DATE 08/17/2007

Columbia County Building Permit

This Permit Expires One Year From the Date of Issue

PERMIT 000026145

APPLICANT CRAIG TIMBERLAKE PHONE 352 472-6850

ADDRESS 25370 NW 8TH PLACE NEWBERRY FL 32669

OWNER JAN & LEANNE WHITLOW PHONE

ADDRESS 402 SW STUART LOOP LAKE CITY FL 32024

CONTRACTOR BONNIE JORDAN PHONE 352 472-6850

LOCATION OF PROPERTY 47S, TR ON CR 242, TL ON STUART LOOP,LOT ON FIRST CORNER ON LEFT

TYPE DEVELOPMENT POOL ENCLOSURE ESTIMATED COST OF CONSTRUCTION 8272.00

HEATED FLOOR AREA TOTAL AREA HEIGHT STORIES

FOUNDATION WALLS ROOF PITCH FLOOR

LAND USE & ZONING RSF-2 MAX. HEIGHT

Minimum Set Back Requirments: STREET-FRONT 25.00 REAR 15.00 SIDE 10.00

NO. EX.D.U. 0 FLOOD ZONE DEVELOPMENT PERMIT NO.

PARCEL ID 25-4S-16-03170-102 SUBDIVISION MAXWELL SQUARE

LOT 2 BLOCK PHASE UNIT TOTAL ACRES

		SCC056711	Craig Timberlake	
Culvert Permit No.	Culvert Waiver	Contractor's License Number	Applicant/Owner/Contractor	
EXISTING	X07-313	BK	JH	N
Driveway Connection	Septic Tank Number	LU & Zoning checked by	Approved for Issuance	New Resident

COMMENTS: NOC ON FILE

Check # or Cash CASH

FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power date/app. by — Foundation date/app. by — Monolithic date/app. by

Under slab rough-in plumbing date/app. by — Slab date/app. by — Sheathing/Nailing date/app. by

Framing date/app. by — Rough-in plumbing above slab and below wood floor date/app. by

Electrical rough-in date/app. by — Heat & Air Duct date/app. by — Peri. beam (Lintel) date/app. by

Permanent power date/app. by — C.O. Final date/app. by — Culvert date/app. by

M/H tie downs, blocking, electricity and plumbing date/app. by — Pool date/app. by

Reconnection date/app. by — Pump pole date/app. by — Utility Pole date/app. by

M/H Pole date/app. by — Travel Trailer date/app. by — Re-roof date/app. by

BUILDING PERMIT FEE $ 45.00 CERTIFICATION FEE $ 0.00 SURCHARGE FEE $ 0.00

MISC. FEES $ 0.00 ZONING CERT. FEE $ FIRE FEE $ 0.00 WASTE FEE $

FLOOD DEVELOPMENT FEE $ FLOOD ZONE FEE $ CULVERT FEE $ **TOTAL FEE** 45.00

INSPECTORS OFFICE Gale Tolar CLERKS OFFICE CH

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.

Columbia County Building Permit Application

For Office Use Only Application # 0708-07 Date Received 8/14/07 By GT Permit # 26145

Application Approved by - Zoning Official _____ Date _____ Plans Examiner _____ Date _____

Flood Zone _____ Development Permit _____ Zoning _____ Land Use Plan Map Category _____

Comments _____

NOC ☐ EH ☐ Deed or PA ☐ Site Plan ☐ State Road Info ☐ Parent Parcel # ☐ Development Perm

Fax 352-472-6855

Name Authorized Person Signing Permit Craig Timberlake Phone 352-472-6850

Address 25370 NW 8th Place Newberry FL 32669

Owners Name Jan + Leanne Whitlow Phone _____

911 Address 402 SW Stuart Loop Lake City, FL 32024

Contractors Name Bonnie Jordan 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 Lender Name & Address N/A

Circle the correct power company – FL Power & Light – Clay Elec. – Suwannee Valley Elec. – Progressive Ene

Property ID Number 25-4S-16-03170-102 Estimated Cost of Construction 8272.00

Subdivision Name _____ Lot 2 Block _____ Unit _____ Phase _____

Driving Directions South on Hwy 47 take right onto CR 242, Left onto Stuart Loop (First road on Left) Follow curve to Right. New home under construct

Type of Construction Screen enclosure Number of Existing Dwellings on Property _____

Total Acreage _____ Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing D

Actual Distance of Structure from Property Lines - Front 150' Side 50 Side 30' Rear 80'

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 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.

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

Owner Builder or Authorized Person by Notarized Letter

Bonnie Jordan
Contractor Signature

Contractors License Number SCCO56711

Competency Card Number

NOTARY STAMP/SEAL

FRANCIS G. MYERS
MY COMMISSION # DD 446231
EXPIRES: August 11, 2009
Bonded Thru Notary Public Underwriters

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me

this _____ day of _____ 20____.

Personally known _____ or Produced Identification _____

Notary Signature

(Revised Sept. 2

FROM :COLUMBIA CO BUILDING + ZONING FAX NO. :386-758-2160 Aug. 17 2007 01:23PM P1

Columbia County Building Permit Application

For Office Use Only Application # 0708-07 Date Received 8/3/07 By G Permit # _____

Application Approved by - Zoning Official cfs Date 8/4/07 Plans Examiner OK JTH Date 8-13-07

Flood Zone N/A Development Permit N/A Zoning RSF-2 Land Use Plan Map Category RLD

Comments _____

Applicants Name: Larry Cole
Address: 25370 NW 8th Place Newberry, FL 32669
Owners Name: Jan & LeAnne Whitlow
911 Address: 402 SW Stuart Loop Lake City, FL 32024
Contractors Name: Bonnie Jordan
Address: 25370 NW 8th Place Newberry, FL 32669

Phone: (352) 472-6850

Phone: _____

Phone : (352) 472-6850

Lot 2 Maxwell Sq. S/D

Fee Simple Owner Name & Address: N/A
Bonding Co. Name & Address: N/A
Architect/Engineer Name & Address: Lawrence E. Bennett, P.E. PO Box 214368, South Daytona, FL 32121
Mortgage Lenders Name & Address: Mercantile

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

Property ID Number 25-4S-16-03170-102 Estimated Cost of Construction $ 8272.00
Subdivision Name: Maxwell Square Lot 2 Block Unit ____ Phase ____
Driving Directions: S Hwy 47 To 242 R To Stuart Loop L, lot on first corner on left.
Type of Construction: Pool Enclosure over existing pool, concrete done by others
Number of Existing Dwellings on Property _____

Total Acreage 0.000 Lot Size _____ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive

Actual Distance of Structure from Property Lines - Front 90' Side 30' Side 50' Rear 50'

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.

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

Owner Builder or Agent (Including Contractor)

STATE OF FLORIDA
COUNTY OF COLUMBIA

Sworn to (or affirmed) and subscribed before me this 3 day of August 2007.

Personally known ✓ or Produced Identification _____

Contractor Signature
Contractor's License Number: SCC056711
Competency Card Number _____
NOTARY STAMP/SEAL

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

Notary Signature

Timberlake Aluminum Construction, Inc.

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

THIS LETTER AUTHORIZES Larry Dale TO OBTAIN PERMITS AND SIGN ALL APPLICABLE FORMS AND AFFADAVITS NECESSARY FOR LICENSES FOR LICENSE NUMBER #SCCO56711.

Bonnie Jordan

BONNIE JORDAN
DATE 1-12-07

SWORN TO AND SUBSCRIBED BEFORE ME THIS 12 DAY OF JANUARY, 2007

Craig C Timberlake

NOTARY PUBLIC

NOTARY PUBLIC STATE OF FLORIDA
CRAIG C. TIMBERLAKE
MY COMMISSION # DD 289931
EXPIRES: April 12, 2008
Bonded Thru Notary Public Underwriters

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 AUHTORIZES CRAIG TIMBERLAKE TO SIGN ALL APPLICABLE FORMS AND AFFADAVITS NECESSARY FOR OBTAING PERMITS OR RENEWAL OF LICENSE FOR BONNIE L JORDAN SCC 056711.

Bonnie L Jordan
BONNIE L JORDAN

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

NOTARY PUBLIC Jennifer R Smith
AFFIX SEAL

Jennifer R. Smith
My Commission DD288541
Expires February 08, 2008

Columbia County Property Appraiser

DB Last Updated: 5/11/2007

Parcel: 25-4S-16-03170-102

2007 Proposed Values

Tax Record | Property Card | Interactive GIS Map | Print

Search Result: 1 of 6 Next >>

Owner & Property Info

Owner's Name	WHITLOW JAN B & LEANNE M		
Site Address			
Mailing Address	P O BOX 3485 LAKE CITY, FL 32056		
Use Desc. (code)	VACANT (000000)		
Neighborhood	25416.03	**Tax District**	2
UD Codes	MKTA01	**Market Area**	01
Total Land Area	0.000 ACRES		
Description	LOT 2 MAXWELL SQUARE S/D. WD 1113-2583.		

GIS Aerial

Property & Assessment Values

Mkt Land Value	cnt: (1)	$20,500.00
Ag Land Value	cnt: (0)	$0.00
Building Value	cnt: (0)	$0.00
XFOB Value	cnt: (0)	$0.00
Total Appraised Value		$20,500.00

Just Value	$20,500.00
Class Value	$0.00
Assessed Value	$20,500.00
Exempt Value	$0.00
Total Taxable Value	$20,500.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale Vlmp	Sale Qual	Sale RCode	Sale Price
3/15/2007	1113/2583	WD	I	Q		$232,700.00

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
000100	SFR (MKT)	1.000 LT - (.000AC)	1.00/1.00/1.00/1.00	$20,500.00	$20,500.00

Columbia County Property Appraiser DB Last Updated: 5/11/2007

1 of 6 Next >>

Notice of Commencement

State Of Florida
County of Columbia

1. Description of Property Residential
2. Parcel ID# 25-4S-16-03117-102 (AP)
3. General Description of Improvement: Screen Enclosure
4. Owner Name and Address: Jan & LeAnne Whitlow
402 SW Stuart Loop Lake City Fl 32024
5. Interest in Property: Owner
6. Fee Simple Titleholder(if other than owner): None (28)
7. Contractor Name: Timberlake Muminum Construction
8. Surety: None
9. Lender: Mercantile **(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 (AP) Aluminum
14. **Return to:** Peeler Pools, Inc 9878 S. US Hwy 441 Lake City, Fl 32025

Owner Name (Print) LeAnne Whitlow Owner Name Signature LeAnne Whitlow

Sworn to and subscribed before me this 22nd day of February, 2007

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

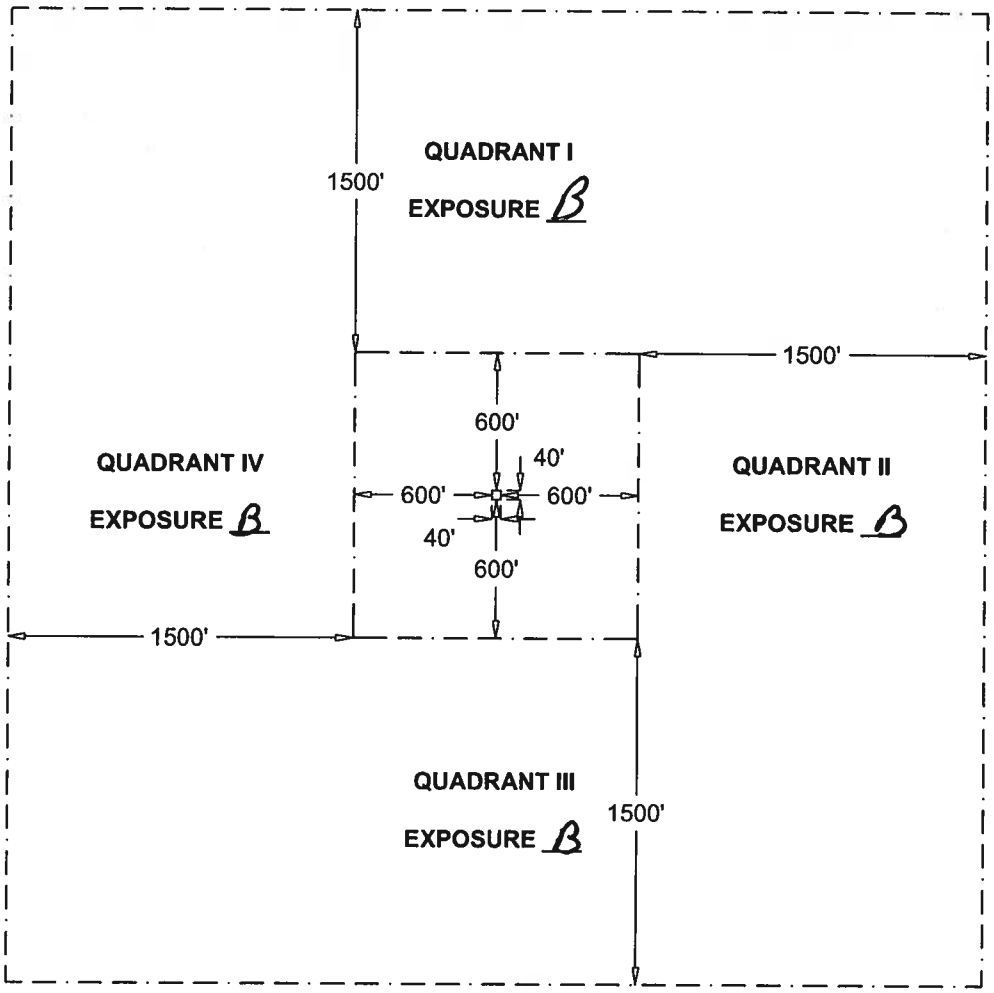
Notary's Name Alice B. Peeler Notary Public State Of Florida _____

Commission Expiry and Number Alice B. Peeler

NOTARY PUBLIC STATE OF FLORIDA (407) 396-0163
ALICE B PEELER
MY COMMISSION # DD472231
EXPIRES: Sept. 15, 2009
Florida Notary Service.com

Inst:200712017610 Date:8/3/2007 Time:12:47 PM
DC,P.DeWitt Cason ,Columbia County Page 1 of 1

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: _____

SIGNATURE: Craig LICENSE #: SCC056711

CRAIG TIMBERLAKE, *President*
HARVEY STOKES, *Sales*

Timberlake

Aluminum Construction, Inc.

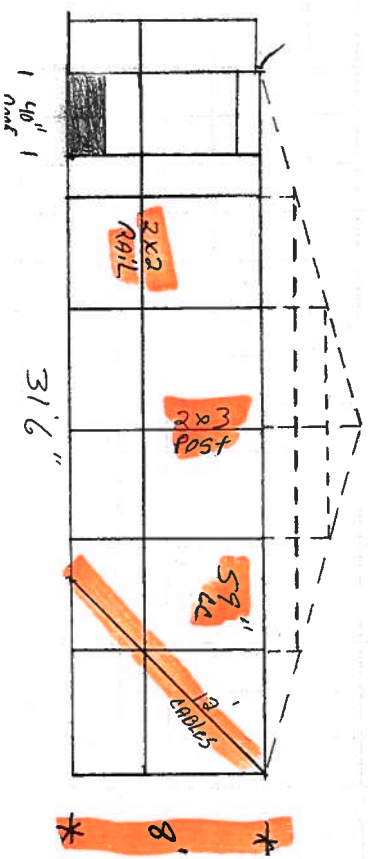
Don't clean it - screen it!

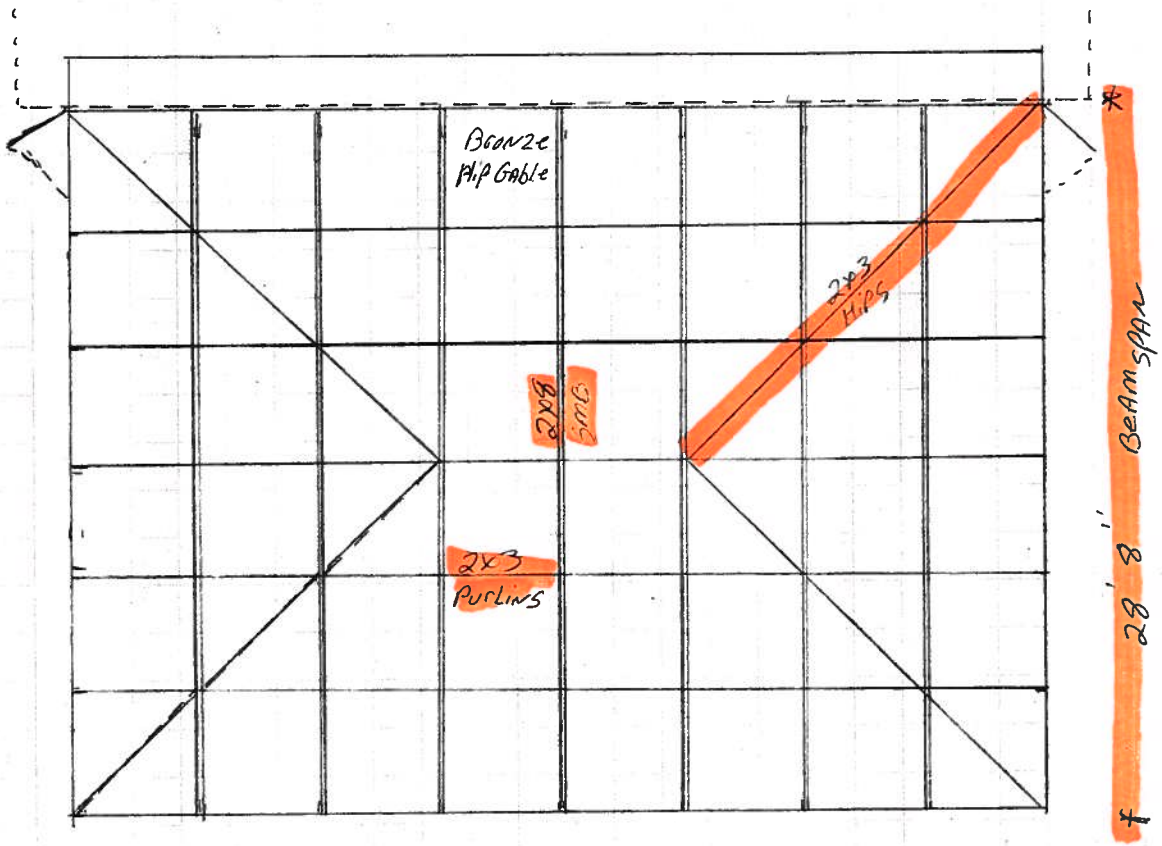
License # SCC056711

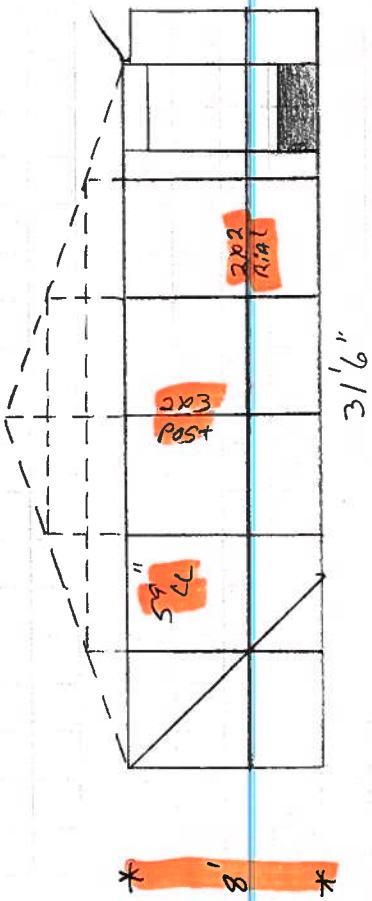
25370 NW 8th Place
Newberry, Florida 32669

Toll Free 1-800-976-9890
Phone (352) 472-6850
Fax (352) 472-6855

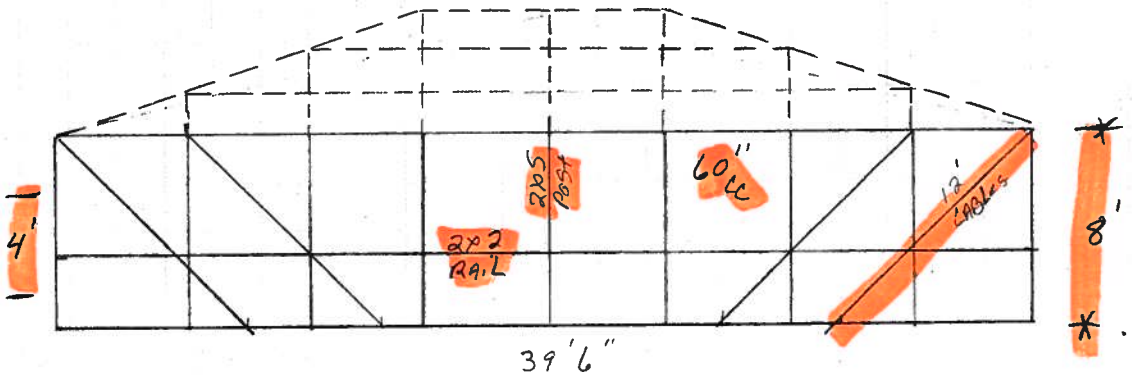
Whitlow / Peeler # 134
402 SW Stuart Loop
Lake City FL



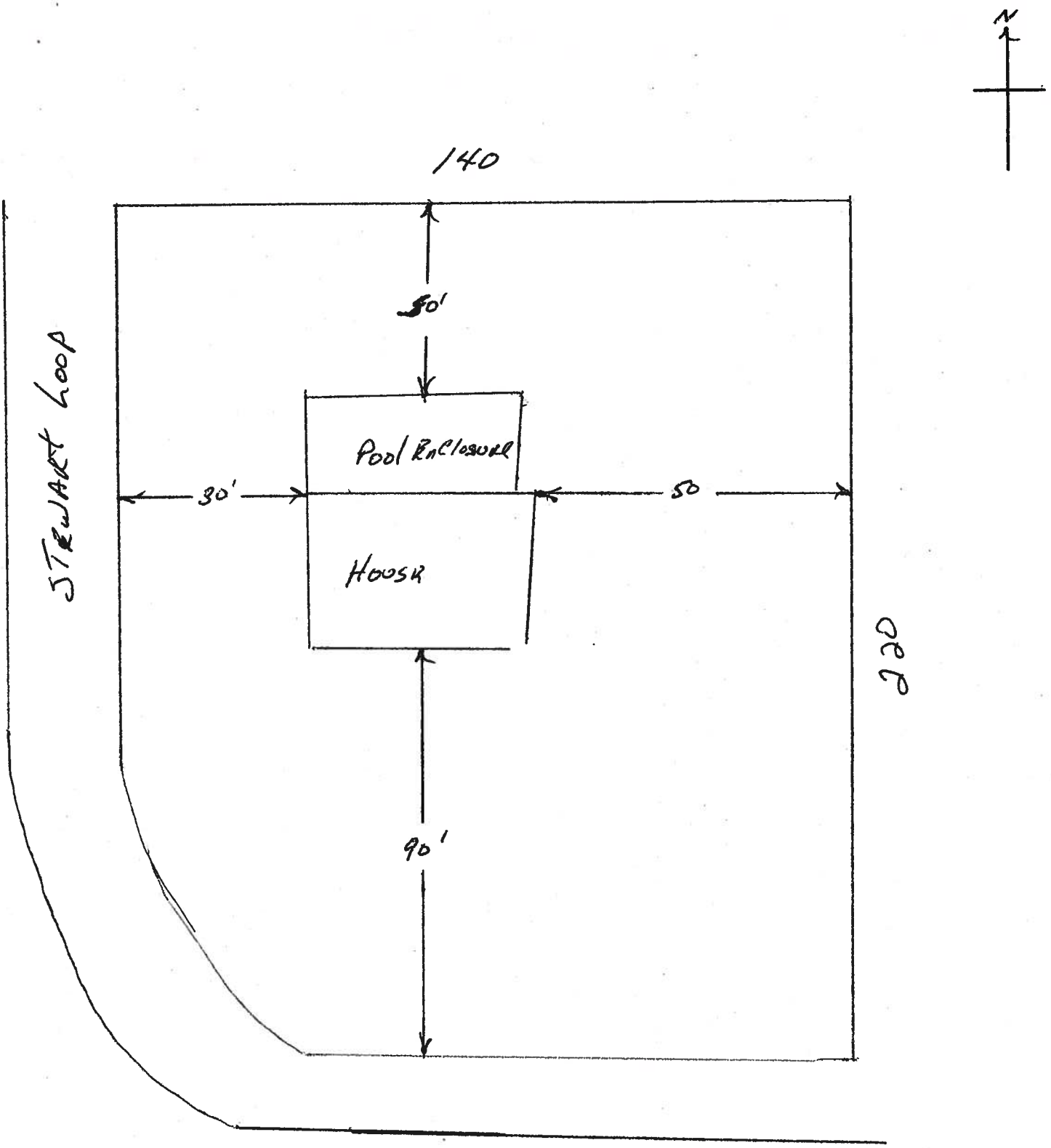




2x3 Post
7'-9" x 1.10 = 8'-7"



Bennitt 06



Timberlake Aluminum Coast Inc
25370 NW 8A1
Newberry FL 32669

Whitlow
402 SW Stewart Loop
Lake City FL

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.

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

Craig Timberlake Date: 7-31-07
Contractor / Authorized Rep* Signature

Whitlow / 402 SW Stuart Loop 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 120 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:

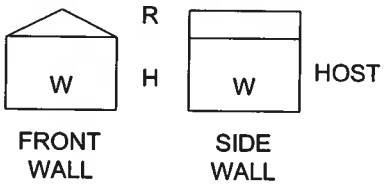
Span @ 120 MPH — 0 (b or d) x 0 (b or d) x 0 (b or d) = 0 — Required Converted Span / Height

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 3 of 4)



Example 2: Gable Roof

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

Front gable rise: _____ft. x 1/2(_____ft.) = _____ft.² @ 100% = ... _____ ft.²
R W b

Largest side wall: _____ft. x _____ = _____ft.² @ 50% = ... _____ ft.²
W H c

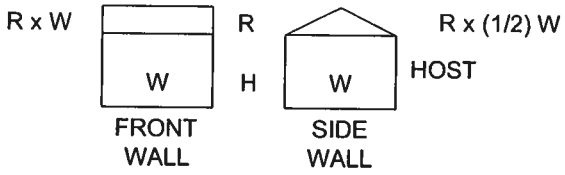
Largest side gable rise: _____ft. x _____ft. = _____ft.² @ 50% = ... _____ ft.²
R W d

TOTAL = ... _____ ft.²

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

Side wall cable calculation: _____ft.² + _____ft.² = _____ft.² @ 100% = ... _____ ft.²
c d

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



Example 3: Transverse Gable Roof

Front wall @ eave: 39'6" ft. x 8' ft. = 316 ft.² @ 100% = ... 316 ft.²
W H a

Front gable rise: 5 ft. x 19'9" ft. = 197'6" ft.² @ 100% = ... 197'6" ft.²
R W b

Largest side wall: 31'6" ft. x 8 = 252 ft.² @ 50% = ... 126 ft.²
W H c

Largest side gable rise: 5 ft. x 1/2 (31'6" ft.) = 78'9" ft.² @ 50% = ... 39'4" ft.²
R W d

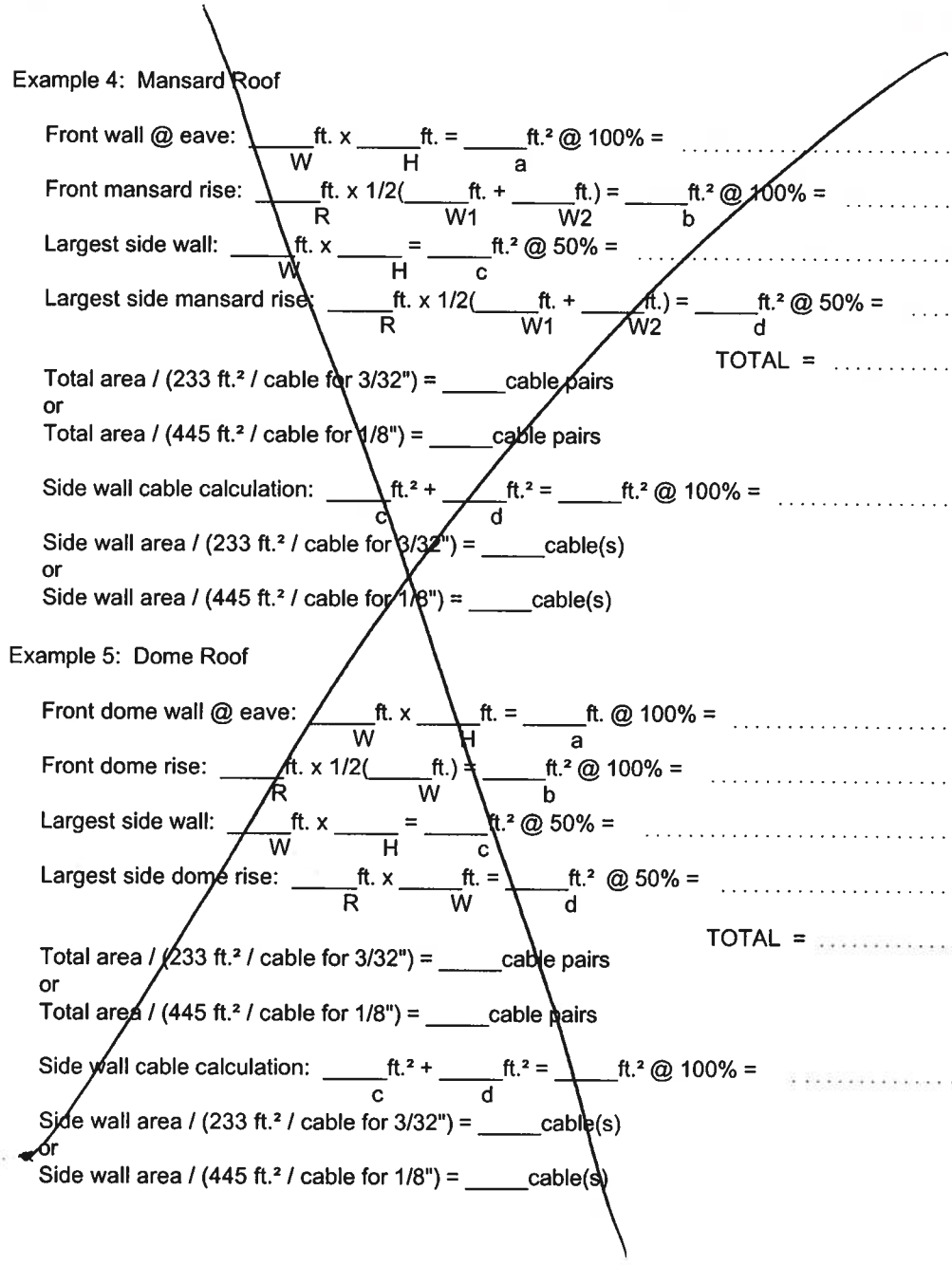
TOTAL = ... 678.10" ft.²

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

Side wall cable calculation: 252 ft.² + 78'9" ft.² = 330 ft.² @ 100% = ... 330'9" ft.²
c d

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

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



Example 4: Mansard Roof

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

Front mansard rise: _____ft. x 1/2(_____ft. + _____ft.) = _____ft.² @ 100% = ... _____ ft.²
R W1 W2 b

Largest side wall: _____ft. x _____ = _____ft.² @ 50% = ... _____ ft.²
W H c

Largest side mansard rise: _____ft. x 1/2(_____ft. + _____ft.) = _____ft.² @ 50% = ... _____ ft.²
R W1 W2 d

TOTAL = ... _____ ft.²

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

Side wall cable calculation: _____ft.² + _____ft.² = _____ft.² @ 100% = ... _____ ft.²
c d

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

Example 5: Dome Roof

Front dome wall @ eave: _____ft. x _____ft. = _____ft. @ 100% = ... _____ ft.²
W H a

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

Largest side wall: _____ft. x _____ = _____ft.² @ 50% = ... _____ ft.²
W H c

Largest side dome rise: _____ft. x _____ft. = _____ft.² @ 50% = ... _____ ft.²
R W d

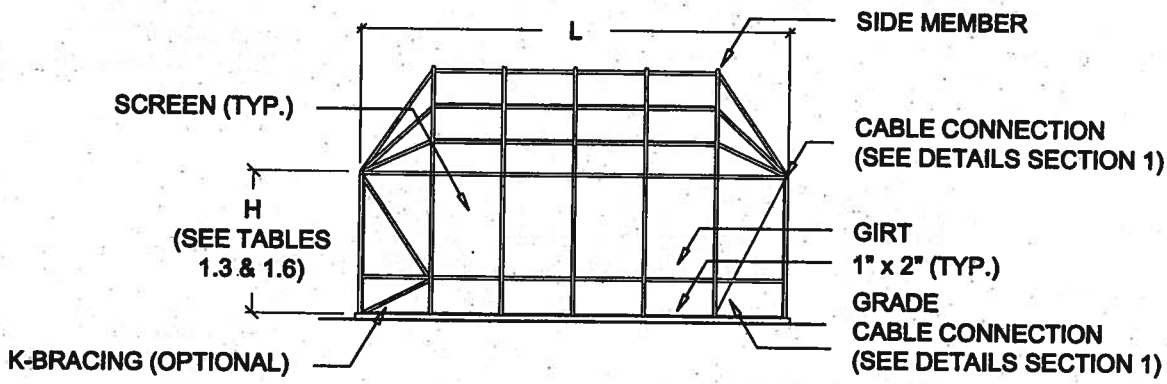
TOTAL = ... _____ ft.²

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

Side wall cable calculation: _____ft.² + _____ft.² = _____ft.² @ 100% = ... _____ ft.²
c d

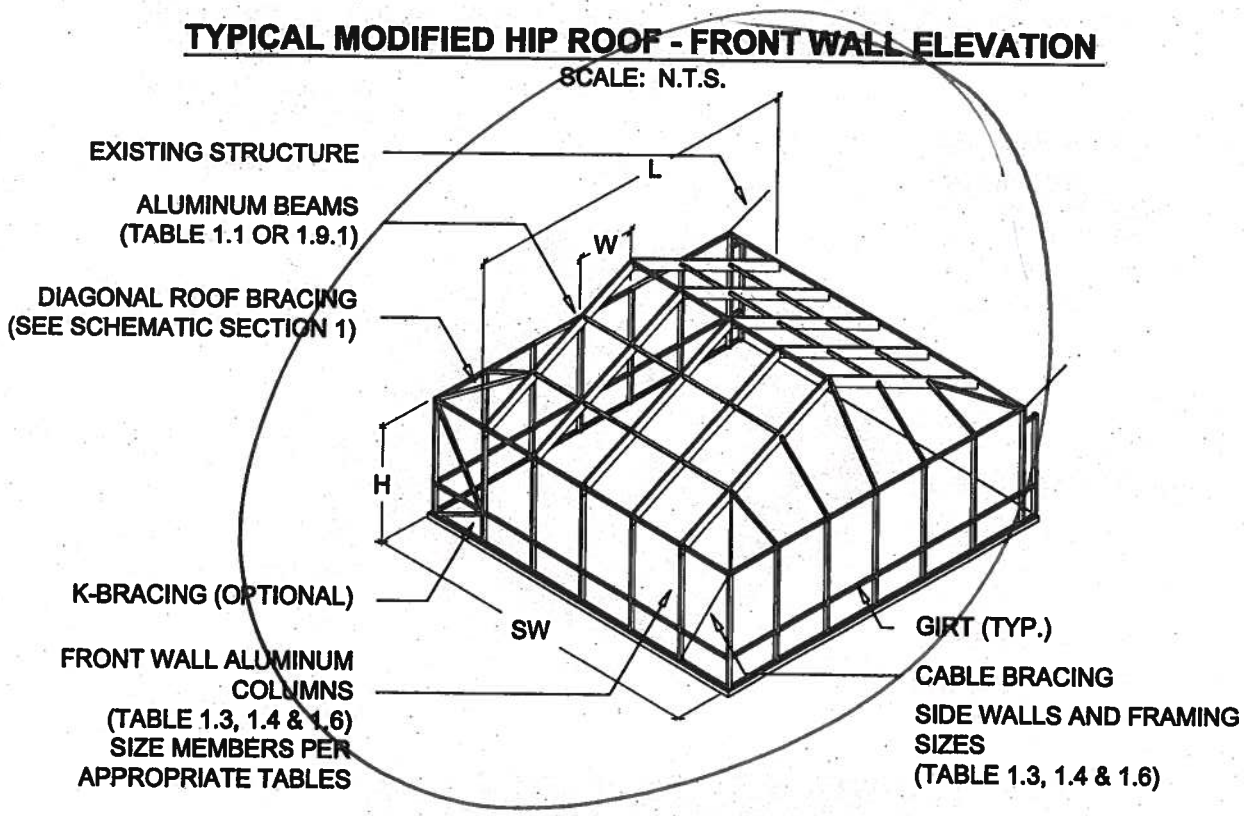
Side wall area / (233 ft.² / cable for 3/32") = _____cable(s)
or
Side wall area / (445 ft.² / cable for 1/8") = _____cable(s)

Notes:



TYPICAL MODIFIED HIP ROOF - FRONT WALL ELEVATION

SCALE: N.T.S.



TYPICAL MODIFIED HIP ROOF - ISOMETRIC

SCALE: N.T.S.

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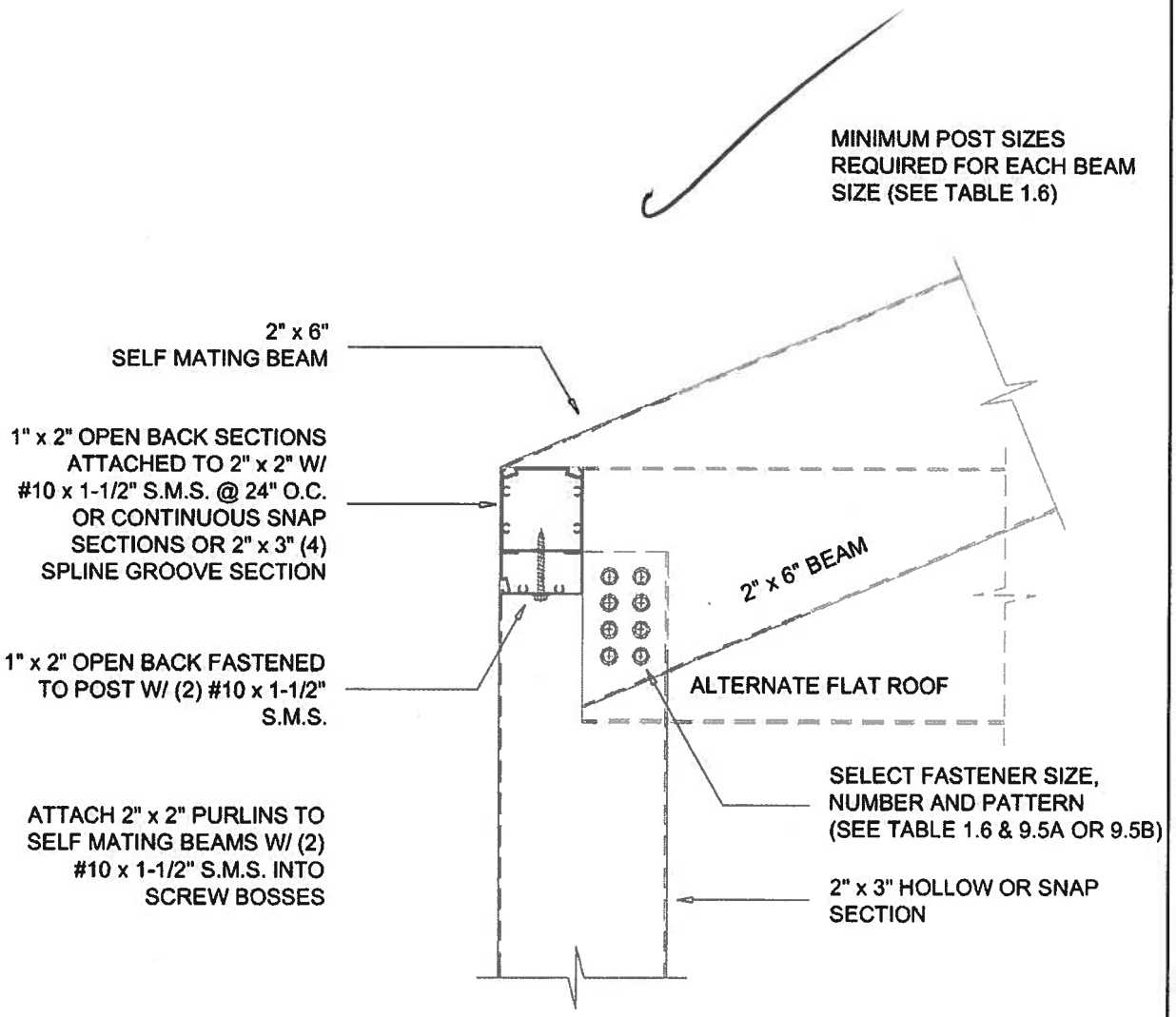

SLOPING BEAM TO UPRIGHT CONNECTION DETAIL (PARTIAL LAP)

SCALE: 3" = 1'-0"

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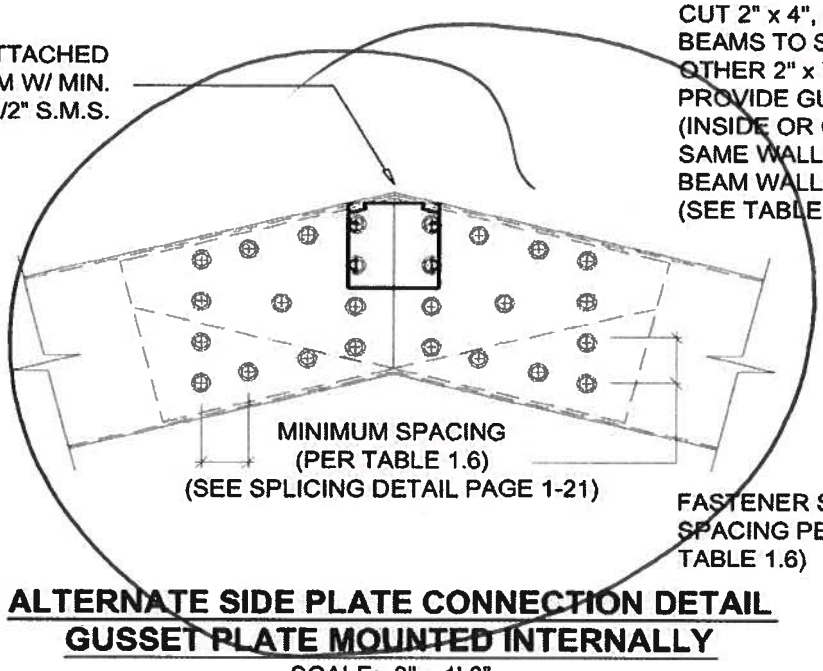
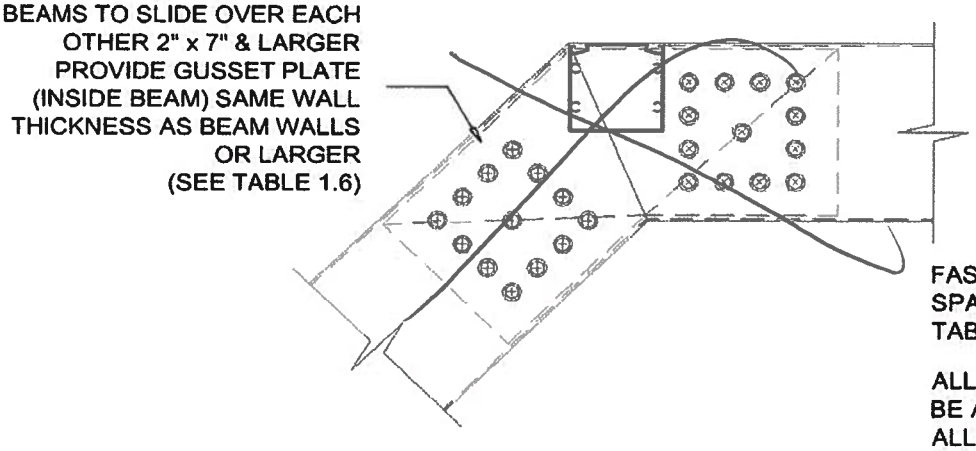


ALTERNATE SIDE PLATE CONNECTION DETAIL
GUSSET PLATE MOUNTED INTERNALLY

SCALE: 3" = 1'-0"



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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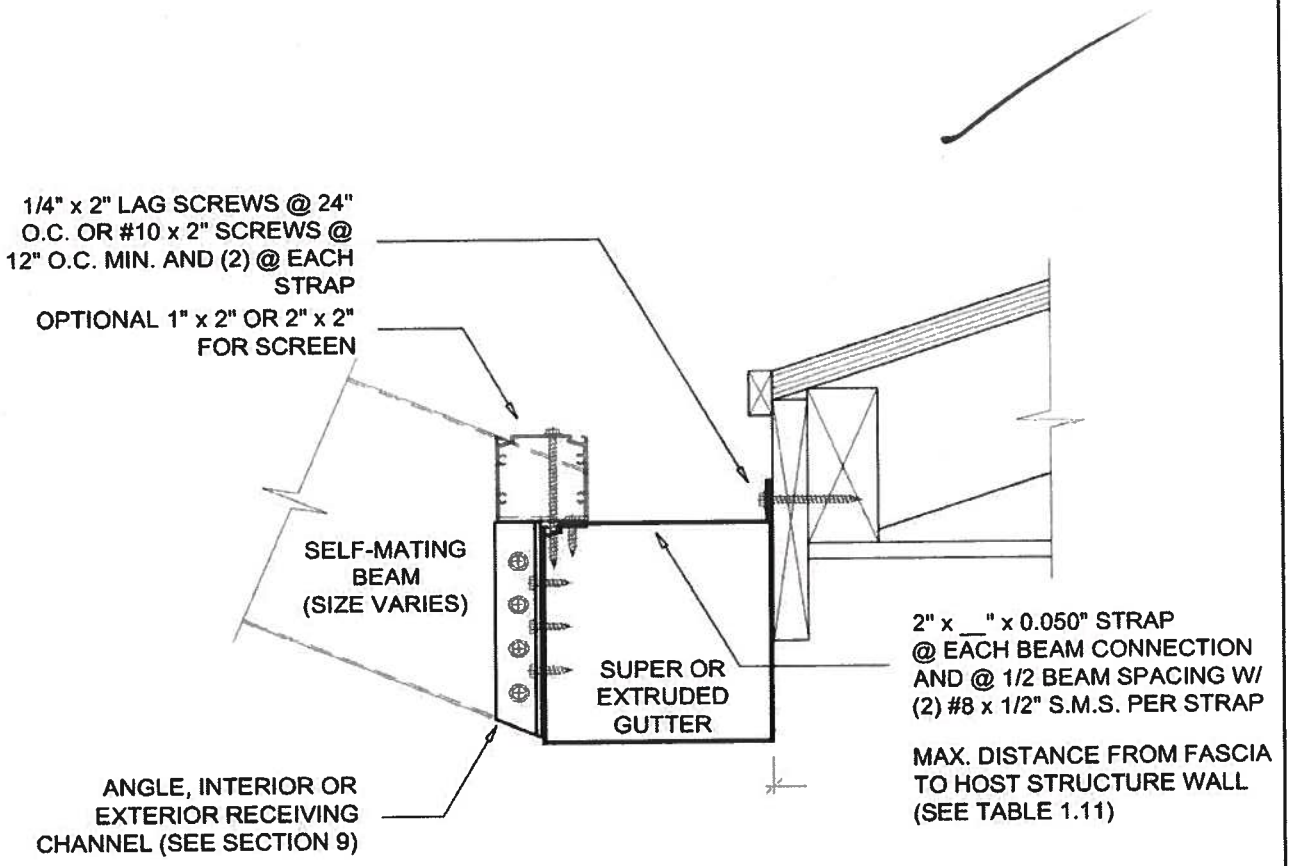

ALTERNATE SELF MATING BEAM CONNECTION TO SUPER OR EXTRUDED GUTTER

SCALE: 3" = 1'-0"

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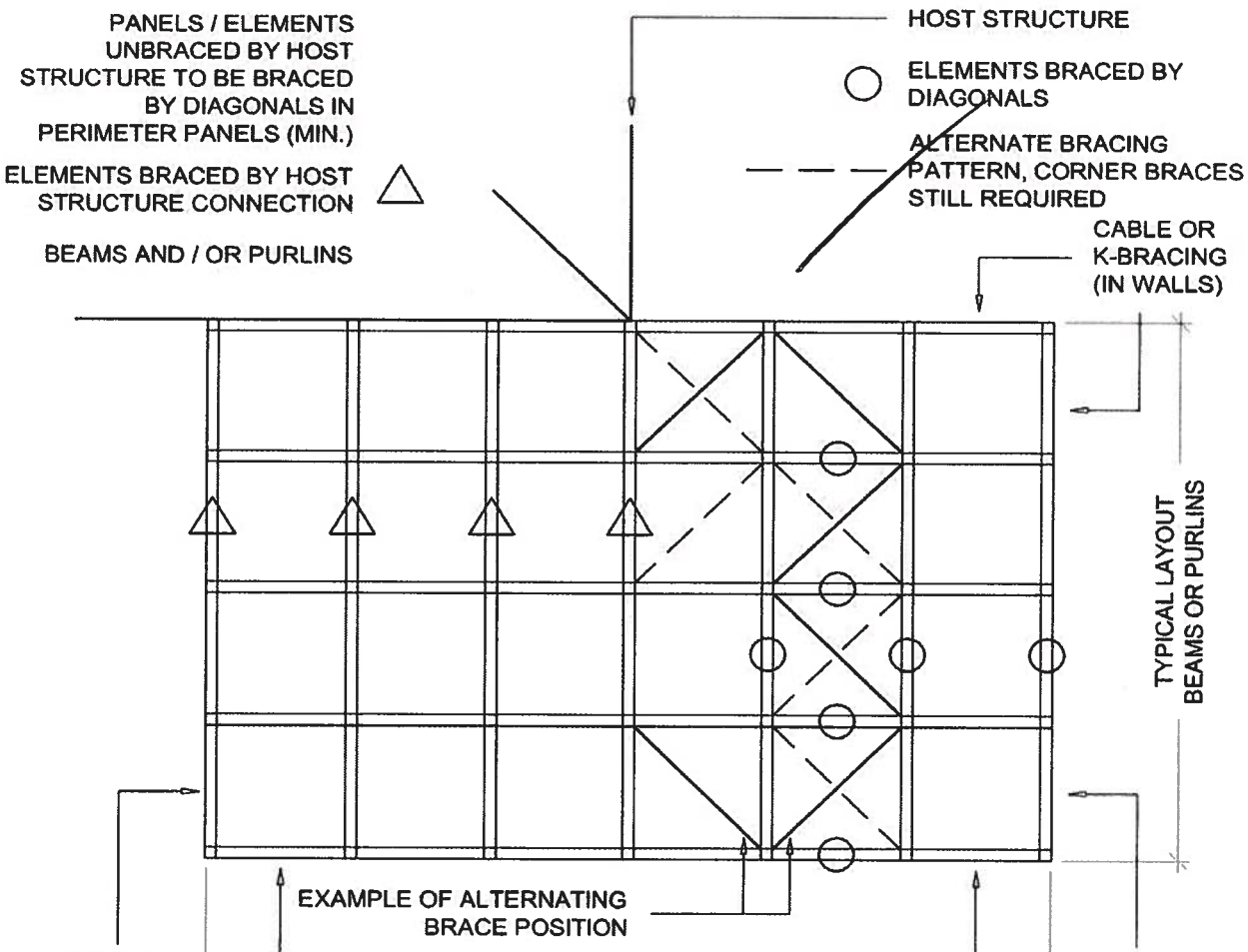
SECTION 1	SCREENED ENCLOSURES



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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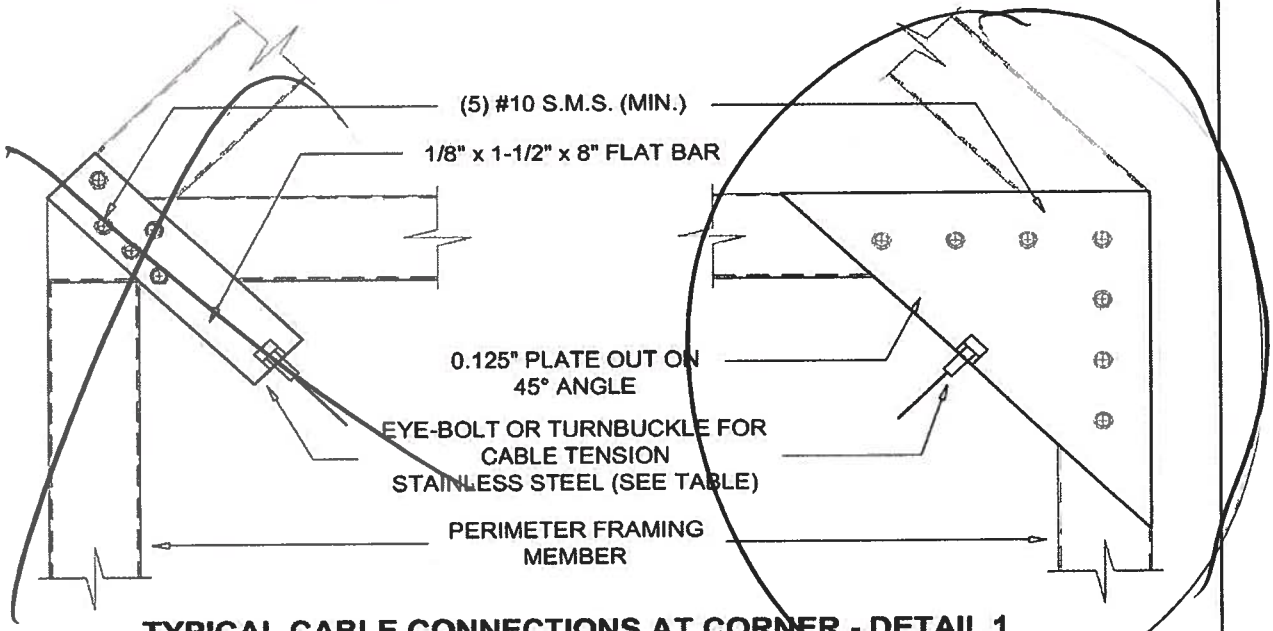
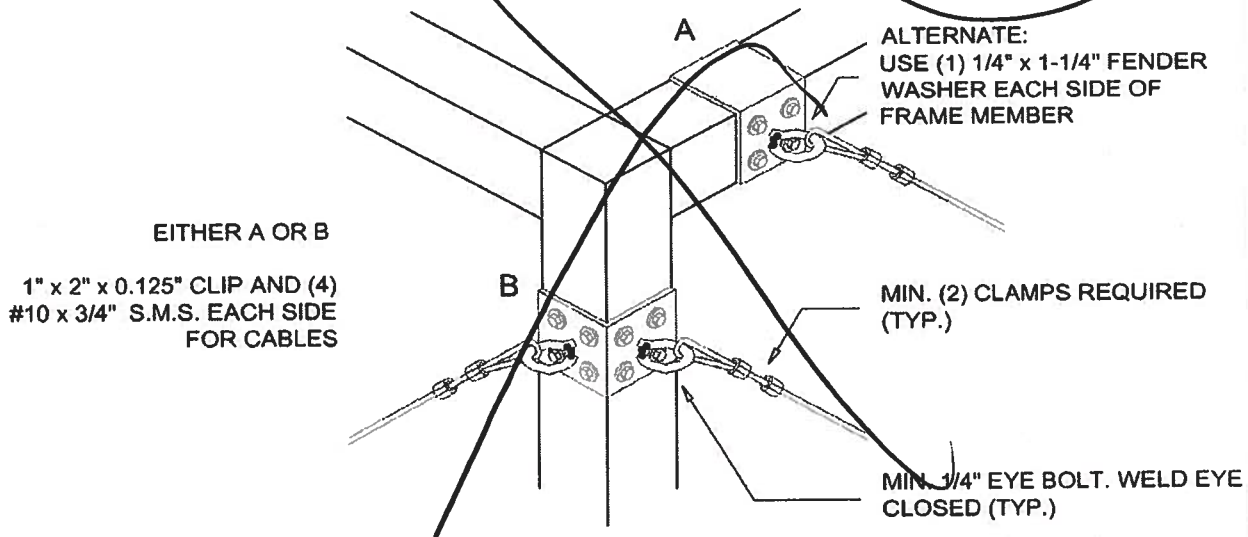


TYPICAL CABLE CONNECTIONS AT CORNER - DETAIL 1

SCALE: 3" = 1'-0"



ALTERNATE TOP CORNER OF CABLE CONNECTION - DETAIL 1A

SCALE: 3" = 1'-0"

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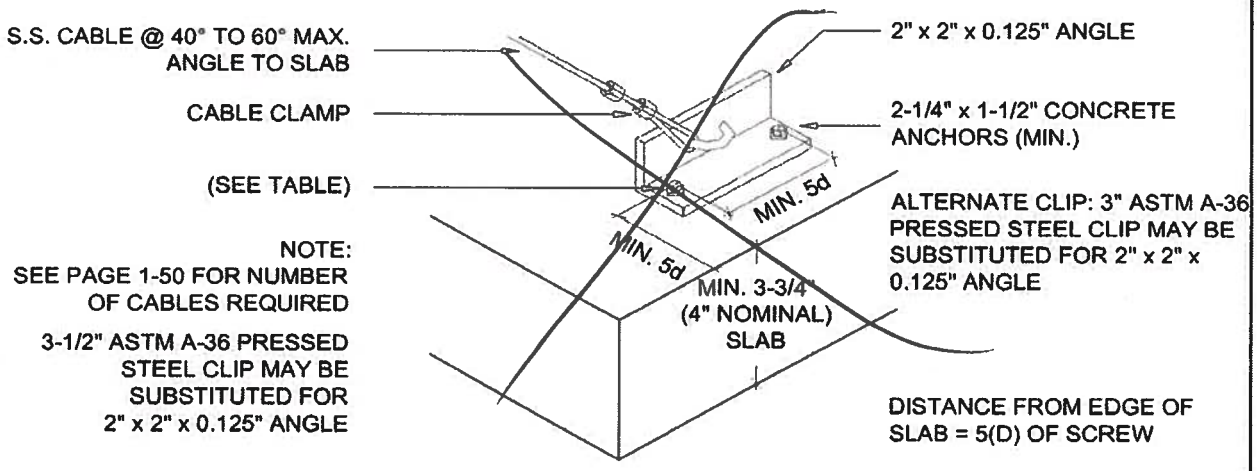
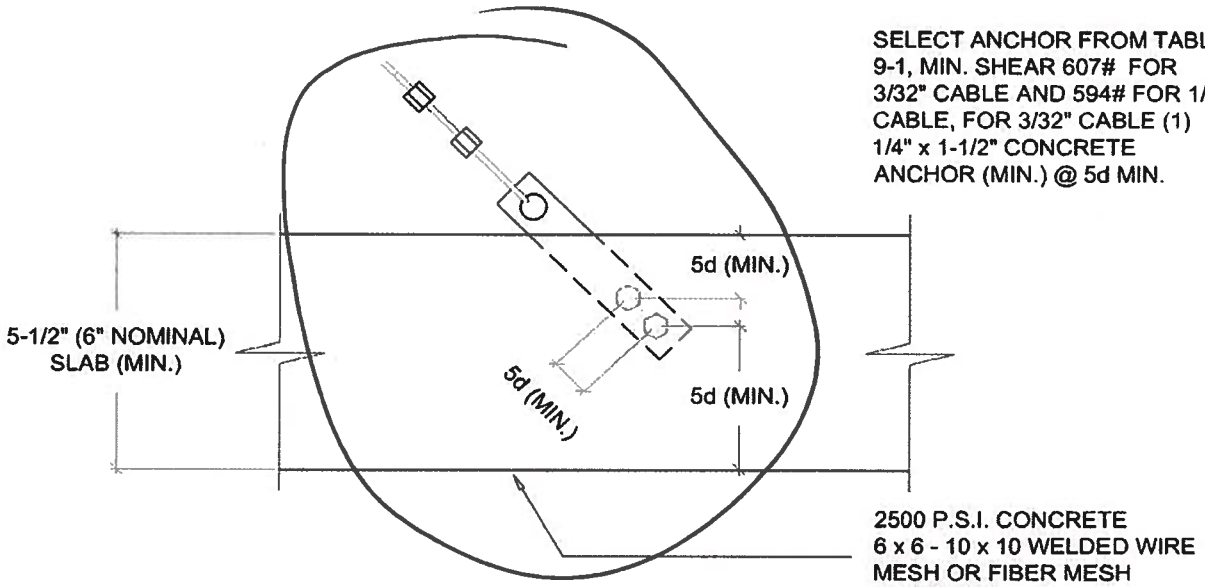


ALTERNATE CABLE CONNECTION AT SLAB DETAIL - DETAIL 2B

SCALE: 3" = 1'-0"



ALTERNATE CABLE CONNECTIONS AT FOUNDATION - DETAIL 2C

SCALE: 3" = 1'-0"

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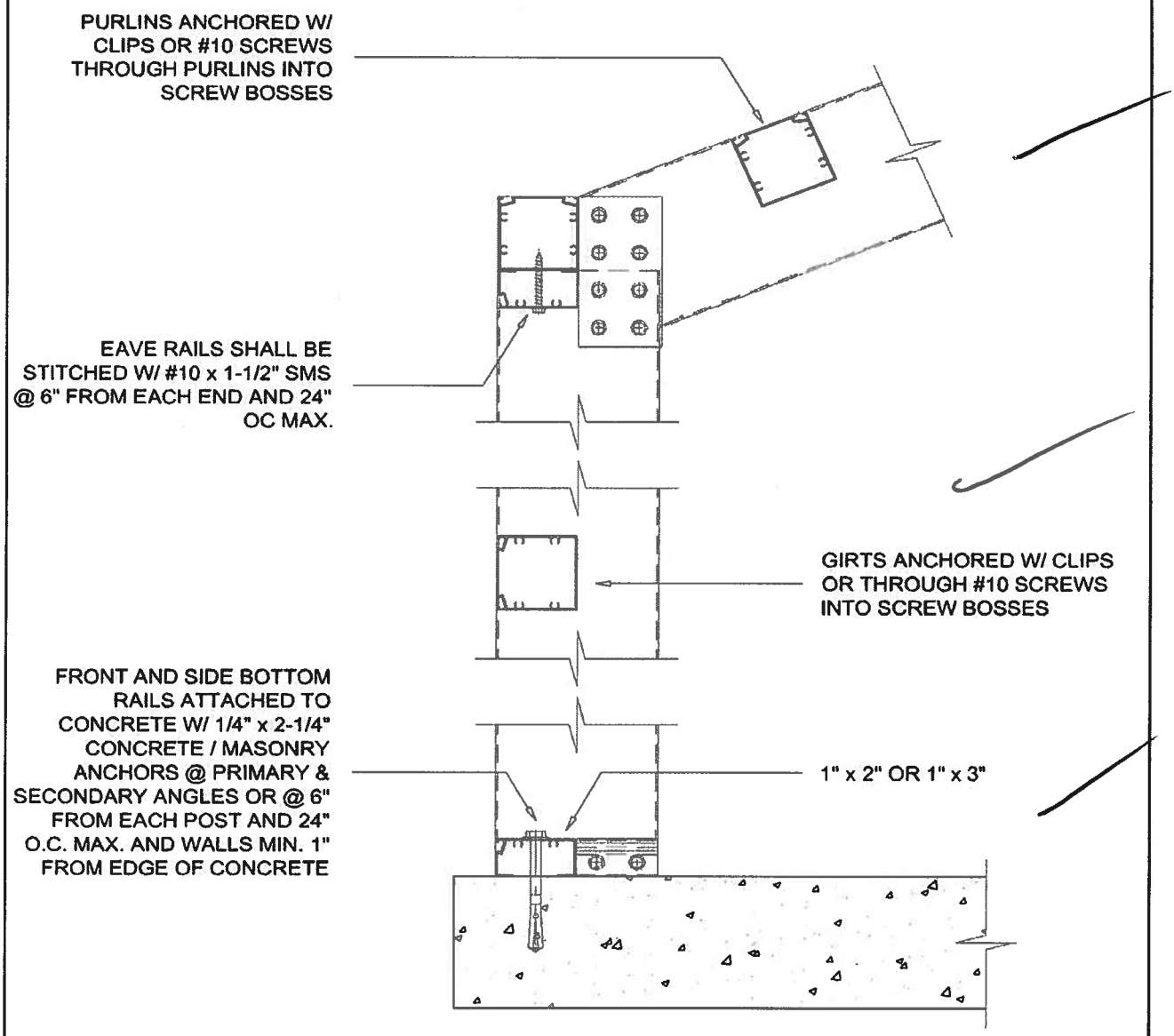
SECTION 1	SCREENED ENCLOSURES



PURLIN & CHAIR RAIL DETAIL

SCALE: 3" = 1'-0"

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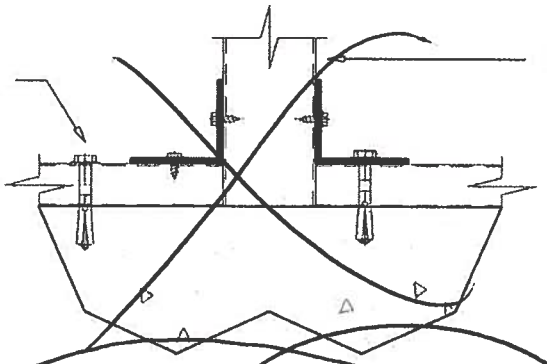
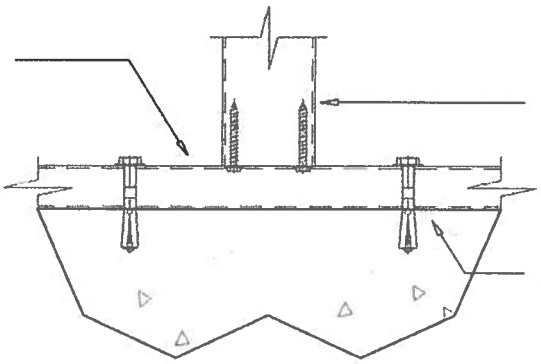


SIDE WALL POST TO PLATE TO CONCRETE DETAIL

SCALE: 3" = 1'-0"



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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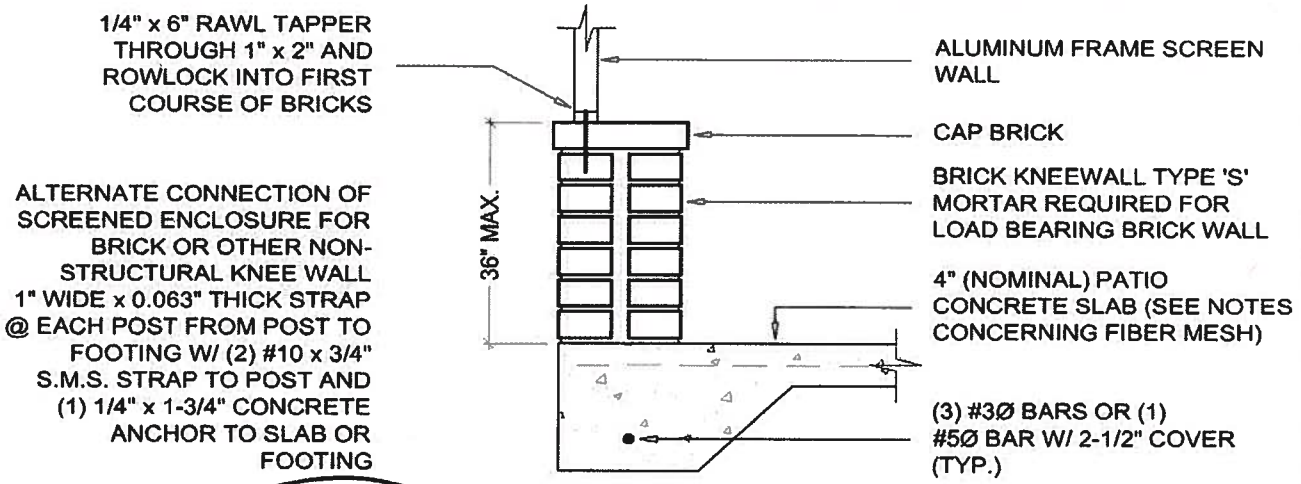
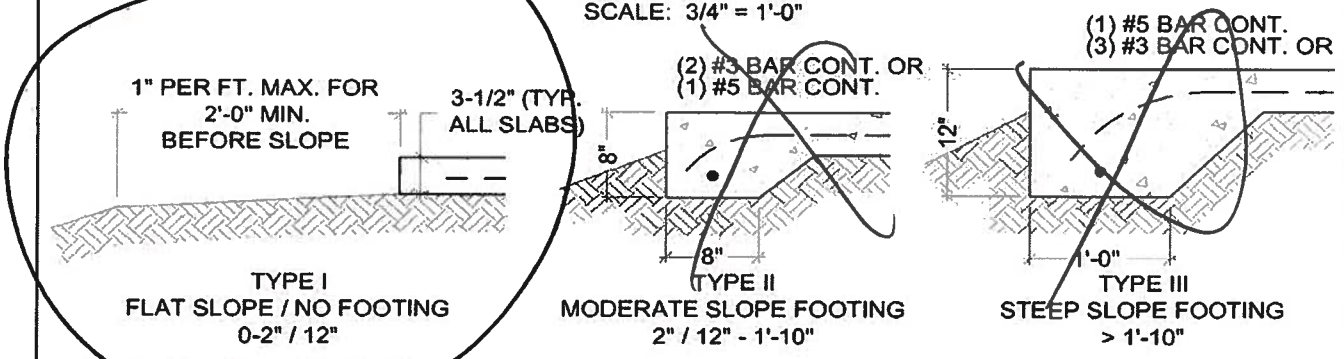


BRICK KNEEWALL AND FOUNDATION FOR SCREEN WALLS

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



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'-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				

7'-9" x 1.10 = 8'-7"

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"		[redacted]		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"	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'-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)													
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/heights 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 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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