

DATE 03/05/2009

## Columbia County Building Permit

PERMIT

This Permit Must Be Prominently Posted on Premises During Construction

000027670

APPLICANT J. VINCE RICHARDSON PHONE 386.755.5779  
ADDRESS 692 SW ARLINGTON BLVD. LAKE CITY FL 32025  
OWNER KENT & IRENE LOURCEY PHONE 386.758.9556  
ADDRESS 659 NE CEMETERY LOOP LAKE CITY FL 32055  
CONTRACTOR J. VINCE RICHARDSON PHONE 386.755.5779  
LOCATION OF PROPERTY 441-N TO CEMETERY LOOP, TR TO 1/2 MILE ON THE L  
WITH CHAIN LINKED FENCE.  
TYPE DEVELOPMENT SCREEN ENCLOSURE ESTIMATED COST OF CONSTRUCTION 10488.00  
HEATED FLOOR AREA TOTAL AREA HEIGHT STORIES  
FOUNDATION WALLS ROOF PITCH FLOOR  
LAND USE & ZONING A-3 MAX. HEIGHT  
Minimum Set Back Requirments: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00  
NO. EX.D.U. 1 FLOOD ZONE DEVELOPMENT PERMIT NO.

PARCEL ID 33-1S-17-04635-000 SUBDIVISION  
LOT BLOCK PHASE UNIT TOTAL ACRES 14.85

110  
Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor  
EXISTING X-09-052 CFS RTJ N  
Driveway Connection Septic Tank Number LU & Zoning checked by Approved for Issuance New Resident

COMMENTS:

Check # or Cash 15206

## FOR BUILDING &amp; 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 Insulation 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 Pool date/app. by  
Permanent power date/app. by C.O. Final date/app. by Culvert date/app. by  
Pump pole date/app. by Utility Pole date/app. by M/H tie downs, blocking, electricity and plumbing date/app. by  
Reconnection date/app. by RV date/app. by Re-roof date/app. by

BUILDING PERMIT FEE \$ 55.00 CERTIFICATION FEE \$ 0.00 SURCHARGE FEE \$ 0.00  
MISC. FEES \$ 0.00 ZONING CERT. FEE \$ 50.00 FIRE FEE \$ 0.00 WASTE FEE \$  
FLOOD DEVELOPMENT FEE \$ FLOOD ZONE FEE \$ CULVERT FEE \$ TOTAL FEE 105.00  
INSPECTORS OFFICE CLERKS OFFICE

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

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

EVERY PERMIT ISSUED SHALL BECOME INVALID UNLESS THE WORK AUTHORIZED BY SUCH PERMIT IS COMMENCED WITHIN 180 DAYS AFTER ITS ISSUANCE, OR IF THE WORK AUTHORIZED BY SUCH PERMIT IS SUSPENDED OR ABANDONED FOR A PERIOD OF 180 DAYS AFTER THE TIME THE WORK IS COMMENCED. A VALID PERMIT RECIEVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS OT THE PREVIOUS INSPECTION.

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



## Columbia County Building Permit Application

For Office Use Only Application # 0902-31 Date Received 2/23 By JW Permit # 27670  
 Zoning Official dfs Date 2/25/09 Flood Zone MA Land Use A-3 Zoning A-3  
 FEMA Map # \_\_\_\_\_ Elevation \_\_\_\_\_ MFE \_\_\_\_\_ River \_\_\_\_\_ Plans Examiner RA Date 2/25/09  
 Comments \_\_\_\_\_  
☒ NOC ☐ EH ☐ Deed or PA ☒ Site Plan ☐ State Road Info ☐ Parent Parcel # \_\_\_\_\_  
☐ Dev Permit # \_\_\_\_\_ ☐ In Floodway ☐ Letter of Auth. from Contractor ☐ F W Comp. letter  
 IMPACT FEES: EMS \_\_\_\_\_ Fire \_\_\_\_\_ Corr \_\_\_\_\_ Road/Code \_\_\_\_\_  
 School \_\_\_\_\_ = TOTAL \_\_\_\_\_

Septic Permit No. K-09-052 in fire Box. Fax 386-755-7889

Name Authorized Person Signing Permit Vince Richardson Phone 386-755-5779

Address 692 S.W. Arlington Blvd. Lake City, Fla. 32025

Owners Name Ken + Irene Lourcey Phone 386-758-9556

911 Address 659 NE Cemetery Loop Lake City, Fla. 32055

Contractors Name Richardson Aluminum LLC. Vince Richardson Phone 386-755-5779

Address 692 S.W. Arlington Blvd. Lake City, Fla. 32025

Fee Simple Owner Name & Address \_\_\_\_\_

Bonding Co. Name & Address \_\_\_\_\_

Architect/Engineer Name & Address Lawrence E. Bennett

Mortgage Lenders Name & Address \_\_\_\_\_

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

Property ID Number 33-1S-17-04635-000 HX Estimated Cost of Construction 10,488.00

Subdivision Name \_\_\_\_\_ Lot \_\_\_\_\_ Block \_\_\_\_\_ Unit \_\_\_\_\_ Phase \_\_\_\_\_

Driving Directions 441 North / Turn right on cemetery loop 1/2 mile on left  
with chain link fence.

Number of Existing Dwellings on Property 1

Construction of Screen Enclosure Total Acreage 14.85 Lot Size \_\_\_\_\_

Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height 14

Actual Distance of Structure from Property Lines - Front 300 Side 48 Side 295.5 Rear 830.54

Number of Stories 1 Heated Floor Area 0 Total Floor Area 1767 S.F. 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.

- CLK 15206

**TIME LIMITATIONS OF APPLICATION :** An application for a permit for any proposed work shall be deemed to have been abandoned 180 days after the date of filing, unless such application has been pursued in good faith or a permit has been issued; except that the building official is authorized to grant one or more extensions of time for additional periods not exceeding 90 days each. The extension shall be requested in writing and justifiable cause demonstrated.

**TIME LIMITATIONS OF PERMITS:** Every permit issued shall become invalid unless the work authorized by such permit is commenced within 180 days after its issuance, or if the work authorized by such permit is suspended or abandoned for a period of 180 days after the time work is commenced. A valid permit receives an approved inspection every 180 days. Work shall be considered not suspended, abandoned or invalid when the permit has received an approved inspection within 180 days of the previous approved inspection.

**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.

**WARNING TO OWNER:** YOUR FAILURE TO RECORD A NOTICE OF COMMENCEMENT 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.

**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.

*Ken Jouncey*  
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 including all application and permit time limitations.

*Vince Richardson*  
Contractor's Signature (Permitee)

Contractor's License Number \_\_\_\_\_  
Columbia County  
Competency Card Number 000110

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 20 day of Feb 2009.  
Personally known ☒ or Produced Identification \_\_\_\_\_

*Sandra H. Tillotson*  
State of Florida Notary Signature (For the Contractor)

SEAL:



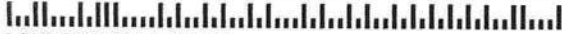
SANDRA H. TILLOTSON  
MY COMMISSION # DD 629530  
EXPIRES: January 31, 2011  
Bonded Thru Budget Notary Services

**RONNIE BRANNON, CFC**  
COLUMBIA COUNTY TAX COLLECTORREAL ESTATE 2008 119401.0000  
NOTICE OF AD VALOREM TAXES AND NON-AD VALOREM ASSESSMENTS

ACCOUNT NUMBER	ESCROW CD	ASSESSED VALUE	EXEMPTIONS	TAXABLE VALUE	MILLAGE CODE
R04635-000		36,520	25,000	11,520	003

C 12771

45\*\*AUTO\*\*SCH 5-DIGIT 32024

LOURCEY KEN & IRENE  
659 NE CEMETERY LOOP  
LAKE CITY FL 32055-522233-1S-17 5000/5000 14.85 acres  
COMM NW COR OF S1/2 OF NW1/4  
OF SE1/4, RUN E 12.89 FT TO E  
R/W US-441, S ALONG R/W 10.11  
FT FOR POB, CONT SE'LY ALONG  
See Tax Roll for extra legal.**AD VALOREM TAXES**

TAXING AUTHORITY	MILLAGE RATE (Dollars per \$1,000 of taxable value)	TAXES LEVIED
CO01 BOARD OF COUNTY COMMISSIONERS	7.8910	25,000 11,520 90.90
S002 COLUMBIA COUNTY SCHOOL BOARD		
DISCRETIONARY	0.7480	25,000 11,520 8.62
LOCAL	5.2220	25,000 11,520 60.16
CAPITAL OUTLAY	1.7500	25,000 11,520 20.16
W SR SUWANNEE RIVER WATER MGT DIST	0.4399	25,000 11,520 5.07
HLSH LAKE SHORE HOSPITAL AUTHORITY	2.0160	25,000 11,520 23.22
IIDA COLUMBIA COUNTY INDUSTRIAL	0.1240	25,000 11,520 1.43
TOTAL MILLAGE 18.1909		AD VALOREM TAXES 209.56

**NON-AD VALOREM ASSESSMENTS**

LEVYING AUTHORITY	RATE	AMOUNT
FFIR FIRE ASSESSMENTS	Per Parcel	146.58
GGAR SOLID WASTE - ANNUAL	Per Parcel	201.00
FOR INFORMATION OR TO PAY WITH CREDIT/DEBIT CARD VISIT <a href="http://www.columbiataxcollector.com">www.columbiataxcollector.com</a> (CONVENIENCE FEE APPLIES)		
NON-AD VALOREM ASSESSMENTS		347.58

**COMBINED TAXES AND ASSESSMENTS** **PAY ONLY ONE AMOUNT 557.14** SEE REVERSE SIDE FOR IMPORTANT INFORMATION

If Paid By	Nov 30, 2008	Dec 31, 2008	Jan 31, 2009	Feb 28, 2009	Mar 31, 2009
Please Pay	534.85	540.43	546.00	551.57	557.14

RETAIN THIS PORTION AS YOUR RECEIPT OR MAIL A SELF-ADDRESSED STAMPED ENVELOPE FOR RETURN OF VALIDATED RECEIPT.  
AFTER MAR 31, 2009, TAXES BECOME DELINQUENT. ADDITIONAL PENALTIES AND FEES WILL APPLY.



NO. \_\_\_\_\_

- (1) DIMENSIONS OF PROPERTY
- (2) ALL STREETS BOUNDING YOUR PROPERTY
- (3) ALL PROPOSED AND/OR EXISTING IMPROVEMENTS  
(BUILDING AND/OR STRUCTURES)
- (4) DISTANCE FROM PROPERTY LINE FOR THE PROPOSED IMPROVEMENT
- (5) ALL WELL AND SEPTIC TANKS - PROVIDE SETBACKS
- (6) MUST SHOW DRIVEWAY LOCATION AND DIMENSIONS
- (7) SURVEY CORNER MARKERS MUST BE VISIBLE FOR FIRST INSPECTION
- (8) IF CORNER LOT, PLEASE INDICATE THE FRONT

**INCOMPLETE SITE PLAN WILL RESULT IN DELAYS.**

**OFFICE USE ONLY**

P.A. NO. \_\_\_\_\_ SEC \_\_\_\_\_ TWP \_\_\_\_\_ RGE \_\_\_\_\_ ZONING MAP \_\_\_\_\_

PLAT BK \_\_\_\_\_ PGE \_\_\_\_\_ ZONING CLASS. \_\_\_\_\_ TAZ \_\_\_\_\_

ESDZ \_\_\_\_\_ FLOOD ZONE \_\_\_\_\_ MAP NO. ELEV. \_\_\_\_\_ NOTES: \_\_\_\_\_

MINIMUM SETBACKS: FRONT \_\_\_\_\_ REAR \_\_\_\_\_ SIDE \_\_\_\_\_ SIDE \_\_\_\_\_

# Lawrence E. Bennett, P.E.

P.O. Box 214368  
South Daytona, FL 32121  
386-767-4774 fax: 386-767-6556

January 1, 2008

TO ALL BUILDING DEPARTMENTS

Re: Master File Engineering  
"ALUMINUM STRUCTURES DESIGN MANUAL"  
2004 Florida Building Code with 2006 Supplements

Dear Building Official/Plans Examiner:

This is to certify that the following contractor/company is hereby authorized to use my "ALUMINUM STRUCTURES DESIGN MANUAL" during the year 2008.

Authorization is on a January to January basis regardless of the edition of the manual. This authorization also applies to contractor master file drawings, "ONE PERMIT ONLY" drawings or any "site specific" drawings that I may furnish the contractor.

The following contractor/company is hereby added to my 2008 MASTERFILE LIST:

Vince Richardson  
Richardson Aluminum LLC  
692 SW Arlington Blvd  
Lake City, FL 32025

Should you have any questions, please contact me at your convenience.

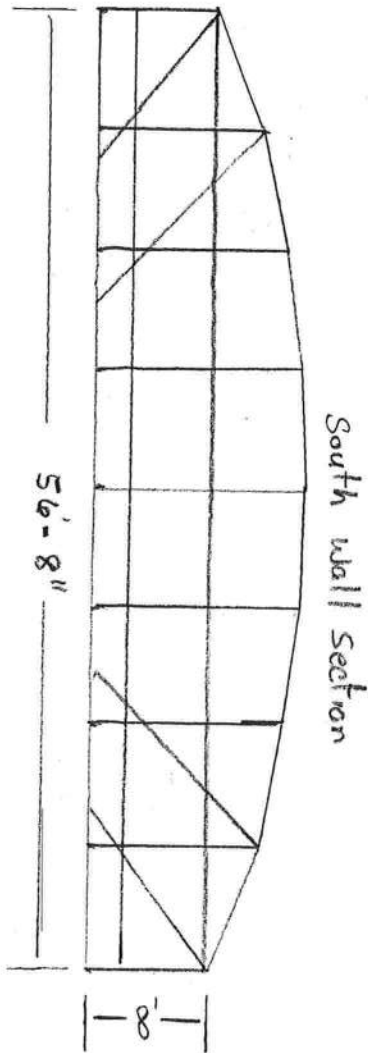
Sincerely,



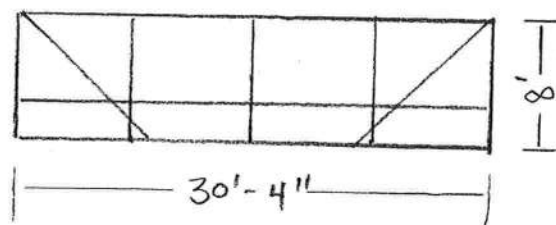
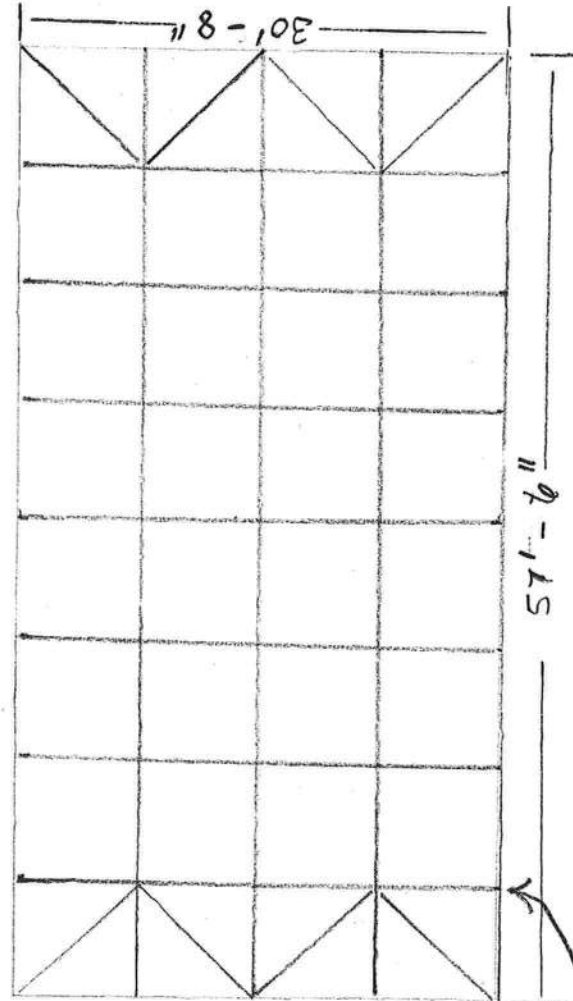
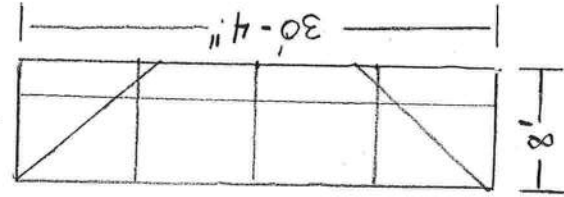
Lawrence E. Bennett, P.E. #16644



Wall Upright Spacing  
 $L/W = 7'-5"$

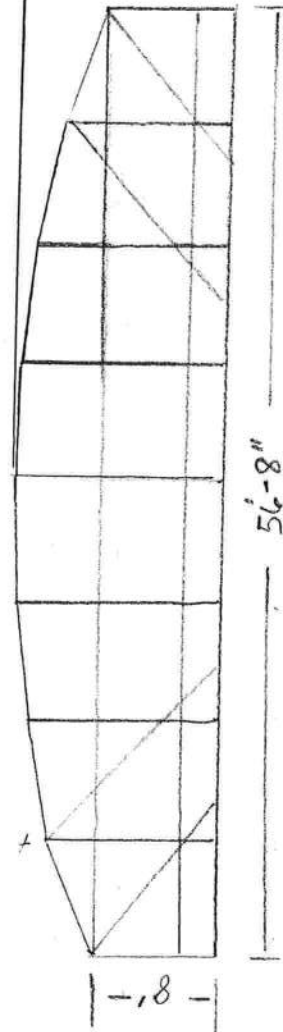


West wall Section



East wall Section

North wall section



Rise in center of wall  
 $5'$

Wall upright Spacing or  
 $L/W = 6'-11"$

RooF Beam Spacing  
 $L/W = 6'-11"$   
 RooF Beam Span  
 $26'-8"$

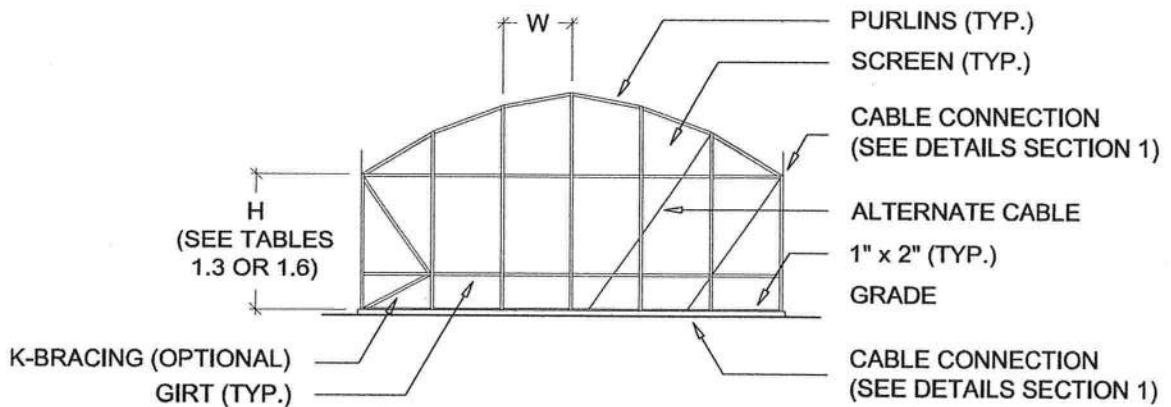
# **SECTION 1**

## **SCREENED ENCLOSURES**

### **General Notes and Specifications:**

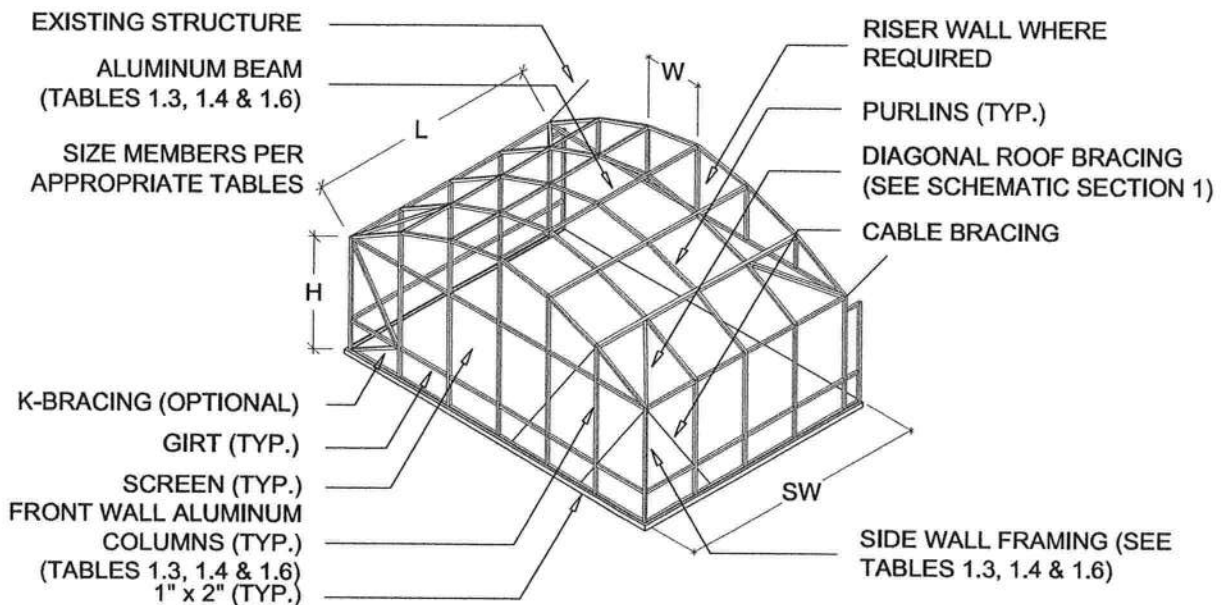
1. The following structures are designed to be married to site built block or wood frame DCA approved modular structures of adequate structural capacity. The contractor / home owner shall verify that the host structure is in good condition and of sufficient strength to hold the proposed addition.
2. If the owner or contractor has a question about the host structure, the owner (at his own expense) shall hire an architect, engineer, or a certified home inspection company to verify host structure capacity.
3. 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.
4. Spans are for enclosures with mean roof heights less than 30'. For greater heights, consult engineer.
5. Connections to fascia shall be limited to overhangs shown in table 1.11 or less unless site specific engineering is provided.
6. The proper structural name for a chair rail or top rail of an enclosure is a girt. Thus the terminology shall be interchangeable.
7. Screws that penetrate the water channel of the super gutter shall have ends clipped off for safety of cleaning gutter and the heads of screws through the gutter into the fascia shall be caulked.
8. Section 7 contains span tables and attachment details for pans and composite panels.
9. When using TEK screws in lieu of S.M.S., longer screws must be used to compensate for drill head.
10. An additional super gutter strap or ferrule is required to be located near the midpoint of the beam spacing. Straps shall be attached to each truss / rafter tail when a 2" sub-fascia does not exist. Straps at the beam are not required when straps are placed @ each truss / rafter tail and spacing of straps does not exceed 2'-0".
11. Super or extruded gutter details are applicable to all widths of super or extruded gutters, and gutters may be substituted. Gutter straps and/or ferrules shall be the width of the inside and outside of the super or extruded gutter respectively. The center of the knee braces shall not be more than 6" above the top of the super or extruded gutter.
12. If the sub-fascia is 3/4", and the sub-fascia is in good repair, a 3/4" P.T.P. strip the width of the fascia may be added to the existing sub-fascia by attaching the plywood with (2) 16d x 3" common nails or (2) #8 x 3" screws. This gives the equivalent of a 2" fascia.
13. Spans may be interpolated between values but not extrapolated outside values.
14. All 2" X 4" and larger purlins shall have an internal or external angle clip or screw boss to fasten the bottom of the purlin to the beam.
15. Load width and / or panel spacing used in determining spans / heights is measured from center to center of the members.  
EXAMPLE:  
Screen panel A is 6' center to center. Screen panel B is 7' center to center. The load width of the frame member between panel A and B is  $(6'/2 + 7'/2) = 6.5'$  or 6'-6".  
The distance, spacing or load width is not measured between frame members as that would add 2" to the load width if figured that way.
16. For Design Check List and Inspection Guides for Screened Enclosures, see Appendix (Section 10).
17. All aluminum extrusions shall meet the strength requirements of ASTM B221 after powder coating.
18. Other shapes than those shown in Section 8 with State Product Approvals may be used with the details of this section so long as the shapes are compatible with the details.
19. All aluminum shall be ordered as to the alloy and hardness after heat treatment and paint is applied.  
Example: 6063-T6 after heat treatment and paint process.





**TYPICAL DOME ROOF - FRONT WALL ELEVATION**

SCALE: N.T.S.



**TYPICAL DOME 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 214368, South Daytona, FL 32121

Telephone #: (386) 767-4774 Fax #: (386) 767-6556

Email: lebpe@bellsouth.net

## Section 1 Design Statement:

The structures designed for Section 1 are framing systems with screen roofs & walls and loads have been determined by wind tunnel test that include any negative internal pressure coefficient. Since these structures are open, the negative internal pressure coefficient is considered to be 0.00. The design loads used are from Chapter 20 of the 2004 Florida Building Code w/ 2006 Supplements. The loads assume a mean roof height of less than 30'; roof slope of 0° to 20°;  $I = 0.87$  for 100 MPH and 0.77 for 110 or higher. All loads are based on 20 / 20 screen or larger. Multiply wall heights by 1.10 for members controlled by bending(b) and 1.07 for members controlled by deflection(d) when using 18 / 14 screen. All pressures shown in the below table are in PSF (#/SF). All framing components are considered to be 6063-T6 alloy. For components of 6005-T5 and 6061-T6 multiply spans by 1.13.

## General Notes and Specifications for Section 1 Tables:

### SECTION 1 Uniform Loads for Structures with Screen Roof & Walls

Wind Velocity MPH	Basic Wind Pressure	Exposure 'B'			Exposure 'C'		
		Roofs	Windward Walls	Leeward Walls	Roofs	Windward Walls	Leeward Walls
100	13	3	12	10	5	17	13
110	14	4	13	9	5	18	14
120	17	4	15	13	6	21	17
123	18	4.3	15.9	13.3	6.3	22.2	17.6
130	20	5	18	14	7	25	19
1401 & 2	23	6	21	15	8	29	23
150	26	7	24	18	9	33	27

Loads per table 2002.4

Multipliers only apply to members when spans / heights are controlled by wind pressure, not by point load.

### Conversion Table 1A

#### Wind Zone Conversion Factors for Screen Roof or Wall Frame Members

From 120 MPH Wind Zone to Others; Exposure 'B'

Wind Zone MPH	Roofs		Walls	
	Applied Load #/ SF	Conversion Factor	Applied Load #/ SF	Conversion Factor
100	3	1.15	12	1.12
110	4	1.00	13	1.07
120	4	1.00	15	1.00
123	4.3	0.96	15.9	0.97
130	5	0.89	18	0.91
1401 & 2	6	0.82	21	0.85
150	7	0.76	24	0.79

Note:

Multipliers are for wall loads only.

Multipliers only apply to members when spans / heights are controlled by wind pressure, not by point load.

### Conversion Table 1B

#### Load Conversion Factors Based on Mean Roof Height from Exposure "B" to "C" & "D"

Mean Roof Height*	Exposure "B" to "C"			Exposure "B" to "D"		
	Load Conversion Factor	Span Multiplier		Load Conversion Factor	Span Multiplier	
		Bending	Deflection		Bending	Deflection
0 - 15'	1.21	0.91	0.94	1.47	0.83	0.88
15' - 20'	1.29	0.88	0.92	1.54	0.81	0.87
20' - 25'	1.34	0.86	0.91	1.60	0.79	0.86
25' - 30'	1.40	0.85	0.89	1.66	0.78	0.85
30' - 40'	1.37	0.85	0.90	1.61	0.79	0.85

\* Use larger mean roof height of host structure or enclosure

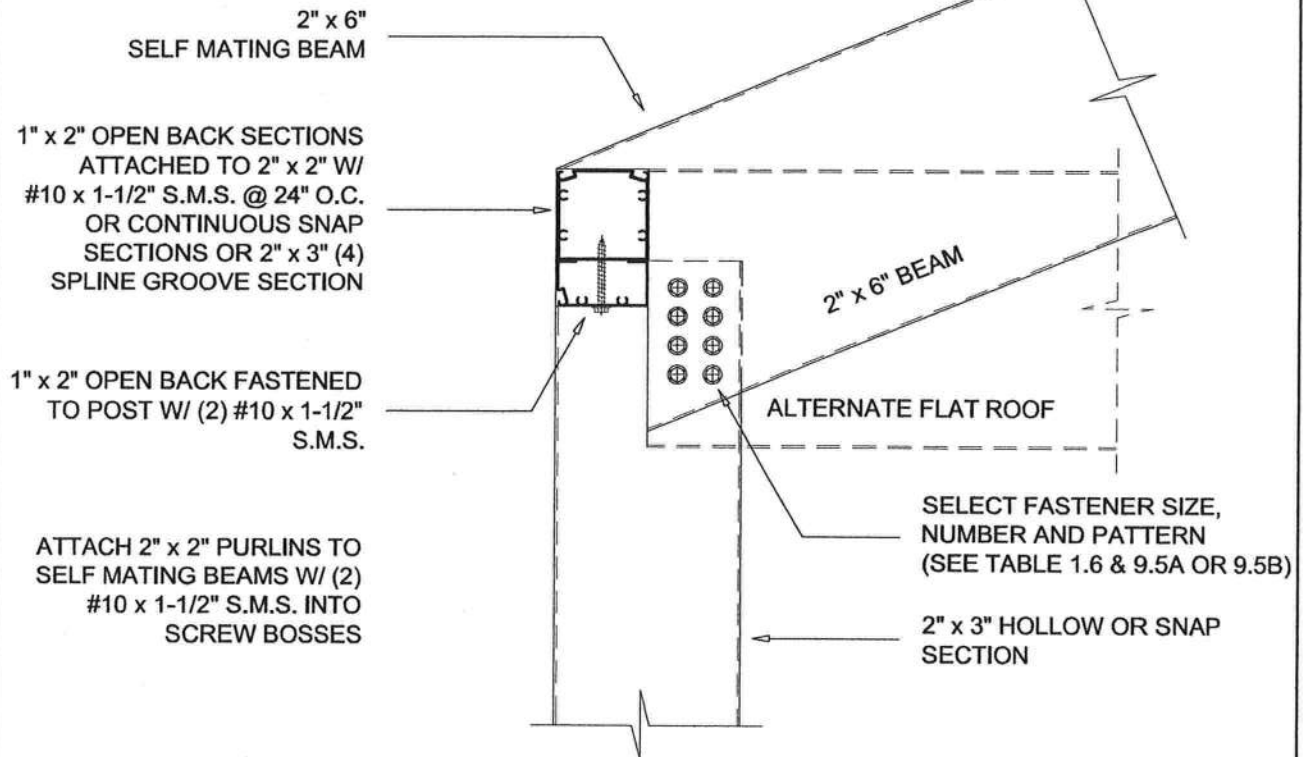
Values are from ASCE 7-02

Multipliers only apply to members when spans / heights are controlled by wind pressure, not by point load.

#### Conversion Example (Convert span for Exposure "B" to "C"):

If max span found from span tables for Exposure "B" = 31'-11" = 31.92'  
and the mean roof height of the structure is 0-15' then multiply span by 0.91  
the span for Exposure "C" is 31.92' \* 0.91 = 29.05' = 29'-1"

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



**SLOPING BEAM TO UPRIGHT CONNECTION DETAIL (PARTIAL LAP)**

SCALE: 3" = 1'-0"

Lawrence E. Bennett, P.E. FL # 16644

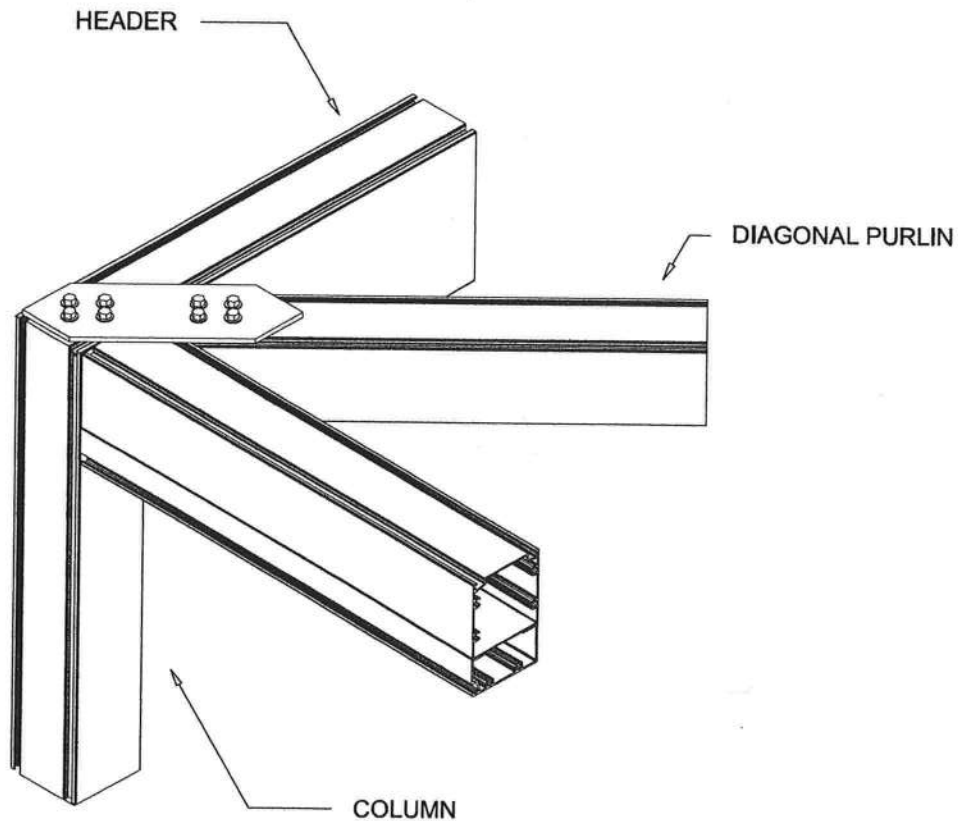
CIVIL & STRUCTURAL ENGINEERING

P.O. Box 214368, South Daytona, FL 32121

Telephone #: (386) 767-4774 Fax #: (386) 767-6556

Email: lebpe@bellsouth.net



**WIND BRACE CONNECTION DETAIL**

SCALE: 3" = 1'-0"

**NOTES:**

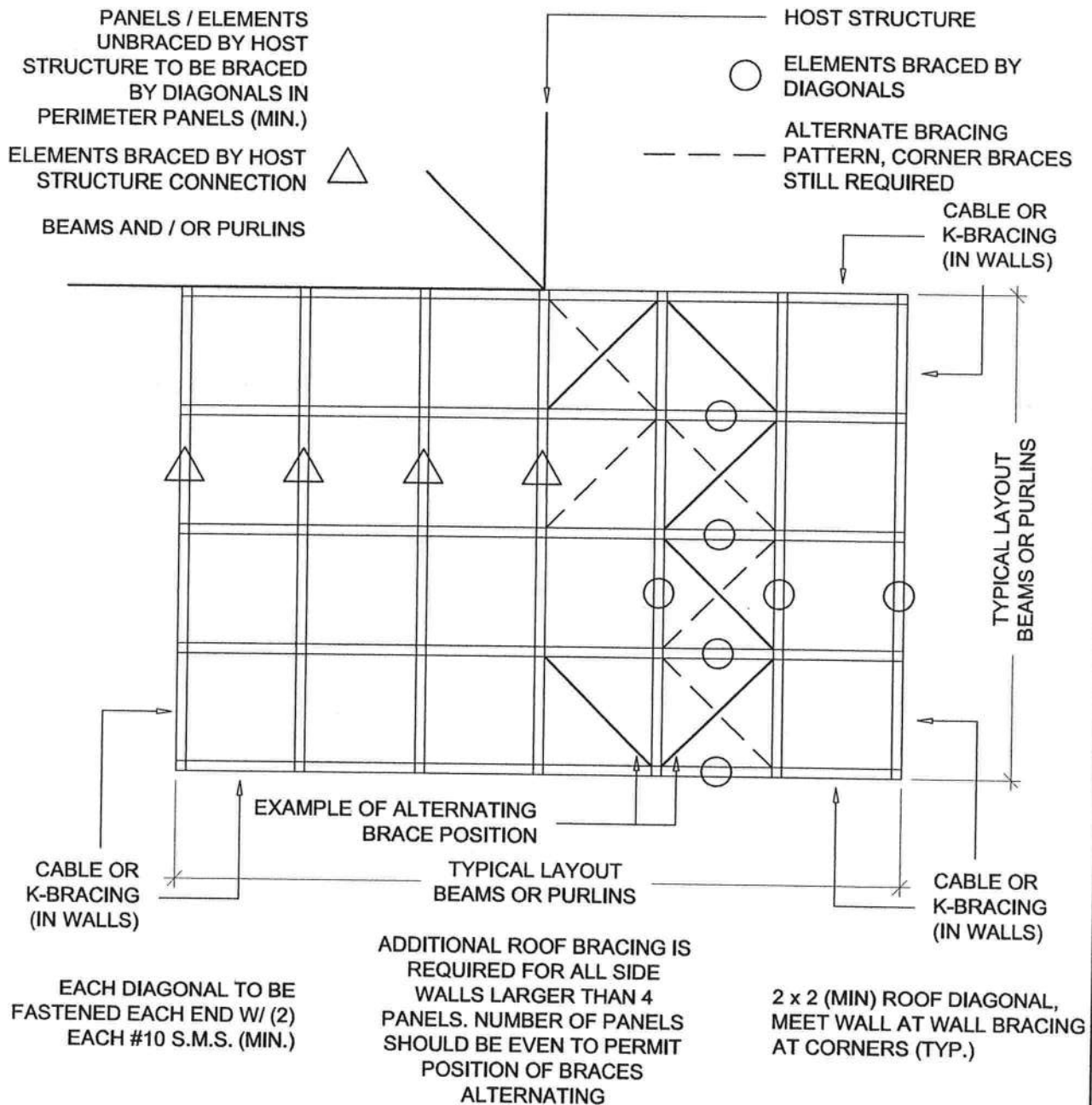
1. Wind bracing shall be provided at each side wall panel when enclosure projects more than three panels from host structure. Structures of four or more panels shall be spaced for even number of panels for opposing wind bracing.
2. Cut brace parts with min. 12" lap of larger and smaller brace.
3. Cut receiving channel with angle.

Lawrence E. Bennett, P.E. FL # 16644  
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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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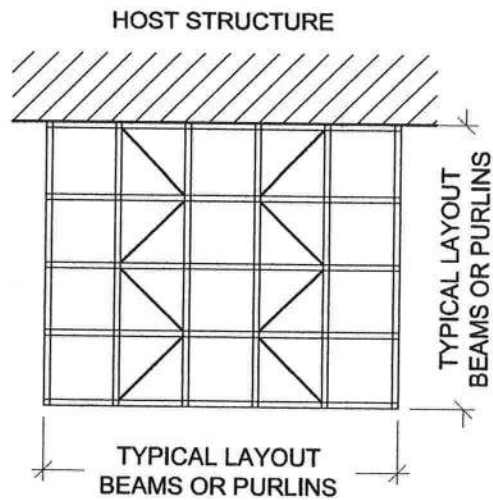
Email: lebpe@bellsouth.net

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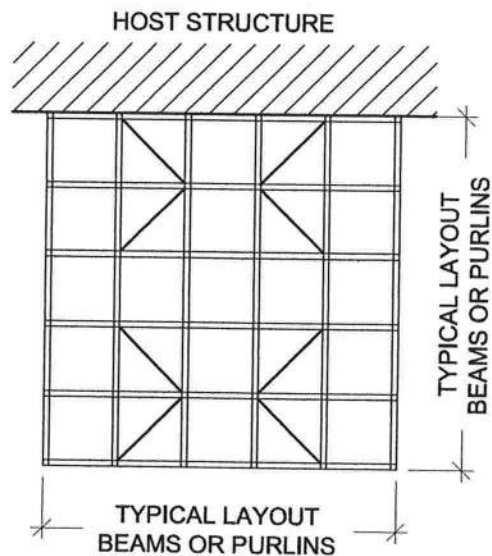
1-48

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**WIND BRACING PATTERN**  
**TYPICAL FOR EVEN NUMBER OF SIDE PANELS OVER 4**  
 SCALE: 3/16" = 1'-0"



**WIND BRACING PATTERN**  
**TYPICAL FOR ODD NUMBER OF SIDE PANELS OVER 4**  
 SCALE: 3/16" = 1'-0"

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**CABLE BRACING****General Notes and Specifications:**

- 1) The following shall apply to the installation of cables as additional bracing to DIAGONAL bracing for pool enclosures:

a) FRONT WALL CABLES - 7 x 19 STAINLESS STEEL

CABLE DIAMETER	TOTAL ALLOWABLE WALL AREA *
3/32"	233 Sq. Ft. / PAIR OF CABLES
1/8"	445 Sq. Ft. / PAIR OF CABLES

\* TOTAL WALL AREA = 100% OF FRONT WALL + 50% OF ONE SIDE WALL

EXAMPLE: FRONT WALL AREA @ 100% (8' x 32') = 256 Sq. Ft.

SIDE WALL AREA @ 50% (8' x 20') = 80 Sq. Ft.

TOTAL WALL AREA = 336 Sq. Ft.

233 Sq. Ft. x 2 sets = 466 Sq. Ft. > 336 Sq. Ft.; thus two sets of 3/32" cables is required.

b) SIDE WALL CABLES - 7 x 19 STAINLESS STEEL

CABLE DIAMETER	SIDE WALL CABLE **
3/32"	ONE PER 233 Sq. Ft. OF WALL
1/8"	ONE PER 445 Sq. Ft. OF WALL

\*\* SIDE WALL CABLES ARE NOT REQUIRED FOR SIDE WALLS LESS THAN 233 Sq. Ft.

- c) To calculate the required pair of cables for free standing pool enclosures use 100% of each wall area & 50% of the area of one adjacent wall.

**NOTES:**

1. Where wall height is such that a girt is required between the top or eave rail and the chair rail, (i.e. a mid-rise girt), then the front wall shall have two cable pairs and they shall be attached to the top rail and the mid-rise rail. If more than one additional girt is required between the top or eave rail and the chair rail, then there shall be an additional front wall cable pair at that girt also.
2. Side walls do not require cables until the side wall area is greater than 233 Sq. Ft.. The side wall cable may be attached at the mid-rise girt or the top rail.
3. Standard rounding off rules apply. ie: if the number of cables calculated is less than 2.5 pairs use two cables; if the number of cables calculated is 2.5 pairs or greater use 3 pairs of cables.
4. Additional roof bracing is required for all side walls larger than 4 panels. Number of panels shall be even and position shall be alternating.

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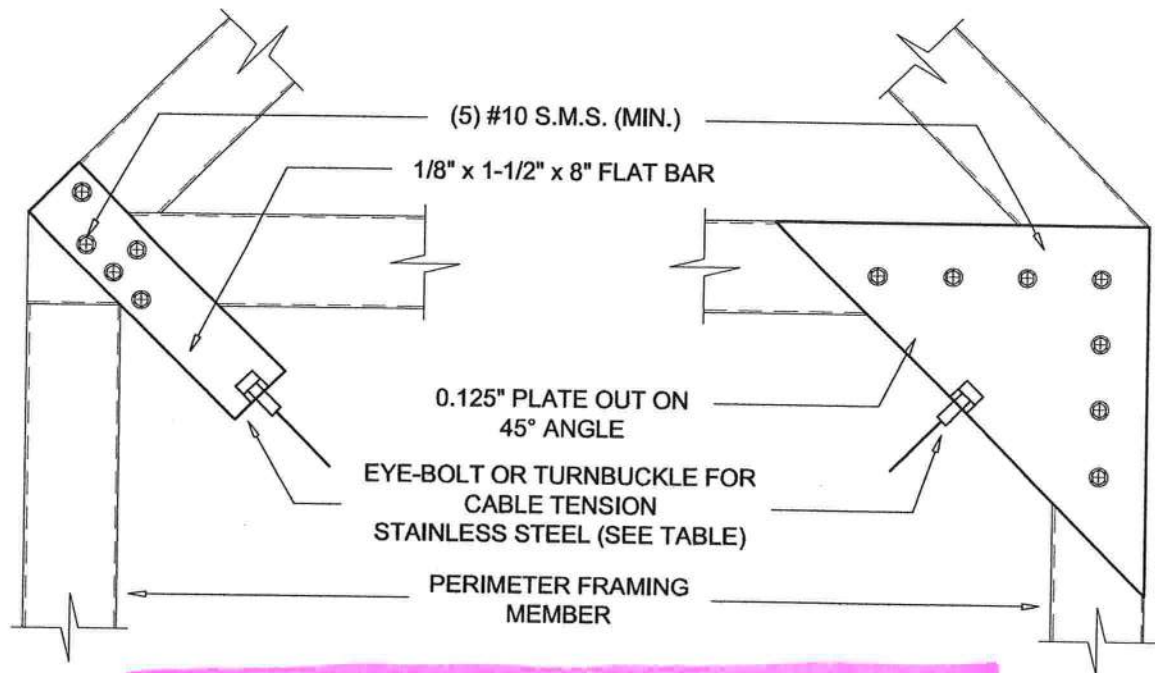
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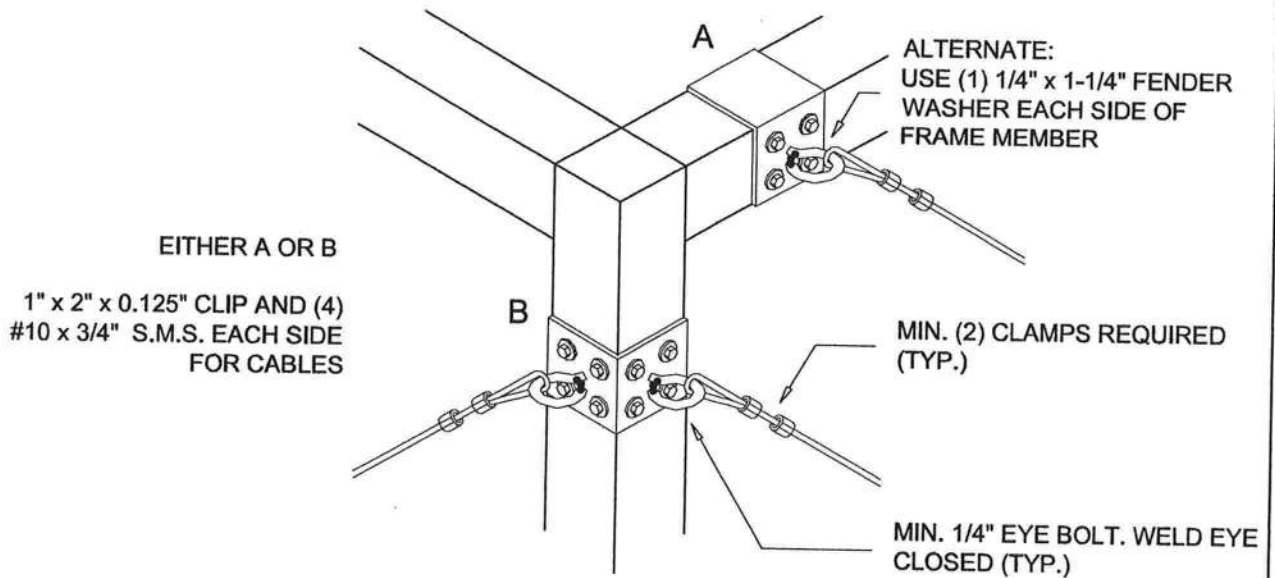
# SCREENED ENCLOSURES

## SECTION 1



**TYPICAL CABLE CONNECTIONS AT CORNER - DETAIL 1**

SCALE: 3" = 1'-0"



**ALTERNATE TOP CORNER OF CABLE CONNECTION - DETAIL 1A**

SCALE: 3" = 1'-0"

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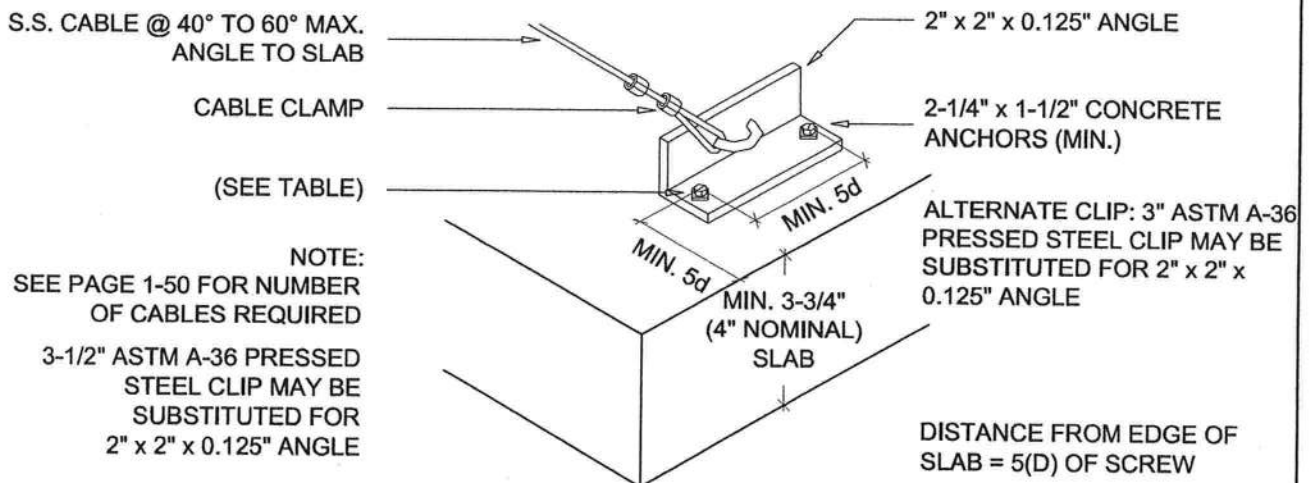
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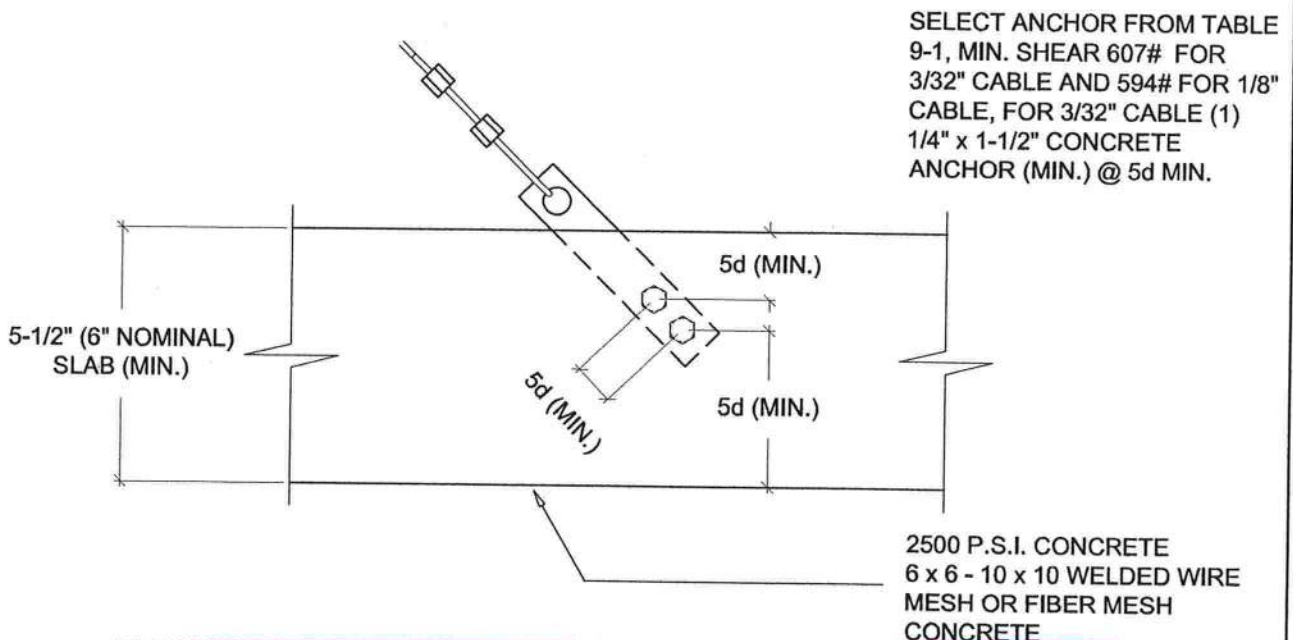
# SCREENED ENCLOSURES

## SECTION 1



### ALTERNATE CABLE CONNECTION AT SLAB DETAIL - DETAIL 2B

SCALE: 3" = 1'-0"



### ALTERNATE CABLE CONNECTIONS AT FOUNDATION - DETAIL 2C

SCALE: 3" = 1'-0"

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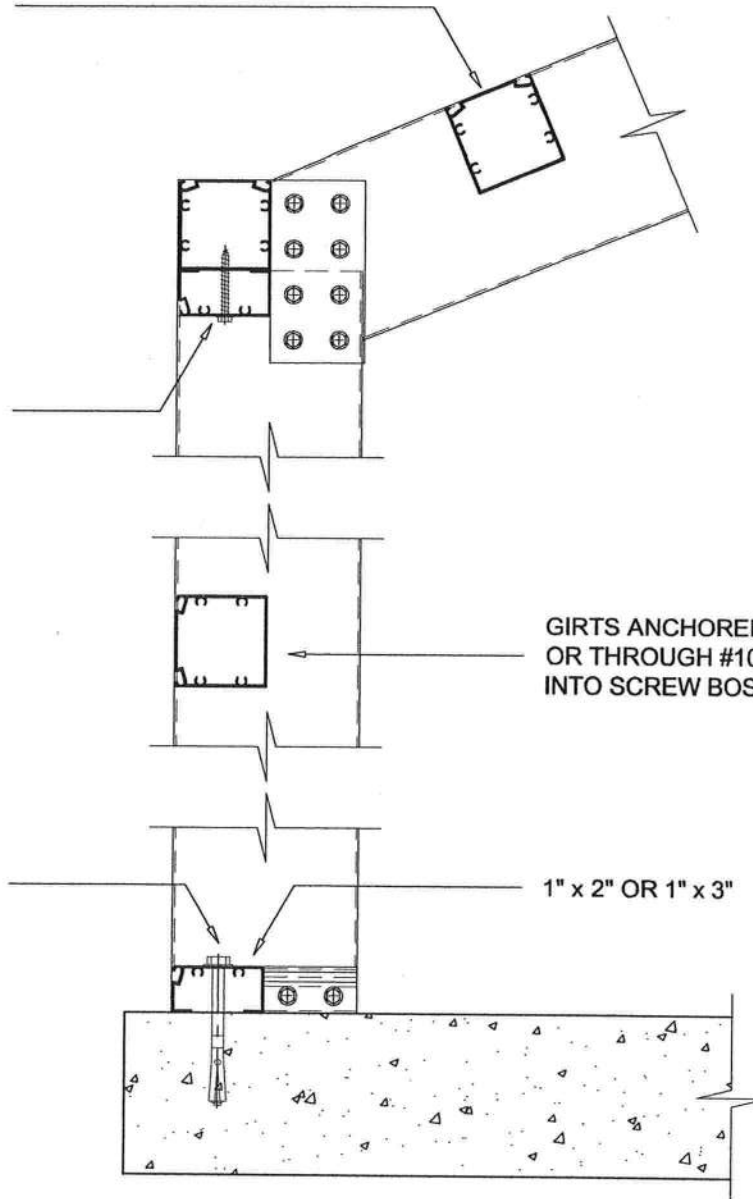
# SECTION 1

# SCREENED ENCLOSURES

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

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

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



## PURLIN & CHAIR RAIL DETAIL

SCALE: 3" = 1'-0"

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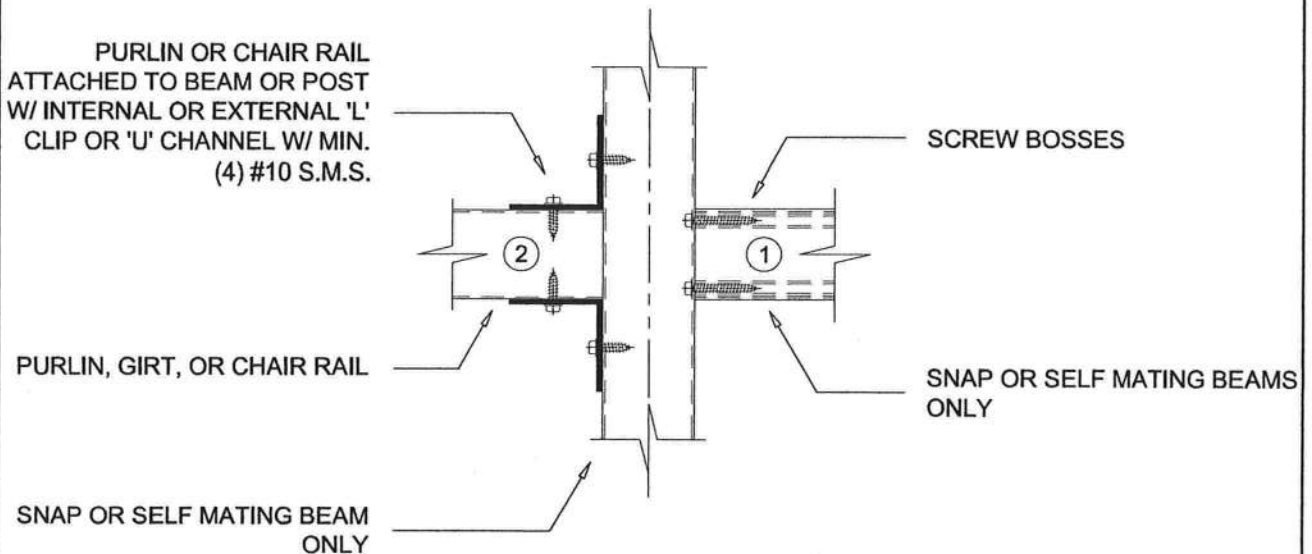
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**PURLIN TO BEAM OR GIRT TO POST DETAIL**

SCALE: 3" = 1'-0"

- ① FOR WALLS LESS THAN 6'-8" FROM TOP OF PLATE TO CENTER OF BEAM CONNECTION OR BOTTOM OF TOP RAIL THE GIRT IS DECORATIVE AND SCREW HEADS MAY BE REMOVED AND INSTALLED IN PILOT HOLES
- ② FOR ALL OTHER PURLINS AND GIRTS IF THE SCREW HEADS ARE REMOVED THEN THE OUTSIDE OF THE CONNECTION MUST BE STRAPPED FROM GIRT TO POST WITH 0.050" x 1-3/4" x 4" STRAP AND (4) #10 x 3/4" S.M.S. SCREWS TO POST AND GIRT

IF GIRT IS ON BOTH SIDES OF THE POST THEN STRAP SHALL BE 6" LONG AND CENTERED ON THE POST AND HAVE A TOTAL (12) #10 x 3/4" S.M.S.

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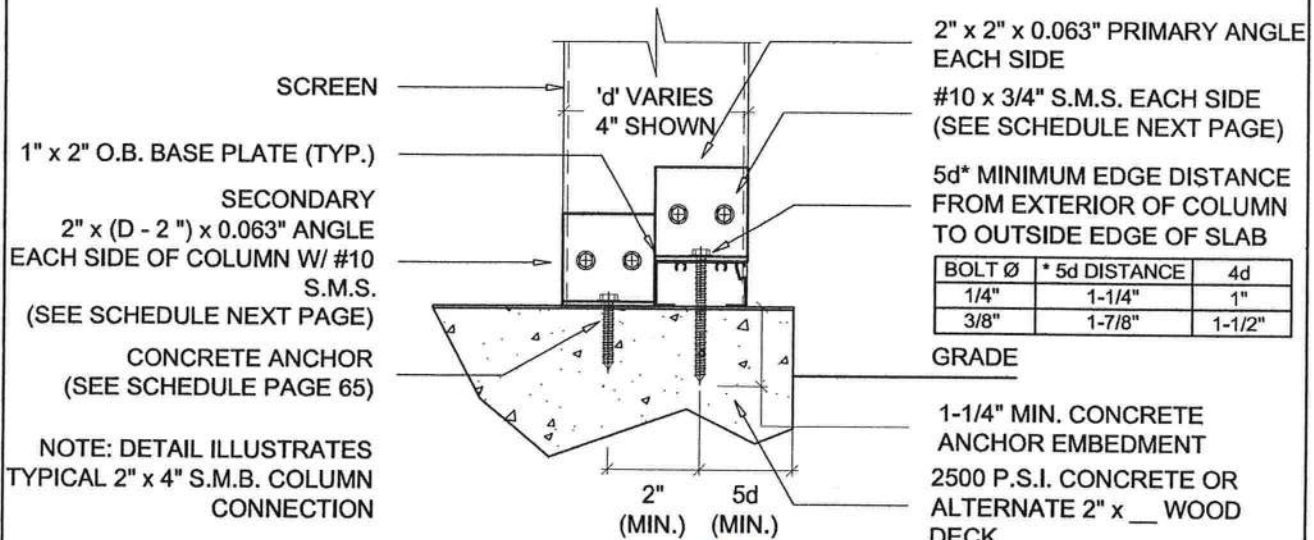
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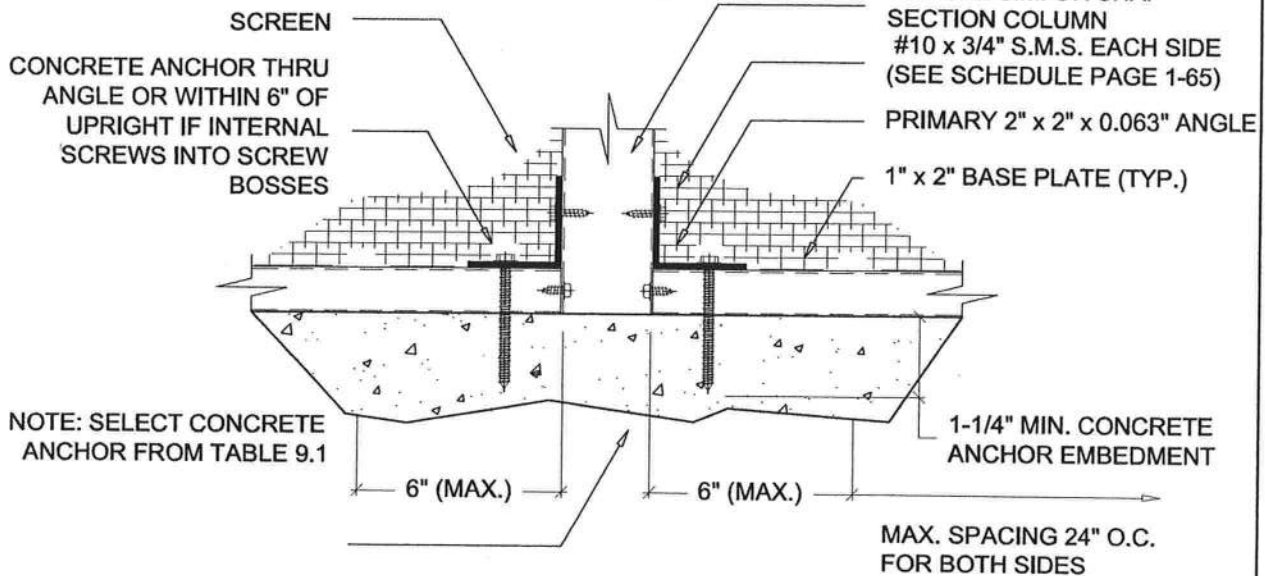
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# SECTION 1

# SCREENED ENCLOSURES



**SIDE VIEW**



**FRONT VIEW**

## 2" x 4" OR LARGER SELF MATING OR SNAP SECTION POST TO DECK DETAILS

SCALE: 3" = 1'-0"

### NOTE:

1. FOR SIDE WALLS OF 2" x 4" OR SMALLER ONLY ONE ANGLE IS REQUIRED.
2. PREDRILL PAVERS W/ MIN. 1/4" MASONRY BIT.

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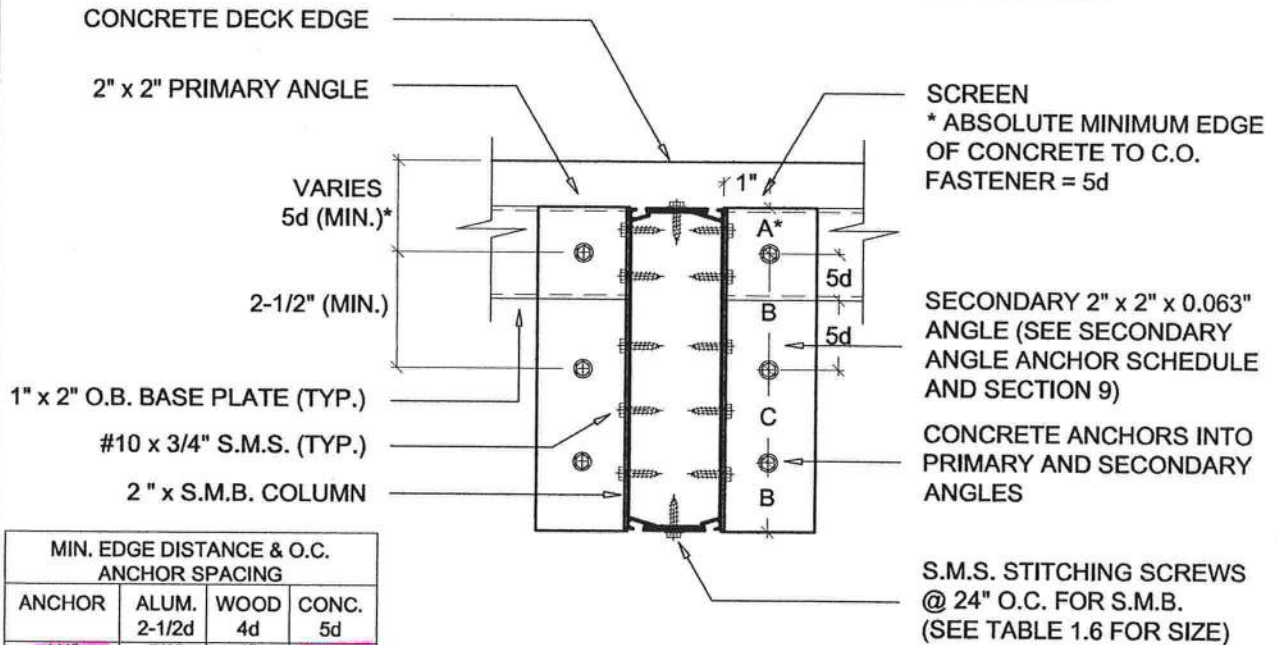
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# SCREENED ENCLOSURES

## SECTION 1

DETAIL ILLUSTRATES TYPICAL  
2" x 4" S.M.B. THRU 2" x 9" SUB  
CONNECTIONS



**TOP VIEW POST TO DECK DETAIL**

SCALE: 3" = 1'-0"

### Primary and Secondary Anchor Schedule

Column Size	Secondary Angle				Maximum Number and Spacing Anchors											
	Angle Length "L"	Number of Anchors			1/4"				5/16"				3/8"			
		1/4"	5/16"	3/8"	#	"A"	"B"	"C"	#	"A"	"B"	"C"	#	"A"	"B"	"C"
2 x 4	2"	4	4	4	4	1"	1"	1"	4	1"	1"	1"	4	1"	1"	1"
2 x 5	3"	4	4	4	4	1"	1-1/2"	-	4	1"	1-1/2"	-	4	1"	1-1/2"	-
2 x 6	4"	4	4	4	4	1"	2"	-	4	1"	2"	-	4	1"	2"	-
2 x 7	5"	6	4	4	6	1"	5/8"	1-7/8"	4	1"	2-1/2"	-	4	1"	2-1/2"	-
2 x 8	6"	6	4	4	6	1"	5/8"	2-3/8"	4	1"	3"	-	4	1"	3"	-
2 x 9	7"	6	6	4	6	1"	5/8"	2-7/8"	6	1"	13/16"	2-7/8"	4	1"	3-1/2"	-
2 x 10	8"	8	6	6	8	1"	5/8"	2"	6	1"	13/16"	3-3/16"	6	1"	3/4"	3-1/4"

#### Example:

Calculate the number of anchors required:  $1.5 \times \text{beam span} / 2 \times \text{beam spacing} \times \text{roof wind pressure (PSF)} = \text{total \#}$   
 if  $1.5 \times 30' / 2 \times 6' \times 10 \text{ PSF} = 1350\#$  and  $1/4" \times 1/4"$  Tapcon in tension @  $5d = 427\# / \text{ea.}$  (see table 9.1)  
 then  $1350\# / 427\# / \text{ea.} = 3.16 \text{ ea.}$  use (3) ea., secondary angle not required

#### Actual Edge Distance Example:

From edge of concrete to fastener =  $2" / \text{dia. of } 0.25" = 8d$

#### Note:

For attachment to wood deck substitute wood fasteners for concrete fasteners & calculate the required number of fasteners using tables from section 9.

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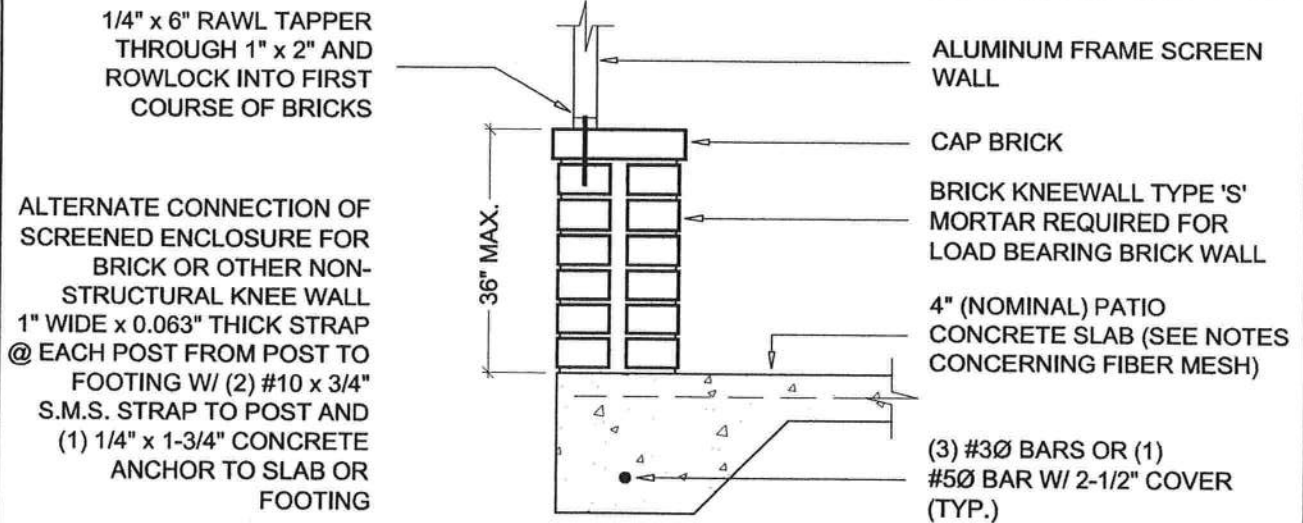
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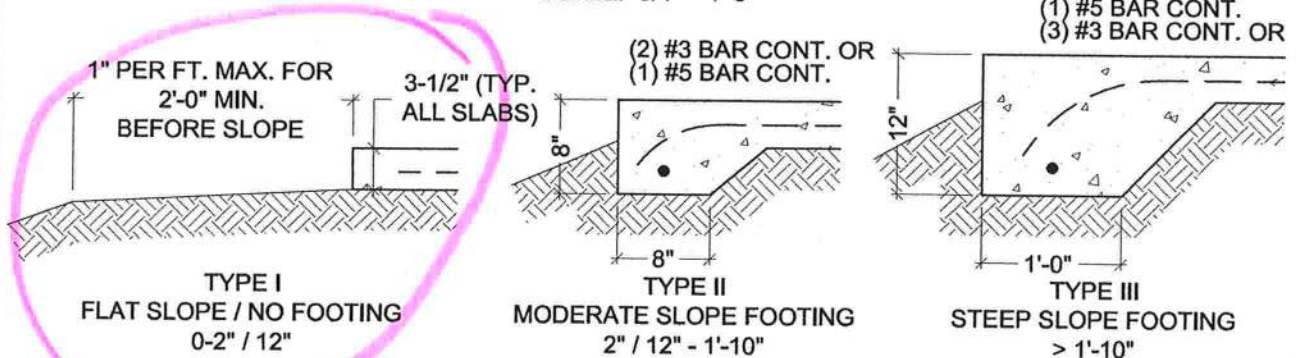
# SCREENED ENCLOSURES

## SECTION 1



### 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 category in which case a type II footing is required.
4. Monolithic slabs and footings shall be minimum 2,500 psi concrete with 6 x 6 - 10 x 10 welded wire mesh or crack control fiber mesh; Fibermesh® Mesh, InForce™ e3™ (Formerly Fibermesh MD) per manufacturer's specification may be used in lieu of wire mesh. All slabs / footings shall be allowed to cure for 7 days before installing anchors.
5. If local codes require a minimum footing use Type II footing or footing section required by local code. Local codes govern.

### SLAB-FOOTING DETAILS

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

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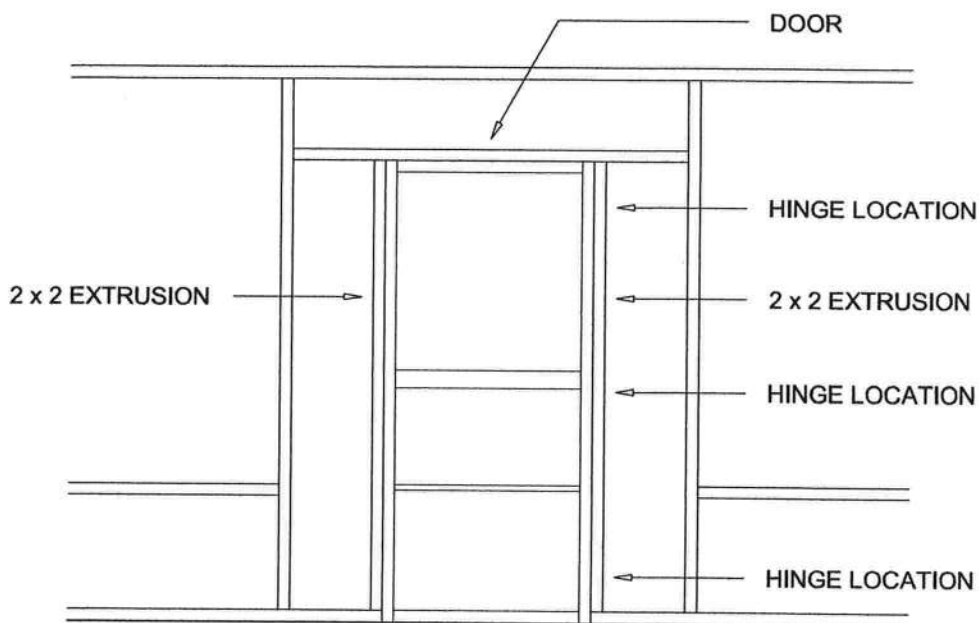
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**NOTES:**

1. Door to be attached to structure with minimum two (2) hinges.
2. Each hinge to be attached to structure with minimum four (4) #12 x 3/4" S.M.S..
3. Each hinge to be attached to door with minimum three (3) #12 x 3/4" S.M.S..
4. Bottom hinge to be mounted between 10 inches and 20 inches from ground.
5. Top hinge to be mounted between 10 inches and 20 inches from top of door.
6. If door location is adjacent to upright a 1" x 2" x 0.044" may be fastened to upright with #12 x 1" S.M.S. at 12" on center and within 3" from end of upright.

**TYPICAL SCREEN DOOR CONNECTION DETAIL**

SCALE: N.T.S.

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## SECTION 1

## SCREENED ENCLOSURES

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

Aluminum Alloy 6063 T-6

For 3 second wind gust at a velocity of 110 MPH, Exposure "B" or an applied load of 13 # / 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"	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 guardrails provided they are attached with min. (3) #10 x 1-1/2" s.m.s. into the screw bosses and do not exceed 8'-0" o.c.
6. Girt spacing shall not exceed 6'-8".
7. Max. beam size for 2" x 5" is 2" x 7" x 0.055" x 0.120"
8. 2" x 4" & 2" x 5" hollow girts shall be connected w/ an internal or external 1-1/2" x 1-1/2" x 0.044" angle.
9. Spans/heights may be interpolated.
10. To convert spans/heights to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

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# SECTION 1

# SCREENED ENCLOSURES

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

Beam/Upright or Post	Upright or Post/Beam	Minimum Purlin, Girt & Knee Brace Size	Notes	Minimum Number of Screws*			Beam Stitching Screw at 24" OC
				#8 x 1/2"	#10 x 1/2"	#12 x 1/2"	
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, i.e., a 2" x 4" upright shall have a 2" x 3" beam.
8. For minimum girt size read upright size as a beam and 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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# SCREENED ENCLOSURES

## SECTION 1

**Table 1.7 Minimum Size Screen Enclosure Knee Braces and Anchoring Required**  
Aluminum 6063 T-6

Brace Length*	Extrusion	Anchoring System
0' - 2'-0"	2" x 2" x 0.044"	2" H-Channel With (3) #10 x 1/2" each leg of channel
To 3'-0"	2" x 3" x 0.045"	2" H-Channel With (3) #10 x 1/2" each leg of channel
To 6'-0"	2" x 4" x 0.044" x 0.125"	2" H-Channel With (4) #10 x 1/2" each leg of channel

\* Knee brace length shall be the horizontal and vertical length @ a 45° angle from the center of the connection to the face of the beam or upright.

**Note:**

1. For required knee braces greater than 4'-6" contact engineer for specifications and details.
2. Cantilever beam detail shown on page 1-40 shall be used for transom wall to host structure attachment when knee brace length exceeds 6'-0".

**Table 1.8 K-Bracing Fastening Schedule**

Maximum Wall Width =	Number of #10 x 3/4" S.M.S. Required				
	Corner Post @ Top	Diagonals (K) per End	Intermediate Post @ Chair Rail	Corner Post @ Bottom	Plate to Sole Plate
20'-0"	2	2	4	2	2
30'-0"	2	2	4	2	2
40'-0"	3	4	6	2	2
50'-0"	4	5	8	3	3
60'-0"	6	7	12	3	3

Use front wall width when determining number of s.m.s. for the side wall K-bracing.

Use side wall width when determining number of s.m.s. for the front and / or back wall K-bracing.

**Lawrence E. Bennett, P.E. FL # 16644**  
**CIVIL & STRUCTURAL ENGINEERING**

P.O. Box 214368, South Daytona, FL 32121

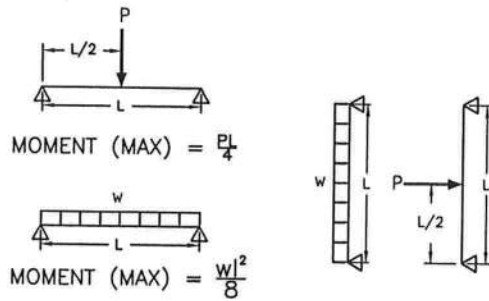
Telephone #: (386) 767-4774 Fax #: (386) 767-6556

Email: lebpe@bellsouth.net



# Trac Beam Technical Sheet

FL7350



2x5 TRAC SELF-MATING BEAM			
L-SPAN (ft)	ALLOWABLE LOAD-P (lbs)	ALLOWABLE UNIFORM LOAD-w (plf)	DEFLECTION @ ALLOWABLE LOAD (inches)
10	1037.0	207	0.68
11	970.5	176	0.90
12	903.9	151	1.12
13	837.4	129	1.34
13.67	792.8	116	1.49
14	781.9	112	1.57
15	748.7	100	1.82
16	715.6	89	2.07
17	682.4	80	2.32
18	649.3	72	2.57
19	616.2	65	2.82
20	583.0	58	3.07
21	549.9	52	3.31
22	516.7	47	3.56
23	483.6	42	3.81
24	450.4	38	4.06
25	417.3	33	4.31

2x5 TRAC BEAM (ROOF BEAM SPAN)

BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' O.C.	> 25'	> 25'	> 25'	> 25'	24.79'
6' O.C.	> 25'	> 25'	> 25'	24.66'	23.86'
7' O.C.	> 25'	> 25'	24.79'	23.86'	22.93'
8' O.C.	> 25'	> 25'	24.13'	23.06'	22'

2x5 TRAC BEAM (COLUMN HEIGHT)

BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' O.C.	20.81'	19.47'	17.48'	15.47'	13.83'
6' O.C.	19.07'	17.48'	15.07'	13.57'	12.78'
7' O.C.	17.34'	15.48'	13.57'	12.65'	11.74'
8' O.C.	15.61'	13.83'	12.78'	11.73'	10.69'

2x7 TRAC SELF-MATING BEAM			
L-SPAN (ft)	ALLOWABLE LOAD-P (lbs)	ALLOWABLE UNIFORM LOAD-w (plf)	DEFLECTION @ ALLOWABLE LOAD (inches)
10	1390.9	278	0.41
11	1332.9	242	0.54
12	1274.9	212	0.67
13	1216.9	187	0.81
14	1158.9	166	0.94
15	1100.9	147	1.07
16	1042.9	130	1.21
17	984.9	116	1.34
18	927.0	103	1.47
19	869.0	91	1.60
20	811.0	81	1.74
21	753.0	72	1.87
22	695.0	63	2.00
23	637.0	55	2.13
24	579.0	48	2.27
25	521.1	42	2.40
26	511.6	39	2.65
27	502.1	37	2.90
28	492.6	35	3.15
29	483.1	33	3.40
30	473.6	32	3.65
31	464.1	30	3.90
32	454.6	28	4.15
33	445.2	27	4.40
34	435.7	26	4.65
35	426.2	24	4.90
36	416.7	23	5.15
37	407.2	22	5.40
38	397.7	21	5.65
39	388.2	20	5.90
40	378.7	19	6.15

2x7 TRAC BEAM (ROOF BEAM SPAN)

BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' O.C.	39.32'	39.32	36.03'	32.73'	29.45'
6' O.C.	36.68'	36.68	32.73'	28.8'	24.99'
7' O.C.	34.05'	34.05	29.45'	24.98'	24.55'
8' O.C.	31.42'	31.42	26.16'	24.61'	24.11'

2x7 TRAC BEAM (COLUMN HEIGHT)

BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' O.C.	23.54'	22.92'	21.98'	21.03'	20.09'
6' O.C.	22.72'	21.97'	20.84'	19.71'	18.58'
7' O.C.	21.91'	21.03'	19.70'	18.39'	17.08'
8' O.C.	21.10'	20.09'	18.58'	17.08'	15.58'

## General Notes:

1. Refer to Florida Product Approval #FL7350 for project specific requirements to be used by design professional.
2. Drawings are illustrative purposes only.
3. Loads in tables are allowable working loads and may be used without any additional reductions.
4. Allowable point loads and deflections are converted to allowable uniform loads and deflections using analytic and comparative analysis.
5. Allowable spans tables are based on 2004 Florida Building Code with 2006 Updates. Wind loads are based on Chapter 20 and Table 2004.4.
6. Design professional shall provide site specific drawings for each project utilizing this product information.
7. Maximum allowable deflections limits of L/60 shall be considered by design professional. L/80 in HVHZ.

2x5 TRAC BEAM (ROOF BEAM SPAN)					
BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' D.C.	> 25'	> 25'	> 25'	> 25'	24.79'
6' D.C.	> 25'	> 25'	> 25'	24.66'	23.86'
7' D.C.	> 25'	> 25'	24.79'	23.86'	22.93'
8' D.C.	> 25'	> 25'	24.13'	23.06'	22'

2x7 TRAC BEAM (ROOF BEAM SPAN)					
BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' D.C.	39.32'	39.32'	36.03'	32.73'	29.45'
6' D.C.	36.68'	36.68'	32.73'	28.8'	24.99'
7' D.C.	34.05'	34.05'	29.45'	24.98'	24.55'
8' D.C.	31.42'	31.42'	26.16'	24.61'	24.11'

2x8 TRAC BEAM CLEAR SPAN (FLAT ROOF)					
BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' D.C.	40.0'	40.0'	40.0'	40.0'	36.0'
6' D.C.	40.0'	40.0'	40.0'	37.0'	35.0'
7' D.C.	40.0'	40.0'	38.0'	35.5'	34.0'
8' D.C.	40.0'	38.0'	36.0'	34.2'	32.0'

2x5 TRAC BEAM (COLUMN HEIGHT)					
BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' D.C.	20.81'	19.47'	17.48'	15.47'	13.83'
6' D.C.	19.07'	17.48'	15.07'	13.57'	12.78'
7' D.C.	17.34'	15.48'	13.57'	12.65'	11.74'
8' D.C.	15.61'	13.83'	12.78'	11.73'	10.69'

2x7 TRAC BEAM (COLUMN HEIGHT)					
BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' D.C.	23.54'	22.92'	21.98'	21.03'	20.09'
6' D.C.	22.72'	21.97'	20.84'	19.71'	18.58'
7' D.C.	21.91'	21.03'	19.70'	18.39'	17.08'
8' D.C.	21.10'	20.09'	18.58'	17.08'	15.58'

2x8 TRAC BEAM SPAN (MANSARD ROOF)					
BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' D.C.	52.0'	52.0'	52.0'	52.0'	47.0'
6' D.C.	52.0'	52.0'	52.0'	50.0'	46.0'
7' D.C.	52.0'	52.0'	52.0'	47.5'	44.8'
8' D.C.	52.0'	50.0'	47.0'	45.0'	42.8'

2x8 TRAC BEAM SPAN (COLUMN HEIGHT)					
BEAM TO BEAM SPACING (ft)	110 mph	120 mph	130 mph	140 mph	150 mph
5' D.C.	32.5'	30.0'	28.9'	27.7'	26.3'
6' D.C.	29.5'	28.7'	27.6'	26.3'	25.0'
7' D.C.	28.7'	27.8'	26.7'	24.9'	23.5'
8' D.C.	27.8'	26.5'	25.2'	23.4'	21.8'

#### General Notes:

1. Refer to Florida Product Approval #FL7350 & #FL9328 for project specific requirements to be used by design professionals.
2. Drawings are illustrative purposes only.
3. Tables developed from loads in FL9328 tables which are allowable working loads and may be used without any additional reductions. Spans are based on ten feet wall height.
4. Allowable point loads and deflections are converted to allowable uniform loads and deflections using analytic and comparative analysis.
5. Allowable spans tables are based on 2004 Florida Building Code with 2006 Updates. Wind loads are based on Chapter 20 and Table 2004.4.
6. Consult a licensed design professional for use of this product information.
7. Maximum allowable deflections limits of L/60 shall be considered by design professional. L/80 in HVHZ.

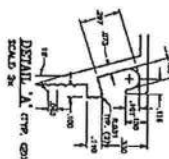
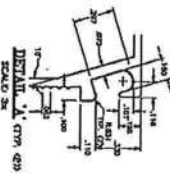
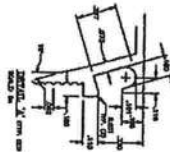
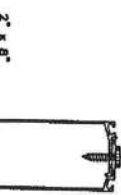
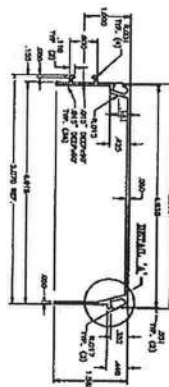
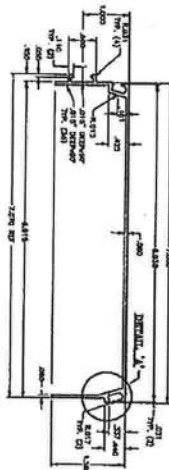


Pool Enclosure Collective, LLC  
 Manufactures Recommended Trac Beam™  
 Standard Installation Details  
 For Screen Enclosures (FL# 7350 & 9328)

BUILDING  
 STRENGTH  
 WITH  
 INTEGRITY

P.O. Box 10000  
 Tampa, FL 33608  
 Tel: (813) 874-5000  
 Fax: (813) 874-6066

# Pool Enclosure Collective, LLC Trac Beam (FL State Product Approval #7350)



2' x 8' TRAC SELF-MATING BEAM (SMB)  
[patent pending]

2' x 7' TRAC SELF-MATING BEAM (SMB)  
[patent pending]

2' x 5' TRAC SELF-MATING BEAM (SMB)  
[patent pending]

2' x 5' TRAC SELF-MATING BEAM (SMB)  
[patent pending]

Pool Enclosure Collective, LLC  
Manufactures Recommended Trac Beam™  
Standard Installation Details  
For Screen Enclosures (FL# 7350 & 9328)



BUILDING  
STRENGTH  
WITH  
INTEGRITY

P.O. Box 10000  
Tampa, FL 33600  
Tel: (813) 874-5000  
Fax: (813) 874-5000

Drawing No. - 070822  
SHEET 4 OF 5



# NOTICE OF COMMENCEMENT

PERMIT NUMBER: \_\_\_\_\_

STATE OF: FLORIDA

COUNTY OF: Columbia

CITY OF: \_\_\_\_\_

THE UNDERSIGNED HEREBY gives notice that improvement(s) will be made to certain real property, and in accordance with Chapter 713, Florida Statutes, the following information is provided in this Notice of Commencement.

## DESCRIPTION OF PROPERTY

LOT: \_\_\_\_\_ BLOCK: \_\_\_\_\_ SECTION: 33 TOWNSHIP: 1S RANGE: 17

TAX PARCEL NUMBER: 33-1S-17-04635

SUBDIVISION: \_\_\_\_\_ PLATBOOK: \_\_\_\_\_ MAP PAGE: \_\_\_\_\_

STREET ADDRESS: 659 NE Cemetery Loop

## GENERAL DESCRIPTION OF IMPROVEMENTS

TO CONSTRUCT: Screen Enclosure

## OWNER INFORMATION

OWNER NAME: Rent Irene Lourcey

ADDRESS: 659 NE Cemetery Loop

PHONE NUMBER: 386-758-9556

CITY: Lake City STATE: Fla. ZIP CODE: 32055

INTEREST IN PROPERTY: \_\_\_\_\_

FEE SIMPLE TITLEHOLDER NAME: \_\_\_\_\_

FEE SIMPLE TITLEHOLDER ADDRESS: \_\_\_\_\_

(if other than owner)

Inst 200912003528 Date: 3/5/2009 Time: 1:56 PM  
DC, P. DeWitt Cason, Columbia County Page 1 of 1 B 1168 P. 1571

CONTRACTOR NAME: Vince Richardson

ADDRESS: 692 S.W. Arlington Blvd.

PHONE NUMBER: 386-755-5779

CITY: Lake City STATE: Fla. ZIP CODE: 32025

BONDING COMPANY: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE NUMBER: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

LENDER NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_ PHONE NUMBER: \_\_\_\_\_

CITY: \_\_\_\_\_ STATE: \_\_\_\_\_ ZIP CODE: \_\_\_\_\_

Persons within the State of Florida designated by Owner upon whom notices or other documents may be served as provided by Section 713.13(1)(a) 7., Florida Statutes:

NAME: \_\_\_\_\_ ADDRESS: \_\_\_\_\_

In addition to himself, Owner designates \_\_\_\_\_ of \_\_\_\_\_ to receive a copy of Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes.

Expiration date is one (1) year from date of recording unless a different date is specified.

\* SIGNATURE OF OWNER: Rent Lourcey

SWORN to and subscribed before me this 20 day of Feb 2009, A.D. 2004:

Notary Public: Sandra H. Tillotson (Columbia County)

My commission Expires: \_\_\_\_\_



SANDRA H. TILLOTSON  
MY COMMISSION # DD 629530  
EXPIRES: January 31, 2011  
Bonded Thru Budget Notary Services

# COLUMBIA COUNTY OFFICE OF OCCUPANCY

## COLUMBIA COUNTY, FLORIDA

### Department of Building and Zoning Inspection

This Certificate of Occupancy is issued to the below named permit holder for the building and premises at the below named location, and certifies that the work has been completed in accordance with the Columbia County Building Code.

Parcel Number 33-1S-17-04635-000

Building permit No. 000027670

Use Classification SCREEN ENCLOSURE

Fire: 0.00

Permit Holder J. VINCE RICHARDSON

Waste:           

Owner of Building KENT & IRENE LOURCEY

Total: 0.00

Location: 659 NE CEMETARY LOOP, LAKE CITY, FL

Date: 03/24/2009

Building Inspector

POST IN A CONSPICUOUS PLACE  
(Business Places Only)

