	Building Permit	PERMIT
	Year From the Date of Issue PHONE 754-8678	000026169
APPLICANT BOB MCINTOSH ADDRESS 289 NW CORINTH DRIVE	LAKE CITY	- FL 32055
OWNER PAUL TWING	PHONE 754-9163	
ADDRESS 162 NW LIVE OAK PLACE	LAKE CITY	 FL 32025
CONTRACTOR MICHAEL DELAHOZ	PHONE 754-8678	
	IDIAN SPRNGS DRIVE, TL ON LIVE	_
OAK PLACE, 2ND DRIVE ON		
TYPE DEVELOPMENT POOL ENCLOSURE E	STIMATED COST OF CONSTRUCTION	11000.00
HEATED FLOOR AREA TOTAL AF	REA HEIGHT	STORIES
FOUNDATION WALLS	ROOF PITCHF	CLOOR
LAND USE & ZONING A-3	MAX. HEIGHT	
Minimum Set Back Requirments: STREET-FRONT 30.0	0 REAR 25.00	SIDE 25.00
NO. EX.D.U. 0 FLOOD ZONE	DEVELOPMENT PERMIT NO.	
PARCEL ID 12-3S-15-00167-018 SUBDIVISI	ON OAK HAVEN	
LOT 3 BLOCK B PHASE UNIT	1 TOTAL ACRES _	4.05
	JUM WA	-0
SCC056689	What I Method	
Culvert Permit No. Culvert Waiver Contractor's License No EXISTING X07-329 BK	umber Applicant/Owne	er/Contractor N
	ing checked by Approved for Issuar	
·		
COMMENTS: NOC ON FILE		
COMMENTS: NOC ON FILE		
COMMENTS: NOC ON FILE	Check # or 0	Cash <u>3471</u>
	Check # or 0	
		Cash 3471 (footer/Slab)
FOR BUILDING & ZON	NG DEPARTMENT ONLY	
Temporary Power Foundation date/app. by Under slab rough-in plumbing Slab	Monolithic date/app. by Sheathin	(footer/Slab) date/app. by g/Nailing
FOR BUILDING & ZON Temporary Power Foundation date/app. by Under slab rough-in plumbing Slab date/app. by	Monolithic date/app. by Sheathing date/app. by	(footer/Slab) date/app. by
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We led Cu 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.

INSPECTORS OFFICE

"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."

CLERKS OFFICE

This Permit Must Be Prominently Posted on Premises During Construction

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

Columbia County Building Permit Application

41	0/21	24460
For Office Use Only Application # 0708-46 Date I	Received 8/20/07 By UH Permit	# 26/69
Application Approved by - Zoning Official Oate	Plans Examiner OKJA	Date_8-2/-87
Flood Zone Development Permit MA Zonir	ng 4-3 Land Use Plan Map Cat	egory $4-3$
Comments		
NOC DEH Doesd or PA Site Plan St	ate Road info 🏻 Parent Parcel # 🖽 🗈	Development Permit
X07-0329	Fax	
	Phone 376-75	8 608.4
Address and Mul Corneth Dr Lake Coly, FI		
Owners Name Thing Paul & Barbard	Phone	
911 Address 162 NW Tide Oak Place Lal	xe City F1 32055	
Contractors Name Michael A Dela Hos	Phone Stb. 75	8628-6
Address 927 Hickory St Altamonte Sprin	103, FI 32711	
Fee Simple Owner Name & Address 1/1/14		
Bonding Co. Name & Address N/A		
Architect/Engineer Name & Address		
Mortgage Lenders Name & Address_\(\gamma\gamma\)\(\foats\)		
Circle the correct power company - FL Power & Light - Ci	av Flec Suwannee Valley Flec	Prograshia Engrav
Property ID Number 12-38-15-00167-018 HX	Fstimated Cost of Construction	
Subdivision Name Oakhayen	Lot 3 Block B U	
Driving Directions WCR 250, Lest on NW	Tradica Divisa De	nii rndse
Mul Live Ook Place, 2th Drive on	Bight Springs Dr	Letion
		· · · · · · · · · · · · · · · · · · ·
Type of Construction 2001 Enchosure	Number of Existing Dwellings on Pro	norty \ /
Total Acreage Lot Size Do you need a - C	Ivert Permit or Culvert Waiver or H	ave an Existing Drive
Actual Distance of Structure from Property Lines - Front	of Side 3330 Side 35	Down 15 0 TOT
Total Building Height Number of Storles		
Application is hereby made to obtain a permit to do work and	installations as indicated. I certify th	at no work or
installation has commenced prior to the issuance of a permit all laws regulating construction in this jurisdiction.	and that all work be performed to me	et the standards of
OWNERS AFFIDAVIT: I hereby certify that all the foregoing in	formation is accurate and all work wi	i be done in
compliance with all applicable laws and regulating constructi	on and zoning.	
WARNING TO OWNER: YOUR FAILURE TO RECORD A NOTICE TWICE FOR IMPROVEMENTS TO YOUR PROPERTY. IF YOU I	CE OF COMMENCMENT MAY RESULT	IN YOU PAYING
LENDER OR ATTORNEY BEFORE RECORDING YOUR NOTIC	NTEND TO OBTAIN FINANCING, CON E OF COMMENCEMENT.	SULT WITH YOUR
	11	111-
Owner Builder or Authorized Person by Notarized Letter	Contractor Signature	unox
9,	Contractors License Number	P821202
STATE OF FLORIDA COUNTY OF COLUMBIA	Competency Card Number NOTARY STAMP/STAMP	
Sworn to (or affirmed) and subscribed before me	Sol Teams	ean G.S. McIntosh hission # DD371494
this day of An 2007.	Markon ASMOSTOR Expire Sended Tray F	
Personally known or Produced Identification	Notary Signature	
	aiRiiafnia	(Revised Sept. 2006)

NOTICE OF COMMENCEMENT FORM COLUMBIA COUNTY, FLORIDA

THE UNDERSIGNED hereby gives notice that improvement 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.

Tax Parcel ID Number 12-33-15-00167-018 HX

1. Description of property: (legal description of t	the property and street address or 911 address)
162 MW Live Oak Place.	Lake City. Fl 32055
	Inst;200712018836 Date:8/20/2007 Time:9:59 AMDC,P.DeWitt Cason ,Columbia County Page 1 or
2. General description of improvement: Pool	Enclosure
3. Owner Name & Address Twing The Race Lake City #1 32855	aul + Barbara 162 NW Live Cak
4. Name & Address of Fee Simple Owner (if other	or than owner): N N
5. Contractor Name Wike Delation	Phone Number 386-154-8678
6. Surety Holders Name \(\frac{\gamma}{\pi} \) Address	Phone Number
Amount of Bond	
7. Lender Name	Phone Number
	d by the Owner upon whom notices or other documents may be
Address	Phone Number
9. In addition to himself/herself the owner design	gnates Fl. Pool Enclosure Inc of
(a) 7. Phone Number of the designee 37	e a copy of the Lienor's Notice as provided in Section 713.13 (1) –
10. Expiration date of the Notice of Commencer	nent (the expiration date is 1 (one) year from the date of recording,
(Unless a different date is specified)	
NOTICE AS PER CHAPTER 713, Florida Statutes: The owner must sign the notice of commenceme	nt and no one else may be permitted to sign in his/her stead.
(a. 1. 7)	Sworn to (or affirmed) and subscribed before day of, 2007
Signature of Owner	NOTARY STAMP Nadean G.S. McIntosh Commission # DD371494 Expires November 14, 2008
	7/7 (N) Bonded Troy Fain - Insurance, Inc. 808-346-7019

Signature of Notary

SURVEYOR'S NOTES:

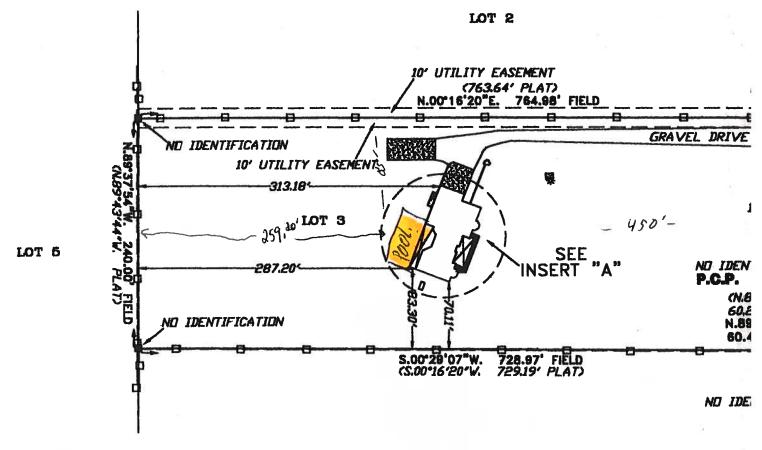
BOUNDARY BASED ON MONUMENTATION FOUND IN ACCORDANCE WITH THE RETRACEMENT THE DRIGINAL SURVEY FOR SAID PLAT OF RECORD.

BEARINGS ARE BASED ON SAID PLAT OF RECORD.

THIS PARCEL IS IN ZUNE "X" AND IS DETERMINED TO BE DUTSIDE THE 500 YEAR FLI PLAIN AS PER FLOOD RATE MAP, DATED 6 JANUARY, 1988 COMMUNITY PANEL NUMBER 120070 0125 B. HOVEVER, THE FLOOD INSURANCE RATE MAPS ARE SUBJECT TO CHAN THE IMPROVEMENTS, IF ANY, INDICATED ON THIS SURVEY DRAWING ARE AS LOCATED DATE OF FIELD SURVEY AS SHOWN HEREON.

IF THEY EXIST, NO UNDERGROUND ENCROACHMENTS AND/OR UTILITIES WERE LOCATED THIS SURVEY EXCEPT AS SHOWN HEREON.

THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE COMMITMENT OR A POLICY.



Curve number 1

Radlus= 433.53' Delta= 24°46'35' (22°22'47' PLAT) Arc= 187.47' (183.99' PLAT) Tangent= 95.22' Chord= 186.01' Chord Brg. N.78°09'56°W.

LOT 4

DESCRIPTION: LOT 3 IN BLOCK "B" OF "OA IN PLAT BOOK 5, PAGES 54 COLUMBIA COUNTY, FLORIDA.

CERTIFIED TO

PAUL E. & BARBARA E. TWING FIRST FEDERAL SAVINGS BANK OF FLORIDA ABSTRACT AND TITLE SERVICES, INC. CHICAGO TITLE INSURANCE COMPANY

77 234 FIELD BOOKL PAGE(S)

SURVEYOR'S CERTIFICATION

I HERENY CERTIFY THAT THUS SURVEY WAS MADE UNDER MY RES TECHNICAL STANDARDS AS SET FURTH BY THE FLURIDA BUARD II IN CHAPTER GIGIP-G, FLURIDA AUMBISTRATIVE GUDE, PURSUANT

11/06/02 FELD SURVEY DATE

11/08/02 ENVISOR PARE

MUTE UNLESS IT BEARS THE SIGNATURE AND THE ERIGINAL RAISED MAPPER THUS BRAVING, SKETCH, PLAT UR HAP IS FUR INFURNATIONA

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

Parcel: 12-3S-15-00167-018 HX

2007 Proposed Values

Tax Record Property Card Interactive GIS Map Print

Search Result: 1 of 1

Owner & Property Info

Owner's Name	TWING PAUL F & BARBARA			
Site Address	LIVE OAK			
Mailing Address	162 NW LIVE OAK PLACE LAKE CITY, FL 32055			
Use Desc. (code)	SINGLE FAM (000100)			
Neighborhood	12315.01	Tax District	3	
UD Codes	MKTA01	Market Area	01	
Total Land Area	4.050 ACRES			
Description	LOT 3 BLOCK	B OAKHAVEN S/D. ORB 94	5-941, 945-942,	

GIS Aerial



Property & Assessment Values

Mkt Land Value	cnt: (1)	\$70,000.00
Ag Land Value	cnt: (0)	\$0.00
Building Value	cnt: (1)	\$240,632.00
XFOB Value	cnt: (2)	\$6,086.00
Total Appraised Value		\$316,718.00

Just Value		\$316,718.00
Class Value		\$0.00
Assessed Value		\$236,988.00
Exempt Value	(code: HX)	\$25,000.00
Total Taxable Value		\$211,988.00

Sales History

Sale Date	Book/Page	Inst. Type	Sale VImp	Sale Qual	Sale RCode	Sale Price
1/28/2002	945/942	WD	V	Q		\$34,500.00
1/17/2002	945/941	WD	٧	U	04	\$26,500.00

Building Characteristics

Bldg Item	Bldg Desc	Year Blt	Ext. Walls	Heated S.F.	Actual S.F.	Bldg Value	
1	SINGLE FAM (000100)	2002	Vinyl Side (31)	2764	4276	\$240,632.00	
Note: All S.F. calculations are based on exterior building dimensions.							

Extra Features & Out Buildings

Code	Desc	Year Bit	Value	Units	Dims	Condition (% Good)
0166	CONC,PAVMT	2002	\$5,126.00	2563.000	0 x 0 x 0	(.00)
0119	MASONRY WA	2002	\$960.00	192.000	4 x 48 x 0	(.00)

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value
000100	SFR (MKT)	1.000 LT - (4.050AC)	1.00/1.00/1.00/1.00	\$70,000.00	\$70,000.00

Columbia County Property Appraiser

DB Last Updated: 5/11/2007

COLUMBIA COUNTY BUILDING DEPARTMENT CHECKLIST FOR PERMITTING

	Application #
	Notarized completed Building Permit Application
	Notes:
	If an Owner Builder, signed Disclosure Statement
	Notes:
	Recorded Deed or a Notarized Affidavit (form from the Building Dept.)
L	Notes:
	Approved and Signed Site Plan from Environmental Health on the septic
	Notes:
$\sqrt{}$	Site plan with actual distances of the structure to each property line
	Notes:
√	911 Address form, Contact 386.752.8787 for an appointment
	Notes:
	Residential or Commercial Checklist completed
1	Notes:
	Driving directions including all road names
	Notes:
,	Well information (on plans or letter from the well driller)
	Notes:
$\sqrt{\mathbf{B}}$	efore the 1st inspection Recorded Notice of Commencement signed by owner
	Notes:
/	2 sets of plans (blueprints)
1	Notes:
	2 sets of sealed truss engineering
1	Notes:
2	2 sets of energy code & manual J
1.	Votes:
$\sqrt{2}$	sets of engineering packets including specs on windows, doors, roof and etc.
	Votes:

January 01, 2007

LAWRENCE E. BENNETT, P.E. P.O. BOX 214368 SOUTH DAYTONA, FL 32121 386-767-4774

TO ALL BUILDING DEPARTMENTS

Re: Master File Engineering
"ALUMINUM STRUCTURES DESIGN MANUAL"
2004 edition & 2006 edition

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 2007. When we publish and distribute the 2006 ed of the "ALUMINUM STRUCTURES DESIGN MANUAL", they will be authorized to use that manual for the remainder of 2007.

Our authorization is based on a January to January basis requardless 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.

Mike Delahoz
AAF Mid Fl
Florida Pool Enclosures Inc
P.O. Box 521136
Longwood, FL 32752

They are hereby added to my 2007 MASTERFILE LIST

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

Sincerely,

Lawrence E. Bennett, P.E. #1664

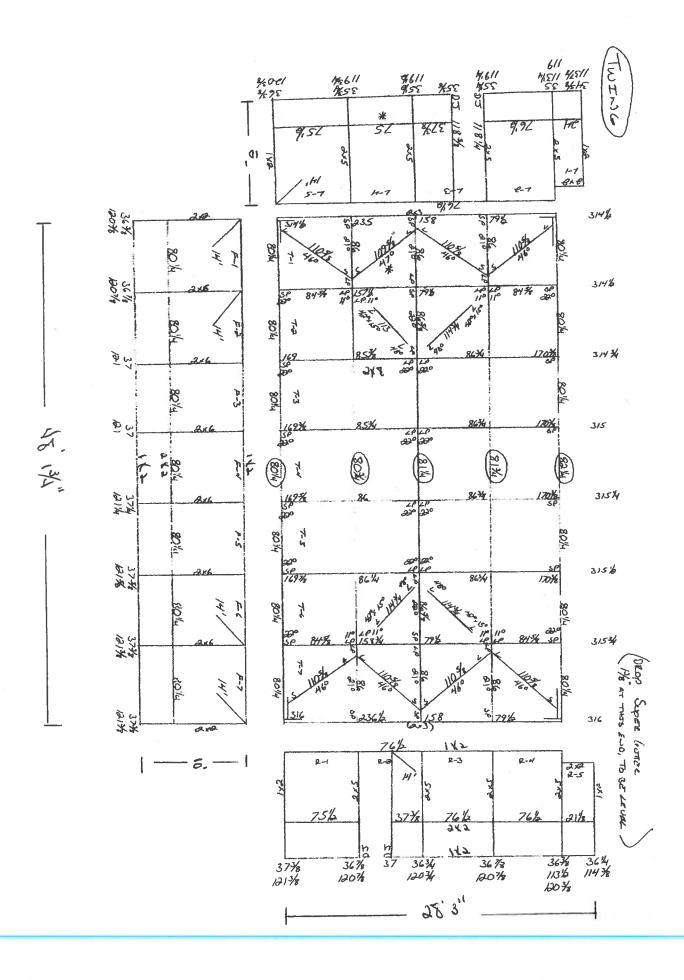
Specifications Pool Perimeter Patto Perimeter Rosal to Equip Shallow Depth Spa Perimeter eck Perimete Deep Depth Spa to Equip Pool Area Face Tile Deck Area Patio Area Spa Area Coping 0 0 0 0 0 0 0 0 0 Accepted Designed by: Ray Lussier Advantage Pools
757 SW SR 247 Suite 101
Lake City FL 32025 Fax: 386-758-6932 47 6 x 28 3 S ft.

(3)

--- Property line

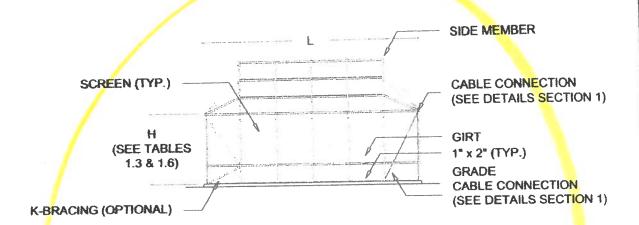
.. aun Anadon

6 ₽



SECTION 1

SCREENED ENCLOSURES



TYPICAL MODIFIED HIP ROOF - FRONT WALL ELEVATION

SCALE: N.T.S.

EXISTING STRUCTURE

ALUMINUM BEAMS (TABLE 1.1 OR 1.9.1)

DIAGONAL ROOF BRACING (SEE SCHEMATIC SECTION 1)

K-BRACING (OPTIONAL)

FRONT WALL ALUMINUM COLUMNS

(TABLE 1.3, 1.4 & 1.6) SIZE MEMBERS PER APPROPRIATE TABLES GIRT (TYP.)

CABLE BRACING
SIDE WALLS AND FRAMING
SIZES

(TABLE 1.3, 1.4 & 1.6)

TYPICAL MODIFIED HIP ROOF - ISOMETRIC

SCALE: N.T.S.

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

CIVIL & STRUCTURAL ENGINEERING

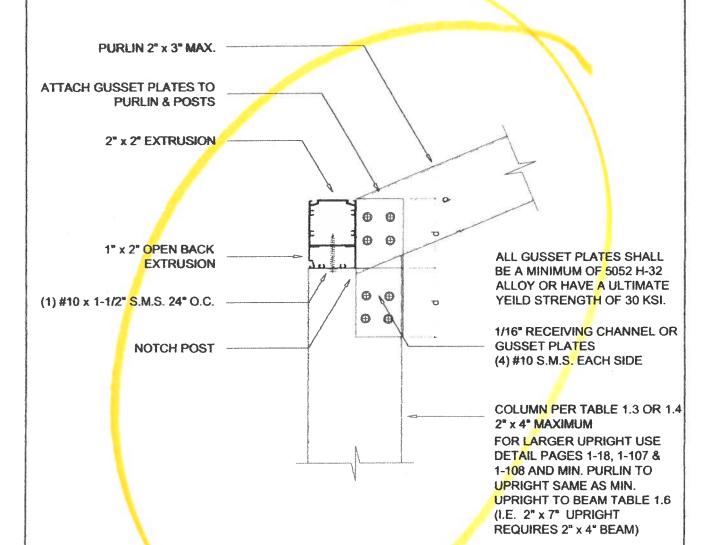
P.O. Box 214368, South Daytona, Fl 32121 Telephone #: (386) 767-4774 Fax #: (386) 767-6556 Email: lebpe@bellsouth.net

PAGE

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1-6

SECTION 1



SIDE WALL TO PURLIN DETAIL

SCALE: 3" = 1'-0"

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SECTION 1

SCREENED ENCLOSURES

1-3/4" STRAP MADE FROM REQUIRED GUSSET PLATE MATERIAL

(SEE TABLE FOR LENGTH AND # OF SCREWS REQUIRED)

CONNECT 2" x 2" OR 2" x 3" TO BEAM W/ MIN. (3) #10 x 1-1/2" S.M.S. INTO SCREW BOSSES

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

1" x 2" OPEN BACK ATTACHED TO 2" x 2" W/ #10 x 1-1/2" S.M.S. @ 24" O.C.

> SCREW LOCATIONS PER TABLE 1.6 FILL OUTSIDE LOCATIONS FIRST

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

d - 1/2" -+ + + + + 2" x 8" BEAM CUT TO ACCEPT WALL UPRIGHT 1-3/4" STRAP MADE FROM REQUIRED GUSSET PLATE MATERIAL (SEE TABLE FOR LENGTH AND # OF SCREWS REQUIRED) SELF MATING UPRIGHT CUT TO MATCH BEAM ANGLE NOTE: 2" x 8" BEAM W/ 2" x 5" **UPRIGHT SHOWN** OTHER BEAM TO UPRIGHT **COMBINATIONS PER**

TABLE 1.6 MAY BE USED

NOTES

- FILL OUTER SCREW POSITIONS FIRST UNTIL REQUIRED NUMBER OF SCREWS IS ACHIEVED.
- 2. SEE TABLE 1.6 FOR SCREW SIZES AND NUMBER.
- 3. SCREW PATTERN LAYOUT W/ SPACING BETWEEN SCREWS GREATER THAN MINIMUM IS ALLOWED SO THAT EQUAL SPACING IS ACHIEVED.

ALTERNATE BEAM TO EXTERNAL GUSSET PLATE CONNECTION (FULL 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) 767-6566 Email: lebpe@bellsouth.net

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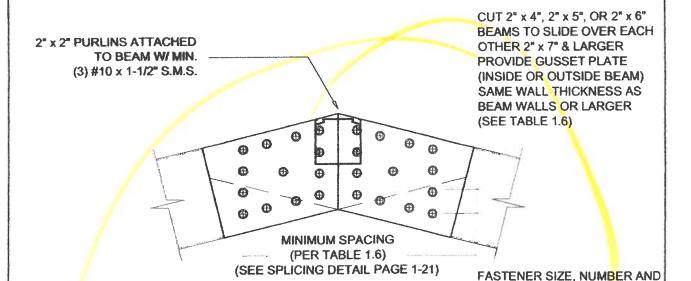
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1-18

SECTION 1

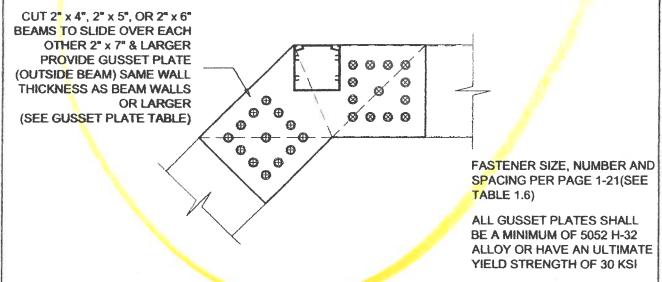
SPACING PER PAGE 1-21(SEE

TABLE 1.6)



TYPICAL SIDE PLATE CONNECTION DETAIL

SCALE: 3" = 1'-0"



TYPICAL SIDE PLATE CONNECTION DETAIL - MANSARD ROOF

SCALE: 3" = 1'-0"

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

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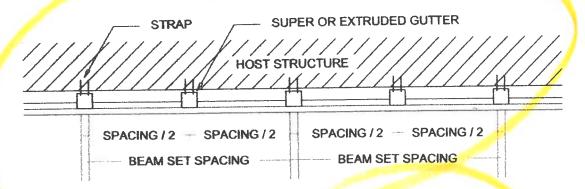
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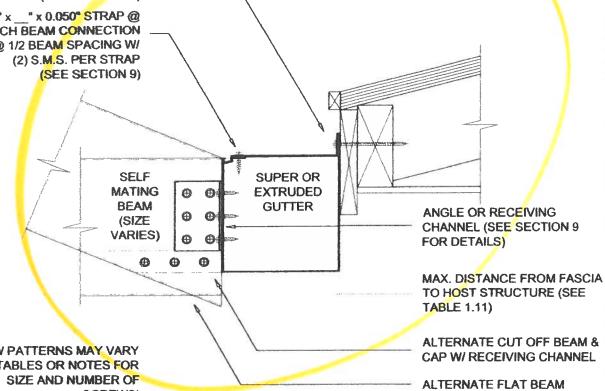
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STRAP LOCATION FOR SUPER OR EXTRUDED GUTTER REINFORCEMENT SCALE: 3/8" = 1'-0"

2" S.M.S. OR LAG SCREWS (SEE SECTION 9) 2" x " x 0.050" STRAP @ **EACH BEAM CONNECTION** AND @ 1/2 BEAM SPACING W/ (2) S.M.S. PER STRAP (SEE SECTION 9)



SCREW PATTERNS MAY VARY (SEE TABLES OR NOTES FOR SCREWS)

SELF MATING BEAM CONNECTION TO SUPER OR EXTRUDED GUTTER

SCALE: 3" = 1'-0"

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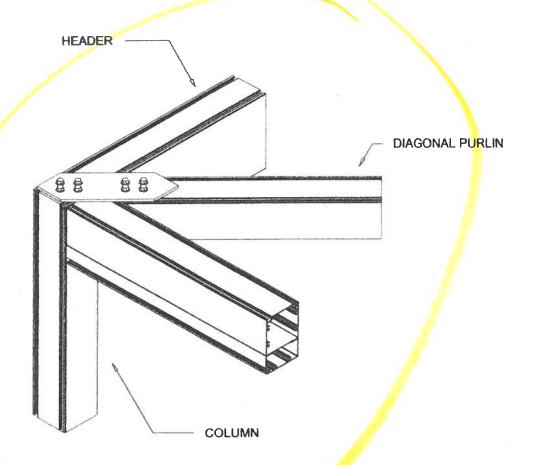
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SECTION 1



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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CABLE BRACING

General Notes and Specifications:

- 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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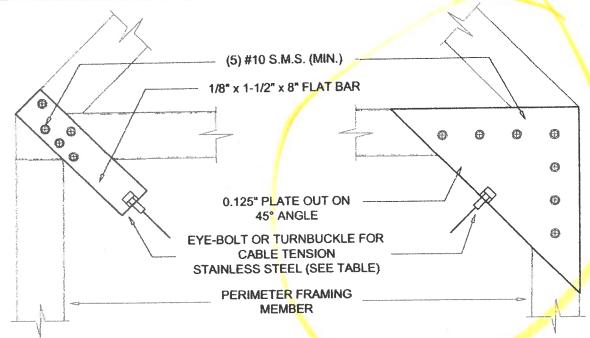
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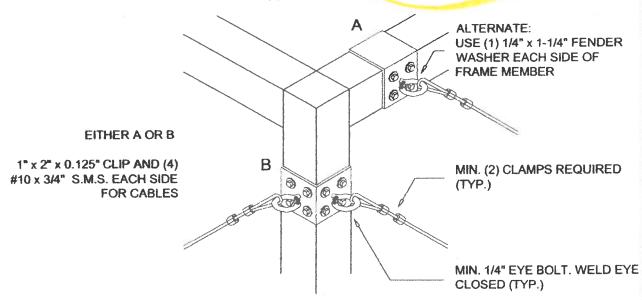
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SECTION 1



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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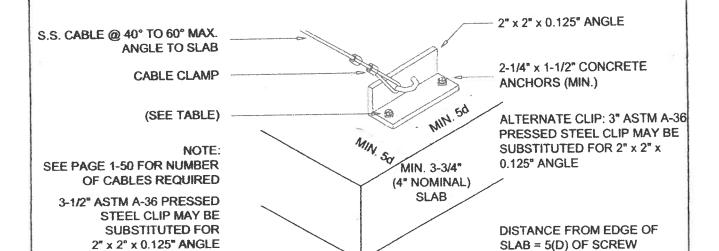
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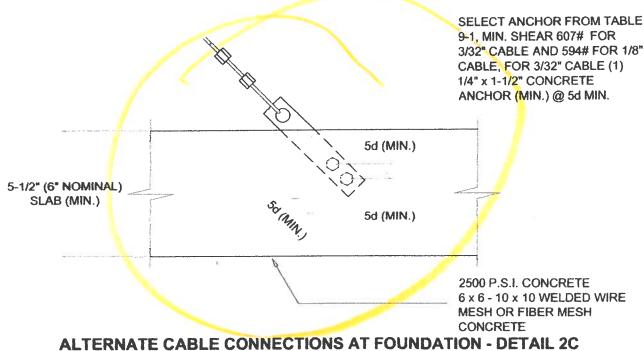
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SECTION 1



ALTERNATE CABLE CONNECTION AT SLAB DETAIL - DETAIL 2B

SCALE: 3" = 1'-0"



SCALE: 3" = 1'-0"

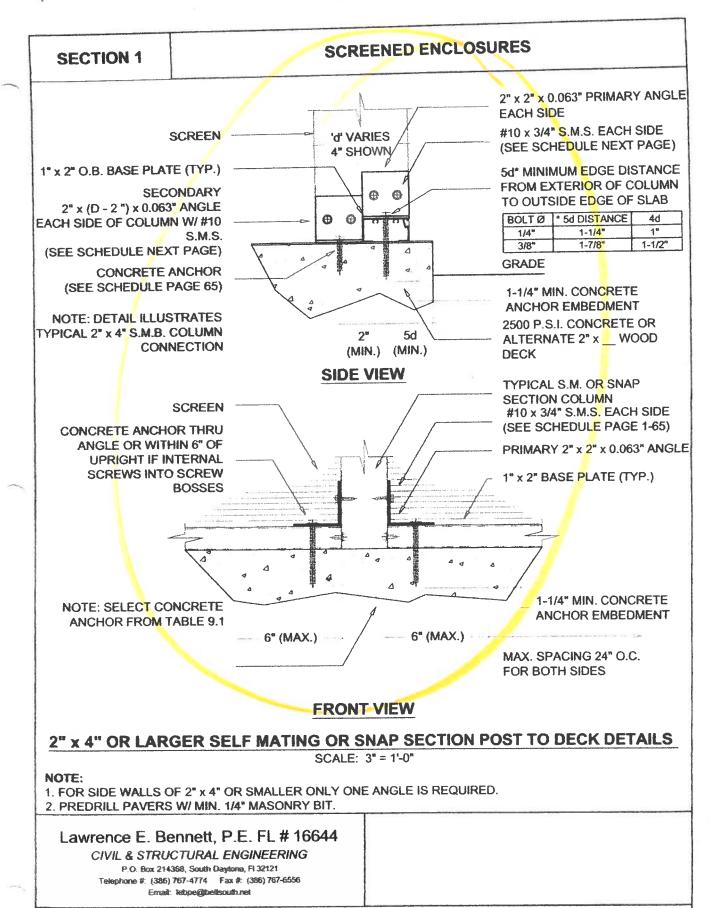
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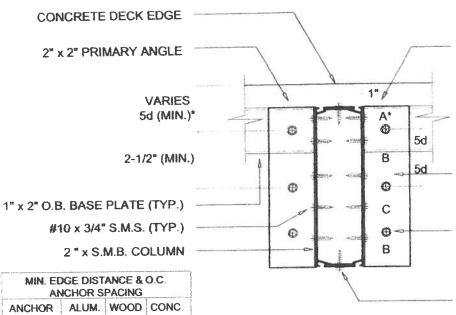
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SECTION 1





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)

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	Sec	ondan	Angle					Maxi	mum N	lumber	and Spa	acing An	chors			
Size	Angle		er of A	nchors		1	14"			5/	16"			3.	/8"	
0.00	Length "L"	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 st	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"	7-
2×7	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"	12
2 x 10	8ª	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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SECTION 1 SCREENED ENCLOSURES ALUMINUM FRAME SCREEN 1/4" x 6" RAWL TAPPER THROUGH 1" x 2" AND WALL **ROWLOCK INTO FIRST** COURSE OF BRICKS CAP BRICK BRICK KNEEWALL TYPE 'S' MORTAR REQUIRED FOR ALTERNATE CONNECTION OF LOAD BEARING BRICK WALL SCREENED ENCLOSURE FOR BRICK OR OTHER NON-4" (NOMINAL) PATIO STRUCTURAL KNEE WALL CONCRETE SLAB (SEE NOTES 1" WIDE x 0.063" THICK STRAP **CONCERNING FIBER MESH)** @ EACH POST FROM POST TO FOOTING W/ (2) #10 x 3/4" S.M.S. STRAP TO POST AND (3) #3Ø BARS OR (1) (1) 1/4" x 1-3/4" CONCRETE #5Ø BAR W/ 2-1/2" COVER ANCHOR TO SLAB OR (TYP.) **FOOTING** BRICK KNEEWALL AND FOUNDATION FOR SCREEN WALLS SCALE: 3/4" = 1'-0" 1) #5 BAR CONT (3) #3 BAR CONT. OR (2) #3 BAR CONT. OR (1) #5 BAR CONT. 1" PER FT. MAX. FOR 3-1/2" (TYP. 2'-0" MIN. ALL SLABS) BEFORE SLOPE ō . 1'-0" 8" TYPE III TYPE II TYPE I STEEP SLOPE FOOTING MODERATE SLOPE FOOTING FLAT SLOPE / NO FOOTING > 1'-10" 2" / 12" - 1'-10" 0-2" / 12" 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

- 3. No footing is required except when addressing erosion until the slab width in the direction of the primary beams exceeds the span per table on page 1-69, then a type II slab is required under the load bearing wall only unless the side wall exceeds 16' in height or the enclosure is in a "C" exposure catagory in which case a type II footing is required.
- 4. Monolithic slabs and footings shall be minimum 2,500 psi concrete with 6 x 6 10 x 10 welded wire mesh or crack control fiber mesh; Fibermesh® Mesh, InForce™ e3™ (Formerly Fibermesh MD) per manufacturer's specification may be used in lieu of wire mesh. All slabs / footings shall be allowed to cure for 7 days before installing anchors.
- 5. If local codes require a minimum footing use Type II footing or footing section required by local code. Local codes govern.

SLAB-FOOTING DETAILS

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

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SECTION 1

SCREENED ENCLOSURES

Table 1.1 120

Allowable Spans for Primary Screen Roof Frame Members

Aluminum Alloy 6063 T-6

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

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

1			1	ributary	Load	Width V	A. = 1	seam Sp	acıng	<u> </u>			
3'-0'	- 1	4'-0'	4	5'-0'	•	6'-0"		7'-0"	· 1	8,-0,			
		e Span 'l	-1	Point Lo	ad (P) or Unife	orm l	.oad (U),	ben	ding (b),	defle	ction (d)	
	_					4'-5"	Pb	4'-5"	Pb	4'-5"	Pb	4'-5"	Pb
						E! 28	Dh	51.2"	Ph	5'-2"	Ph	5'-2"	Pb
5'-2"	Pb	5'-2"	Pb	5-2"	PD		-						Pb
7'-6"	Ph	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	Pb	7'-6"	PD		
		71 71	Dh	71.70	Ph	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb	7'-7"	Pb
1-1-	Po	1-1	1	<u> </u>			-	01.48	7%	01.48	Dh	0'.1"	Pb
9'-1"	Pb	9'-1"	Pb	9'-1"	Pb	9'-1"	PO						-
20'-5"	Pb	20'-5"	Pb	20'-5"	Pb	20'-4"	Ud	19'-4"	Ud	18'-6"	Ud	17'-9"	Ud
֡֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜֜	3'-0' Alio 4'-5" 5'-2" 7'-6" 7'-7" 9'-1"	3'-0" Allowabl 4'-5" Pb 5'-2" Pb 7'-6" Pb 7'-7" Pb 9'-1" Pb	3'-0" 4'-0' Allowable Span 'I 4'-5" Pb 4'-5" 5'-2" Pb 5'-2" 7'-6" Pb 7'-6" 7'-7" Pb 7'-7" 9'-1" Pb 9'-1"	3'-0" 4'-0" Allowable Span "L' / 4'-5" Pb 4'-5" Pb 5'-2" Pb 5'-2" Pb 7'-6" Pb 7'-6" Pb 7'-7" Pb 7'-7" Pb 9'-1" Pb 9'-1" Pb	3'-0" 4'-0" 5'-0'	3'-0" 4'-0" 5'-0" Allowable Span 'L' / Point Load (P 4'-5" Pb 4'-5" Pb 4'-5" Pb Fb 5'-2" Pb 5'-2" Pb Pb 5'-2" Pb 5'-2" Pb 7'-6" Pb 7'-6" Pb 7'-6" Pb 7'-7" Pb 7'-7" Pb 7'-7" Pb 9'-1" Pb 9'-1" Pb 9'-1" Pb	3'-0" 4'-0" 5'-0" 6'-0"	3'-0" 4'-0" 5'-0" 6'-0"	3'-0" 4'-0" 5'-0" 6'-0" 7'-0"	3'-0" 4'-0" 5'-0" 6'-0" 7'-0"	3'-0" 4'-0" 5'-0" 6'-0" 7'-0" 8'-0" Allowable Span 'L' / Point Load (P) or Uniform Load (U), bending (b), 4'-5" Pb 4'-5" Pb 4'-5" Pb 4'-5" Pb 4'-5" Pb 4'-5" 5'-2" Pb 5'-2" Pb 5'-2" Pb 5'-2" Pb 5'-2" Pb 5'-2" 7'-6" Pb 7'-6" Pb 7'-6" Pb 7'-6" Pb 7'-6" Pb 7'-6" 7'-7" Pb 7'-7" Pb 7'-7" Pb 7'-7" Pb 7'-7" Pb 7'-7" 9'-1" Pb 9'-1"	3'-0" 4'-0" 5'-0" 6'-0" 7'-0" 8'-0"	3'-0" 4'-0" 5'-0" 6'-0" 7'-0" 8'-0" 9'-0'

				T	ributary	Load	Width 1	N. =	Beam Sp	acin	9			
Self Mating Sections	3'-0"		4'-0"		5'-0"	•	6'-0'		7'-0"		8'-0"		9,-0,	
Sell mating Sections	Allon	wabl	e Span 'L	: /	Point Los	id (P	or Unifo	mic	Load (U),	ben	ding (b),	defle	ction (d)	
2" x 4" x 0.044 x 0.100"	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pd	11'-8"	Pa
2" x 5" x 0.050" x 0.100"	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	16'-1"	Pd	15'-9"	Ud	15'-1"	Ud
2" x 6" x 0.050" x 0.120"	20'-4"	Pd		Pd	20'-4"	Pd	20'-3"	Ud	19'-3"	Ud	18'-5"	Ud	17'-8"	Ud
	24'-9"	Pd	24'-9"	Pd	24'-6"	Ud	23'-1"	Ud	21'-11"	Ud	20'-11"	Ud	20'-2"	Ud
2" x 7" x 0.055" x 0.120"		Pd	32'-9"	Ud	30'-5"	Ud	28'-7"	Ud	27'-2"	Ud	25'-11"	Ud	24'-11"	Ud
2" x 8" x 0.072" x 0.224"	34'-2"		4.00	Ud	33'-4"	Ud	31'-5"	Ud	29'-10"	Ud	28'-6"	Ud	27'-5"	Ud
2" x 9" x 0.072" x 0.224"	39,-3,	Pd				Ud	33'-8"	Ud	31'-11"	Ud		Ud	29'-5"	Ud
2" x 9" x 0.082" x 0.310"	42'-5°	Ud	38'-7"	Ud	35'-10"				37'-2"	Ud		Ud		Ud
2" x 10" x 0.092" x 0.369"	49'-3"	Ud	44'-9"	Ud	41'-7"	Πq	39'-1"	Ųd	31-2	00	20.00	100	U-7-2	100

2" x 10" x 0.092" x 0.369	49-3	Uu	44 -5	100		00		44						
				1	ributary	Loac	Width 1	N' =	Beam Sp	acing	9			
Snap Sections	3'-0		4'-0'		5'-0'	•	6'-0'		7'-0"	'	8'-0'		9'-0'	
• • •	Allo	ewabl	e Span '	. /	Point Lo	ad (P	or Unife	orm	Load (U),	ben	ding (b),	defle	ction (d)	1
2" x 2" x 0.044"	4'-10"	Pd	4'-10"	Pd	4'-10"	Pd				Pd	4'-10"	Pd	4'-10"	Pd
2" x 3" x 0.045"	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd	7'-6"	Pd
2" x 4" x 0.045"	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd	10'-8"	Pd
2" x 6" x 0.062"	22'-2"	Pd	22'-2"	Pd	22'-2"	Pd	21'-5"	Ud	20'-5"	Ud	19'-6"	Πq	18'-9"	Ud
2" x 7" x 0.062"	26'-8°	Pd	26'-8"	Pd	25'-9"	Ud	24'-3"	Ud	23'-0"	Ud	22'-0"	Ud	21'-2"	Ud
2 X / X 0.00E	200	1	200											

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

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

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

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

	7		T	rib	rtary Lo	ad \	Nidth W	= (Jpright S	Spa	cing			
Hollow Sections	3'-0"		4'-0"	-	5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
Hollow Secretia	3.0	1	Allov	vab	le Heigh	t "H	" / bend	ing	(b), defi	ect	on (d)			
2" x 2" x 0.044"	7'-5"	Ы	6'-5"	Ь	5'-8"	b	5'-1"	Ь	4'-8"	b	4'-3"	b	3'-11"	b
2" x 2" x 0.050"	7'-10"	7	7'-1"	Ь	6'-3"	Ь	5'-8"	b	5'-2"	b	4'-9"	b	4'-5"	b
2" x 2" x 0.090"	8'-11"	7	8'-2"	d	7'-10"	d	7'-1"	b	6'-7"	b	6'-1"	b	5'-9"	b
2" x 3" x 0.045"	8'-4"	d	7'-7"	d	7'-9"	d	6'-11"	d	6'-5"	d	5'-11"	b	5'-6"	b
2" x 4" x 0.050"	11'-2"	1	9'-7°	Ь	8'-6"	b	7'-9"	b	7'~1"	b	6'-7"	b	6'-1"	Ь
2" x 5" x 0.062"	17'-3"	ь	14'-10"	b	13'-2"	b	11'-11"	Ь	11'-0"	b	10'-3"	b	9'-7"	Ь

	1		T	rib	utary Lo	ad \	Nidth W	· = [Jpright S	pa	cing			
Self Mating Sections	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8'-0"		9'-0"	
Octi impuig occurre			Allow	rab	le Heigh	L "H	"/ bend	ing	(b), defi	ect	ion (d)			
2" x 4" x 0.044 x 0.100"	115-11"	d	10'-10"	d	10'-0"	d	9'-5"	b	8'-8"	b	8'-0"	b	7'-6"	b
2" x 5" x 0.050" x 0.100"	14'-9"	d	13'-5"	d	12'-5"	d	11'-7"	b	10'-8"	b	9'-11"	b	9'-4"	l
2" x 6" x 0.050" x 0.120"	17'-3"	d	15'-8"	d	14'-4"	b	13'-1"	b	12'-0"	b	11'-3"	b	10"-6"	t
2" x 7" x 0.055" x 0.120"	19'-8"	d	17'-6"	ь	15'-7"	b	14'-2"	b	13'-1"	b	12'-2"	Ь	11'-5"	Įt.
2" x 8" x 0.072" x 0.224"	24'-4"	ď	22'-1"	d	20'-6"	d	19'-4"	d	18'-4"	d	17'-6"	d	16'-10"	C
2" x 9" x 0.072" x 0.224"	26'-8"	d	24'-3"	d	22'-6"	d	21'-2"	d	20'-1"	d	19'-3"	d	18'-2"	L
2" x 9" x 0.082" x 0.310"	28'-8"	d	26'-0"	d	24'-2"	d	22'-9"	d	21'-7"	d	20'-8"	d	19'-10"	C
2" x 10" x 0.092" x 0.369"	33'-3"	d	30'-3"	d	28'-1"	d	26'-5"	d	25'-1"	d	23'-11°	d	23'-1"	10

			1	rib	utary Lo	ad '	Width 'W	r= t	Jpright S	Spa	cing			
Snap Sections	3'-0"		4'-0"		5'-0"		6'-0"		7'-0"		8,-0,,		9'-0"	,
·			Allov	vab	le Heigh	t "H	" / bend	ling	(b), def	ect	ion (d)			
2" x 2" x 0.044"	6'-7"	d	5'-11"	d	5'-7"	d	5'-3"	d	4'-10"	b	4'-5"	b	4'-1"	b
2" x 3" x 0.045"	8'-10"	d	8'-1"	d	7'-6"	d	6'-11"	b	6'-3"	b	5'-9°	b	5'-3"	b
2" x 4" x 0.045"	11'-2"	d	10'-2"	d	9'-2"	b	8'-2"	b	7'-5°	b	6'-9"	b	6'-2"	b
2" x 6" x 0.062"	18'-3"	d	16'-7"	d	15'-5"	d	14'-6"	d	13'-9"	d	13'-2"	d	12'-8"	d
2" x 7" x 0.062"	20'-7"	d	18'-9"	d	17'-5"	d	16'-4"	d	15'-7"	d	14'-10"	d	14'-2"	b

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

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

Atuminum 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

				Tri	butary Lo	oad	Width 'V	A. =	Upright	Sp	acing			
Hollow Sections	3'-0"		4'-0"		5'-0"		6'-0°		7'-0"		8'-0"		9'-0"	
			Allowa	abk	Height	Ή"	or Span	"L	" / bend	ing	(b), defle	ecti		
2" x 2" x 0.044"	7'-5"	d	6'-5"	b	5'-8"	b	5'-1"	Ь	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"	ď	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"	Ь	4'-7"	b
3" x 2" x 0.070"	9'-5"	d	8'-6"	d	7'-9"	b	7'-0"	b	6'-5"	Ь	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"	Ь
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"	ь	14'-10"	b	13'-2"	b	11'-11"	b	11'-0"	b	10'-3"	b	9'-7"	b

		Tri	butary Load	Width W=	Upright Sp	acing	
Snap Sections	3'-0"	4'-0"	5'-0"	6'-0°	7'-0"	8'-0"	9'-0"
		Allowable	Height "H"	or Span "L	"/ bending	(b), deflecti	on (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

				Tri	butary L	oad	Width 7	N" =	Upright	Sp	acing			
Hollow Sections	3'-0"		4'-0"	_	5'-0"	-	6'-0"		7'-0"		8'-0"		9'-0"	
			Allow	abk	Height	"H"	or Span	"L	"/ bend	ing	(b), defic	ecti	on (d)	
2" x 2" x 0.044"	8'-4"	b	7'-2"	b	6'-4"	b	5'-8"	b.	5'-2"	b	4'-9"	b	4'-5"	b
3" x 2" x 0.045"	9'-7"	b	8'-3"	b	7'-3"	b	6'-6"	b	5'-11"	b	5'-6"	b	5'-1"	b
3" x 2" x 0.070"	11'-5"	b	9'-10"	b	8'-8"	b	7'-10"	b	7'-2"	b	6'-8"	b	6'-3"	b
2" x 3" x 0.045"	11'-2"	d	9'-9"	b	8'-8"	b	7'-10"	b	7'-2"	b	6'-8"	b	6'-2"	b
2" x 4" x 0.050"	124-6"	b	10'-9"	b	9'-6"	b	8'-7"	b	7'-11"	b	7'-4"	b	6'-10"	Ь
2" x 5" x 0.062"	19'-3"	b	16'-7"	b	14'-9"	b	13'-5"	b	12'-4"	Ь	11'-6"	b	10'-9"	b

	Tributary Load Width W≔ Upright Spacing							
Snap Sections	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 $2^{\circ} \times 2^{\circ} \times 0.044^{\circ}$ min. and set @ 36° in height are designed to be residential gardrails provided they are attached with min. (3) #10 x 1-1/2° s.m.s. into the screw bosses and do not exceed 8'-0° o.c.
- 6. Girt spacing shall not exceed 6'-8".
- 7. Max. beam size for 2" x 5" is 2" x 7" x 0.055" x 0.120"
- 8. $2^n \times 4^n & 2^n \times 5^n$ hollow girts shall be connected w/ an internal or external 1-1/2" \times 1-1/2" \times 0.044" angle.
- 9. Spans/heights may be interpolated.
- 10. To convert spans to "C" and "D" exposure categories see exposure multipliers and example on page 1-ii.

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

Beam/Upright Upright or It		Minimum Purlin, Girt	Notes	Minimum Number of Screws*			Beam Stitching	
or Post	Post/Beam	& Knee Brace Size		#8 x ½"	#10 x ½"	#12 x ½"	Screw at 24" OC	
2 x 4 SMB	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	8	6	4	#10	
	2 x 3 SMB or H	2" x 2" x 0.044"	Partial Lap	8	6	4	#8	
	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		Full Lap	14	12	10	#12	
	2 x 5 SMB or H		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	Minlmum 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 0306"	0.190"	
5/16"	7/8"	1-3/4"	2" x 10" x 0.092" x 0.369"	0.250"	
3/8"	1"	2 ^{ss}			

^{* 0.082&}quot; wall thickness, 0.310" flange thickness

Connection Example:

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

Note:

- 1. Connection of 2" x 6" to 2" x 4" shall use a full lap cut or 1/16" gusset plate.
- 2. For beam splice connections the number of screws shown is the total for each splice with 1/2 the screws on each side of the cut.
- 3. The number of screws is based on the maximum allowable moment of the beam.
- 4. The number of deck anchors is based on RAWL R Tapper allowable load data for 2,500 psi concrete and / or equal anchors may be used. The number shown is the total use 1/2 per side.
- 5. Hollow splice connections can be made provided the connection is approved by the engineer.
- 6. If a larger than minimum upright is used the number of screws is the same for each splice with 1/2 the screws on each side of the cut.
- 7. The side wall upright shall have a minimum beam size as shown above, ie., a 2" x 4" upright shall have a 2" x 3" beam.
- 8. For minimum girt size read upright size as a beam and purlin size is minimum girt size. (i.e. $2" \times 9" \times 0.072" \times 0.224"$ s.m.b. w/ $2" \times 6" \times 0.050 \times 0.120"$ s.m.b. upright requires a $2" \times 3" \times 0.045"$ girt / chair rail.)

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^{** (1)} Stitching screw at 16" O.C. max.

