

DATE 06/19/2008

# Columbia County Building Permit

**PERMIT**

**This Permit Must Be Prominently Posted on Premises During Construction**

**000027092**

APPLICANT DREW TURNER PHONE 352.208.8821  
 ADDRESS 545 FAIRWAYS DRIVE OCALA FL 32035  
 OWNER SWINDERMAN, BRIAN & JENNIFER PHONE 352.514.8271  
 ADDRESS 586 SW WOODLAND AVENUE FT. WHITE FL 32038  
 CONTRACTOR WM.WOODARD-COASTAL CRAFTSMEN PHONE 352.369.1444  
 LOCATION OF PROPERTY US 27-S TO C-138, R, L ON WOODLAND AVE, 1/4 MILE ON RIGHT  
(PROPERTY @ THE VERY END).

TYPE DEVELOPMENT SCREEN ENCLOSURE ESTIMATED COST OF CONSTRUCTION 8590.00  
 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 30-7S-17-10058-573 SUBDIVISION SANTA FE RIVER PLANTATION  
 LOT 43 BLOCK \_\_\_\_\_ PHASE \_\_\_\_\_ UNIT \_\_\_\_\_ TOTAL ACRES 2.02

CGC047465  
 Culvert Permit No. \_\_\_\_\_ Culvert Waiver \_\_\_\_\_ Contractor's License Number \_\_\_\_\_ Applicant/Owner/Contractor \_\_\_\_\_  
 EXISTING X-08-209 \_\_\_\_\_ CFS \_\_\_\_\_ RTJ \_\_\_\_\_ N \_\_\_\_\_  
 Driveway Connection \_\_\_\_\_ Septic Tank Number \_\_\_\_\_ LU & Zoning checked by \_\_\_\_\_ Approved for Issuance \_\_\_\_\_ New Resident \_\_\_\_\_

COMMENTS: NOC ON FILE.

Check # or Cash 7367

## FOR BUILDING & ZONING DEPARTMENT ONLY

(footer/Slab)

Temporary Power \_\_\_\_\_ Foundation \_\_\_\_\_ Monolithic \_\_\_\_\_  
 date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_  
 Under slab rough-in plumbing \_\_\_\_\_ Slab \_\_\_\_\_ Sheathing/Nailing \_\_\_\_\_  
 date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_  
 Framing \_\_\_\_\_ Rough-in plumbing above slab and below wood floor \_\_\_\_\_  
 date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_  
 Electrical rough-in \_\_\_\_\_ Heat & Air Duct \_\_\_\_\_ Peri. beam (Lintel) \_\_\_\_\_  
 date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_  
 Permanent power \_\_\_\_\_ C.O. Final \_\_\_\_\_ Culvert \_\_\_\_\_  
 date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_  
 M/H tie downs, blocking, electricity and plumbing \_\_\_\_\_ Pool \_\_\_\_\_  
 date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_  
 Reconnection \_\_\_\_\_ Pump pole \_\_\_\_\_ Utility Pole \_\_\_\_\_  
 date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_  
 M/H Pole \_\_\_\_\_ Travel Trailer \_\_\_\_\_ Re-roof \_\_\_\_\_  
 date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_ date/app. by \_\_\_\_\_

BUILDING PERMIT FEE \$ 45.00 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** 95.00  
 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 TO BE IN ACTIVE PROGRESS WHEN THE PERMIT HAS RECIEVED AN APPROVED INSPECTION WITHIN 180 DAYS.

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



Columbia County Building Permit Application

Revised 9-23-04

For Office Use Only Application # 0806-20 Date Received 4/13 By JO Permit # 27092  
 Application Approved by - Zoning Official CFS Date 4/17/08 Plans Examiner [Signature] Date 6-18-08  
 Flood Zone N/A Development Permit [Signature] Zoning A-3 Land Use Plan Map Category A-3  
 Comments  EN RELEASE  NOC \*NEED 2ND TAGIE - ASAP  
 NITE PLAN  Letter of Authority

Applicants Name EDREW TURNER Phone 352. 208. 8821  
 Address 545 Fairways Dr. Ocala FL 34472  
 Owners Name Brian & Jennifer Swinderman Phone \_\_\_\_\_  
 911 Address 586 SW Woodland Ave Fort White FL 32035  
 Contractors Name COASTAL Craftsmen Phone 352-369-1444  
 Address 1406 SW 15th Ave, Ocala FL 34474  
 Fee Simple Owner Name & Address N/A  
 Bonding Co. Name & Address N/A  
 Architect/Engineer Name & Address Bennett Eng. PO Box 214368 S. Daytona FL 321  
 Mortgage Lenders Name & Address N/A

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progressive Energy  
 Property ID Number 30-75-17-10058-573-HX Estimated Cost of Construction 8,590.00  
 Subdivision Name Santa Fe River Plantations Lot 43 Block \_\_\_\_\_ Unif \_\_\_\_\_ Phase \_\_\_\_\_  
 Driving Directions DEPART NE Hernando Ave, T/L onto N/E Madison St. then immediately T/L on US-441, T/R on SR10A, T/L on US-41, Keep right toward SR-47, T/L on US-27, T/R on CR 138, T/L onto SW Woodland Ave  
 Type of Construction Screened Pool enclosure Number of Existing Dwellings on Property 1  
 Total Acreage 2.020 Lot Size \_\_\_\_\_ Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive  
 Actual Distance of Structure from Property Lines - Front 39.58' Side 29.89' Side \_\_\_\_\_ Rear \_\_\_\_\_  
 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.

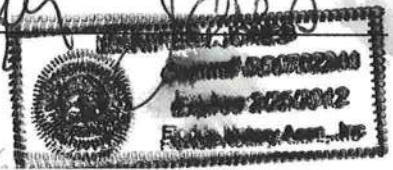
OWNERS AFFIDAVIT: I hereby certify that all the foregoing information is accurate and all work will be done in compliance with all applicable laws and regulating construction and zoning.

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

William Woodard  
Owner Builder or Agent (Including Contractor)

[Signature]  
Contractor Signature  
Contractors License Number CGC047465  
Competency Card Number \_\_\_\_\_  
NOTARY STAMP/SEAL

STATE OF FLORIDA  
COUNTY OF COLUMBIA  
Sworn to (or affirmed) and subscribed before me  
this 12th day of June 2008.  
Personally known  or Produced Identification \_\_\_\_\_

Jennifer Lopez  
Notary Signature  


spoke to Drew 6/18/08

**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.

**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.

Brian Matthew Swindon  
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.

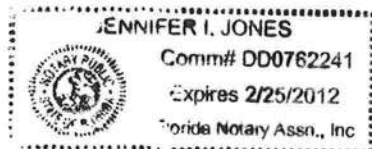
hl  
Contractor's Signature (Permitee)

Contractor's License Number CGC047465  
Columbia County  
Competency Card Number \_\_\_\_\_

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 18th day of June 2008.  
Personally known X or Produced Identification \_\_\_\_\_

Jennifer I. Jones  
State of Florida Notary Signature (For the Contractor)

SEAL:



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

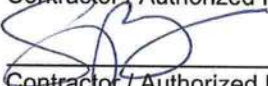
### I. Design Statement:

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; 110 MPH Wind Zone for 3 second wind gust; Basic Wind Pressure 14; Design pressures are 4 PSF for roofs & 13 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.

Stephanie Broderick Phone: 352-369-1444  
 Contractor / Authorized Rep\* Name (please print)  
  
 Contractor / Authorized Rep\* Signature Date: 6/11/08

Swinderman - 586 sw woodland ave. fort white fl 32035  
 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 .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
B. Site plan or survey with enclosure location .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
C. Contractor's / Designer's name, address, phone number, & signature on plans .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
D. Site exposure form completed .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
E. Enclosure layout drawing @ 1/8" or 1/10" scale with the following: .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1. Plan view with host structure, enclosure length, projection from host structure, and all dimensions .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Front and side elevation views with all dimensions & heights .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

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

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

$$\begin{array}{c}
 \text{Span} \\
 \text{@ 120 MPH} \quad \downarrow \\
 \text{0.00 (b or d) x 1.00 (b or d) x 1.00 (b or d) = } \quad \downarrow \text{ Required Converted Span / Height} \\
 \text{Wind Zone Multiplier} \quad \uparrow \quad \uparrow \quad \text{Exposure Multiplier} \\
 \text{(see page 1ii)} \quad \quad \quad \text{(see page 1ii)}
 \end{array}$$

4. Upright location (show in plan & elevation view) & size (Table 1.3 & 1.6) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5. Chair rail & girt size, length, & spacing (Table 1.4) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>
6. Eave rail size, length, spacing and stitching of (Table 1.2) .....	<input checked="" type="checkbox"/>	<input type="checkbox"/>

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

NOTICE OF COMMENCEMENT

County Clerk's Office Stamp or Seal

Tax Parcel Identification Number 30-75-17-10058-573-HX

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

1. Description of property (legal description): Lot 43 Santa Fe River Plantations DRB 737-305  
a) Street (job) Address: 948-529 586 SW Woodland Ave Fort White FL 32035

2. General description of improvements: Screen Enclosure  
3. Owner Information  
a) Name and address: Brian & Jennifer Swinderman P.O. Box 1383 Alachua FL 32616  
b) Name and address of fee simple titleholder (if other than owner) N/A  
c) Interest in property Owner

4. Contractor Information  
a) Name and address: William Woodard Coastal Craftsmen 1406 SW 15th Ave Ocala FL 34474  
b) Telephone No.: 352-369-1444 Fax No. (Opt.) \_\_\_\_\_

5. Surety Information  
a) Name and address: N/A  
b) Amount of Bond: N/A  
c) Telephone No.: N/A

6. Lender  
a) Name and address: N/A  
b) Phone No.: N/A

7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:  
a) Name and address: N/A  
b) Telephone No.: N/A Fax No. (Opt.) \_\_\_\_\_

8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b), Florida Statutes:  
a) Name and address: \_\_\_\_\_  
b) Telephone No.: \_\_\_\_\_ Fax No. (Opt.) \_\_\_\_\_

9. Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified): \_\_\_\_\_

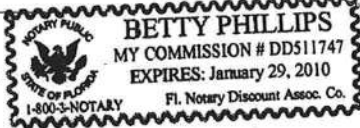
**WARNING TO OWNER: ANY PAYMENTS MADE BY THE OWNER AFTER THE EXPIRATION OF THE NOTICE OF COMMENCEMENT ARE CONSIDERED IMPROPER PAYMENTS UNDER CHAPTER 713, PART I, SECTION 713.13, FLORIDA STATUTES, AND CAN RESULT IN YOUR PAYING TWICE FOR IMPROVEMENTS TO YOUR PROPERTY; A NOTICE OF COMMENCEMENT MUST BE RECORDED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

STATE OF FLORIDA  
COUNTY OF COLUMBIA

10. Brian M. Swinderman Jennifer L. Swinderman  
Signature of Owner or Owner's Authorized Officer/Director/Partner/Manager  
Brian M. Swinderman Jennifer L. Swinderman  
Print Name

The foregoing instrument was acknowledged before me, a Florida Notary, this 26 day of February, 20 08, by:  
Jennifer & Brian Swinderman as owner (type of authority, e.g. officer, trustee, attorney fact) for \_\_\_\_\_ (name of party on behalf of whom instrument was executed).

Personally Known XX OR Produced Identification \_\_\_\_\_ Type \_\_\_\_\_

Notary Signature Betty Phillips Notary Stamp or Seal: 

11. Verification pursuant to Section 92.525, Florida Statutes, under penalties of perjury, I declare that I have read the foregoing and that the facts stated in it are true to the best of my knowledge and belief.  
Brian M. Swinderman Jennifer L. Swinderman  
Signature of Natural Person Signing (in line #10 above)

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



By Sharon Feagle  
Deputy Clerk

Date 06-13-2008



@ CAM112M01 S CamaUSA Appraisal System  
 6/19/2008 10:16 Legal Description Maintenance  
 Year T Property Sel  
 2008 R 30-7S-17-10058-573  
 '586 WOODLAND AVE SW FT WHITE  
 HX SWINDERMAN BRIAN M & JENNIFER

Columbia County  
 54540 Land 001  
 AG 000  
 166165 Bldg 001  
 2800 Xfea 002  
 223505 TOTAL B\*

1	LOT 43 SANTA FE RIVER	PLANTATIONS. ORB 737-305,	2
3	948-529,		4
5			6
7			8
9			10
11			12
13			14
15			16
17			18
19			20
21			22
23			24
25			26
27			28

Mnt 3/12/2002 KYLIE

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

**COASTAL  
CRAFTSMEN  
ALUMINUM**  
Leaders of Innovation, Quality, & Dependability™  
LICENSE # CGC-047465

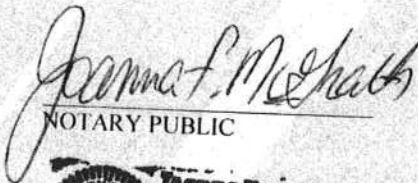
July 10, 2003

TO: ALL BUILDING DEPARTMENTS

I, WILLIAM WOODARD, PRESIDENT OF COASTAL CRAFTSMEN ALUMINUM, INC. HEREBY AUTHORIZE ALL BUILDING DEPARTMENTS TO INCLUDE **ANDREW TURNER** ON THE LIST OF EMPLOYEES TO SIGN ALL PAPERS AND DOCUMENTS NECESSARY TO OBTAIN LICENSES AND PERMITS FOR JOBS CONTRACTED BY COASTAL CRAFTSMEN ALUMINUM, INC. IF YOU HAVE ANY QUESTIONS PLEASE CALL THE OFFICE AT 352-369-1444.



WILLIAM M. WOODARD  
PRESIDENT  
COASTAL CRAFTSMEN ALUMINUM  
CGC047465



NOTARY PUBLIC



Joanna Faye McGrath  
Commission # DD134341  
Expires July 16, 2006  
Bonded Thru  
Atlantic Bonding Co., Inc.

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

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

$$\begin{array}{c} \text{Span / Height} \\ \text{@ 120 MPH} \\ \text{or } \underline{\quad} \text{ MPH} \end{array} \begin{array}{c} \swarrow \\ \downarrow \\ \frac{0.00}{\text{Wind Zone}} \\ \text{Multiplier **} \end{array} (b \text{ or } d) \times \frac{1.00}{\text{Exposure Multiplier}} (b \text{ or } d) \times \frac{1.00}{\text{Exposure Multiplier}} (b \text{ or } d) = \underline{\quad} \begin{array}{c} \swarrow \\ \downarrow \\ \text{Required Converted} \\ \text{Span / Height} \end{array}$$

(see page 1ii)

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

Wall area calculations for cables:

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

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

E. Select footing from examples in manual.

Example 1: Flat Roof

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

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

Total area / (233 ft.<sup>2</sup> / cable for 3/32") = 0 cable pairs

or  
 Total area / (445 ft.<sup>2</sup> / cable for 1/8") = 0 cable pairs

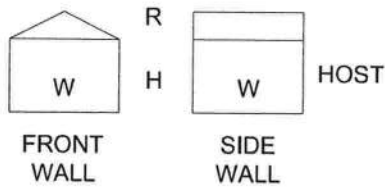
TOTAL = 0.00 ft.<sup>2</sup>

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

Side wall area / (233 ft.<sup>2</sup> / cable for 3/32") = 0 cable(s)

or  
 Side wall area / (445 ft.<sup>2</sup> / cable for 1/8") = 0 cable(s)

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



Example 2: Gable Roof

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

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

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

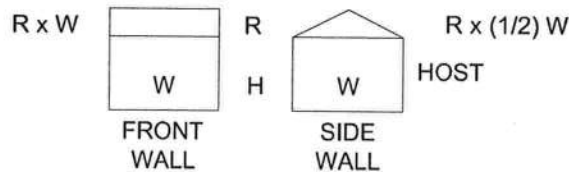
Largest side gable rise:  $\frac{\text{ft.}}{R} \times \frac{\text{ft.}}{W} = \frac{0.00 \text{ ft.}^2}{d} @ 50\% = \dots\dots\dots 0.00 \text{ ft.}^2$

TOTAL =  $\dots\dots\dots 0.00 \text{ ft.}^2$

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

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

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



Example 3: Transverse Gable Roof

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

Front gable rise:  $\frac{\text{ft.}}{R} \times \frac{\text{ft.}}{W} = \frac{0.00 \text{ ft.}^2}{b} @ 100\% = \dots\dots\dots 0.00 \text{ ft.}^2$

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

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

TOTAL =  $\dots\dots\dots 0.00 \text{ ft.}^2$

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

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

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

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

### Example 4: Mansard Roof

$$\text{Front wall @ eave: } \frac{39.58 \text{ ft.}}{W} \times \frac{9.58 \text{ ft.}}{H} = \frac{379.18 \text{ ft.}^2}{a} @ 100\% = \underline{\hspace{2cm}} 379.18 \text{ ft.}^2$$

$$\text{Front mansard rise: } \frac{2.00 \text{ ft.}}{R} \times \frac{1}{2} \left( \frac{28.24 \text{ ft.}}{W1} + \frac{39.58 \text{ ft.}}{W2} \right) = \frac{67.82 \text{ ft.}^2}{b} @ 100\% = \underline{\hspace{2cm}} 67.82 \text{ ft.}^2$$

$$\text{Largest side wall: } \frac{29.83 \text{ ft.}}{W} \times \frac{9.58 \text{ ft.}}{H} = \frac{285.77 \text{ ft.}^2}{c} @ 50\% = \underline{\hspace{2cm}} 142.89 \text{ ft.}^2$$

$$\text{Largest side mansard rise: } \frac{2 \text{ ft.}}{R} \times \frac{1}{2} \left( \frac{20.49 \text{ ft.}}{W1} + \frac{29.83 \text{ ft.}}{W2} \right) = \frac{50.32 \text{ ft.}^2}{d} @ 50\% = \underline{\hspace{2cm}} 25.16 \text{ ft.}^2$$

$$\text{TOTAL} = \underline{\hspace{2cm}} 615.04 \text{ ft.}^2$$

Total area / (233 ft.<sup>2</sup> / cable for 3/32") = 3 cable pairs

or

Total area / (445 ft.<sup>2</sup> / cable for 1/8") = 1 cable pairs

$$\text{Side wall cable calculation: } \frac{285.77 \text{ ft.}^2}{c} + \frac{50.32 \text{ ft.}^2}{d} = \frac{336.09 \text{ ft.}^2}{e} @ 100\% = \underline{\hspace{2cm}} 336.09 \text{ ft.}^2$$

Side wall area / (233 ft.<sup>2</sup> / cable for 3/32") = 1 cable(s)

or

Side wall area / (445 ft.<sup>2</sup> / cable for 1/8") = 1 cable(s)

### Example 5: Dome Roof

$$\text{Front dome wall @ eave: } \frac{\hspace{1cm} \text{ft.}}{W} \times \frac{\hspace{1cm} \text{ft.}}{H} = \frac{0.00 \text{ ft.}^2}{a} @ 100\% = \underline{\hspace{2cm}} 0.00 \text{ ft.}^2$$

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

$$\text{Largest side wall: } \frac{\hspace{1cm} \text{ft.}}{W} \times \frac{\hspace{1cm} \text{ft.}}{H} = \frac{0.00 \text{ ft.}^2}{c} @ 50\% = \underline{\hspace{2cm}} 0.00 \text{ ft.}^2$$

$$\text{Largest side dome rise: } \frac{\hspace{1cm} \text{ft.}}{R} \times \frac{\hspace{1cm} \text{ft.}}{W} = \frac{0.00 \text{ ft.}^2}{d} @ 50\% = \underline{\hspace{2cm}} 0.00 \text{ ft.}^2$$

$$\text{TOTAL} = \underline{\hspace{2cm}} 0.00 \text{ ft.}^2$$

Total area / (233 ft.<sup>2</sup> / cable for 3/32") = 0 cable pairs

or

Total area / (445 ft.<sup>2</sup> / cable for 1/8") = 0 cable pairs

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

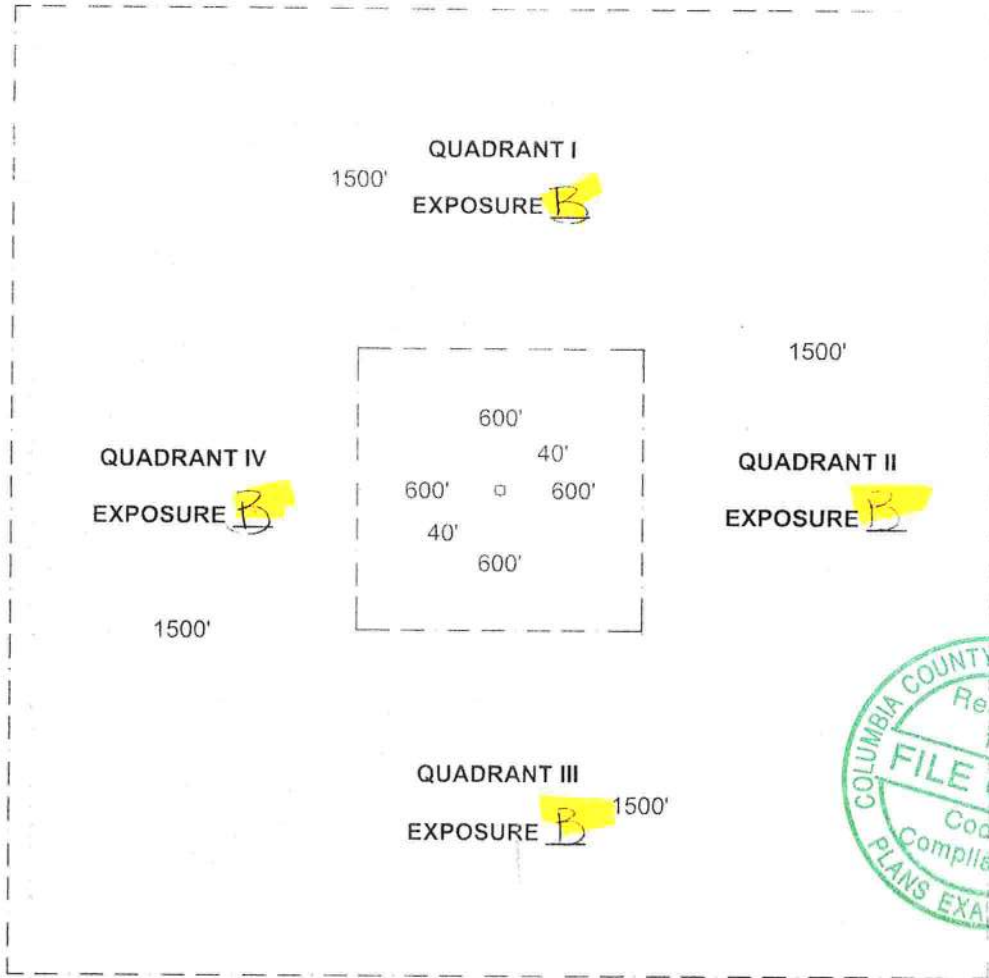
Side wall area / (233 ft.<sup>2</sup> / cable for 3/32") = 0 cable(s)

or

Side wall area / (445 ft.<sup>2</sup> / cable for 1/8") = 0 cable(s)

**Notes:**

**SITE EXPOSURE EVALUATION FORM**



**NOTE:** ZONES ARE MEASURED FROM STRUCTURE OUTWARD

**SITE**

SCALE: 1" = 800'

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

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

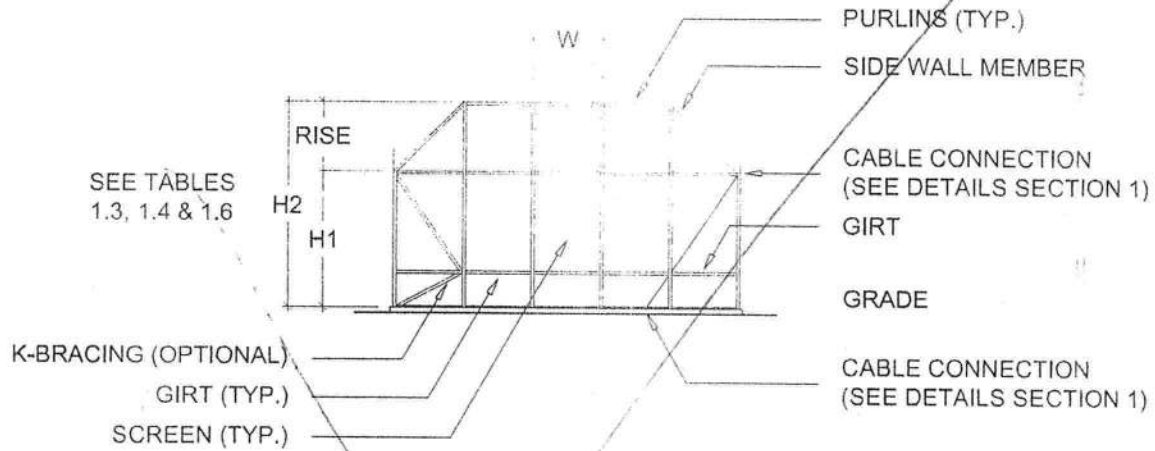
EXPOSURE D: FLAT, UNOBSTRUCTED AREAS THAT ARE 1,500 FT INLAND FROM THE SHORE LINE AND ARE EXPOSED TO WIND FLOWING OVER WATER FOR A DISTANCE OF AT LEAST 1 MILE.

SITE IS EXPOSURE: B EVALUATED BY: William Woodard DATE: 4-12-08

SIGNATURE: hl LICENSE #: CGC047465

**SECTION 1**

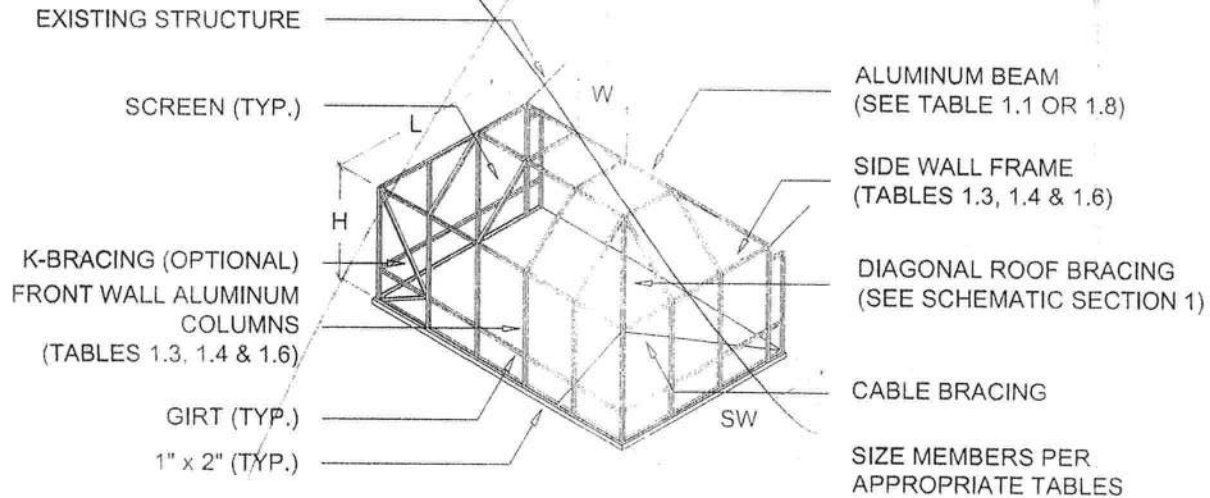
**SCREENED ENCLOSURES**



NOTE: USE H2 FOR CABLE AREA CALCULATION

**TYPICAL MANSARD ROOF - FRONT WALL ELEVATION**

SCALE: N.T.S.



**TYPICAL MANSARD ROOF - ISOMETRIC**

SCALE: N.T.S.

CONNECTION DETAILS AND NOTES ARE FOUND IN THE SUBSEQUENT PAGES.

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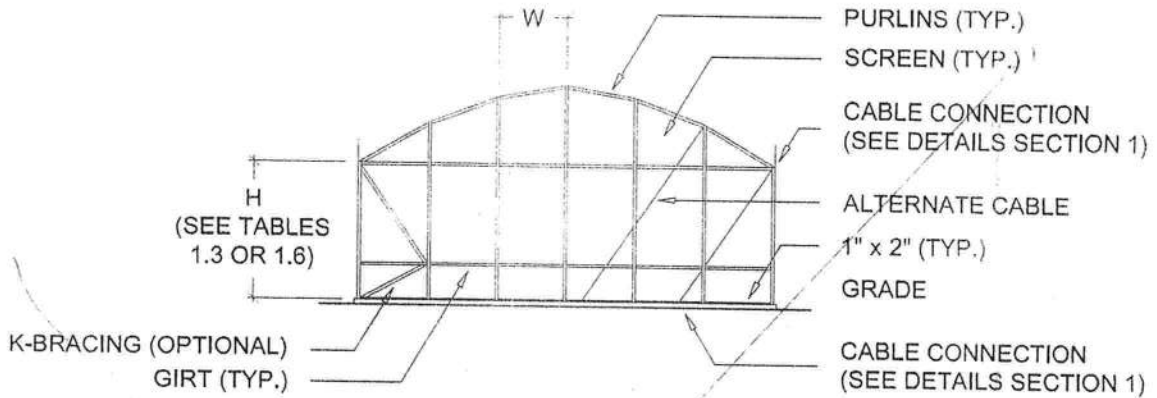
Email: lebbe@bellsouth.net

PAGE

1-2

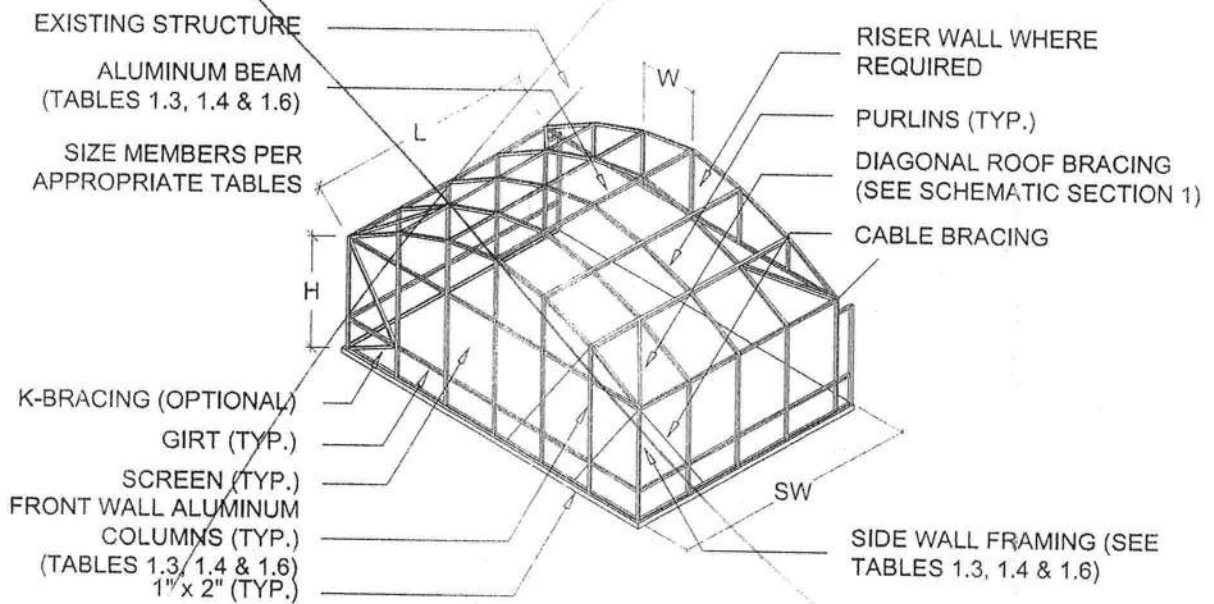
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**TYPICAL DOME ROOF - FRONT WALL ELEVATION**

SCALE: N.T.S.



**TYPICAL DOME ROOF - ISOMETRIC**

SCALE: N.T.S.

CONNECTION DETAILS AND NOTES ARE FOUND IN THE SUBSEQUENT PAGES.

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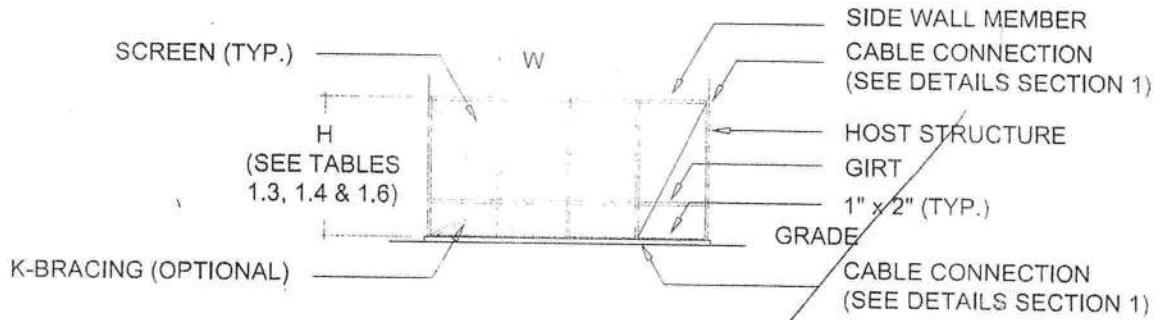
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Email: lebpe@bellsouth.net

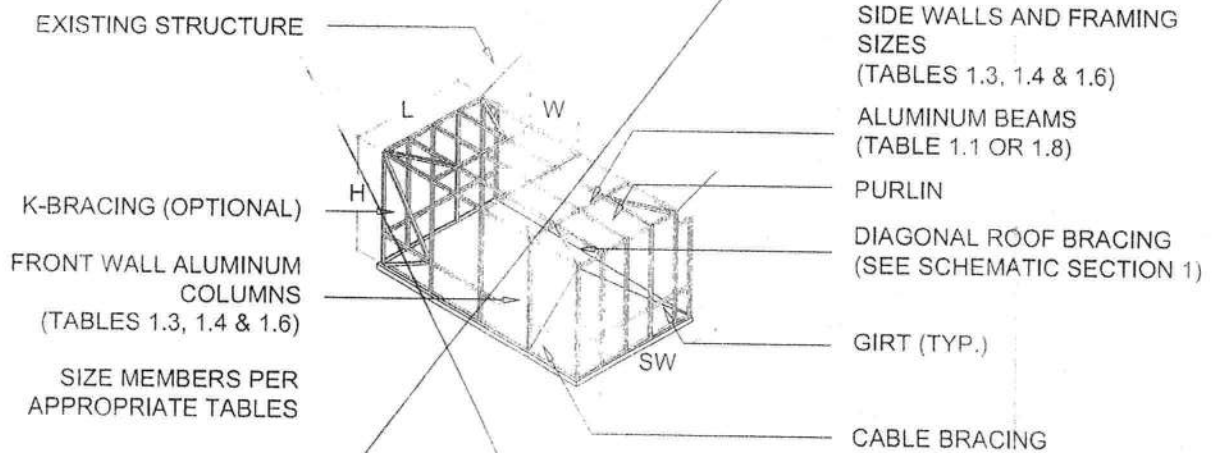
**SCREENED ENCLOSURES**

**SECTION 1**



**TYPICAL FLAT ROOF - FRONT WALL ELEVATION**

SCALE: N.T.S.



**TYPICAL FLAT ROOF - ISOMETRIC**

SCALE: N.T.S.

**TYPICAL NOMENCLATURE FOR SCREENED ENCLOSURES:**

- H - MAXIMUM UPRIGHT HEIGHTS
- L - MAXIMUM BEAM SPAN WITHOUT KNEE BRACE.  
(ADD HORIZONTAL LENGTH OF KNEE BRACE TO SPAN FROM TABLES)
- SW - SIDE WALLS CAN BE FRAMED WITHOUT TOP BEAM AND CAN BE SMALLEST EXTRUSIONS ALLOWED BY SPAN TABLES
- W - SCREEN PANEL SPACING

CONNECTION DETAILS AND NOTES ARE FOUND IN SUBSEQUENT PAGES.

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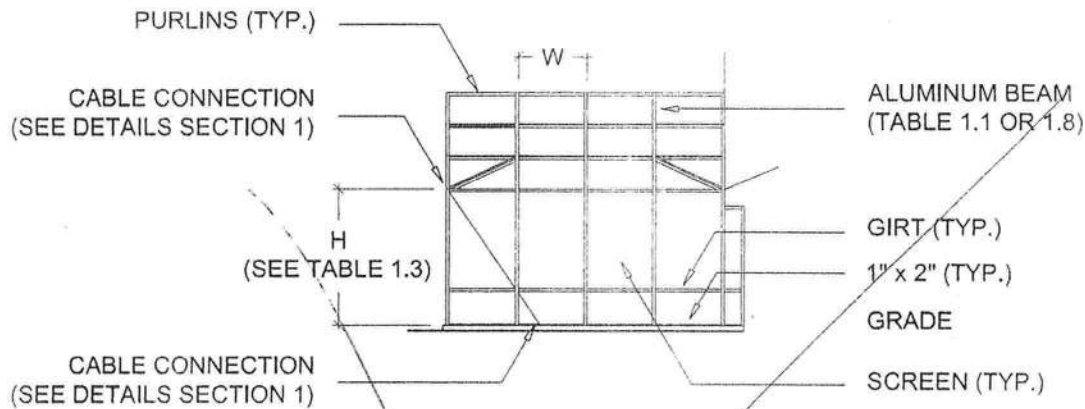
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Email: [lebpe@bellsouth.net](mailto:lebpe@bellsouth.net)

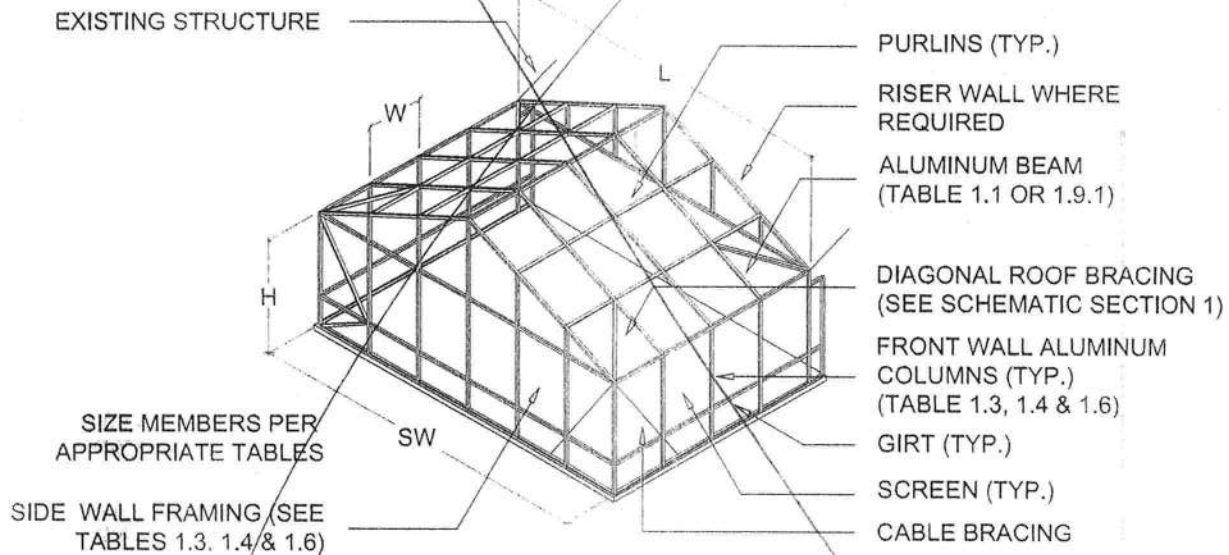
**SECTION 1**

**SCREENED ENCLOSURES**



**TYPICAL GABLE ROOF - FRONT WALL ELEVATION**

SCALE: N.T.S.



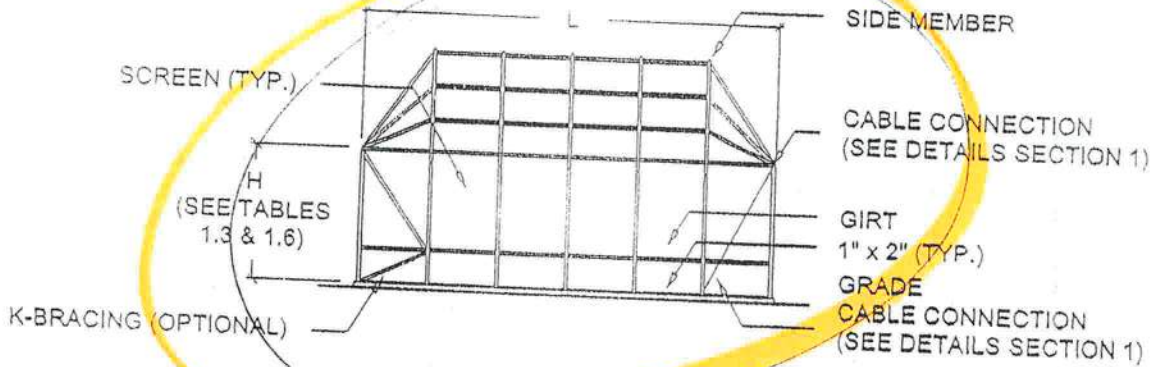
**TYPICAL GABLE ROOF - ISOMETRIC**

SCALE: N.T.S.

CONNECTION DETAILS AND NOTES ARE FOUND IN THE SUBSEQUENT PAGES

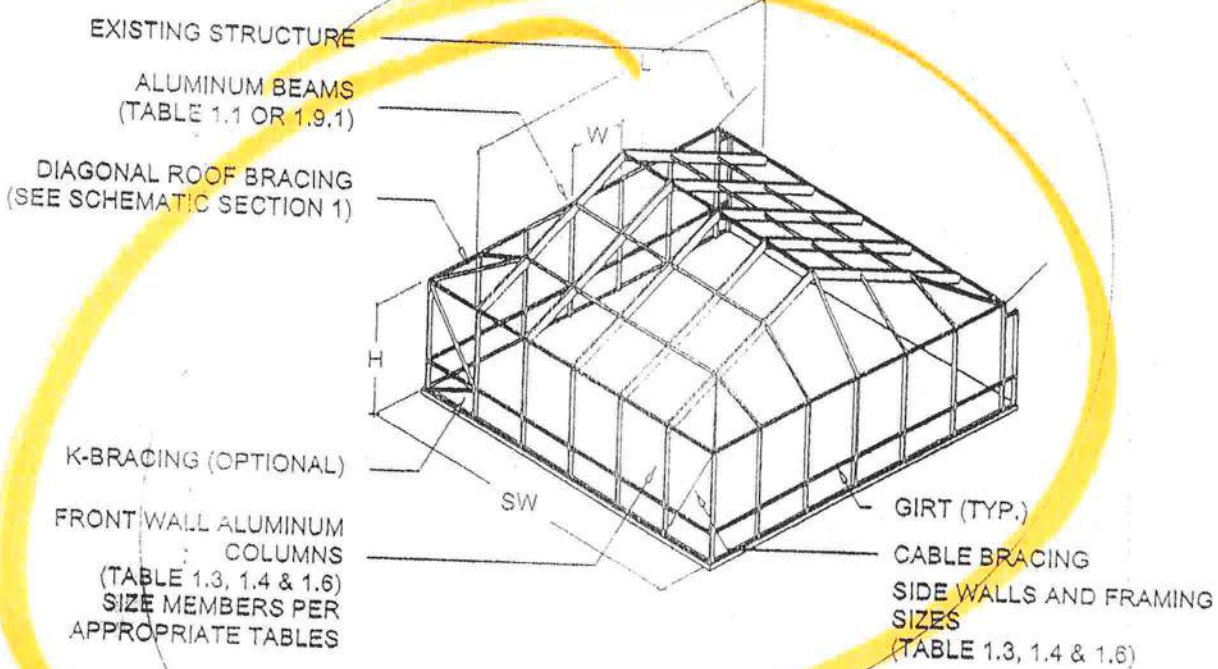
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SCREENED ENCLOSURES



**TYPICAL MODIFIED HIP ROOF - FRONT WALL ELEVATION**

SCALE: N.T.S.



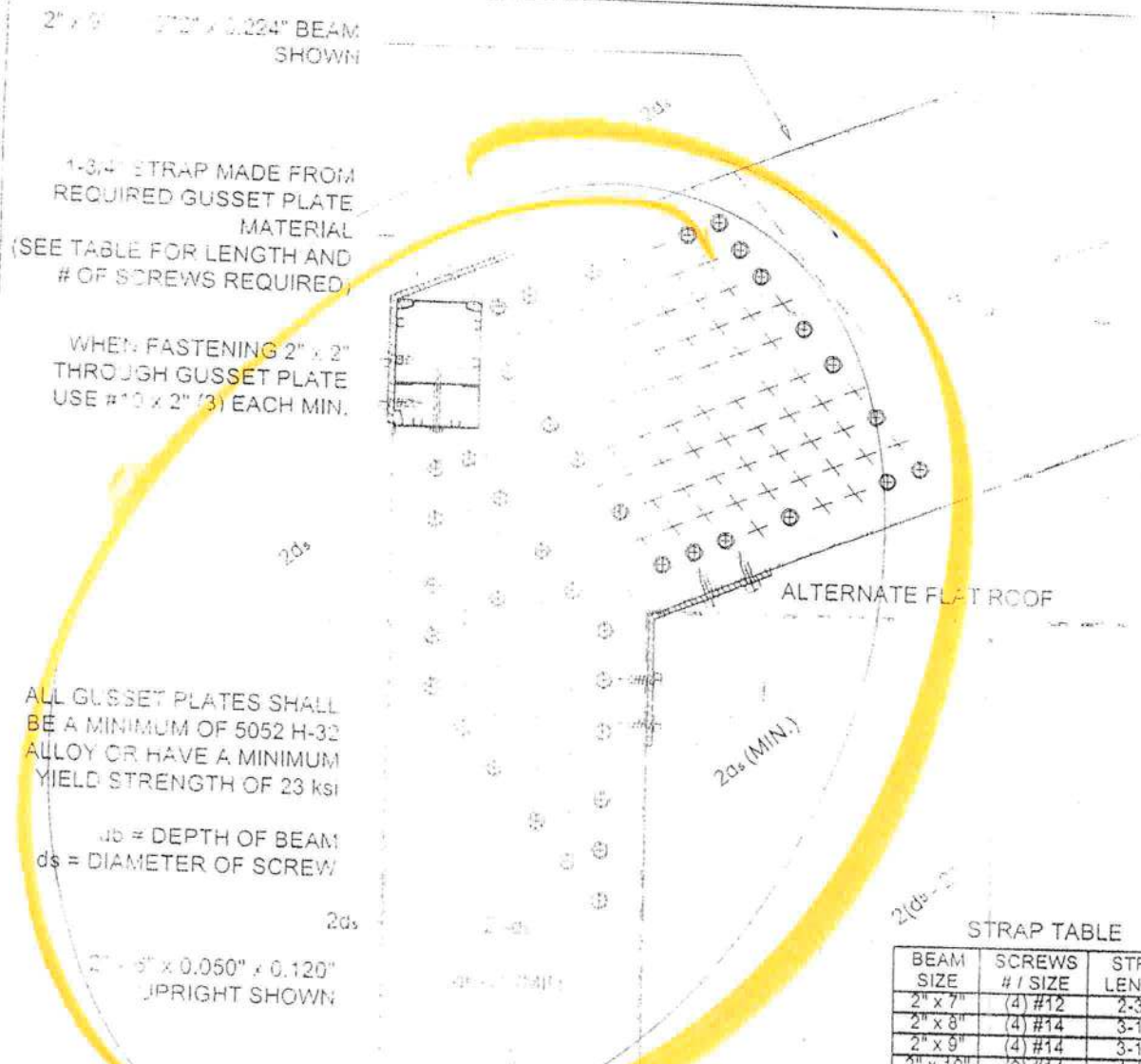
**TYPICAL MODIFIED HIP ROOF - ISOMETRIC**

SCALE: N.T.S.

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SCREENED ENCLOSURES

SECTION



2" x 8" 2" x 0.224" BEAM SHOWN

1-3/4" STRAP MADE FROM REQUIRED GUSSET PLATE MATERIAL (SEE TABLE FOR LENGTH AND # OF SCREWS REQUIRED)

WHEN FASTENING 2" x 2" THROUGH GUSSET PLATE USE #10 x 2" (3) EACH MIN.

ALL GUSSET PLATES SHALL BE A MINIMUM OF 5052 H-32 ALLOY OR HAVE A MINIMUM YIELD STRENGTH OF 23 ksi

db = DEPTH OF BEAM  
ds = DIAMETER OF SCREW

2" x 6" x 0.050" x 0.120" UPRIGHT SHOWN

ALTERNATE FLAT ROOF

STRAP TABLE

BEAM SIZE	SCREWS # / SIZE	STRAP LENGTH
2" x 7"	(4) #12	2-3/4"
2" x 8"	(4) #14	3-1/4"
2" x 9"	(4) #14	3-1/4"
2" x 10"	(6) #14	4-1/2"

\* ALL SCREWS 3/4" LONG

NOTES:

1. FILL OUTER SCREW POSITIONS FIRST UNTIL REQUIRED NUMBER OF SCREWS IS ACHIEVED.
2. SEE TABLE 1.6 FOR GUSSET SIZE, SCREW SIZES, AND NUMBER.
3. GUSSET PLATES ARE REQUIRED ON ALL BEAMS 2" x 7" AND LARGER.
4. SCREW PATTERN LAYOUT W/ SPACING BETWEEN SCREWS GREATER THAN MINIMUM IS ALLOWED SO THAT EQUAL SPACING IS ACHIEVED.

**BEAM SPLICE CUT, GUSSET PLATE CONNECTION & GUSSET SCREW PATTERN  
BEAM TO POST MOMENT CONNECTION DETAIL**

SCALE: 3" = 1'-0"

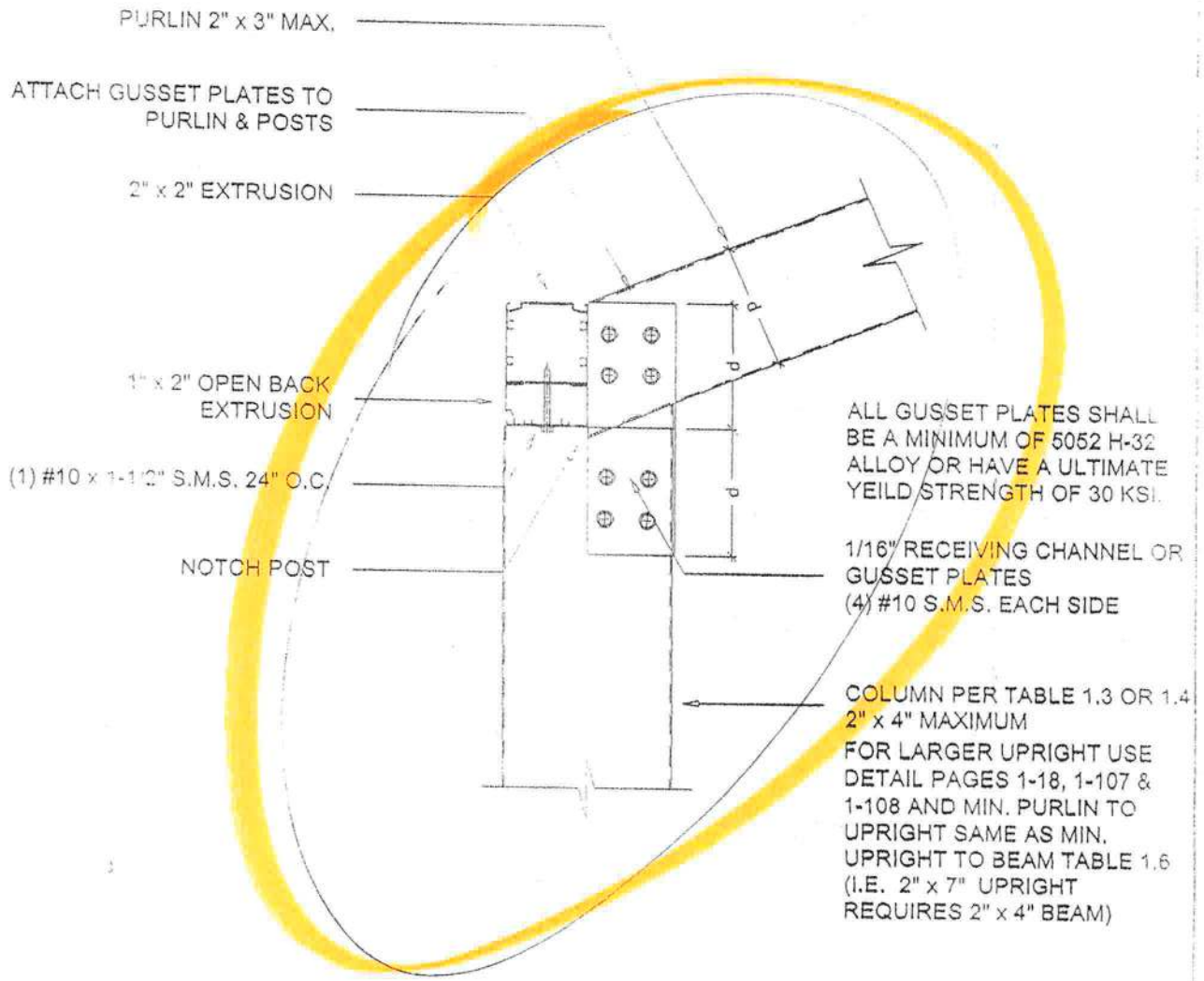
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PAGE

1-107



**SIDE WALL TO PURLIN DETAIL**

SCALE: 3" = 1'-0"

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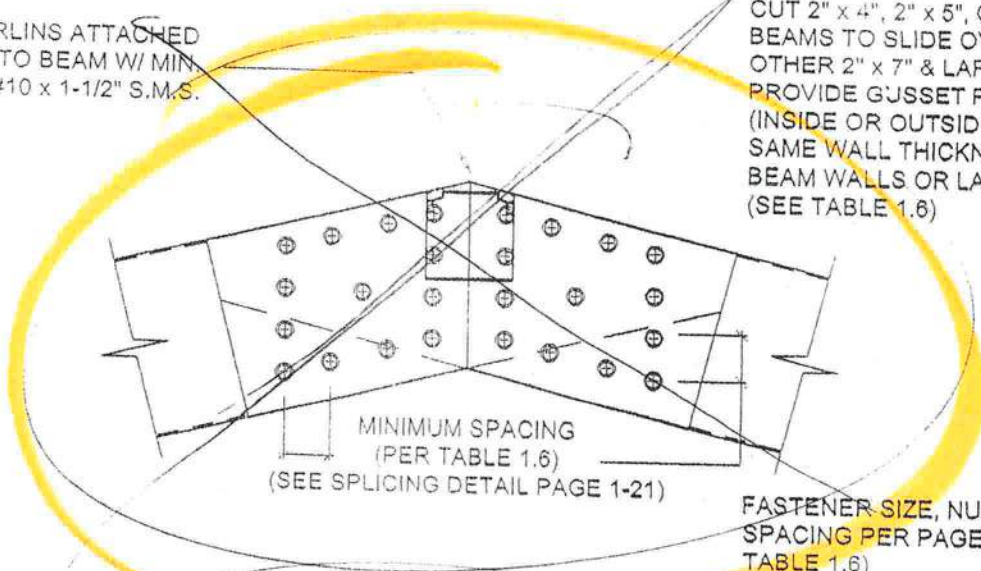
Email: lebpa@bellsouth.net

SCREENED ENCLOSURES

SECTION 1

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

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



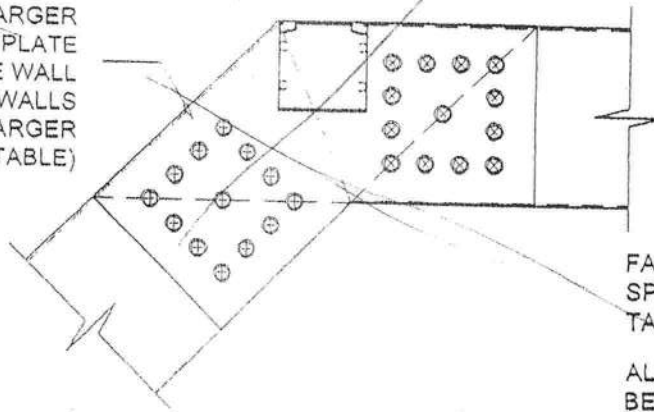
MINIMUM SPACING  
(PER TABLE 1.6)  
(SEE SPLICING DETAIL PAGE 1-21)

FASTENER SIZE, NUMBER AND  
SPACING PER PAGE 1-21(SEE  
TABLE 1.6)

**TYPICAL SIDE PLATE CONNECTION DETAIL**

SCALE: 3" = 1'-0"

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



FASTENER SIZE, NUMBER AND  
SPACING PER PAGE 1-21(SEE  
TABLE 1.6)

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

**TYPICAL SIDE PLATE CONNECTION DETAIL - MANSARD ROOF**

SCALE: 3" = 1'-0"

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

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

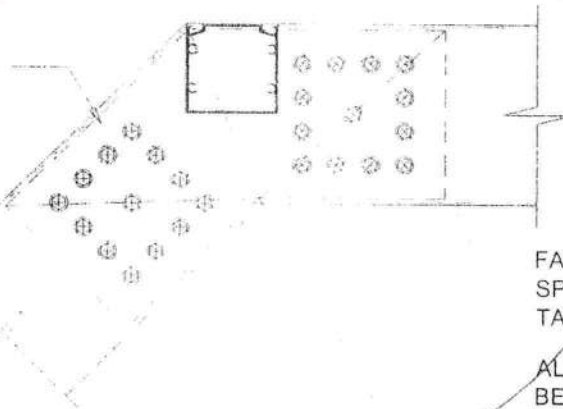
MINIMUM SPACING  
(PER TABLE 1.6)  
(SEE SPLICING DETAIL PAGE 1-21)

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

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

SCALE: 3" = 1'-0"

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



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

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

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

SCALE: 3" = 1'-0"

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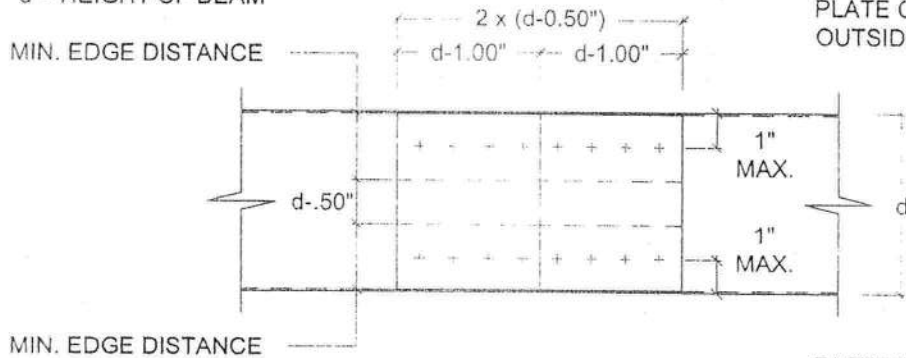
SCREENED ENCLOSURES

SECTION 1

BEAM SPLICE SHALL BE MIN.  
BEAM HEIGHT MINUS 1/2" AND  
2 x (d - .50") LENGTH  
d = HEIGHT OF BEAM

SPLICE LOCATED 1/4 TO 1/3  
BEAM SPAN STAGGERED  
EACH SIDE OF BEAM

PLATE CAN BE INSIDE OR  
OUTSIDE BEAM OR LAP CUT



MIN. EDGE DISTANCE  
DENOTES SCREW PATTERN  
NOT NUMBER OF SCREWS

FASTENER SIZE, NUMBER AND  
SPACING (SEE TABLE 1.6)

Screw Size	ds (In.)	Minimum Distance and Spacing of Screws*		Gusset Plate	
		Edge to Center 2ds (In.)	Center to Center 2-1/2ds (In.)	Beam Size	Thickness (In.)
#8	0.16	3/8	7/16	2" x 7" x 0.055" x 0.120"***	1/16 = 0.063
#10	0.19	3/8	1/2	2" x 8" x 0.072" x 0.224"	1/8 = 0.125
#12	0.21	7/16	9/16	2" x 9" x 0.072" x 0.224"	1/8 = 0.125
#14 or 1/4"	0.25	1/2	5/8	2" x 9" x 0.082" x 0.306"	1/8 = 0.125
5/16"	0.31	5/8	3/4	2" x 10" x 0.092" x 0.369"	1/4 = 0.25

\* refers to each side of splice  
\*\* use for 2" x 4" and 2" x 6" also

Note:

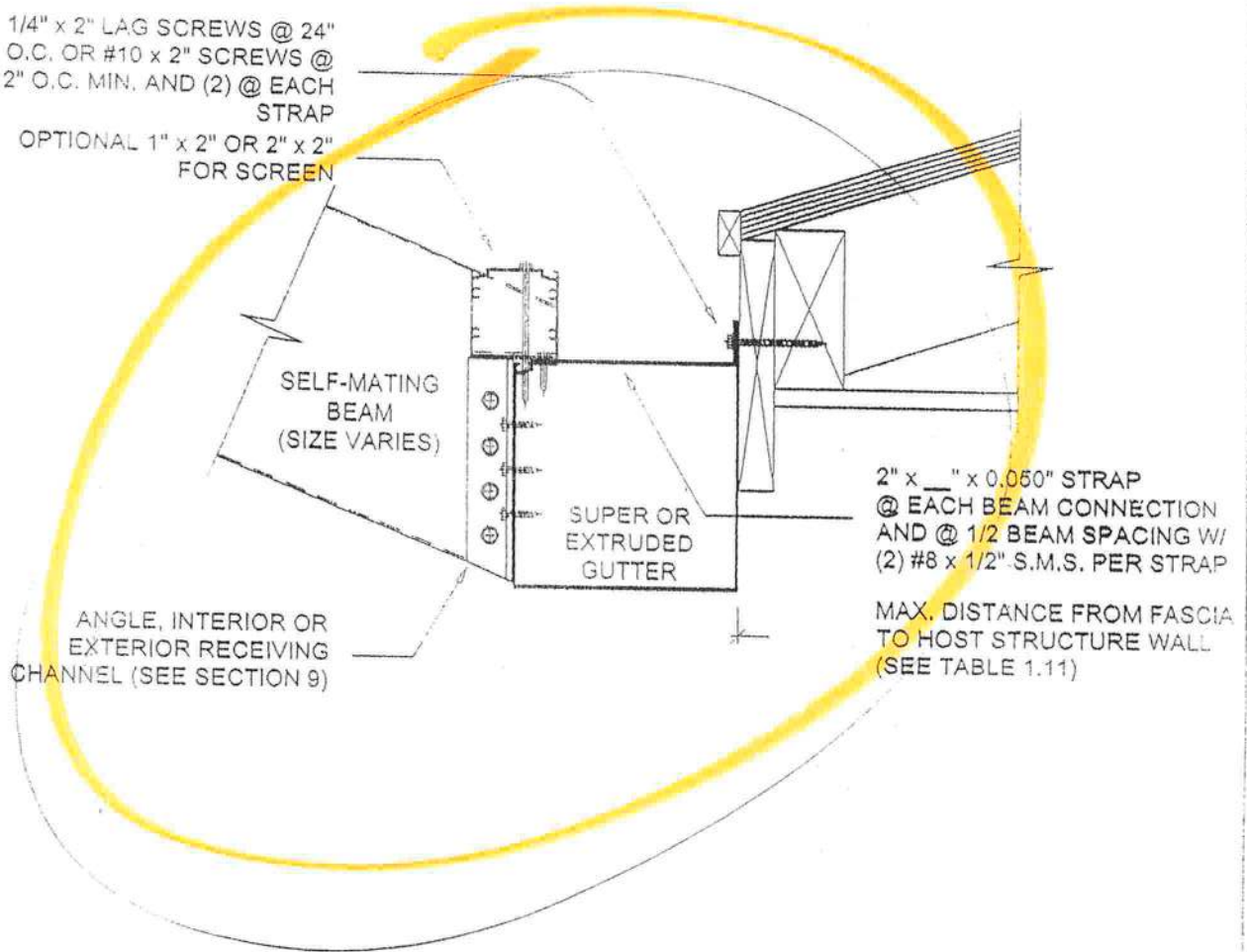
- All gusset plates shall be minimum 5052 H-32 Alloy or have a minimum yield of 30 ksi.

**TYPICAL BEAM SPLICE DETAIL**

SCALE: 3" = 1'-0"

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



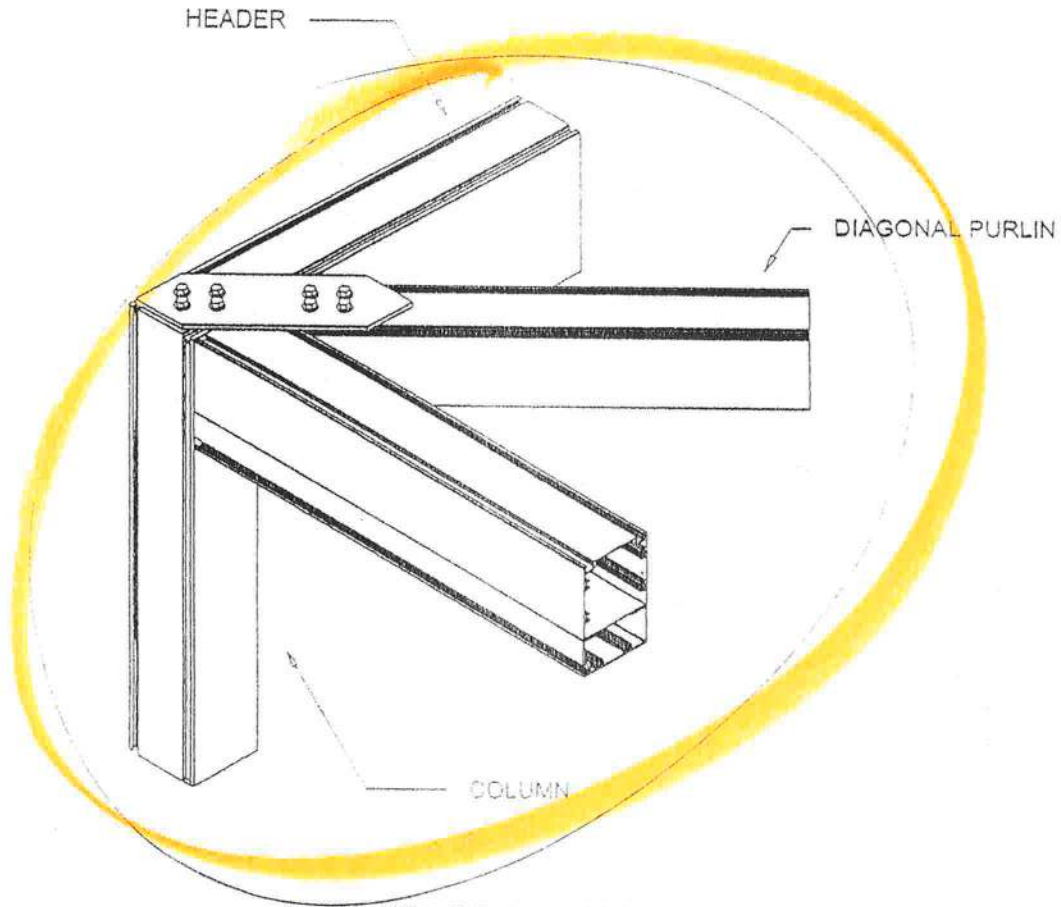
2" x \_\_\_" x 0.050" STRAP  
@ EACH BEAM CONNECTION  
AND @ 1/2 BEAM SPACING W/  
(2) #8 x 1/2" S.M.S. PER STRAP

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

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

SCALE: 3" = 1'-0"

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**WIND BRACE CONNECTION DETAIL**

SCALE: 3" = 1'-0"

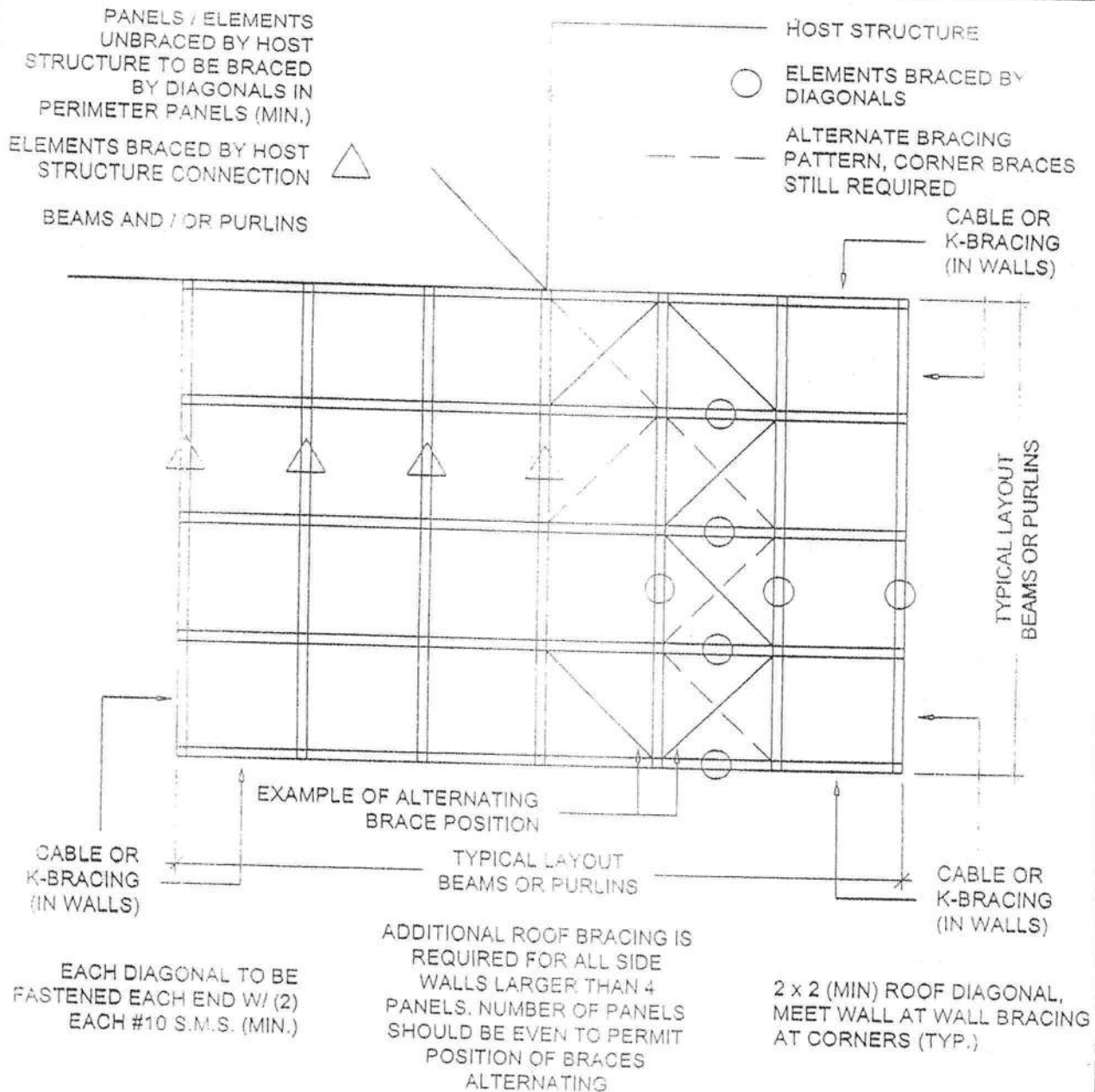
**NOTES:**

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.

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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"

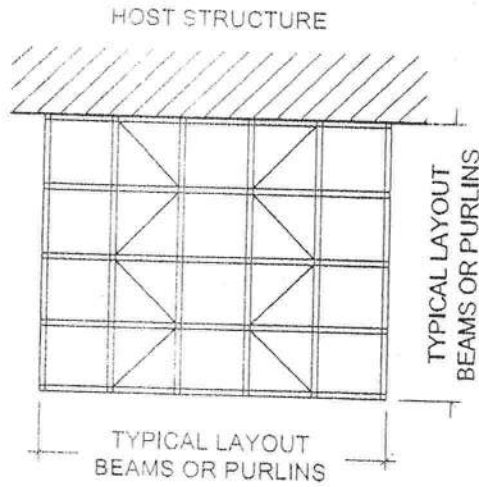
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PAGE

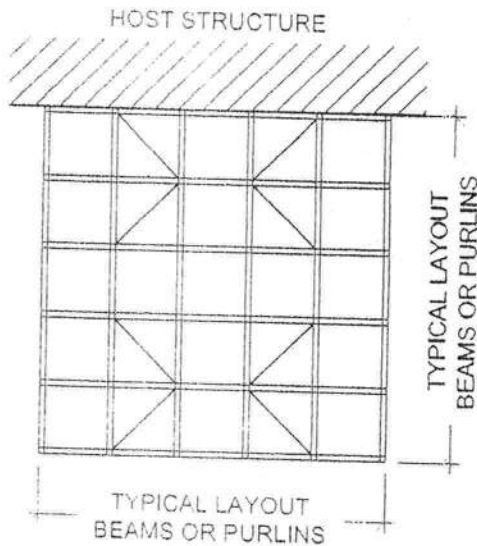
1-48

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

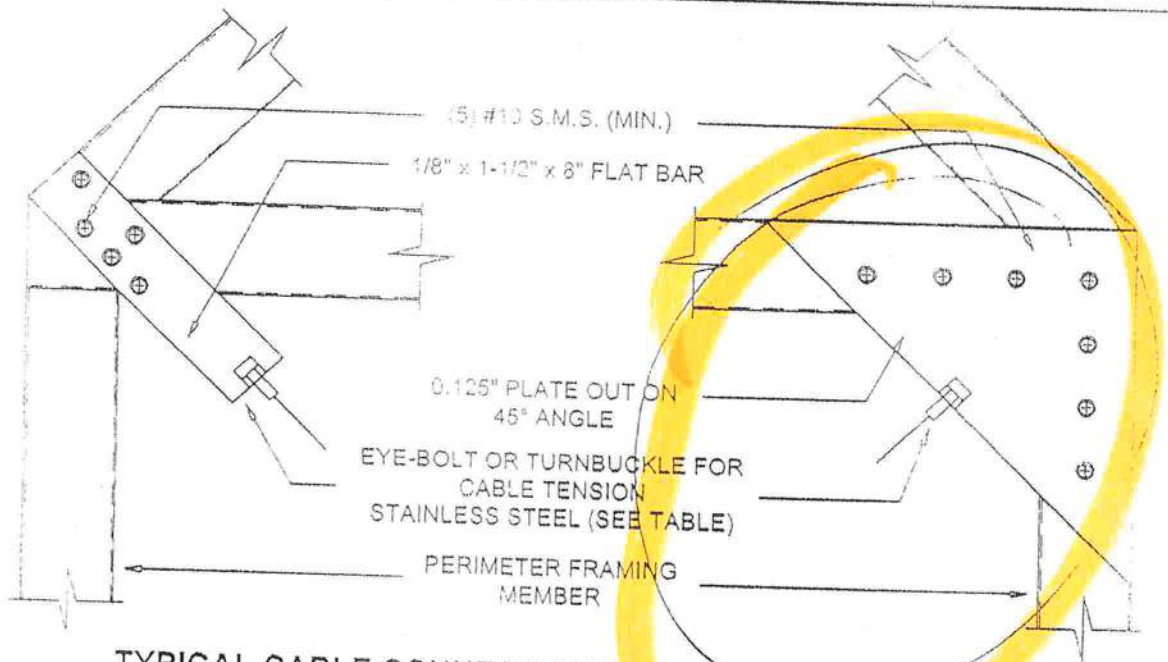


**WIND BRACING PATTERN**  
**TYPICAL FOR ODD NUMBER OF SIDE PANELS OVER 4**  
SCALE: 3/16" = 1'-0"

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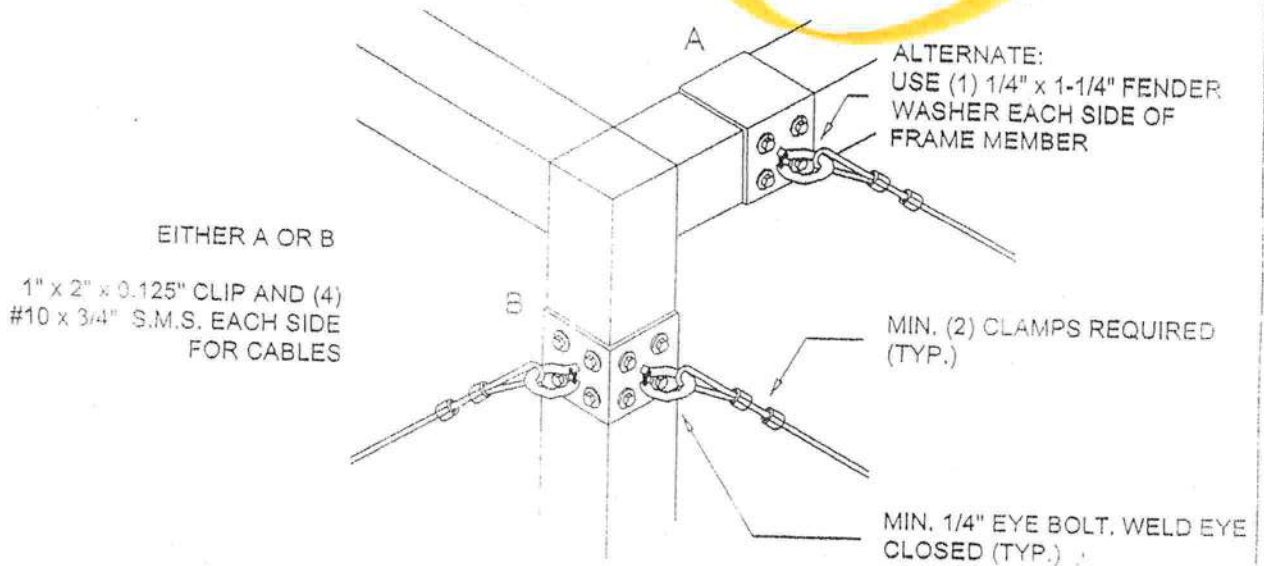
SCREENED ENCLOSURES

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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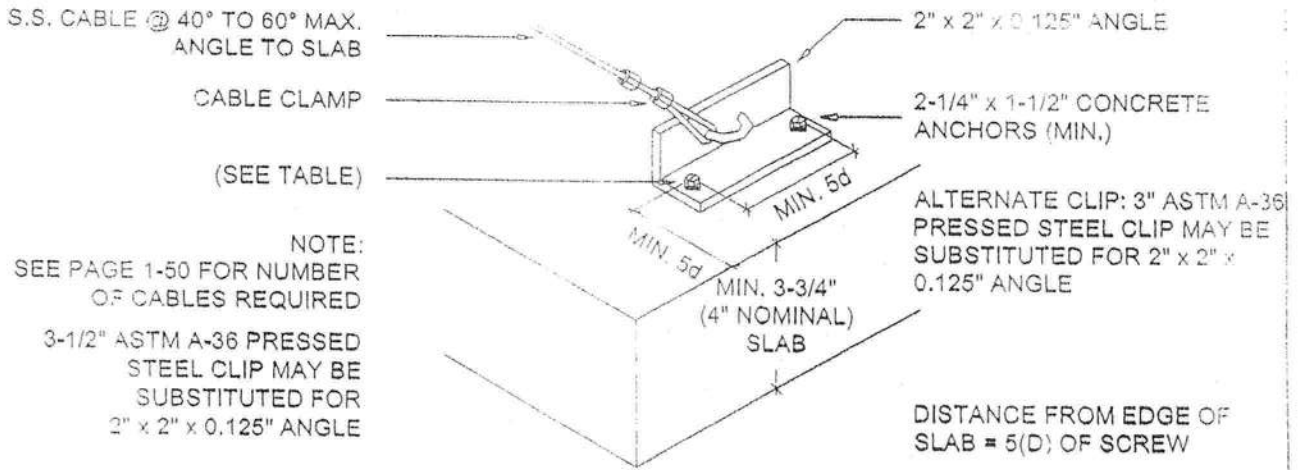
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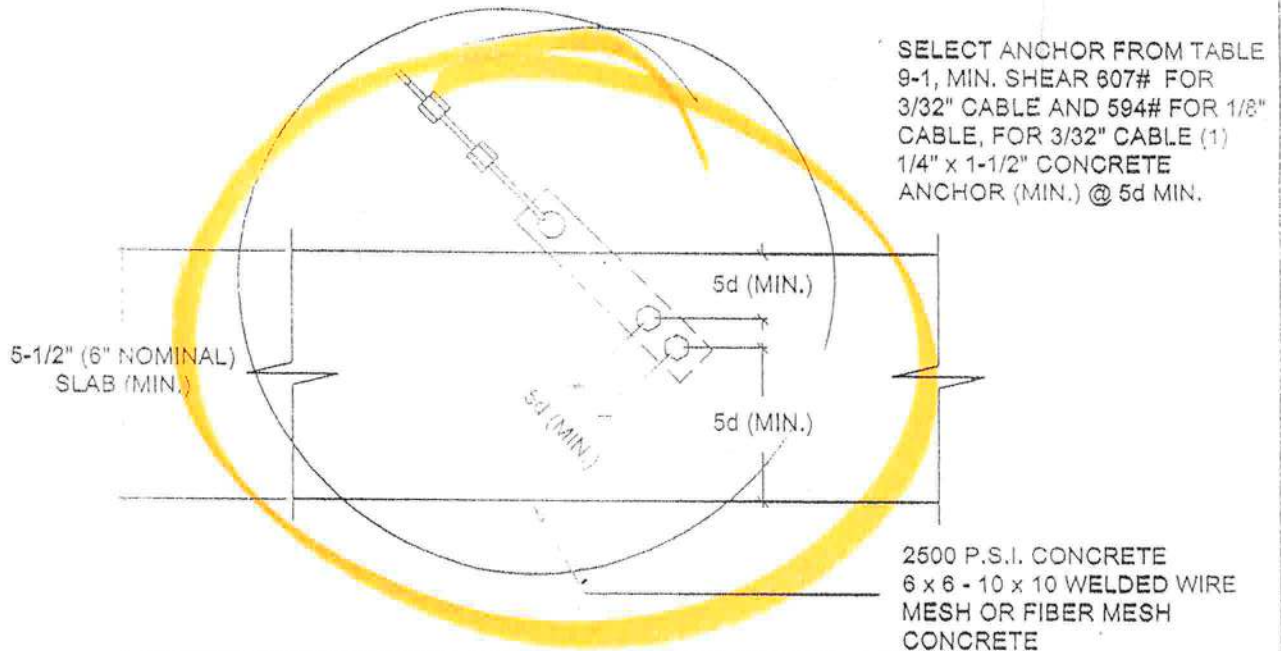
SCREENED ENCLOSURES

SECTION 1



ALTERNATE CABLE CONNECTION AT SLAB DETAIL - DETAIL 2B

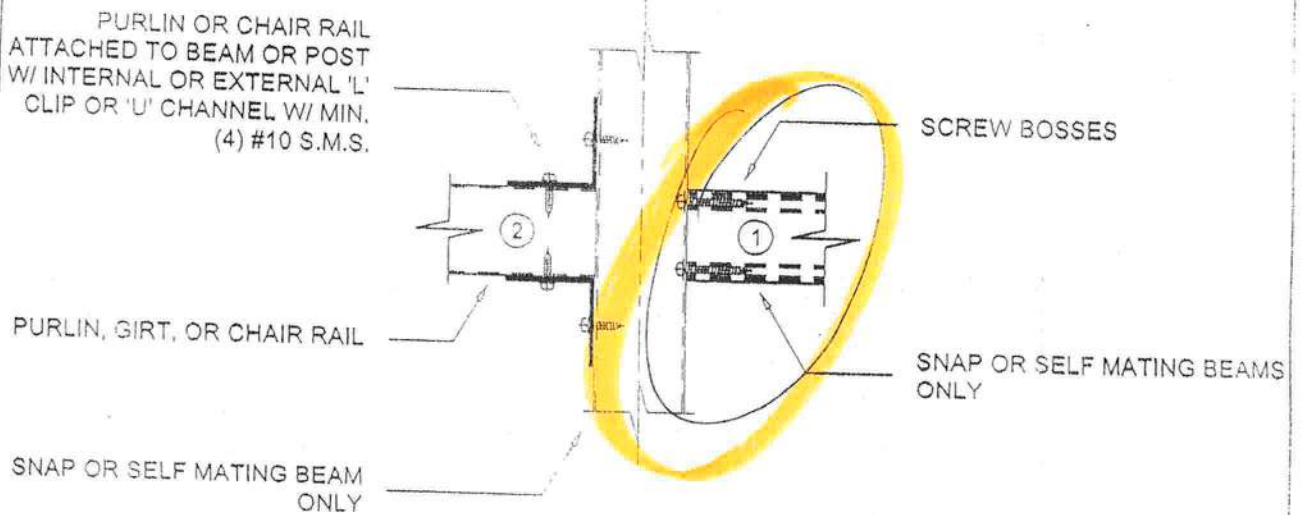
SCALE: 3" = 1'-0"



ALTERNATE CABLE CONNECTIONS AT FOUNDATION - DETAIL 2C

SCALE: 3" = 1'-0"

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PURLIN TO BEAM OR GIRT TO POST DETAIL

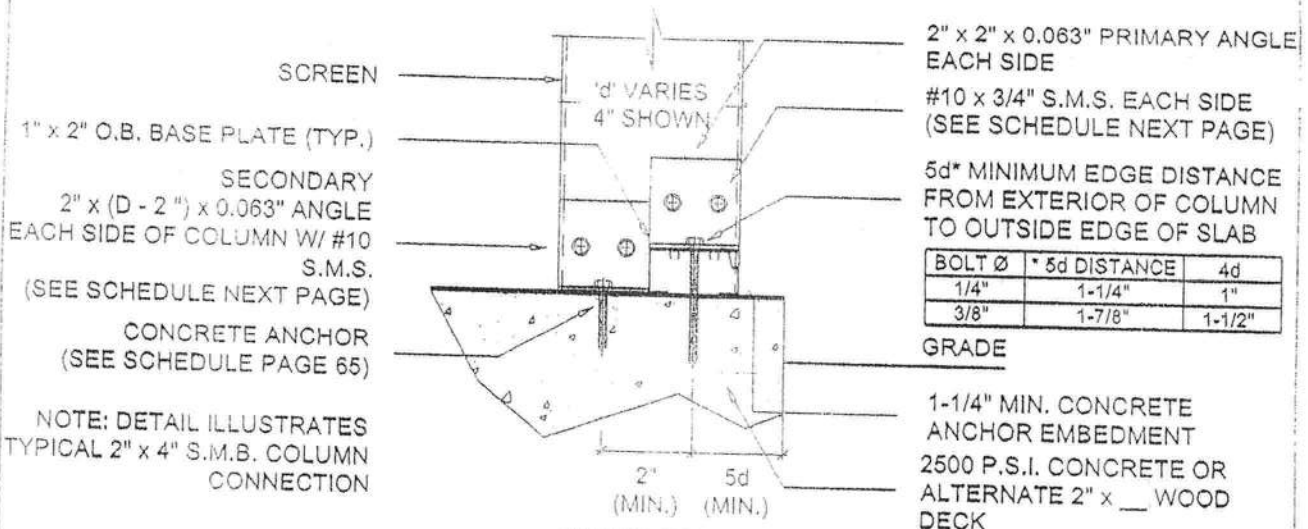
SCALE: 3" = 1'-0"

- 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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**SECTION 1**

**SCREENED ENCLOSURES**

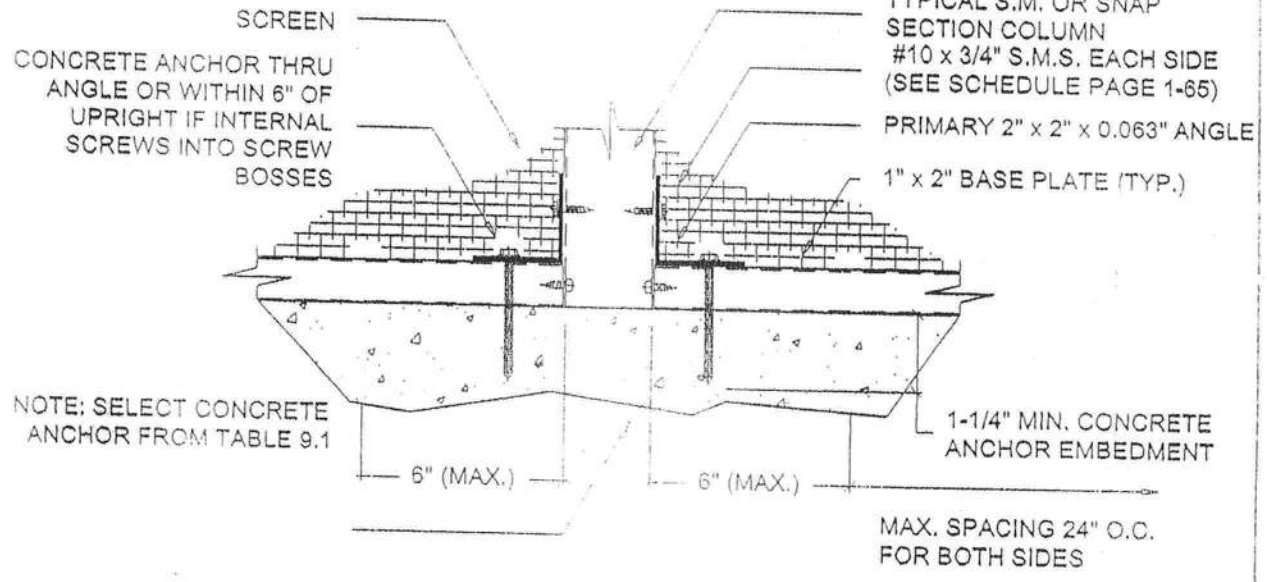


2" x 2" x 0.063" PRIMARY ANGLE EACH SIDE  
 #10 x 3/4" S.M.S. EACH SIDE (SEE SCHEDULE NEXT PAGE)  
 5d\* MINIMUM EDGE DISTANCE FROM EXTERIOR OF COLUMN TO OUTSIDE EDGE OF SLAB

BOLT Ø	5d DISTANCE	4d
1/4"	1-1/4"	1"
3/8"	1-7/8"	1-1/2"

GRADE  
 1-1/4" MIN. CONCRETE ANCHOR EMBEDMENT  
 2500 P.S.I. CONCRETE OR ALTERNATE 2" x \_\_\_ WOOD DECK

**SIDE VIEW**



TYPICAL S.M. OR SNAP SECTION COLUMN  
 #10 x 3/4" S.M.S. EACH SIDE (SEE SCHEDULE PAGE 1-65)  
 PRIMARY 2" x 2" x 0.063" ANGLE  
 1" x 2" BASE PLATE (TYP.)

1-1/4" MIN. CONCRETE ANCHOR EMBEDMENT  
 MAX. SPACING 24" O.C. FOR BOTH SIDES

**FRONT VIEW**

**2" x 4" OR LARGER SELF MATING OR SNAP SECTION POST TO DECK DETAILS**  
 SCALE: 3" = 1'-0"

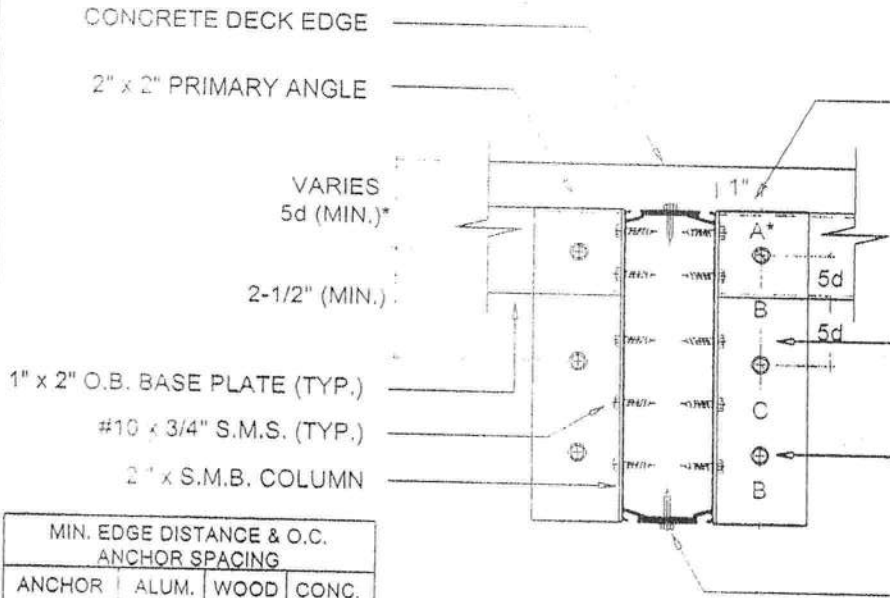
- NOTE:**
1. FOR SIDE WALLS OF 2" x 4" OR SMALLER ONLY ONE ANGLE IS REQUIRED.
  2. PREDRILL PAVERS W/ MIN. 1/4" MASONRY BIT.

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# SCREENED ENCLOSURES

## SECTION 1

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



SCREEN  
\* ABSOLUTE MINIMUM EDGE  
OF CONCRETE TO C.O.  
FASTENER = 5d

SECONDARY 2" x 2" x 0.063"  
ANGLE (SEE SECONDARY  
ANGLE ANCHOR SCHEDULE  
AND SECTION 9)

CONCRETE ANCHORS INTO  
PRIMARY AND SECONDARY  
ANGLES

S.M.S. STITCHING SCREWS  
@ 24" O.C. FOR S.M.B.  
(SEE TABLE 1.6 FOR SIZE)

MIN. EDGE DISTANCE & O.C. ANCHOR SPACING			
ANCHOR	ALUM.	WOOD	CONC.
	2-1/2d	4d	5d
1/4"	5/8"	1"	1-1/4"
5/16"	25/32"	1-1/4"	1-9/16"
3/8"	15/16"	1-1/2"	1-7/8"

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"	8	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 x beam span / 2 x beam spacing x roof wind pressure (PSF) = total #:

If 1.5 x 30/2 x 6' x 10 PSF = 1350# and 1/4" x 1/4" Tapcon in tension @ 5d = 427# / ea. (see table 9.1)

then 1350# / 427# / ea. = 3.16 ea. use (3) ea., secondary angle not required

**Actual Edge Distance Example:**

From edge of concrete to fastener = 2" / 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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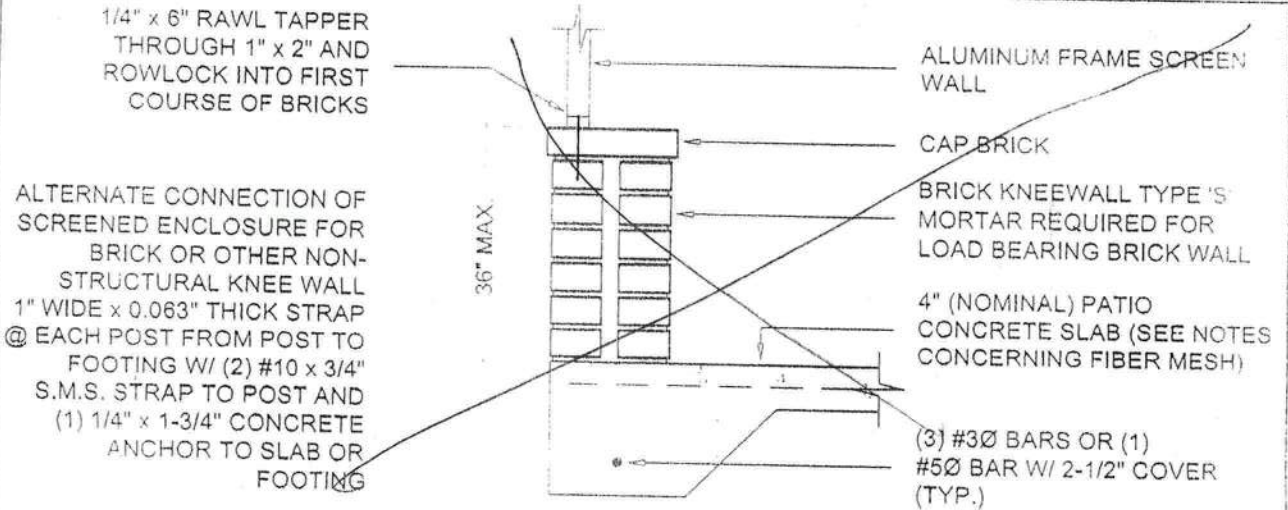
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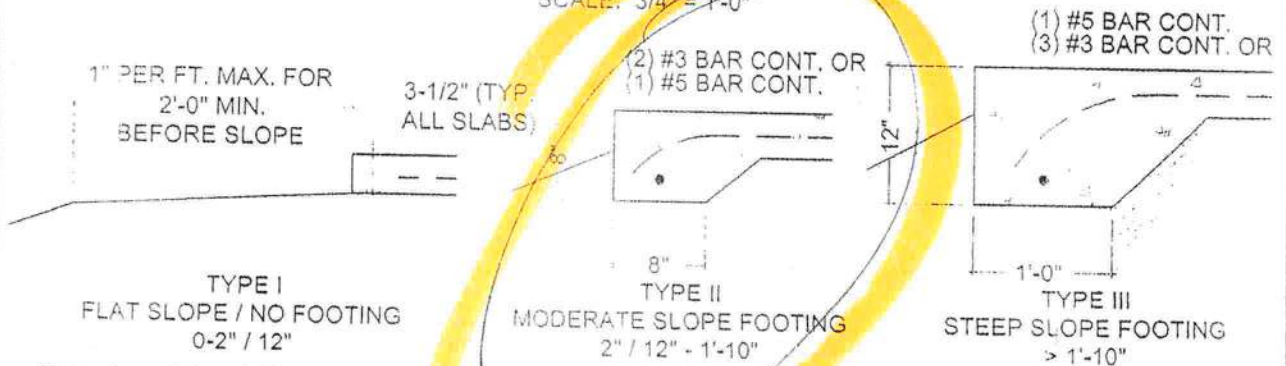
# SCREENED ENCLOSURES

## 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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# SCREENED ENCLOSURES

# SECTION

Table 1.1A 120 Moment Connection  
 Allowable Spans for Primary Screen Roof Frame Members  
 Aluminum Alloy 6063 T-6

for Areas in Wind Zones up to 120 M.P.H., Exposure "B" and Latitudes Below 30°-30'-00" North (Jacksonville, FL).  
 Uniform Load = 4 #/SF, a Point Load of 300 #/SF over 1' linear ft. is also considered

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'-5"	Pb	20'-5"	Pb	20'-5"	Pb	20'-4"	Ub

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"	12'-3"	Pb	12'-3"	Pb	12'-3"	Pb	12'-3"	Pb	12'-3"	Pb	12'-3"	Pb	12'-3"	Pb
2" x 5" x 0.050" x 0.100"	18'-5"	Pb	18'-5"	Pb	18'-5"	Pb	18'-5"	Pb	18'-5"	Pb	18'-5"	Pb	18'-5"	Pb
2" x 6" x 0.050" x 0.120"	23'-0"	Pb	23'-0"	Pb	23'-0"	Pb	23'-0"	Pb	23'-0"	Pb	22'-5"	Ub	21'-0"	Ub
2" x 7" x 0.055" x 0.120"	27'-0"	Pb	27'-0"	Pb	27'-0"	Pb	27'-0"	Pb	27'-0"	Pb	26'-2"	Ub	24'-4"	Ub
2" x 8" x 0.072" x 0.224"	48'-3"	Ud	43'-10"	Ud	40'-8"	Ud	38'-4"	Ud	36'-5"	Ud	34'-10"	Ud	33'-5"	Ud
2" x 9" x 0.072" x 0.224"	52'-11"	Ud	48'-1"	Ud	44'-8"	Ud	42'-0"	Ud	39'-11"	Ud	38'-2"	Ud	36'-6"	Ub
2" x 9" x 0.082" x 0.310"	56'-10"	Ud	51'-8"	Ud	47'-11"	Ud	45'-1"	Ud	42'-10"	Ud	40'-11"	Ud	39'-5"	Ud
2" x 10" x 0.092" x 0.369"	66'-0"	Ud	59'-11"	Ud	55'-8"	Ud	52'-5"	Ud	49'-9"	Ud	47'-7"	Ud	45'-9"	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	22'-2"	Pd	22'-2"	Pd	22'-2"	Pd	22'-2"	Pd
2" x 7" x 0.062"	26'-8"	Pd	26'-8"	Pd	26'-8"	Pd	26'-8"	Pd	26'-8"	Pd	26'-8"	Pd	26'-8"	Pd

**Note:**

1. Thicknesses shown are "nominal" industry standard tolerances. No wall thickness shall be less than 0.040".
  2. The structures designed using this section shall be limited to a maximum combined span and upright height of 50' and a maximum upright height of 16'. Structures larger than these limits shall have site specific engineering.
  3. Span is measured from center of beam and upright connection to 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.
- Example: Max. 'L' for 2" x 4" x 0.050" hollow section with 'W' = 5'-0" = 9'-1"

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SECTION 1

SCREENED ENCLOSURES

Table 1.3A 110 Moment Connection  
 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"	8'-4" b	7'-2" d	8'-4" b	5'-8" b	5'-2" b	4'-9" b	4'-5" b
2" x 2" x 0.050"	9'-2" b	7'-11" b	6'-11" b	6'-4" b	5'-9" b	5'-4" b	4'-11" b
2" x 2" x 0.090"	11'-5" b	9'-10" b	8'-9" b	7'-11" b	7'-4" b	6'-10" b	6'-5" b
2" x 3" x 0.045"	11'-2" d	9'-9" b	8'-5" 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

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"	15'-1" b	13'-0" b	11'-7" b	10'-6" b	9'-8" b	8'-11" b	8'-5" b
2" x 5" x 0.050 x 0.100"	18'-8" b	16'-1" b	14'-4" b	12'-11" b	11'-11" b	11'-2" b	10'-5" b
2" x 6" x 0.050 x 0.120"	20'-11" b	18'-0" b	16'-1" b	14'-7" b	13'-5" b	12'-6" b	11'-9" b
2" x 7" x 0.055 x 0.120"	22'-8" b	19'-7" b	17'-5" b	15'-10" b	14'-7" b	13'-7" b	12'-10" b
2" x 8" x 0.072 x 0.224"	32'-7" d	29'-3" b	26'-2" b	23'-10" b	22'-0" b	20'-7" b	19'-4" b
2" x 9" x 0.072 x 0.224"	35'-7" b	30'-9" b	27'-5" b	25'-0" b	23'-1" b	21'-7" b	20'-4" b
2" x 9" x 0.082 x 0.310"	38'-4" d	34'-10" d	32'-4" b	29'-3" b	27'-1" b	25'-4" b	23'-10" b
2" x 10" x 0.092 x 0.369"	44'-7" d	40'-6" d	37'-7" d	35'-4" d	32'-11" b	30'-10" b	29'-0" 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" / 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
2" x 3" x 0.045"	11'-9" b	9'-11" b	8'-9" b	7'-9" b	7'-0" b	6'-5" b	5'-10" b
2" x 4" x 0.045"	13'-9" b	11'-8" b	10'-3" b	9'-1" b	8'-3" b	7'-6" b	6'-11" b
2" x 6" x 0.082"	24'-5" d	22'-2" d	19'-10" b	17'-11" b	16'-6" b	15'-4" b	14'-4" b
2" x 7" x 0.082"	27'-7" d	24'-7" b	21'-10" b	19'-10" b	18'-3" b	16'-11" b	15'-10" b

Note:

1. Thicknesses shown are "nominal" industry standard tolerances. Actual thickness shall be less than 0.040".
2. Using screen panel width 'W' select upright length: -
3. Above heights do not include length of knee brace. Add vertical distance from upright to center of brace to bearing connection to the above heights for total beam heights.
4. Site specific engineering required for pool enclosures over 36' 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 height.
7. Maximum beam size for 2" x 5" is a 2" x 7" x 0.055" x 0.120"
8. heights may be interpolated.
9. To convert heights to "C" and "D" exposure categories see ASCE 7-02 multipliers and example on page 1-ii.

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SECTION 1

SCREENED ENCLOSURES

Table 1.6A Moment Connection  
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 Splicing Screw at 24" OC
				#8 x 1/2"	#10 x 1/2"	#12 x 1/2"	
2 x 4 SMB	2 x 4 SMB	2" x 2" x 0.044"	Moment Connection	4	6	4	#8
2 x 5 SMB	2 x 4 SMB	2" x 2" x 0.044"	Moment Connection	4	6	4	#8
2 x 6 SMB	2 x 4 SMB	2" x 2" x 0.044"	Moment Connection	4	8	6	#10
2 x 7 SMB	2 x 5 SMB	2" x 2" x 0.044"	Moment Connection	4	12	10	#10
2 x 8 SMB	2 x 6 SMB	2" x 3" x 0.044"	Moment Connection	4	14	12	#12
2 x 9 SMB	2 x 6 SMB	2" x 3" x 0.045"	Moment Connection	4	16	14	#12
2 x 9 SMB **	2 x 7 SMB	2" x 4" x 0.050"	Moment Connection	4	18	16	#12
2 x 10 SMB	2 x 8 SMB	2" x 5" x 0.050"	Moment Connection	4	18	16	#12

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"		

\* Refers to each side of the connection of the beam and upright and each side of splice connection.

Connection Example:

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

\*\* 0.082" wall thickness 0.310" flange thickness

Note:

1. Connection of 2" x 2" to 2" x 3" 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 beam.
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 1 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. All beam to upright connections for 2" x 7" beams or larger shall have 2" internal gusset plate except when a knee brace is used at the connection. Gusset plates are required for mansard, gabled and all spaced connections.
8. For gusset plate connections 2" x 9" beams or larger use 3/4" long screws.
9. The side wall upright shall have a minimum beam size as shown above. A 2" x 4" upright shall have a 2" x 3" beam.
10. For minimum girt size read upright size as a beam and purlin size is not that girt size. (i.e. 2" x 9" x 0.072" x 0.224" size beam & 2" x 6" x 0.050" x 0.120" size beam upright requires a 2" x 3" x 0.045" girt chair).

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Table 1.9.2A Moment Connection  
 Allowable Spans for Secondary Screen Roof Frame Members  
 Aluminum Alloy 6063 T-6

For Wind Zones up to 130 M.P.H., Exposure "B" and Latitudes North of 30°-30'-00" North (Jacksonville, FL)  
 Uniform Load = 15 #/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'-3"	Ud	6'-11"	Ud	6'-9"	Ud	6'-7"	Ud
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'-6"	Ud	7'-4"	Ud	7'-1"	Ud	6'-10"	Ud
2" x 3" x 0.045"	7'-4"	Pd	7'-4"	Pd	7'-4"	Pd	7'-3"	Ud	7'-0"	Ud	6'-10"	Ud	6'-7"	Ud
2" x 4" x 0.050"	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	8'-10"	Ub	8'-5"	Ub	8'-0"	Ub
2" x 5" x 0.062"	14'-1"	Pd	14'-1"	Pd	14'-1"	Pd	13'-11"	Ud	13'-5"	Ub	12'-11"	Ub	12'-3"	Ub

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'-10"	Ub
2" x 3" x 0.045"	7'-3"	Pd	7'-3"	Pd	7'-3"	Pd	7'-2"	Ud	6'-11"	Ud	6'-9"	Ud	6'-6"	Ud
2" x 4" x 0.045"	9'-2"	Pd	9'-2"	Pd	9'-2"	Pd	9'-0"	Ud	8'-9"	Ud	8'-6"	Ud	8'-2"	Ud

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

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"	8'-2"	Ud	7'-10"	Ud	7'-6"	Ud	7'-3"	Ud	7'-0"	Ud	6'-10"	Ud	6'-7"	Ud
2" x 4" x 0.050"	11'-1"	Ub	10'-4"	Ub	9'-9"	Ub	9'-3"	Ub	8'-10"	Ub	8'-5"	Ub	8'-0"	Ub
2" x 5" x 0.062"	15'-8"	Ud	14'-11"	Ud	14'-5"	Ud	13'-11"	Ud	13'-5"	Ub	12'-11"	Ub	12'-3"	Ub

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"	5'-11"	Ud	5'-8"	Ud	5'-6"	Ud	5'-4"	Ud	5'-2"	Ud	4'-11"	Ud	4'-10"	Ud

Note:

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" = 8'-3"

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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

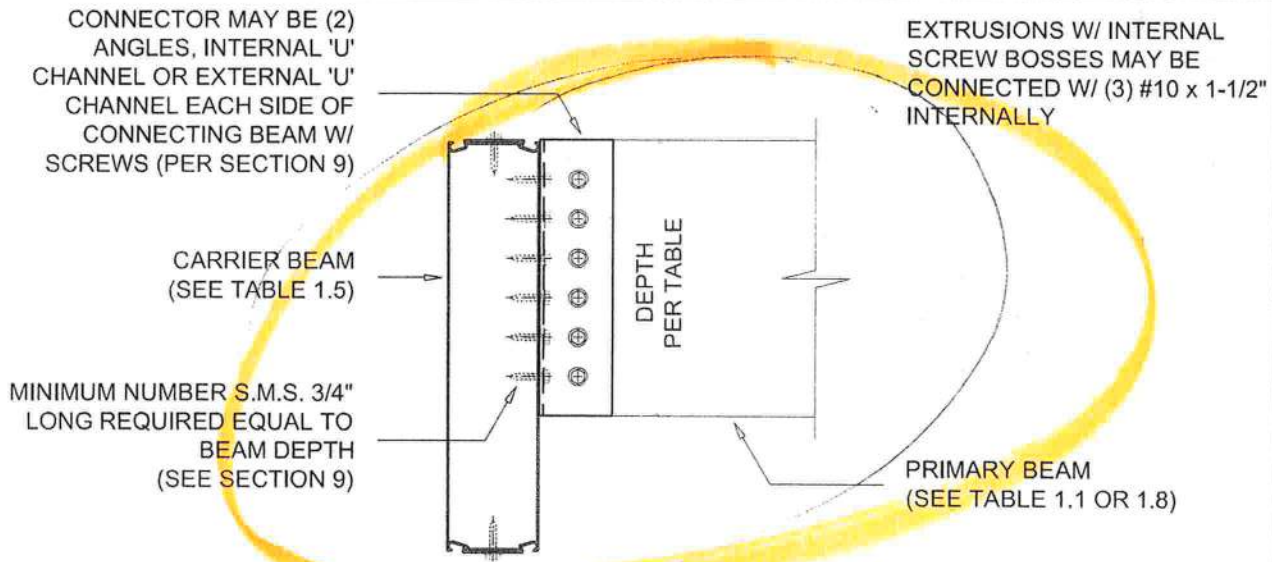
Snap Sections	Tributary Load Width 'W' = Upright Spacing													
	3'-0"	4'-0"	5'-0"	6'-0"	7'-0"	8'-0"	9'-0"							
	Allowable Height "H" or Span "L" / bending (b), deflection (d)													
2" x 2" x 0.044"	8'-10"	d	7'-8"	b	6'-9"	b	6'-0"	b	5'-5"	b	4'-11"	b	4'-7"	b

- 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**



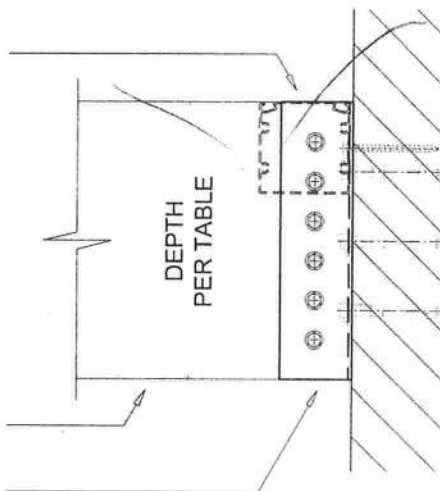
**CARRIER BEAM TO BEAM CONNECTION DETAIL**

SCALE: 3" = 1'-0"

ALTERNATE:  
1" x 2", 1" x 3" OR 2" x 2"  
ATTACHED TO WALL W/ #10 x  
2" S.M.S. @ 16" O.C.

HOST STRUCTURE MASONRY  
OR FRAMED WALL  
(SELECT FASTENERS FROM  
SECTION 9 TABLES)

PRIMARY OR MISC. FRAMING  
BEAM (SIZE PER TABLES)  
ANGLE OR RECEIVING  
CHANNEL



**BEAM TO WALL CONNECTION:**

(2) 2" x 2" x 0.060"  
EXTERNALLY MOUNTED  
ANGLES ATTACHED TO WOOD  
FRAME WALL W/ MIN. (2) 3/8" x  
2" LAG SCREWS PER SIDE OR  
TO CONCRETE W/ (2) 1/4" x  
2-1/4" ANCHORS OR MASONRY  
WALL ADD (1) ANCHOR PER  
SIDE FOR EACH INCH OF BEAM  
DEPTH LARGER THAN 3"

**ALTERNATE CONNECTION:**

(1) 1-3/4" x 1-3/4" x 1-3/4" x 1/8"  
INTERNAL U-CHANNEL  
ATTACHED TO WOOD FRAME  
WALL W/ MIN. (3) 3/8" x 2" LAG  
SCREWS OR TO CONCRETE  
OR MASONRY WALL W/ (3) 1/4"  
x 2-1/4" ANCHORS OR ADD (1)  
ANCHOR PER SIDE FOR EACH  
INCH OF BEAM DEPTH  
LARGER THAN 3"

**BEAM TO WALL CONNECTION DETAIL**

SCALE: 3" = 1'-0"

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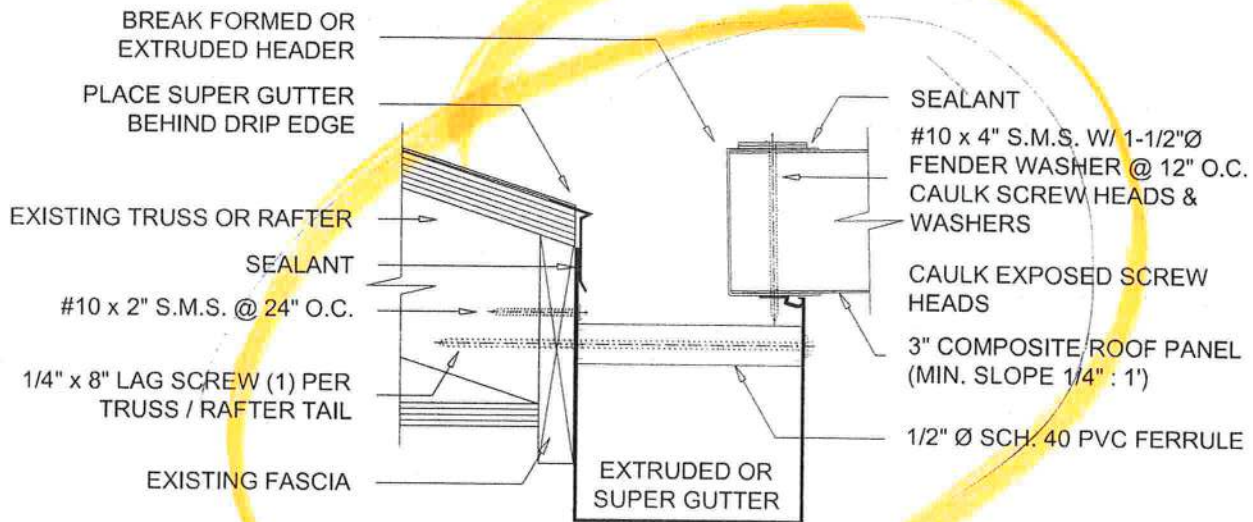
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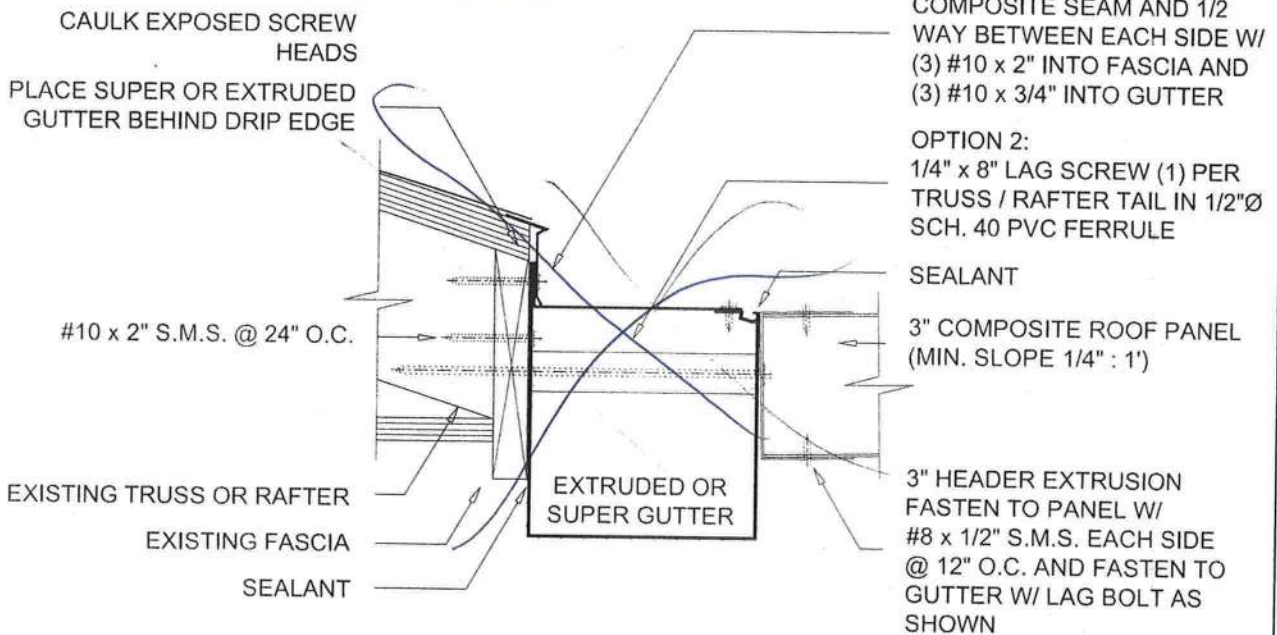
**SECTION 7**

**SOLID ROOF PANEL PRODUCTS**



**EXISTING ROOF TO COMPOSITE ROOF PANEL DETAIL 1**

SCALE: 3" = 1'-0"



**EXISTING ROOF TO COMPOSITE ROOF PANEL DETAIL 2**

SCALE: 3" = 1'-0"

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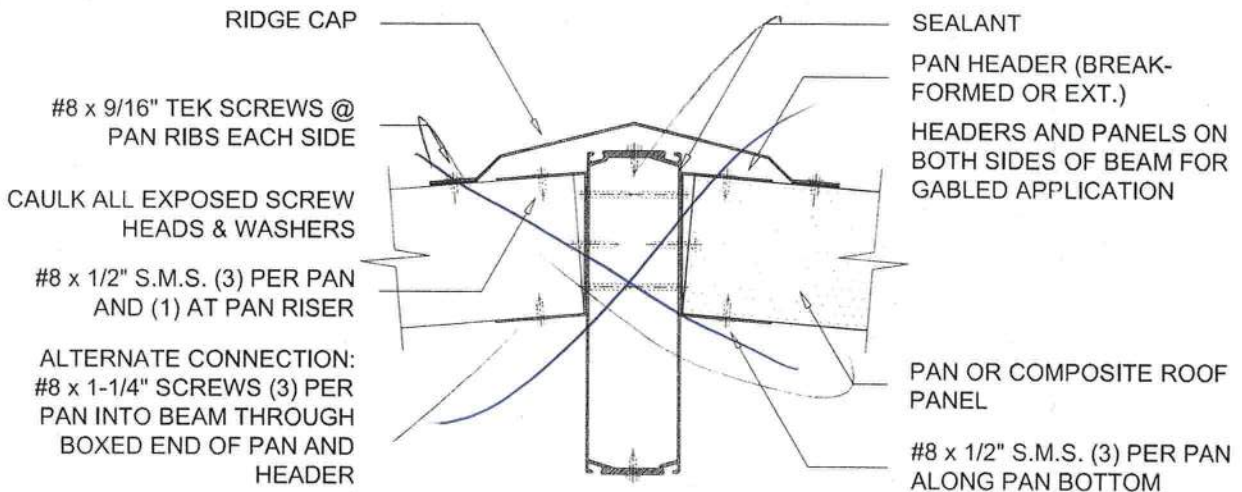
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**PAN ROOF ANCHORING DETAILS**



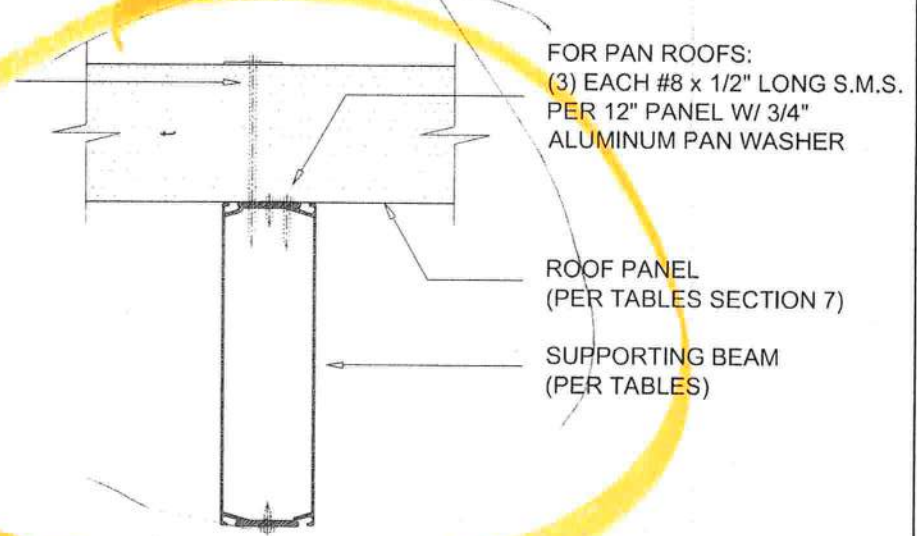
WHEN FASTENING TO ALUMINUM USE TRUFAST HD x ("t" + 3/4") AT 8" O.C. FOR UP TO 130 MPH WIND SPEED EXPOSURE "D"; 6" O.C. FOR ABOVE 130 MPH AND UP TO 150 MPH WIND SPEED EXPOSURE "D"

CAULK ALL EXPOSED SCREW HEADS & WASHERS

FOR COMPOSITE ROOFS: #10 x (t + 1/2") S.M.S. W/ 1-1/4" Ø FENDER WASHERS @ 12" O.C. (LENGTH = PANEL THICKNESS + 1") @ ROOF BEARING ELEMENT (SHOWN) AND 24" O.C. @ NON-BEARING ELEMENT (SIDE WALLS)

**ROOF PANEL TO BEAM DETAIL**

SCALE: 3" = 1'-0"



**ROOF PANEL TO BEAM FASTENING DETAIL**

SCALE: 3" = 1'-0"

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SECTION 1

SCREENED ENCLOSURES

**Table 1.5.1 120 Allowable Spans for Miscellaneous Framing Beams as Supporting Screen Roof Frame Members**  
**Both Ends of Beam Attached to Host Structure (Not Axially Loaded)**  
**for Areas in Wind Zones up to 120 M.P.H., Exposure "B" and Latitudes Below 30°-30'-00" North (Jacksonville, FL)**  
 Uniform Load = 4 #/SF, a Point Load of 300 #/SF over(1) linear ft. is also considered, Aluminum Alloy 6063 T-6

Single Self-Mating Beams	Tributary Load Width											
	10'-0"	14'-0"	18'-0"	22'-0"	26'-0"	30'-0"	34'-0"	38'-0"	42'-0"	46'-0"	50'-0"	54'-0"
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)											
2" x 4" x 0.044" x 0.100"	P 11'-6" d	U 10'-2" b	U 9'-2" b	U 8'-5" b	U 7'-10" b	U 7'-4" b	U 6'-11" b	U 6'-8" b	U 6'-4" b	U 6'-1" b	U 5'-10" b	U 5'-10" b
2" x 5" x 0.050" x 0.100"	P 14'-1" d	U 12'-5" b	U 11'-3" b	U 10'-4" b	U 9'-8" b	U 9'-1" b	U 8'-7" b	U 8'-2" b	U 7'-9" b	U 7'-6" b	U 7'-2" b	U 7'-2" b
2" x 6" x 0.050" x 0.120"	P 17'-8" d	U 15'-9" b	U 13'-11" b	U 12'-7" b	U 11'-7" b	U 10'-9" b	U 10'-1" b	U 9'-7" b	U 9'-1" b	U 8'-4" b	U 8'-0" b	U 8'-0" b
2" x 7" x 0.055" x 0.120"	P 20'-2" d	U 17'-1" b	U 15'-1" b	U 13'-8" b	U 12'-6" b	U 11'-8" b	U 10'-11" b	U 10'-4" b	U 9'-5" b	U 9'-0" b	U 8'-8" b	U 8'-8" b
2" x 8" x 0.072" x 0.224"	P 24'-11" d	U 22'-5" b	U 20'-3" b	U 18'-8" b	U 17'-4" b	U 16'-4" b	U 15'-5" b	U 14'-8" b	U 14'-0" b	U 13'-5" b	U 12'-11" b	U 12'-11" b
2" x 9" x 0.072" x 0.224"	P 27'-5" d	U 26'-8" b	U 23'-6" b	U 21'-3" b	U 19'-7" b	U 18'-3" b	U 17'-1" b	U 16'-2" b	U 15'-5" b	U 14'-9" b	U 13'-7" b	U 13'-7" b
2" x 9" x 0.082" x 0.306"	P 29'-2" d	U 29'-2" b	U 27'-6" b	U 24'-10" b	U 22'-10" b	U 21'-3" b	U 19'-11" b	U 18'-11" b	U 17'-2" b	U 16'-6" b	U 15'-10" b	U 15'-10" b
2" x 10" x 0.092" x 0.369"	P 34'-2" d	U 34'-2" b	U 33'-5" b	U 30'-2" b	U 27'-9" b	U 25'-10" b	U 24'-3" b	U 22'-11" b	U 21'-10" b	U 20'-0" b	U 19'-3" b	U 19'-3" b

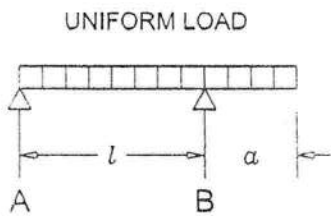
  

Double Self-Mating Beams	Tributary Load Width											
	10'-0"	14'-0"	18'-0"	22'-0"	26'-0"	30'-0"	34'-0"	38'-0"	42'-0"	46'-0"	50'-0"	54'-0"
	Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), deflection (d)											
2" x 8" x 0.072" x 0.224"	P 31'-5" d	P 31'-5" d	P 31'-5" d	P 28'-8" d	U 26'-5" b	U 24'-7" b	U 23'-1" b	U 21'-10" b	U 20'-9" b	U 19'-10" b	U 18'-4" b	U 18'-4" b
2" x 9" x 0.072" x 0.224"	P 34'-6" d	P 34'-6" d	P 33'-3" d	U 30'-1" b	U 27'-8" b	U 25'-9" b	U 24'-2" b	U 22'-11" b	U 21'-9" b	U 20'-10" b	U 19'-2" b	U 19'-2" b
2" x 9" x 0.082" x 0.306"	P 36'-9" d	P 36'-9" d	P 36'-9" d	P 34'-4" d	U 32'-4" b	U 30'-1" b	U 28'-3" b	U 26'-9" b	U 25'-5" b	U 24'-4" b	U 23'-4" b	U 22'-5" b
2" x 10" x 0.092" x 0.369"	P 43'-0" d	P 43'-0" d	P 43'-0" d	P 40'-3" d	U 38'-1" b	U 36'-4" b	U 34'-4" b	U 32'-6" b	U 30'-11" b	U 29'-6" b	U 28'-4" b	U 27'-3" b

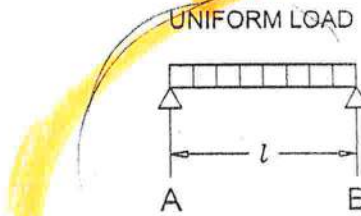
**Note:**

1. It is recommended that the engineer be consulted on any carrier beam that spans more than 50'.
  2. Span is measured from center of connection to fascia or wall connection.
  3. Above spans do not include length of knee brace. Add horizontal distance from upright to center of brace to beam connection to the above spans for total beam spans.
  4. Spans may be interpolated.
  5. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.
- Example: The Maximum 'L' for a 2" x 4" x 0.044" x 0.100" Single Self-Mating Beam with Tributary Load Width = 22'-0" is 9'-2"

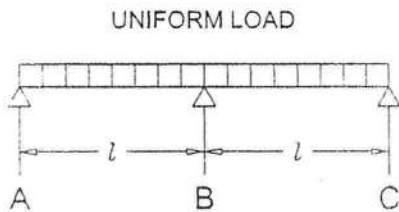
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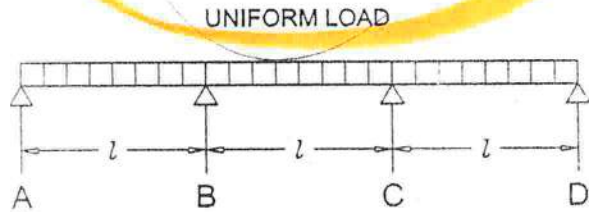
**SINGLE SPAN CANTILEVER**



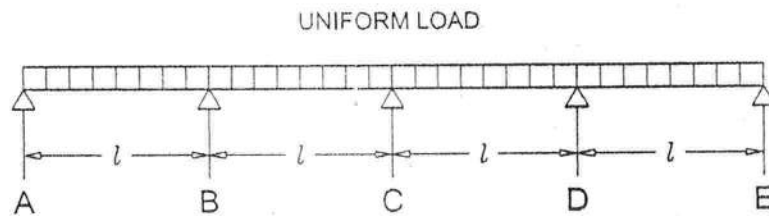
**1 OR SINGLE SPAN**



**2 SPAN**



**3 SPAN**



**4 SPAN**

**NOTES:**

1.  $l$  = Span Length
- $a$  = Overhang Length
2. All spans listed in the tables are for equally spaced distances between supports or anchor points.
3. Panels shall not be spliced except at supports.

**SPAN EXAMPLES FOR SECTION 7 TABLES**

SCALE: N.T.S.

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Table 7.4.1 Structural Building Systems Inc. Snap & Lock® Composite Roof Panels  
Allowable Spans and Applied Loads (#/SF)

Manufacturers Proprietary Products: Aluminum Alloy 3105 H-14 or H-25 Foam Core E.P.S. #1 Density  
3" x 48" x 0.024" Panels

Zone (MPH)	Open Structures			Screen Rooms			Glass & Modular Rooms			Overhang / Cantilever
	1&2 span/load*	3 span/load*	4 span/load*	1&2 span/load*	3 span/load*	4 span/load*	1&2 span/load*	3 span/load*	4 span/load*	
100	18'-10"	21'-1"	20'-5"	16'-4"	17'-8"	17'-8"	12'-11"	15'-8"	15'-2"	23 4'-0" 145
110	18'-4"	20'-5"	19'-10"	15'-11"	18'-7"	18'-7"	11'-11"	13'-4"	12'-10"	23 4'-0" 155
120	18'-7"	17'-11"	17'-5"	12'-8"	15'-8"	15'-8"	10'-7"	11'-10"	11'-5"	41 4'-0" 169
130	15'-3"	17'-1"	16'-6"	12'-1"	13'-6"	13'-6"	9'-5"	11'-3"	10'-10"	45 3'-10" 177
140-1	12'-11"	15'-11"	15'-4"	11'-3"	12'-7"	12'-7"	8'-9"	10'-4"	9'-6"	53 3'-7" 189
140-2	12'-11"	15'-11"	15'-4"	11'-3"	12'-7"	12'-7"	8'-9"	10'-4"	9'-6"	53 3'-7" 189
150	12'-0"	13'-5"	12'-11"	10'-5"	11'-7"	11'-7"	8'-2"	9'-2"	8'-10"	68 3'-4" 102

Zone (MPH)	Open Structures			Screen Rooms			Glass & Modular Rooms			Overhang / Cantilever
	1&2 span/load*	3 span/load*	4 span/load*	1&2 span/load*	3 span/load*	4 span/load*	1&2 span/load*	3 span/load*	4 span/load*	
100	22'-2"	24'-9"	23'-11"	19'-2"	20'-9"	20'-9"	16'-5"	18'-5"	17'-10"	23 4'-0" 145
110	21'-6"	24'-1"	23'-3"	18'-8"	20'-2"	20'-2"	15'-3"	17'-0"	16'-5"	27 4'-0" 155
120	19'-6"	21'-9"	21'-0"	16'-10"	18'-10"	18'-10"	12'-8"	15'-7"	15'-1"	32 4'-0" 165
123	18'-11"	21'-2"	20'-6"	16'-5"	17'-9"	17'-9"	12'-5"	15'-2"	13'-4"	41 4'-0" 169
130	17'-11"	20'-0"	19'-4"	15'-6"	16'-9"	16'-9"	11'-9"	13'-2"	12'-9"	45 4'-0" 177
140-1	16'-8"	23'-8"	23'-8"	13'-2"	16'-2"	16'-2"	11'-9"	12'-9"	12'-9"	45 4'-0" 189
140-2	16'-8"	23'-8"	23'-8"	13'-2"	16'-2"	16'-2"	11'-9"	12'-9"	12'-9"	45 4'-0" 189
150	15'-8"	17'-6"	16'-11"	12'-2"	15'-2"	15'-2"	9'-7"	11'-5"	11'-0"	60 3'-11" 102

Zone (MPH)	Open Structures			Screen Rooms			Glass & Modular Rooms			Overhang / Cantilever
	1&2 span/load*	3 span/load*	4 span/load*	1&2 span/load*	3 span/load*	4 span/load*	1&2 span/load*	3 span/load*	4 span/load*	
100	20'-8"	23'-2"	22'-4"	17'-11"	19'-4"	19'-4"	15'-5"	17'-3"	16'-8"	23 4'-0" 145
110	20'-1"	22'-6"	21'-9"	17'-5"	18'-10"	18'-10"	13'-1"	15'-11"	15'-4"	27 4'-0" 155
120	18'-2"	20'-4"	19'-8"	15'-9"	17'-7"	17'-7"	11'-10"	13'-3"	12'-9"	39 4'-0" 165
123	17'-9"	19'-10"	19'-2"	15'-4"	17'-2"	17'-2"	11'-7"	12'-11"	12'-6"	41 4'-0" 169
130	16'-9"	18'-9"	18'-1"	13'-3"	16'-2"	16'-2"	11'-0"	12'-4"	11'-11"	45 4'-0" 177
140-1	15'-7"	23'-5"	23'-5"	12'-4"	15'-1"	15'-1"	11'-0"	12'-4"	11'-11"	45 3'-11" 189
140-2	15'-7"	23'-5"	23'-5"	12'-4"	15'-1"	15'-1"	11'-0"	12'-4"	11'-11"	45 3'-11" 189
150	13'-2"	16'-4"	15'-10"	11'-5"	12'-9"	12'-9"	8'-11"	10'-8"	10'-4"	60 3'-8" 102

Zone (MPH)	Open Structures			Screen Rooms			Glass & Modular Rooms			Overhang / Cantilever
	1&2 span/load*	3 span/load*	4 span/load*	1&2 span/load*	3 span/load*	4 span/load*	1&2 span/load*	3 span/load*	4 span/load*	
100	23'-10"	26'-8"	25'-9"	20'-8"	23'-1"	23'-1"	17'-9"	19'-10"	19'-2"	23 4'-0" 145
110	23'-2"	25'-11"	25'-1"	20'-1"	22'-5"	22'-5"	16'-5"	18'-4"	17'-9"	27 4'-0" 155
120	20'-11"	23'-5"	22'-8"	18'-2"	20'-4"	20'-4"	15'-1"	16'-10"	16'-3"	32 4'-0" 165
123	20'-5"	22'-10"	22'-1"	17'-8"	19'-9"	19'-9"	13'-4"	15'-5"	15'-10"	34 4'-0" 169
130	19'-4"	20'-7"	20'-10"	16'-8"	18'-8"	18'-8"	12'-8"	14'-8"	13'-9"	45 4'-0" 177
140-1	17'-11"	23'-1"	23'-1"	15'-7"	17'-5"	17'-5"	12'-8"	14'-8"	13'-9"	45 4'-0" 189
140-2	17'-11"	23'-1"	23'-1"	15'-7"	17'-5"	17'-5"	12'-8"	14'-8"	13'-9"	45 4'-0" 189
150	16'-10"	18'-10"	18'-3"	13'-2"	16'-4"	16'-4"	10'-11"	12'-4"	11'-11"	60 4'-0" 102

Note: Total roof panel width = room width + wall width + overhang. \*Design or applied load based on the affective area of the panel

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