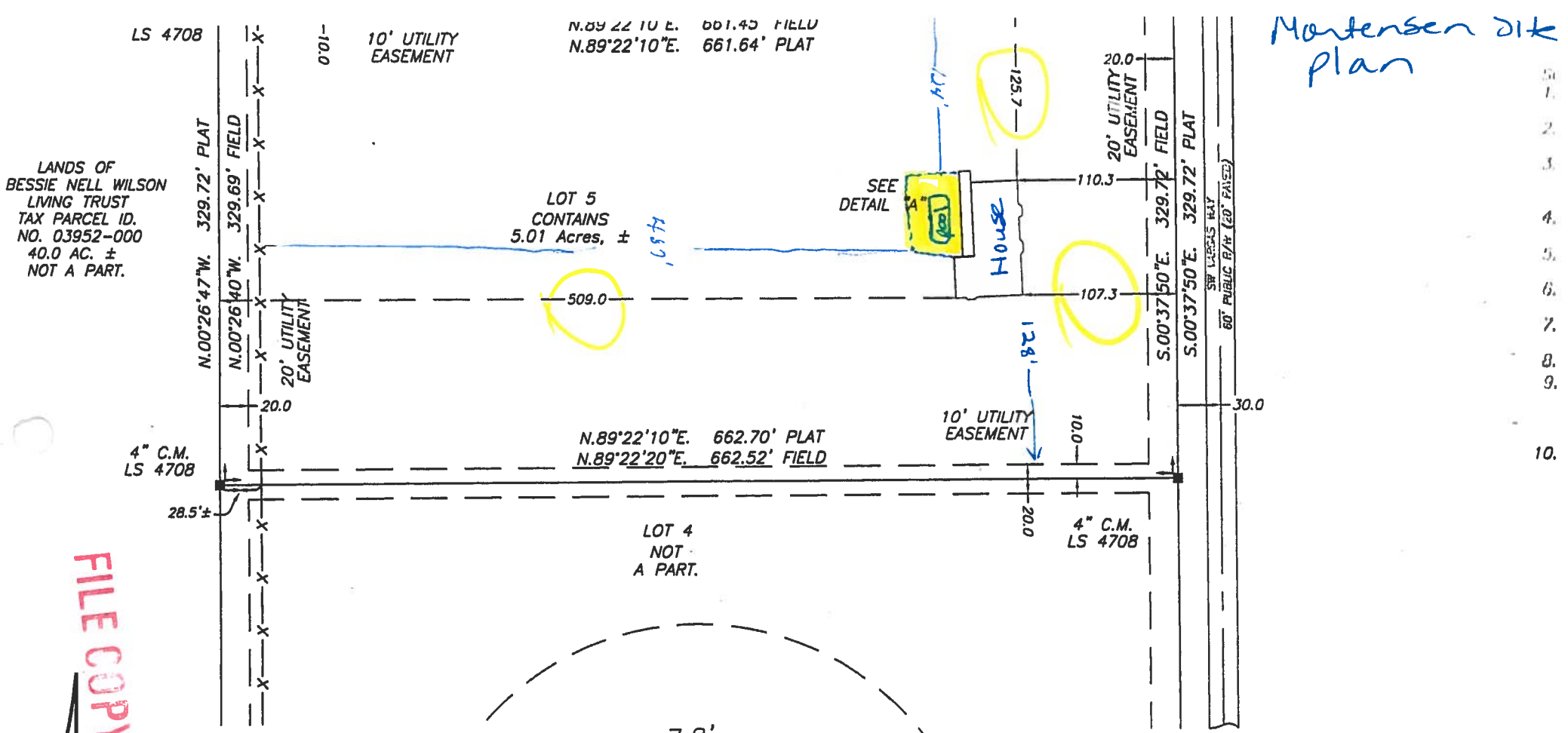
Affirmed under penalty of perjury to by the Contractor and subscribed before me this 13 **day of** December **20**___.
Personally known ___ **or Produced Identification** _____

_____
State of Florida Notary Signature (For the Contractor)

SEAL:

LARRY H. COLE
MY COMMISSION # DD677975
EXPIRES May 23, 2011
(407) 398-0153 FloridaNotaryService.com

Mortensen Site Plan



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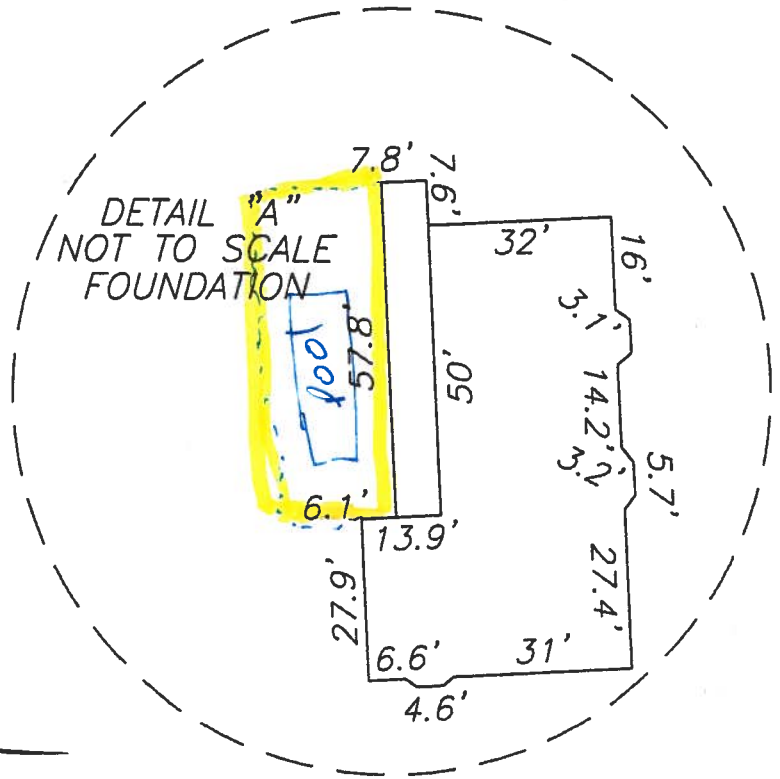

EXTRA ABBREVATION:
(F) FIELD, AS IN "FIELD MEASUREMENT").
(D) DEED, AS IN "DEED DIMENSION").
(P) PLAT, AS IN "PLAT DIMENSION").
(R) RECORD, AS IN "RECORD DIMENSION").

SYME	
O.R.I.	OFFIC
■	CONCI
□	CONCI
●	IRON
○	5/8"
—x—	WIRE
—E—	ELECT
– UGE –	UNDE
— CTV —	CABL
—o—	CHAIN
—o—	WOOD
CMP	CORRU
RCP	REINF
LS	LAND
LB	LICENS
ORB	OFFICI
PRM	PERMA
PCP	PERMA
⊗	UTILIT
R/W	RIGHT
NO ID.	NO ID
FLA. D.O.T.	FLA.
℄	CENTI
C.M.	CONCI
I.R.	IRON

SIGNED:
MARK D. DUREN, LS 4708

NOTICE OF COMMENCEMENT

Inst:200712027498 Date:12/14/2007 Time:10:38 AM
DC,P.DeWitt Cason,Columbia County Page 1 of 1

Tax Parcel Identification Number 33-3S-16-02434-018 HX

THE UNDERSIGNED hereby gives notice that improvements will be made to certain real property, and in accordance with Section 713.13 of the Florida Statutes, the following information is provided in this NOTICE OF COMMENCEMENT.

1. Description of property (legal description): Lot 1 Block B Cypress Lake S/D ORB 650-825, 680-584, 740-1309
   a) Street (Job) Address: 122 SW Ridgewood Pl. Lake City, FL
2. General description of improvements: Screen enclosure over existing pool.
3. Owner Information
   a) Name and address: Carol Gordon
   b) Name and address of fee simple titleholder (if other than owner) N/A
   c) Interest in property Owner
4. Contractor Information
   a) Name and address: Timberlake Aluminum Construction, Inc. 25370 NW 8th Place Newberry, FL 32669
   b) Telephone No.: 852-972-6850 Fax No. (Opt.)
5. Surety Information
   a) Name and address: N/A
   b) Amount of Bond:
   c) Telephone No.: Fax No. (Opt.)
6. Lender
   a) Name and address: N/A
   b) Phone No.
7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:
   a) Name and address:
   b) Telephone No.: Fax No. (Opt.)
8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes:
   a) Name and address:
   b) Telephone No.: Fax No. (Opt.)
9. Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified):

WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. A NOTICE OF COMMENCEMENT MUST BE RECORDED AND POSTED ON THE JOB SITE BEFORE THE FIRST INSPECTION. IF YOU INTEND TO OBTAIN FINANCING, CONSULT YOUR LENDER OR AN ATTORNEY BEFORE COMMENCING WORK OR RECORDING YOUR NOTICE OF COMMENCEMENT.

STATE OF FLORIDA
COUNTY OF COLUMBIA

10. X Carol S. Gordon
Signature of Owner or Owner's Authorized Officer/Director/Partner/Manager

CAROL S. GORDON
Print Name

The foregoing instrument was acknowledged before me, a Florida Notary, this 9 day of November 20 07 by:

Carol Gordon as owner (type of authority, e.g. officer, trustee, attorney in fact) for (name of party on behalf of whom instrument was executed).

Personally Known ___ OR Produced Identification ✓ Type License

Notary Signature Raymond M. Drewnowski

Notary Stamp or Seal:

RAYMOND M. DREWNOWSKI
Comm# DD0681685
Expires 6/4/2011
Florida Notary Assn., Inc

—AND—

11. Verification pursuant to Section 92.525, Florida Statutes. Under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.

X Carol S. Gordon
Signature of Natural Person Signing (in line #10 above.)

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Columbia County Property Appraiser

DB Last Updated: 11/15/2007

2008 Proposed Values

10250

Tax Record | Property Card | Interactive GIS Map | Print

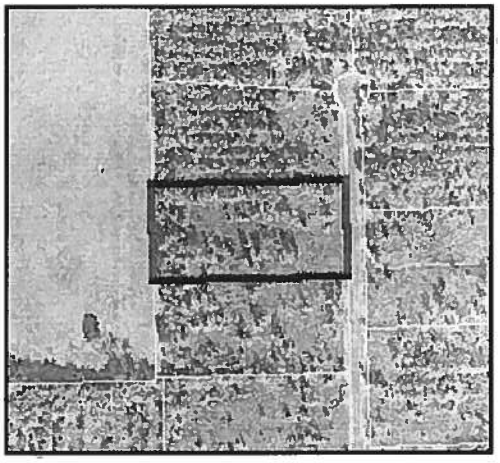
Parcel: 27-6S-16-03951-105

Search Result: 1 of 1

Owner & Property Info

Owner's Name	MORTENSEN GEORGE		
Site Address			
Mailing Address	5 STOCKTON COMMONS YAPHANK, NY 11980		
Use Desc. (code)	VACANT (000000)		
Neighborhood	27616.00	**Tax District**	3
UD Codes	MKTA02	**Market Area**	02
Total Land Area	5.010 ACRES		
Description	LOT 5 FOXWOOD S/D PHASE 1. WD 1110-1320		

GIS Aerial



Property & Assessment Values

Mkt Land Value	cnt: (1)	$65,000.00
Ag Land Value	cnt: (0)	$0.00
Building Value	cnt: (0)	$0.00
XFOB Value	cnt: (0)	$0.00
Total Appraised Value		$65,000.00

Just Value	$65,000.00
Class Value	$0.00
Assessed Value	$65,000.00
Exempt Value	$0.00
Total Taxable Value	$65,000.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale VImp	Sale Qual	Sale RCode	Sale Price
2/2/2007	1110/1320	WD	V	Q		$125,000.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value
NONE						

Extra Features & Out Buildings

Code	Desc	Year Blt	Value	Units	Dims	Condition (% Good)
NONE						

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
000000	VAC RES (MKT)	1.000 LT - (5.010AC)	1.00/1.00/1.00/1.00	$65,000.00	$65,000.00

Columbia County Property Appraiser DB Last Updated: 11/15/2007

1 of 1

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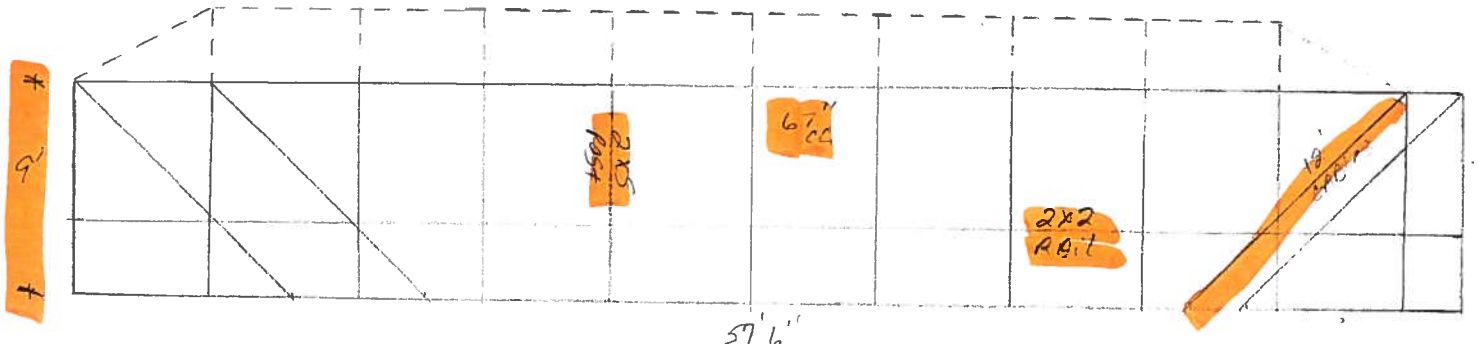
Mortensen
250 SW Vargus Way
Ft. White, FL



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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, ASM35 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.

Carl R. Helms Phone: 352-472-6850
Contractor / Authorized Rep* Name (please print)

Date:
Contractor / Authorized Rep* Signature

Mortensen 250 SW Vargus Way Ft. White, FL
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:

Span @ 120 MPH ┐ ┌ Required Converted Span / Height

0.00 (b or d) x 1.00 (b or d) x 1.00 (b or d) = _____

Wind Zone Multiplier (see page 1ii) ┘ └ Exposure Multiplier (see page 1ii)

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.**

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

Wall 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 1.00 :
Look up span in appropriate 120 MPH span table and apply the following formula:

Span / Height @ 120 MPH or ___ MPH → 0.00 (b or d) x 1.00 (b or d) x 1.00 (b or d) = _____ ← Required Converted Span / Height

Wind Zone Multiplier ** (see page 1ii)

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

Front wall @ eave: _____ (W) ft. x _____ (H) ft. = 0.00 (a) ft.² @ 100% = 0.00 ft.²

Largest side wall: _____ (W) ft. x _____ (H) ft. = 0.00 (b) ft.² @ 50% = 0.00 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: 0.00 (b) ft.² @ 100% = 0.00 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: 57.50 (W) ft. x 9.00 (H) ft. = 517.50 (a) ft.² @ 100% = 517.50 ft.²

Front mansard rise: 3.00 (R) ft. x 1/2(44.00 (W1) ft. + 57.50 (W2) ft.) = 152.25 (b) ft.² @ 100% = 152.25 ft.²

Largest side wall: 28.50 (W) ft. x 9.00 (H) = 256.50 (c) ft.² @ 50% = 128.25 ft.²

Largest side mansard rise: 3 (R) ft. x 1/2(19.50 (W1) ft. + 28.50 (W2) ft.) = 72.00 (d) ft.² @ 50% = 36.00 ft.²

TOTAL = 834.00 ft.²

Total area / (233 ft.² / cable for 3/32") = 4 cable pairs
or
Total area / (445 ft.² / cable for 1/8") = 2 cable pairs

Side wall cable calculation: 256.50 (c) ft.² + 72.00 (d) ft.² = 328.50 ft.² @ 100% = 328.50 ft.²

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

Example 5: Dome Roof

Front dome wall @ eave: ____ (W) ft. x ____ (H) ft. = 0.00 (a) ft. @ 100% = 0.00 ft.²

Front dome rise: ____ (R) ft. x 1/2(____ (W) ft.) = 0.00 (b) ft.² @ 100% = 0.00 ft.²

Largest side wall: ____ (W) ft. x ____ (H) = 0.00 (c) ft.² @ 50% = 0.00 ft.²

Largest side dome rise: ____ (R) ft. x ____ (W) ft. = 0.00 (d) ft.² @ 50% = 0.00 ft.²

TOTAL = 0.00 ft.²

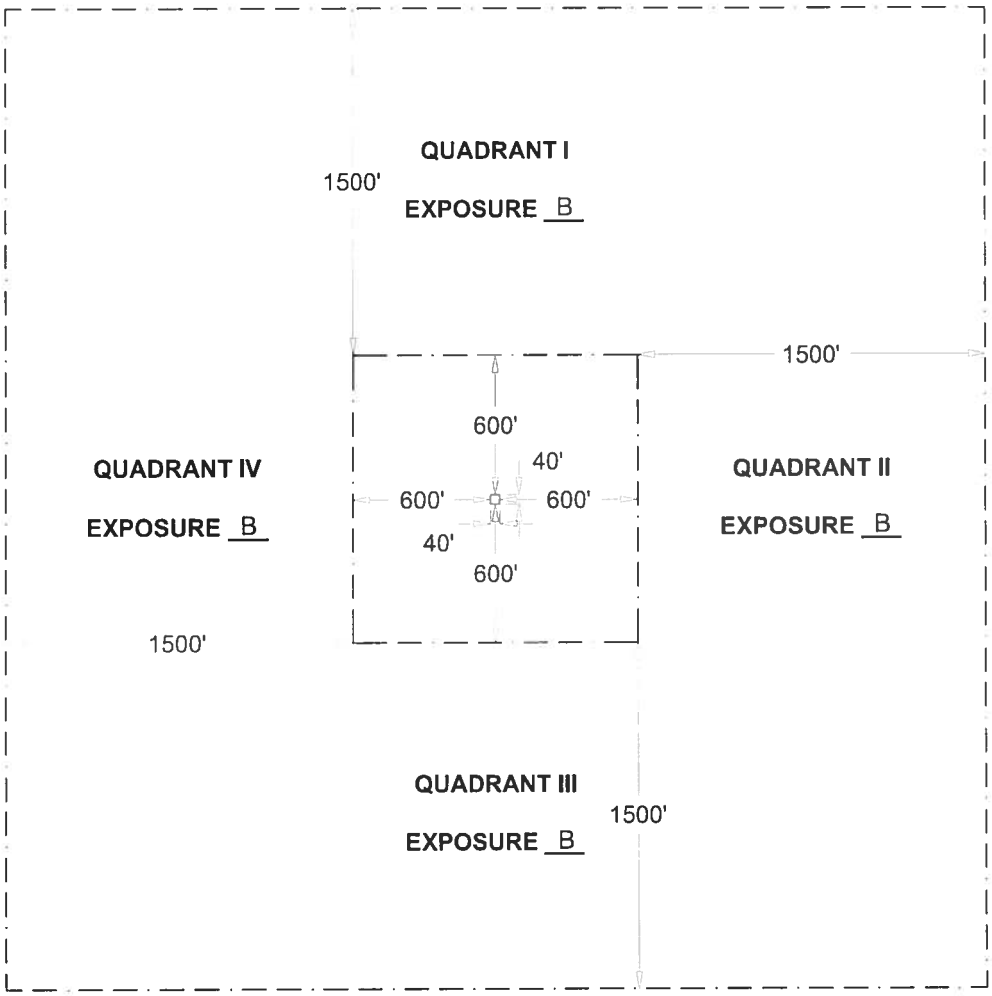
Total area / (233 ft.² / cable for 3/32") = 0 cable pairs
or
Total area / (445 ft.² / cable for 1/8") = 0 cable pairs

Side wall cable calculation: 0.00 (c) ft.² + 0.00 (d) ft.² = 0.00 ft.² @ 100% = 0.00 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:

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.

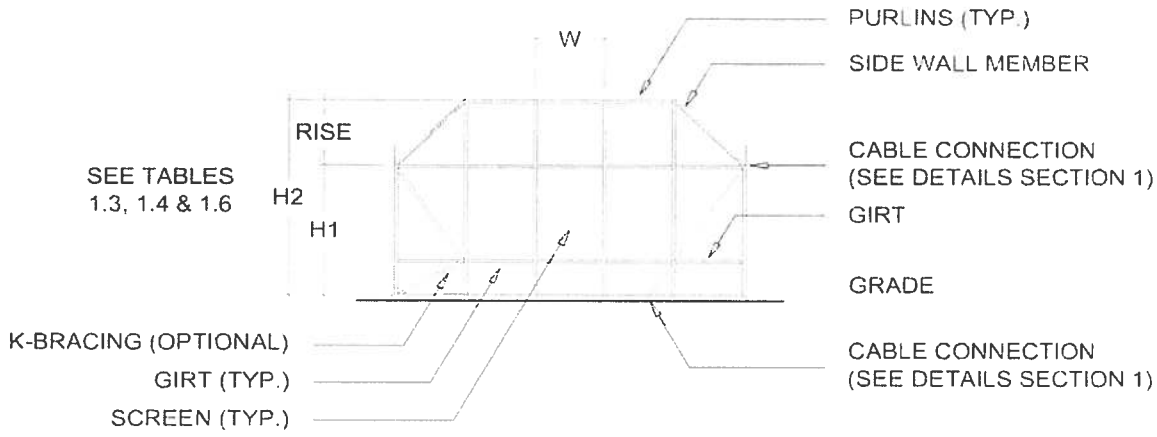
EXPOSURE C:
1. OPEN TERRAIN FOR MORE THAN 1,500 FEET IN ANY QUADRANT.
2. ANY 'C' EXPOSURE FOR GREATER THAN 600 FEET IN ANY QUADRANT.
3. NO SHORT TERM CHANGES IN 'B', 2 YEARS BEFORE SITE EVALUATION AND BUILD OUT WITHIN 3 YEARS, SITE WILL BE 'B'.
4. FLAT, OPEN COUNTRY, GRASSLANDS, PONDS AND OCEAN OR SHORELINES 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: Carl R. Helms DATE: _____

SIGNATURE: Carl R Helms LICENSE #: SCC056710

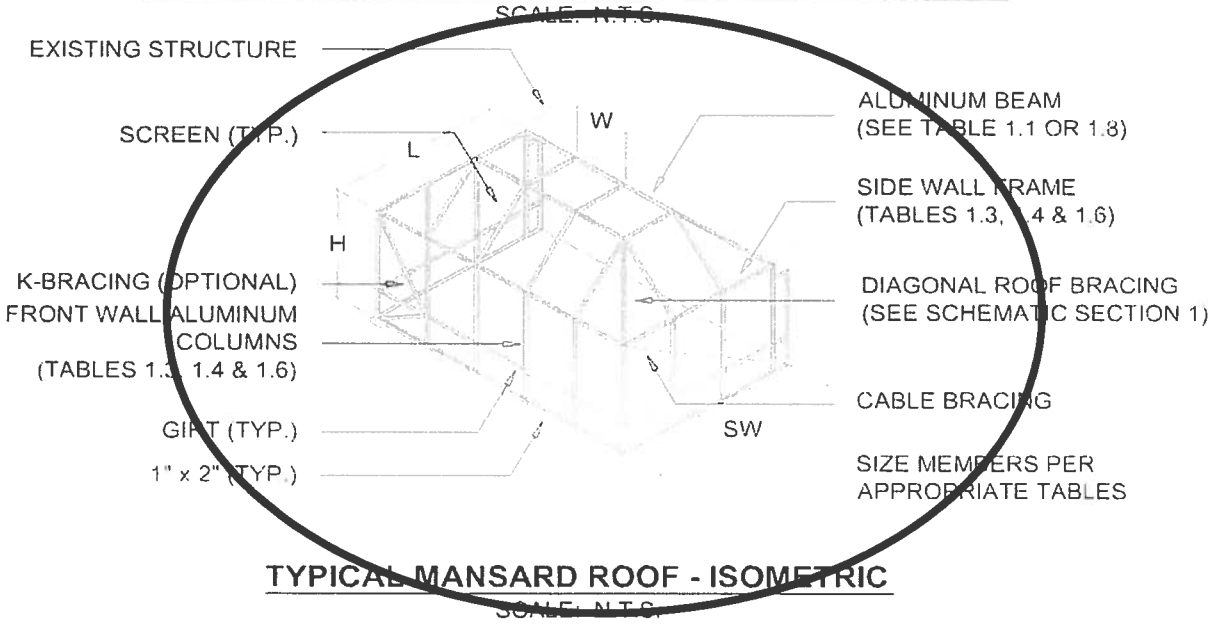
SECTION 1	SCREENED ENCLOSURES



NOTE: USE H2 FOR CABLE AREA CALCULATION

TYPICAL MANSARD ROOF - FRONT WALL ELEVATION

SCALE: N.T.S.

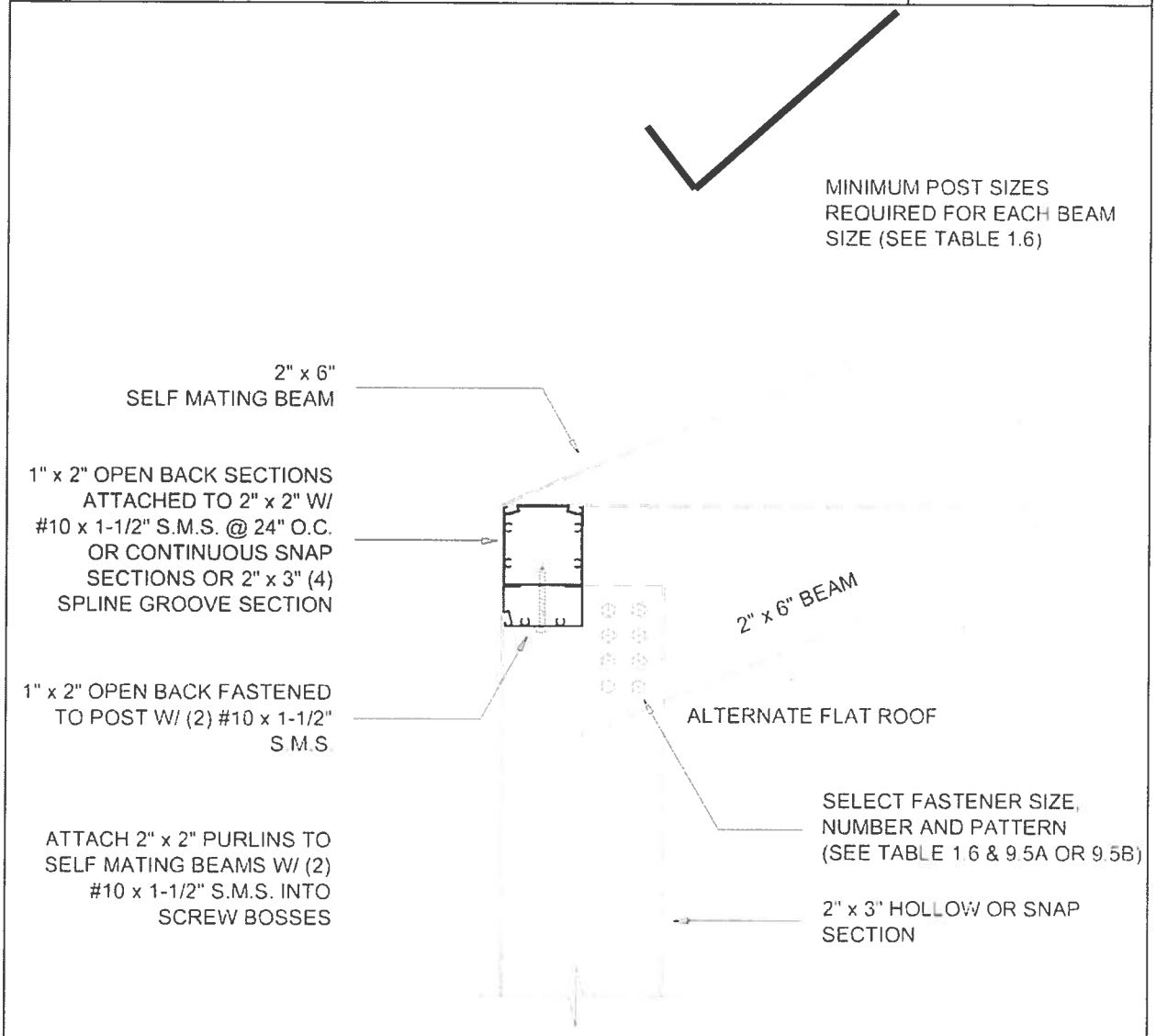


TYPICAL MANSARD ROOF - ISOMETRIC

SCALE: N.T.S.

CONNECTION DETAILS AND NOTES ARE FOUND IN THE SUBSEQUENT PAGES.

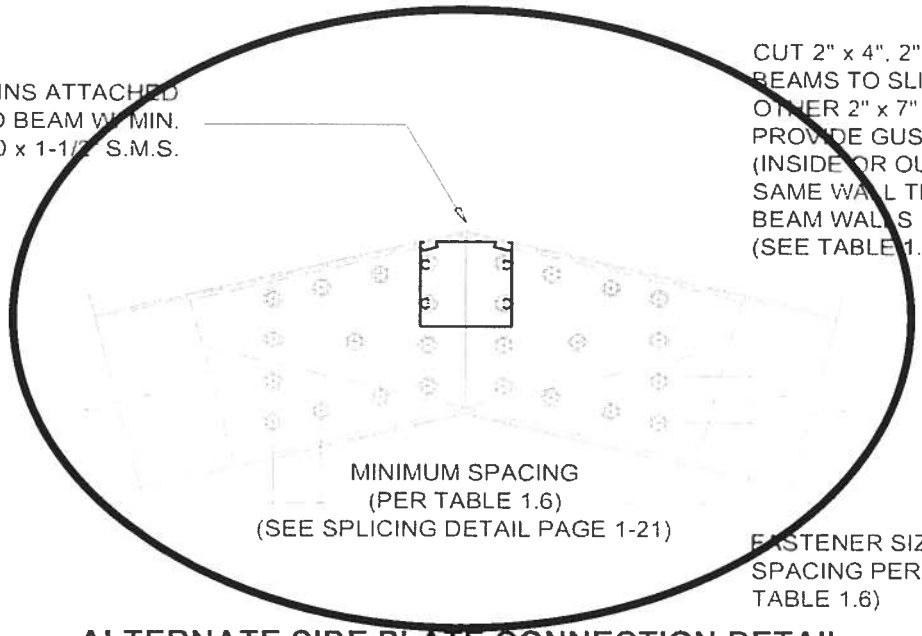
Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P.O. Box 214363, South Daytona, Fl 32121
Telephone #: (386) 767-4774 Fax #: (386) 767-6556
Email: lebpe@bellsouth.net



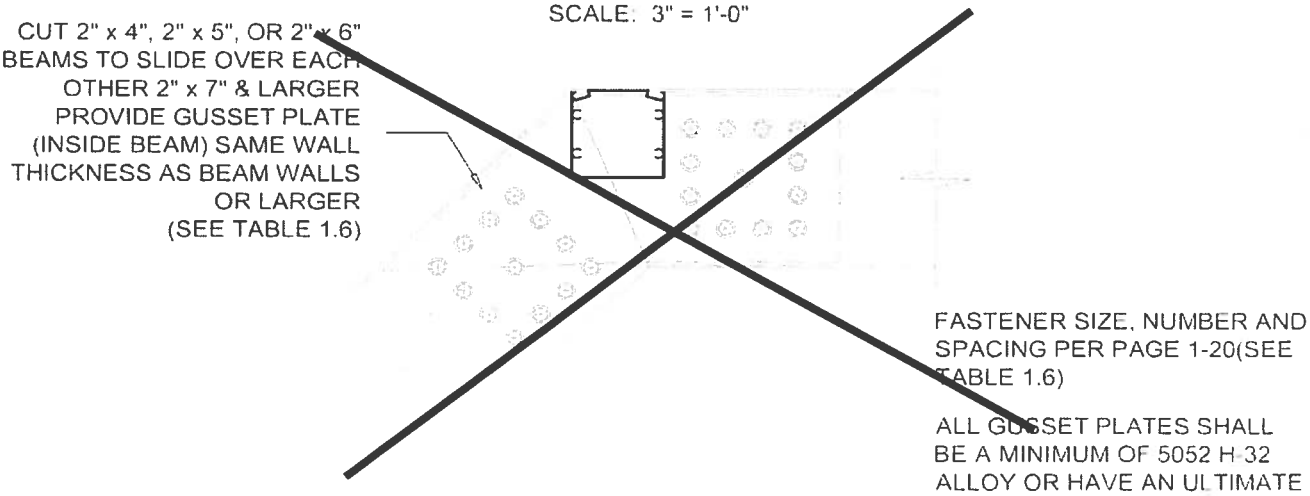
SLOPING BEAM TO UPRIGHT CONNECTION DETAIL (PARTIAL LAP)

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P.O. Box 214368, South Daytona, FL 32121
Telephone # (386) 767-4774 Fax # (386) 767-6556
Email: lebpe@bellsouth.net

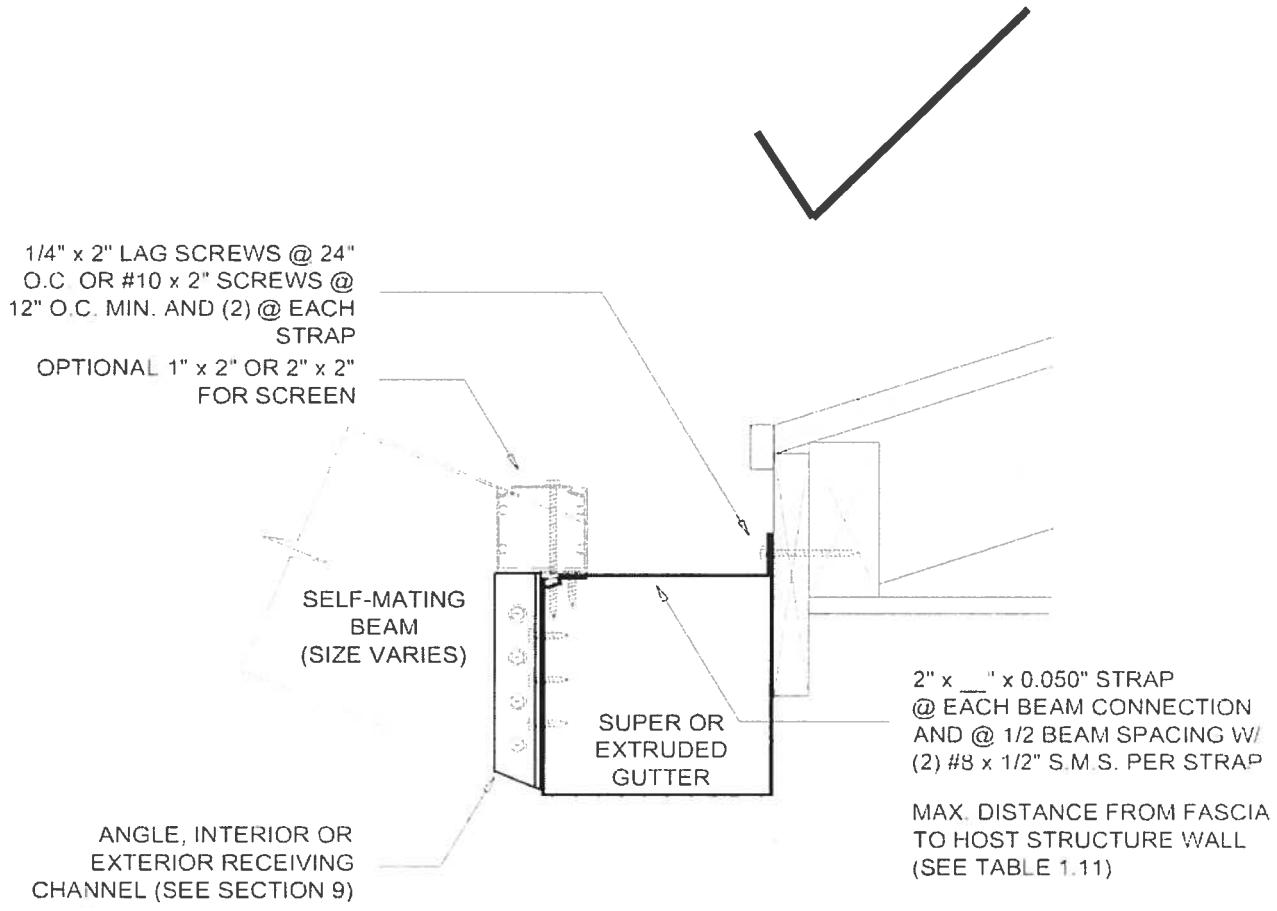


ALTERNATE SIDE PLATE CONNECTION DETAIL
GUSSET PLATE MOUNTED INTERNALLY
SCALE: 3" = 1'-0"



ALTERNATE SIDE PLATE CONNECTION DETAIL - MANSARD ROOF
GUSSET PLATE MOUNTED INTERNALLY
SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P O Box 214369, South Daytona FL 32121
Telephone #: (386) 767-4774 Fax #: (386) 767-6556
Email lebpe@bellsouth.net

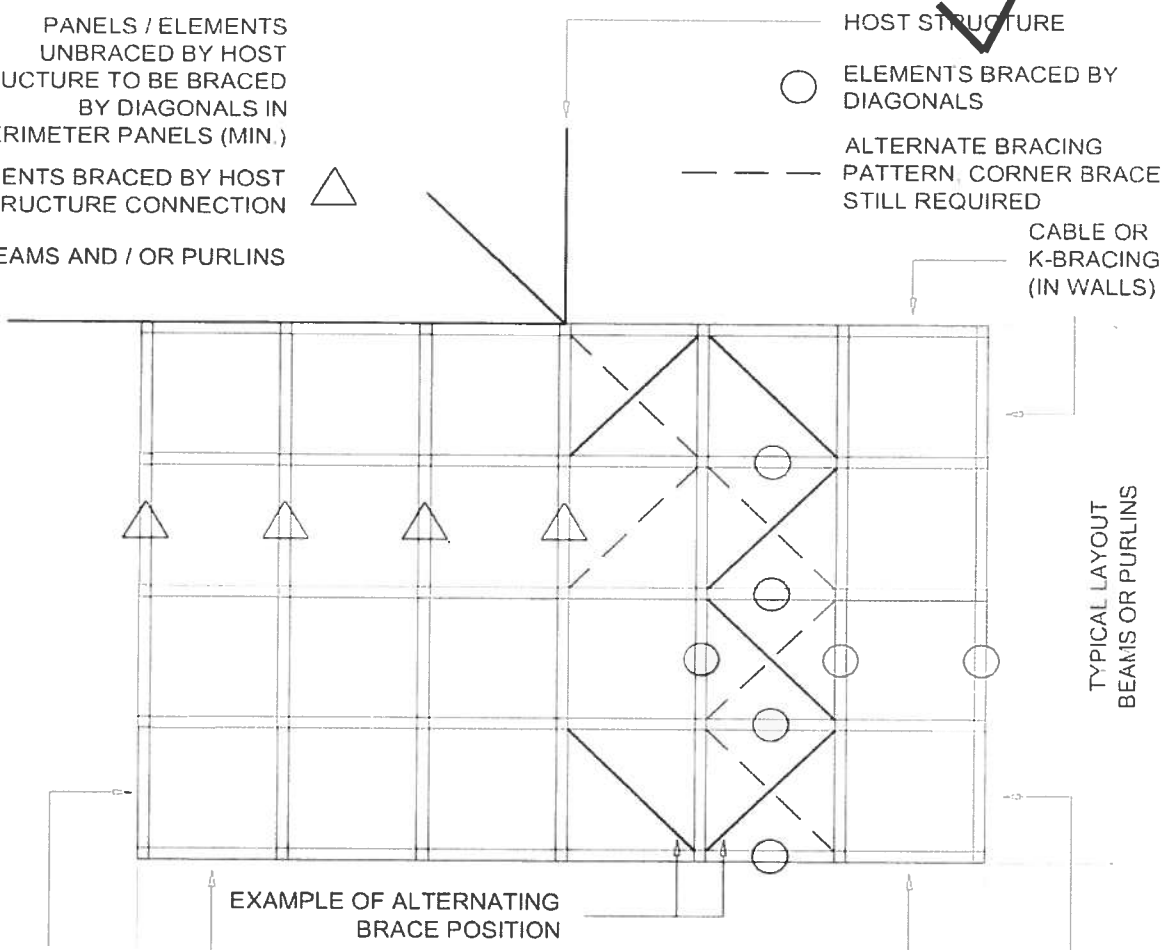


ALTERNATE SELF MATING BEAM CONNECTION TO SUPER OR EXTRUDED GUTTER

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E. FL # 16644
CIVIL & STRUCTURAL ENGINEERING
P.O. Box 214368, South Daytona, FL 32121
Telephone #: (386) 767-4774 Fax #: (386) 767-6556
Email: lebpe@bellsouth.net

SECTION 1	SCREENED ENCLOSURES



(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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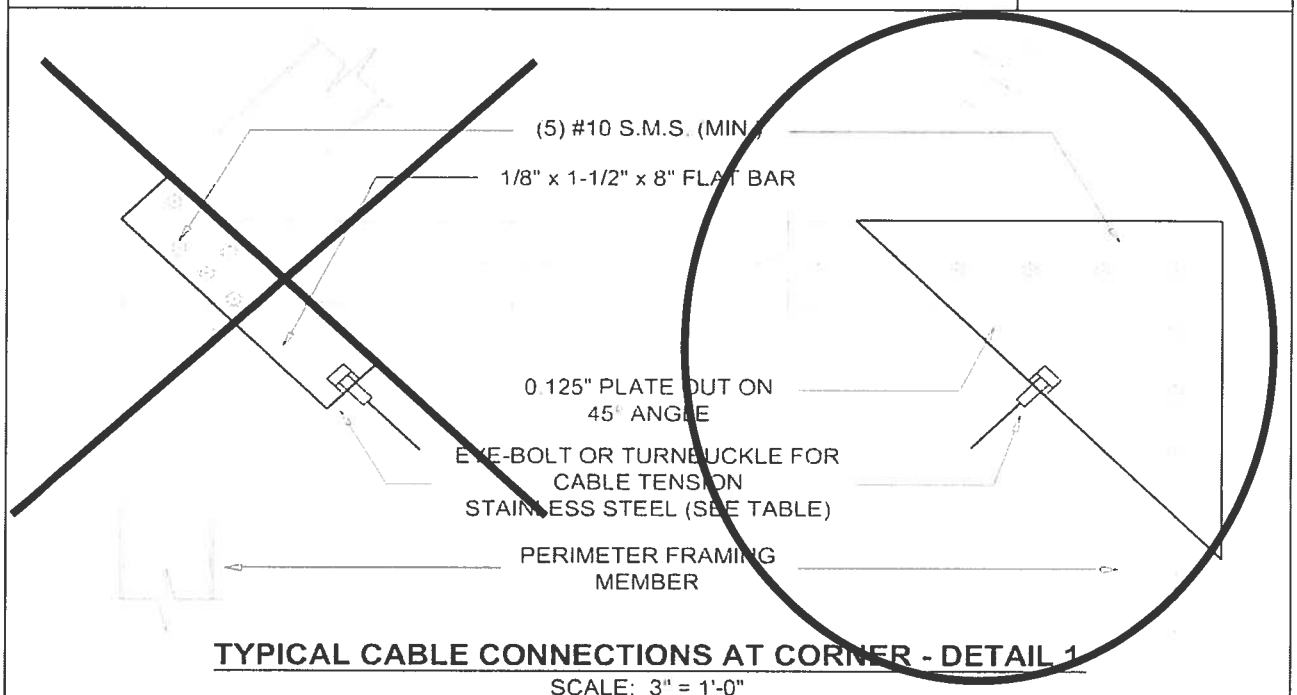
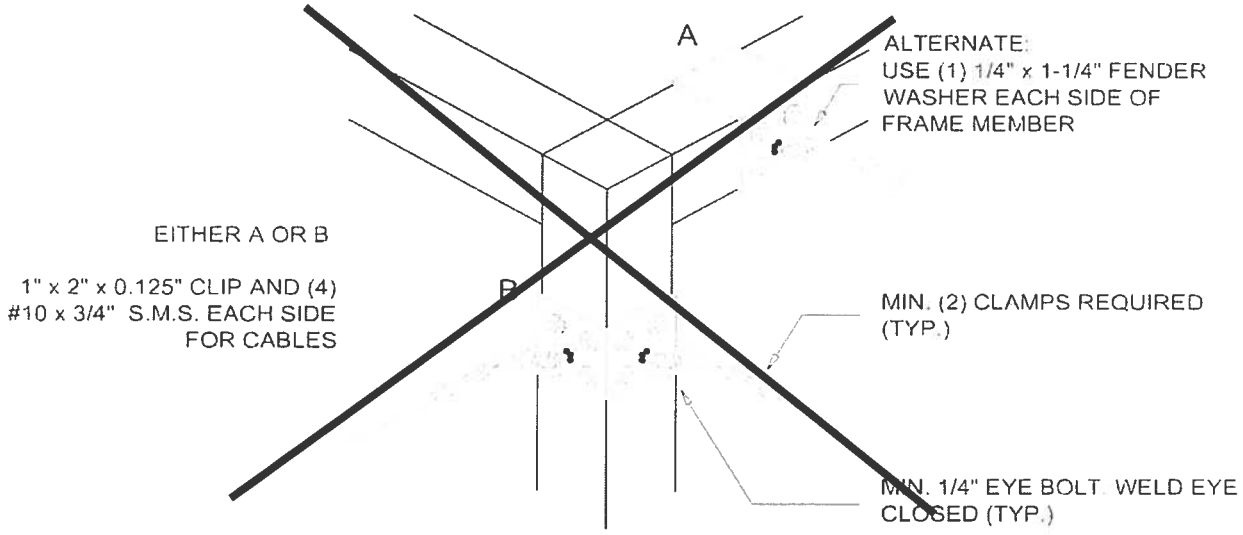


TYPICAL CABLE CONNECTIONS AT CORNER - DETAIL 1

SCALE: 3" = 1'-0"



ALTERNATE TOP CORNER OF CABLE CONNECTION - DETAIL 1A

SCALE: 3" = 1'-0"

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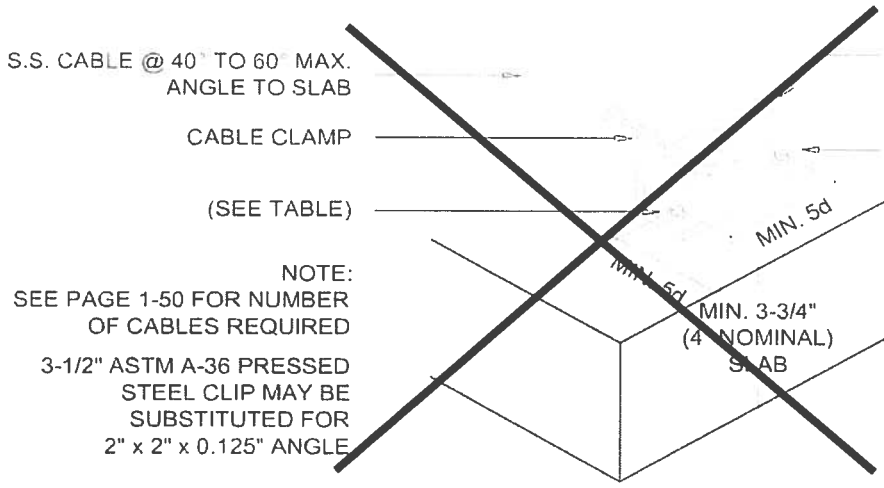
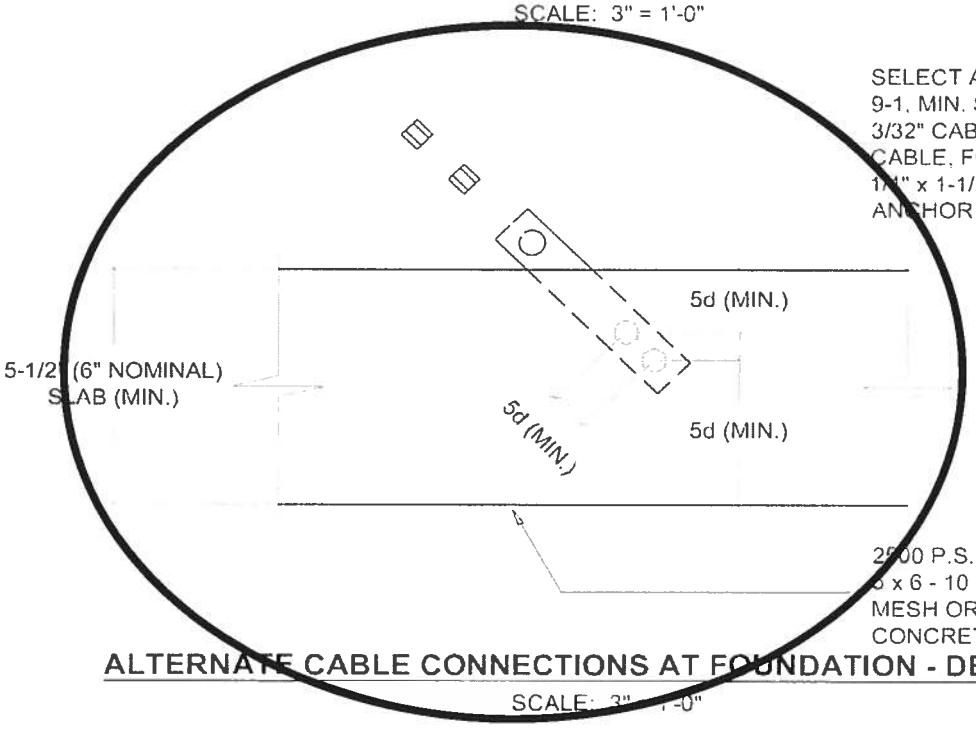


ALTERNATE CABLE CONNECTION AT SLAB DETAIL - DETAIL 2B

SCALE: 3" = 1'-0"



ALTERNATE CABLE CONNECTIONS AT FOUNDATION - DETAIL 2C

SCALE: 3" = 1'-0"

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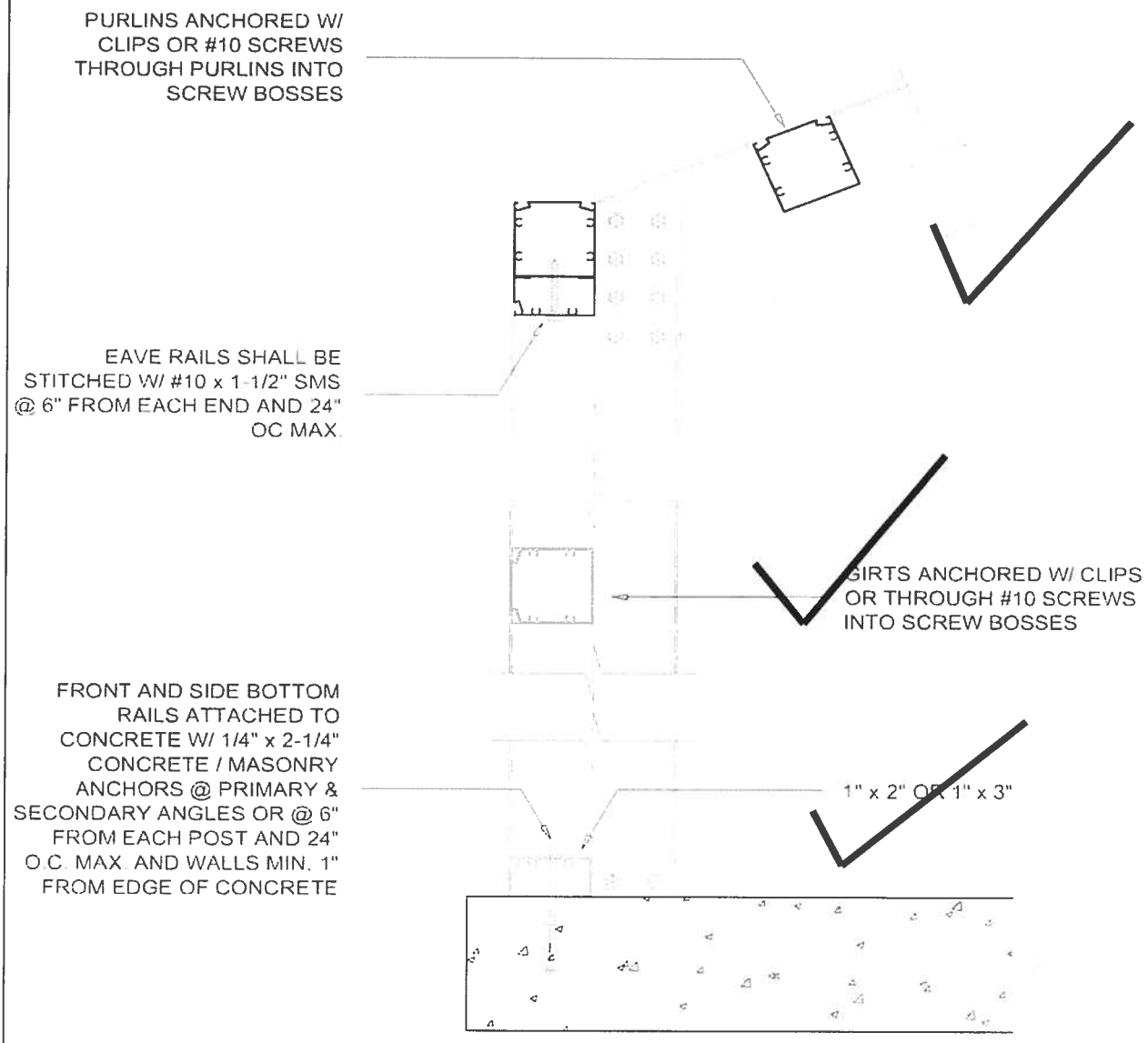
SECTION 1	SCREENED ENCLOSURES



PURLIN & CHAIR RAIL DETAIL

SCALE: 3" = 1'-0"

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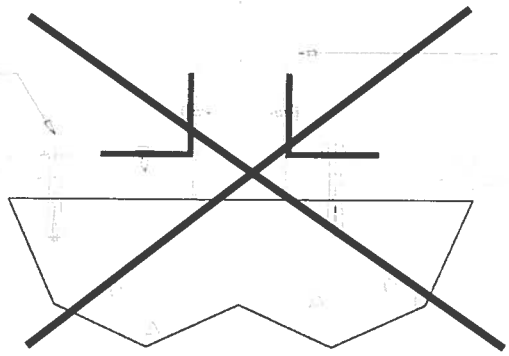
1" x 2" EXTRUSION ANCHOR TO CONCRETE W/ CONCRETE ANCHORS OR THRU PRIMARY ANGLE 6" MAX. EACH SIDE OF EACH POST AND @ 24" O.C. MAX. SELECT CONCRETE ANCHORS FROM SECTION 9

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

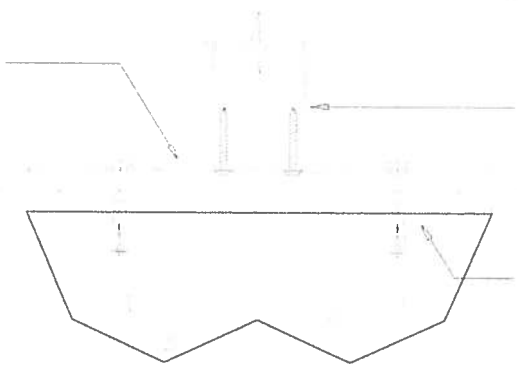


POST SIZE 2" x 4" MAX.

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



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 BOSSES

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

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 23' AND A BEAM & UPRIGHT SPACING OF 7' USE: 1/2 x 17'-11" x 7' x 10# / Sq. Ft. = 627.2# UPLIFT
2. Table 1.6 of this manual uses the worst case loads for all cases.
3. In all cases there must be a primary anchor within 6" of each side of the upright.
4. 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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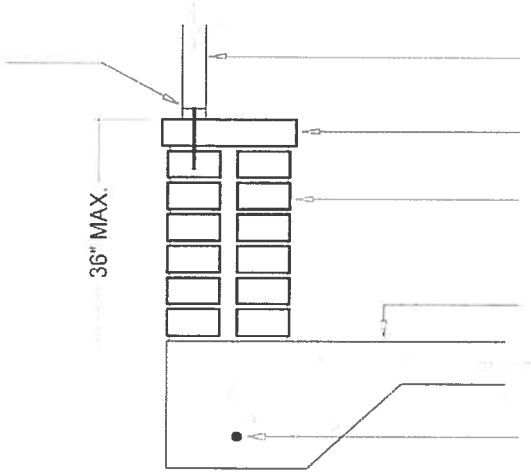
1/4" x 6" RAWL TAPPER THROUGH 1" x 2" AND ROWLOCK INTO FIRST COURSE OF BRICKS

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

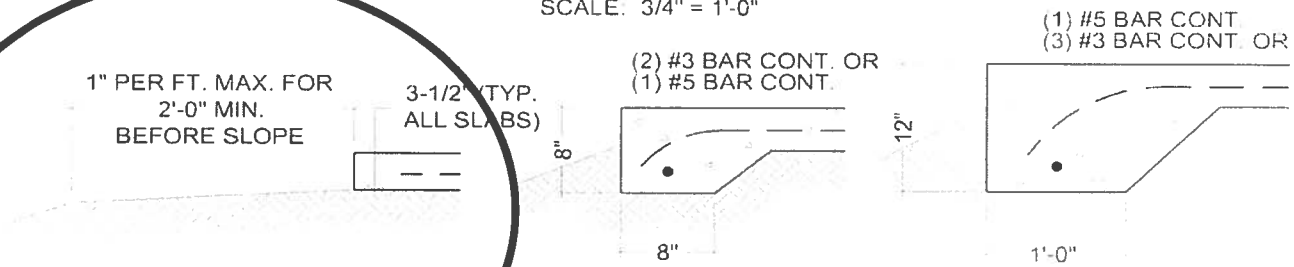
BRICK KNEEWALL TYPE 'S' MORTAR REQUIRED FOR LOAD BEARING BRICK WALL

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

(3) #3Ø BARS OR (1) #5Ø BAR W/ 2-1/2" COVER (TYP.)

BRICK KNEEWALL AND FOUNDATION FOR SCREEN WALLS

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



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 width in the direction of the primary 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 catagory 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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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 30°-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"	
	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	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	5'-2"	Pb	5'-2"	Pb
2" x 2" x 0.090"	7'-6"	Pb	7'-6"	Pb	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	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	9'-1"	Pb	9'-1"	Pb
2" x 5" x 0.062"	20'-5"	Pb	20'-5"	Pb	20'-5"	Pb	20'-4"	Ud	19'-4"	Ud	18'-6"	Ud	17'-9"	Ud

Self Mating Sections	Tributary Load Width 'W' = Beam Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-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'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	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	15'-9"	Ud	15'-1"	Ud
2" x 6" x 0.050" x 0.120"	20'-4"	Pd	20'-4"	Pd	20'-4"	Pd	20'-3"	Ud	19'-3"	Ud	18'-5"	Ud	17'-8"	Ud
2" x 7" x 0.055" x 0.120"	24'-9"	Pd	24'-9"	Pd	24'-6"	Ud	23'-1"	Ud	21'-11"	Ud	20'-11"	Ud	20'-2"	Ud
2" x 8" x 0.072" x 0.224"	34'-2"	Pd	32'-9"	Ud	30'-5"	Ud	28'-7"	Ud	27'-2"	Ud	25'-11"	Ud	24'-11"	Ud
2" x 9" x 0.072" x 0.224"	39'-3"	Pd	35'-11"	Ud	33'-4"	Ud	31'-5"	Ud	29'-10"	Ud	28'-6"	Ud	27'-5"	Ud
2" x 9" x 0.082" x 0.310"	42'-5"	Ud	38'-7"	Ud	35'-10"	Ud	33'-8"	Ud	31'-11"	Ud	30'-7"	Ud	29'-5"	Ud
2" x 10" x 0.092" x 0.369"	49'-3"	Ud	44'-9"	Ud	41'-7"	Ud	39'-1"	Ud	37'-2"	Ud	35'-6"	Ud	34'-2"	Ud

Snap Sections	Tributary Load Width 'W' = Beam Spacing													
	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-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	4'-10"	Pd	4'-10"	Pd
2" x 3" x 0.045"	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd
2" x 4" x 0.045"	10'-8"	Pd	10'-8"	Pd	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	21'-5"	Ud	20'-5"	Ud	19'-6"	Ud	18'-9"	Ud
2" x 7" x 0.062"	26'-8"	Pd	26'-8"	Pd	25'-9"	Ud	24'-3"	Ud	23'-0"	Ud	22'-0"	Ud	21'-2"	Ud

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 fascia or wall 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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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' = Purlin Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-8"	
	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	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	5'-2"	Pb	5'-2"	Pb
2" x 2" x 0.090"	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'-8"	Pb	5'-8"	Pb	5'-8"	Pb	5'-8"	Pb	5'-8"	Pb	5'-8"	Pb	5'-8"	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
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
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
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

Snap Sections	Tributary Load Width 'W' = Purlin Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-8"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 2" x 0.044	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb	4'-11"	Pb
2" x 3" x 0.045"	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd
2" x 4" x 0.045"	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd

B. Sections Fastened Through Beam Webs Into Screw Bosses

Hollow Sections	Tributary Load Width 'W' = Purlin Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-8"	
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)													
2" x 3" x 0.050"	11'-5"	Pb	11'-5"	Pb	11'-5"	Pb	11'-4"	Ud	10'-11"	Ud	10'-8"	Ud	10'-3"	Ud
2" x 4" x 0.050"	13'-8"	Pb	13'-8"	Pb	13'-8"	Pb	13'-8"	Pb	13'-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'-11"	Ud	20'-4"	Ud	19'-7"	Ud

Snap Sections	Tributary Load Width 'W' = Purlin Spacing													
	3'-6"		4'-0"		4'-6"		5'-0"		5'-6"		6'-0"		6'-8"	
	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 fascia 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-ii.

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'-0" = 9'-1"

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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'-8"	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 0.090"	8'-11"	d	8'-2"	d	7'-10"	d	7'-1"	b	6'-7"	b	6'-1"	b	5'-9"	b				
2" x 3" x 0.045"	8'-4"	d	7'-7"	d	7'-9"	d	6'-11"	d	6'-5"	d	5'-11"	b	5'-6"	b				
2" x 4" x 0.050"	11'-2"	b	9'-7"	b	8'-5"	b	7'-9"	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'-0"	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'-6"	b				
2" x 5" x 0.050" x 0.100"	14'-9"	d	13'-5"	d	12'-5"	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	13'-1"	b	12'-0"	b	11'-3"	b	10'-6"	b				
2" x 7" x 0.055" x 0.120"	19'-8"	d	17'-6"	b	15'-7"	b	14'-2"	b	13'-1"	b	12'-2"	b	11'-5"	b				
2" x 8" x 0.072" x 0.224"	24'-4"	d	22'-1"	d	20'-6"	d	19'-4"	d	18'-4"	d	17'-6"	d	16'-10"	d				
2" x 9" x 0.072" x 0.224"	26'-8"	d	24'-3"	d	22'-6"	d	21'-2"	d	20'-1"	d	19'-3"	d	18'-2"	b				
2" x 9" x 0.082" x 0.310"	28'-8"	d	26'-0"	d	24'-2"	d	22'-9"	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'-3"	d	4'-10"	b	4'-5"	b	4'-1"	b				
2" x 3" x 0.045"	8'-10"	d	8'-1"	d	7'-6"	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"	b	8'-2"	b	7'-5"	b	6'-9"	b	6'-2"	b				
2" x 6" x 0.062"	18'-3"	d	16'-7"	d	15'-5"	d	14'-6"	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 mean roof height.
5. Height is to be measured from center of beam and upright connection to fascia or wall connection.
6. 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" 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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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 # / 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'-5"	b	5'-8"	b	5'-1"	b	4'-8"	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 0.090"	8'-11"	d	8'-2"	d	7'-10"	d	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'-6"	d	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"	c	7'-9"	d	6'-11"	d	6'-5"	d	5'-11"	b	5'-6"	b
2" x 4" x 0.050"	11'-2"	b	9'-7"	b	8'-6"	b	7'-9"	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'-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"	d	5'-7"	d	5'-3"	d	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)													
2" x 2" x 0.044"	8'-4"	b	7'-2"	b	6'-4"	b	5'-8"	b	5'-2"	b	4'-9"	b	4'-5"	b
3" x 2" x 0.045"	9'-7"	b	8'-3"	b	7'-3"	b	6'-6"	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'-6"	b	8'-7"	b	7'-11"	b	7'-4"	b	6'-10"	b
2" x 5" x 0.062"	19'-3"	b	16'-7"	b	14'-9"	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 gardrails 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 to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii

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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 Purlin, Girt & Knee Brace Size	Notes	Minimum Number of Screws*			Beam Stitching Screw at 24" OC
				#8 x ½"	#10 x ½"	#12 x ½"	
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	#10
2 x 7 SMB	2 x 4 SMB or H	2" x 3" x 0.044"	Full Lap	14	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 0.120"	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..306"	0.190"
5/16"	7/8"	1-3/4"	2" x 10" x 0.092" x 0.369"	0.250"
3/8"	1"	2"		

* 0.082" wall thickness, 0.310" flange thickness

** (1) Stitching 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 1/16" 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 RAWL R Tapper 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, ie., a 2" x 4" upright shall have a 2" x 3" beam.
8. For minimum girt size read upright size as a beam and purlin size is minimum girt size (i.e. 2" x 5" 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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MEMO

Attention: County Building Departments

RE: Permit Materials

I hereby authorize the following persons to receive applicable information for permits in Columbia County for Timberlake Aluminum Construction, Inc.

License Holder: Carl R. Helms

License Number: SCC056710

Business Address: 25370 NW 8th Place Newberry, FL 32669

Business number: 352-472- 6850 Business Fax: 352-472-6855

Authorized personnel:

1. Craig Timberlake 2. Larry Cole

Effective Dates: From: 10/24/07 To: 8/31/08

Signature of License Holder:

SWORN to and subscribed before me this 5 day of November 2007.

Notary Public, State at Large

RAYMOND M. DREWNOWSKI
Comm# DD0681685
Expires 6/4/2011
Florida Notary Assn., Inc

Notary Seal