

DATE 03/24/2011

Columbia County Building Permit
This Permit Must Be Prominently Posted on Premises During Construction**PERMIT**
000029270

APPLICANT ROB SIMPSON PHONE 407.277.1028
ADDRESS 4881 DISTRIBUTION CT. ORLANDO FL 32822
OWNER BARBARA SWEENEY PHONE 352.318.1530
ADDRESS 918 SW CR 778 FT. WHITE FL 32038
CONTRACTOR DAVID DAVIS PHONE 407.277.1028
LOCATION OF PROPERTY 441-S TO C-778, TR JUST BEFORE STERLING TERR ON L. CORNER
OF STERLING & C-778.
TYPE DEVELOPMENT POOL ENLOSURE ESTIMATED COST OF CONSTRUCTION 4001.00
HEATED FLOOR AREA TOTAL AREA HEIGHT STORIES
FOUNDATION WALLS ROOF PITCH FLOOR
LAND USE & ZONING A-3 MAX. HEIGHT
Minimum Set Back Requirements: STREET-FRONT 30.00 REAR 25.00 SIDE 25.00
NO. EX.D.U. 1 FLOOD ZONE X DEVELOPMENT PERMIT NO.
PARCEL ID 16-7S-17-10006-102 SUBDIVISION SUMMER ACRES
LOT 2 BLOCK PHASE UNIT TOTAL ACRES 10.54
 SCC1311501
Culvert Permit No. Culvert Waiver Contractor's License Number Applicant/Owner/Contractor JLW
EXISTING BLK Approved for Issuance New Resident
Driveway Connection Septic Tank Number LU & Zoning checked by
COMMENTS: ACCESSORY USE. NOC ON FILE.

Check # or Cash 2178**FOR BUILDING & ZONING DEPARTMENT ONLY**

(footer/Slab)

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

BUILDING PERMIT FEE \$ 25.00 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 75.00
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 RECEIVES AN APPROVED INSPECTION EVERY 180 DAYS. WORK SHALL BE CONSIDERED NOT SUSPENDED, ABANDONED OR INVALID WHEN THE PERMIT HAS RECEIVED AN APPROVED INSPECTION WITHIN 180 DAYS OF THE PREVIOUS INSPECTION.

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

370 28547-

Columbia County Building Permit Application

For Office Use Only Application # 1103-03 Date Received 3-2-11 By LH Permit # 29276
Zoning Official BLK Date 10.03.11 Flood Zone X Land Use A-3 Zoning A-3
FEMA Map # NA Elevation N/A MFE N/A River N/A Plans Examiner T.C. Date 3-9-11
Comments _____
☒ NOC ☒ DEH ☒ Deed or PA ☒ Site Plan ☐ State Road Info ☐ Parent Parcel # _____
☐ Dev Permit # _____ ☐ In Floodway ☒ Letter of Auth. from Contractor ☐ F W Comp. letter
IMPACT FEES: EMS _____ Fire _____ Corr _____ Road/Code _____
School _____ = TOTAL Accessary Structure

Septic Permit No. N/A Fax _____
Name Authorized Person Signing Permit Rob Simpson Phone 407.277.1028
Address 4881 Distribution Ct, Orlando, FL 32822
Owners Name Barbara Sweeney Phone 352-318-1530
911 Address 918 SW County Rd 778 Fort White FL 32038
Contractors Name Custom Screens - David David Phone 407.277.1028
Address 4881 Distribution Ct. Orl. 32822

Fee Simple Owner Name & Address _____
Bonding Co. Name & Address _____
Architect/Engineer Name & Address Davis & Cleaton 601 N. Orlando Ave
Mortgage Lenders Name & Address MHD 327

Circle the correct power company - FL Power & Light - Clay Elec. - Suwannee Valley Elec. - Progress Energy
Property ID Number 16-75-17-10006-102 Estimated Cost of Construction 3200 @ 4001
Subdivision Name Summer Acres Lot 2 Block _____ Unit _____ Phase _____
Driving Directions 441 South @ 778, just before Sterling
Continue Left (corner of Sterling and 778)
Number of Existing Dwellings on Property 1

Construction of pool enclosure (34' x 21') 700# Total Acreage 10.54 Lot Size _____
Do you need a - Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height _____
Actual Distance of Structure from Property Lines - Front _____ Side See site plans + copy of old permit applies Side _____ Rear _____
Number of Stories _____ Heated Floor Area _____ Total 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. CODE: Florida Building Code 2007 with 2009 Supplements and the 2008 National Electrical Code. Page 1 of 2 (Both Pages must be submitted together.) Revised 6-19-09

JW spoke w/ Rob on 3.10.11

Columbia County Building Permit Application

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

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

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

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

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

OWNERS CERTIFICATION: I CERTIFY THAT ALL THE FOREGOING INFORMATION IS ACCURATE AND THAT ALL WORK WILL BE DONE IN COMPLIANCE WITH ALL APPLICABLE LAWS REGULATING CONSTRUCTION AND ZONING.

NOTICE TO OWNER: There are some properties that may have deed restrictions recorded upon them. These restrictions may limit or prohibit the work applied for in your building permit. It may be to your advantage to check and see if your property is encumbered by any restrictions.

(Owners Must Sign All Applications Before Permit Issuance.)

X Barbara J. Sweeney

Owners Signature

****OWNER BUILDERS MUST PERSONALLY APPEAR AND SIGN THE BUILDING PERMIT.**

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

[Signature]

Contractor's Signature (Permitee)

Contractor's License Number

Columbia County

Competency Card Number

SCC131150241

148

Affirmed under penalty of perjury to by the Contractor and subscribed before me this 13 day of Dec. 2010.

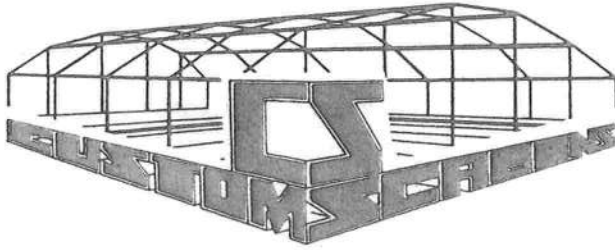
Personally known X or Produced Identification _____

Lani Rae Minson

SEAL:

State of Florida Notary Signature (For the Contractor)





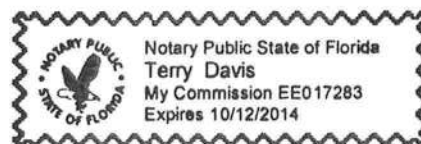
4881 Distribution Court • Orlando, Florida 32822

(407) 277-1028 • FAX (407) 277-1674

Columbia County, Florida
12/13, 2010

I, David Davis, give power of attorney to
Rob Simpson for the purpose of
Obtaining a building permit to construct a pool enclosure on
Lot 2 in Summer Acres subdivision.
Address: 918 SW CR 778

The foregoing instrument was acknowledged before me this
13 day of Dec., 2010 by David Davis.



Davis & Cleaton Engineering, Inc.

601 North Orlando Avenue
Suite #112
Maitland, FL 32751
(407)539-2353
FAX (407)539-2334

103 West Wisconsin Avenue
Suite #104
DeLand, FL 32720
(386)738-7475
FAX (386)738-7781

September 17, 2010

To Whom It May Concern:

This letter is to serve as authorization for the following contractor to use my sealed engineering set of design criteria and details for the design of aluminum structures.

Custom Screens
4881 Distribution Ct.
Orlando, FL 32822
Phone: 407-277-1028
Fax: 407-277-1674
Contractor Name: David Davis
License Number: SCC131150241

Please note that I require only one signed and sealed letter per job and that I furnish the contractor with two complete sets of signed and sealed engineering. Please be advised that any additional signed and sealed copies are treated by me as separate jobs and therefore add cost to the contractor.

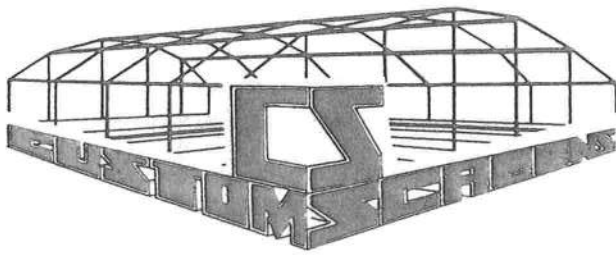
In accordance with Florida Statute 489.113(9), this sealed engineering set is intended to be used as a reference in conjunction with the contractor's own site-specific design drawing. The contractor's drawing is not required to be sealed by me as the engineer of record as per FS 489.113(9). It is only required to be in compliance with what is set forth in my sealed design set.

If there are any questions, please contact us.

Sincerely,


Frank A. Cleaton, Jr., P.E.
FL P.E. License # 35816





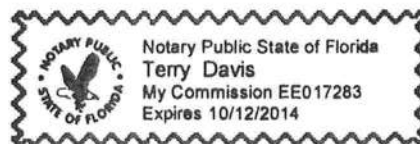
4881 Distribution Court • Orlando, Florida 32822

(407) 277-1028 • FAX (407) 277-1674

Columbia Co., Florida
3/23, 2011

I, David Davis, give power of attorney to
Heb Simpson for the purpose of
Obtaining a building permit to construct a pool enclosure on
Lot 2 in Summer Acres subdivision.
Address: 918 SW CR 778

The foregoing instrument was acknowledged before me this
23 day of March, 2011 by David Davis.



Columbia County Property Appraiser

DB Last Updated: 2/17/2011

2010 Tax Year

Parcel: 16-7S-17-10006-102

<< Next Lower Parcel Next Higher Parcel >>

Tax Collector

Tax Estimator

Property Card

Parcel List Generator

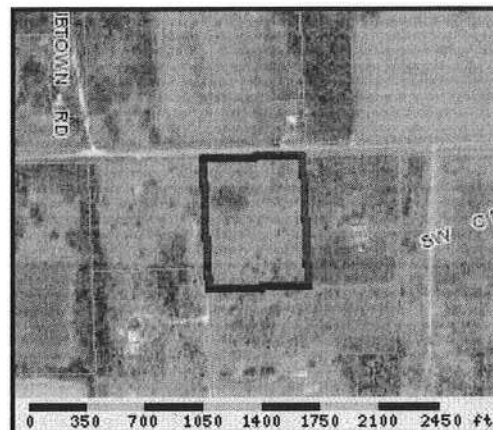
Interactive GIS Map

Print

Search Result: 1 of 1

Owner & Property Info

Owner's Name	SWEENEY KENNETH C & BARBARA J		
Mailing Address	16975 HWY 278 WILLISTON, SC 29853		
Site Address	918 SW COUNTY ROAD 778		
Use Desc. (code)	VACANT (000000)		
Tax District	3 (County)	Neighborhood	16717
Land Area	10.540 ACRES	Market Area	02
Description	NOTE: This description is not to be used as the Legal Description for this parcel in any legal transaction.		
AKA LOT 2 SUMMER'S ACRES UNR: COMM NW COR, RUN S 80.15 FT TO S R/W CR-778, RUN E ALONG R/W 698.08 FT FOR POB, CONT E 587.02 FT, S 782.02 FT, W 587.02 FT, N 782.02 FT TO POB. ORB 983-2580 & WD 1197-2087			



Property & Assessment Values

2010 Certified Values		
Mkt Land Value	cnt: (0)	\$51,388.00
Ag Land Value	cnt: (1)	\$0.00
Building Value	cnt: (0)	\$0.00
XFOB Value	cnt: (0)	\$0.00
Total Appraised Value		\$51,388.00
Just Value		\$51,388.00
Class Value		\$0.00
Assessed Value		\$51,388.00
Exempt Value		\$0.00
Total Taxable Value	Cnty: \$51,388 Other: \$51,388 Schl: \$51,388	

2011 Working Values

NOTE:
2011 Working Values are NOT certified values and therefore are subject to change before being finalized for ad valorem assessment purposes.

Show Working Values

Sales History

Show Similar Sales within 1/2 mile

Sale Date	OR Book/Page	OR Code	Vacant / Improved	Qualified Sale	Sale RCode	Sale Price
7/13/2010	1197/2087	WD	V	Q	01	\$130,000.00
5/21/2003	983/2580	WD	V	Q		\$48,000.00

Building Characteristics

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

Extra Features & Out Buildings

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

Land Breakdown

Lnd Code	Desc	Units	Adjustments	Eff Rate	Lnd Value

NOTICE OF COMMENCEMENT

Tax Parcel Identification Number 16-75-17-10006-102

County Clerk's Office Stamp or Seal

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 2 Summer Acres
a) Street (job) Address: 918 SW County Rd 778 High Springs
2. General description of improvements: _____
3. Owner Information
a) Name and address: Kenneth Sweeney 918 SW County Rd 778, High Springs 32669
b) Name and address of fee simple titleholder (if other than owner) _____
c) Interest in property: OWNER
4. Contractor Information
a) Name and address: Custom Screens 4881 Distribution Ct. Orlando, FL 32822
b) Telephone No.: _____ Fax No. (Opt.) _____
5. Surety Information
a) Name and address: _____
b) Amount of Bond: _____
c) Telephone No.: _____
6. Lender
a) Name and address: _____
b) Phone No.: _____
7. Identity of person within the State of Florida designated by owner upon whom notices or other documents may be served:
a) Name and address: _____
b) Telephone No.: _____ Fax No. (Opt.) _____
8. In addition to himself, owner designates the following person to receive a copy of the Lienor's Notice as provided in Section 713.13(1)(b).
Florida Statutes:
a) Name and address: _____
b) Telephone No.: _____ Fax No. (Opt.) _____
9. Expiration date of Notice of Commencement (the expiration date is one year from the date of recording unless a different date is specified): _____

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

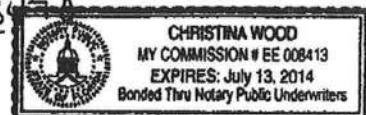
STATE OF FLORIDA
COUNTY OF COLUMBIA

10. Kenneth C Sweeney
Signature of Owner or Owner's Authorized Officer/Director/Partner/Manager
KENNETH C SWEENEY
Print Name

The foregoing instrument was acknowledged before me, a Florida Notary, this 23rd day of November, 2010, by:
Kenneth Sweeney as owner (type of authority, e.g. officer, trustee, attorney
fact) for Kenneth Charles Sweeney (name of party on behalf of whom instrument was executed).

Personally Known _____ OR Produced Identification ☒ Type DL #S500503533

Notary Signature Christina Wood 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.

Kenneth C Sweeney
Signature of Natural Person Signing (in line #10 above.)

Columbia County Building Permit Application ck# - 3358

For Office Use Only		Application # <u>1010-15</u>	Date Received <u>10/7/10</u>	By <u>LH</u>	Permit # <u>28997/1852</u>
Zoning Official <u>BLK</u>	Date <u>10.10.10</u>	Flood Zone <u>X</u>	Land Use <u>A-3</u>	Zoning <u>A-3</u>	
FEMA Map # <u>N/A</u>	Elevation <u>N/A</u>	MFE <u>1/100</u>	River <u>N/A</u>	Plans Examiner <u>T.C.</u>	Date <u>10-15-10</u>
Comments					
<input checked="" type="checkbox"/> NOC <input checked="" type="checkbox"/> EH <input checked="" type="checkbox"/> Deed or PA <input checked="" type="checkbox"/> Site Plan <input checked="" type="checkbox"/> State Road Info <input type="checkbox"/> Parent Parcel #					
<input type="checkbox"/> Dev Permit # _____ <input type="checkbox"/> In Floodway <input type="checkbox"/> Letter of Auth. from Contractor <input type="checkbox"/> F W Comp. letter					
IMPACT FEES: EMS _____ Fire _____ Corr _____ Road/Code _____ School _____ = TOTAL <u>N/A Suspended</u> - <input checked="" type="checkbox"/> VF.					

Septic Permit No. 10-438 Fax (386) 454-4971 call for

Name Authorized Person Signing Permit Kara Sutton Phone (352) 318-9864

Address PO Box 1198 Newberry, FL 32669

Owners Name Kenneth and Barbara Sweeney Phone (352) 316-3463

911 Address 918 SW CR 778 High Springs, FL 32643

Contractors Name KARA SUTTON Sutton Family Homes and Management Consulting, Inc. Phone (352) 318-9864

Address PO Box 1198 Newberry, FL 32669

Fee Simple Owner Name & Address Same as above

Bonding Co. Name & Address None

Architect/Engineer Name & Address Juris Luzins (352) 224-8673

Mortgage Lenders Name & Address None

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

Property ID Number 110-75-17-10006-102 Estimated Cost of Construction \$511,000

Subdivision Name Summers Acres Lot 2 Block _____ Unit _____ Phase _____

Driving Directions 441 South, (R) 778, property is on the Left 2nd lot past SW Marynuk Drive (or) 2nd lot back from Scrubtown Rd

Number of Existing Dwellings on Property 0

Construction of Single Family Dwellings Total Acreage 10.5 Lot Size 10.5 Acre

Do you need a Culvert Permit or Culvert Waiver or Have an Existing Drive Total Building Height 24'-6"

Actual Distance of Structure from Property Lines - Front 230' Side 185' Side 235' Rear 470'

Number of Stories 1 Heated Floor Area 3244 Total Floor Area 5152 Roof Pitch 7/12

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. **CODE:** Florida Building Code 2007 with 2009 Supplements and the 2008 National Electrical Code.

1 441.52

Tw left message for Kara 10.29.10

COLUMBIA COUNTY
FLORIDA

COMPLETION

COLUMBIA COUNTY, FLORIDA

Department of Building and Zoning Inspection

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

Parcel Number 16-7S-17-10006-102

Building permit No. 000029270

Permit Holder DAVID DAVIS

Owner of Building BARBARA SWEENEY

Location: 918 SW CR 778, FT WHITE, FL 32038

Date: 03/29/2011



Greg C...

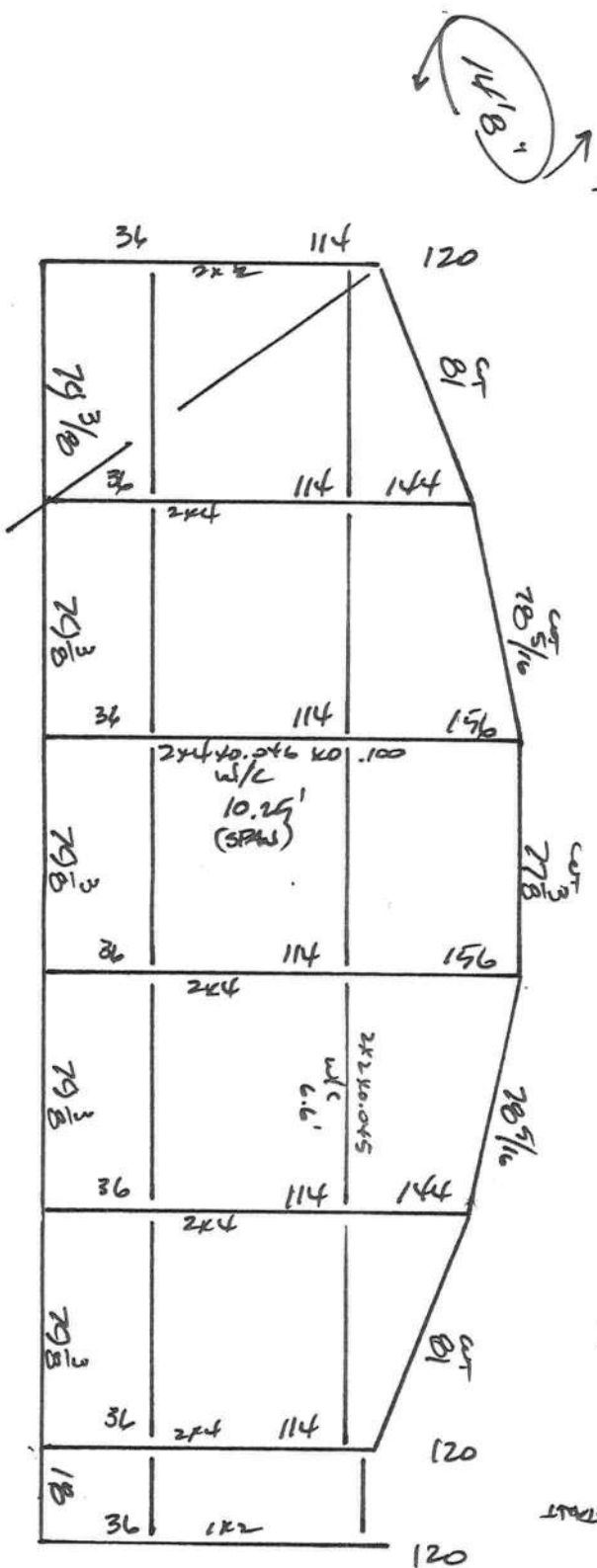
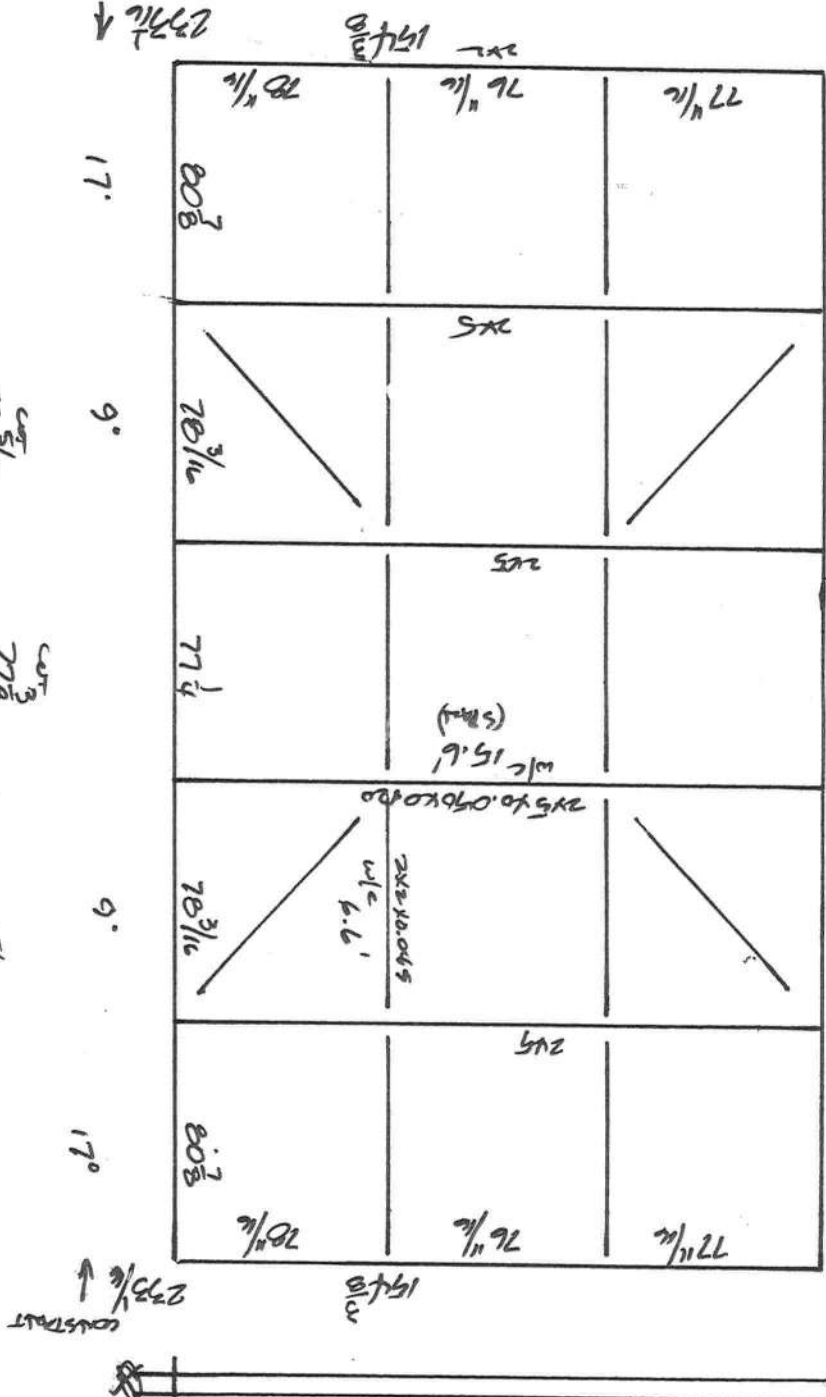
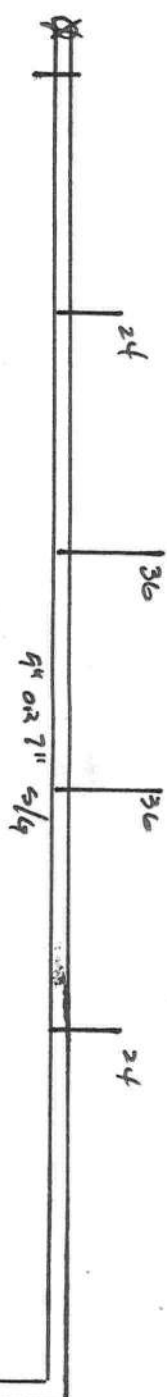
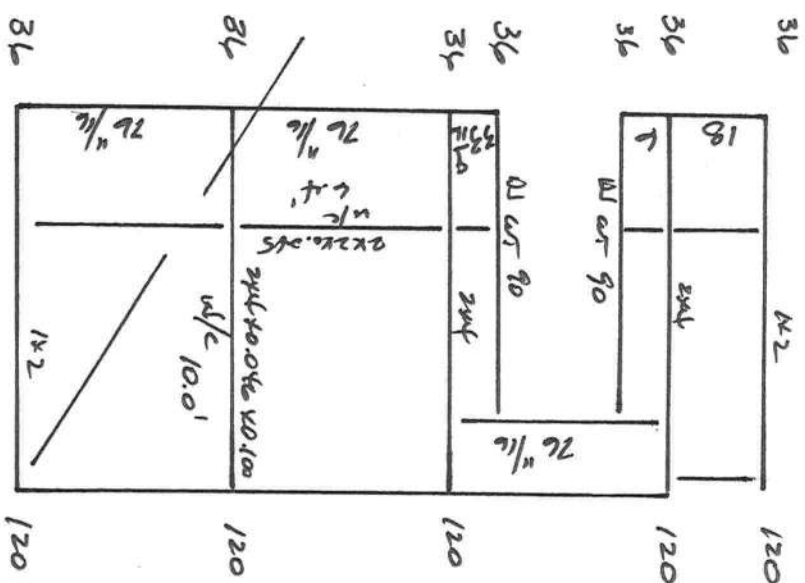
Building Inspector

POST IN A CONSPICUOUS PLACE
(Business Places Only)

20 20
20 37
2x3 A.F. A.U.D.E. c/c = 1.16'

4 @ 2 1/2 243 LGT. & DE LGT. VALUE = 2.5'

2 @ 14' 8"



918 914 CR 778
High Spruce
"Summer Trees"

THE N.W. CORNER OF
SECTION 16,
TOWNSHIP 1 SOUTH,
RANGE 17 EAST,
COLUMBIA COUNTY,
FLORIDA

PARCELS 13
P.O.B. EASEMENT
P.O.C.

COUNTY ROAD NO. 718
(80' RIGHT OF WAY)

N 89°55'25" E 587.02'

THE S. RIGHT OF WAY LINE

SET REBAR
30' E.

FENCE IS
0.8' S.

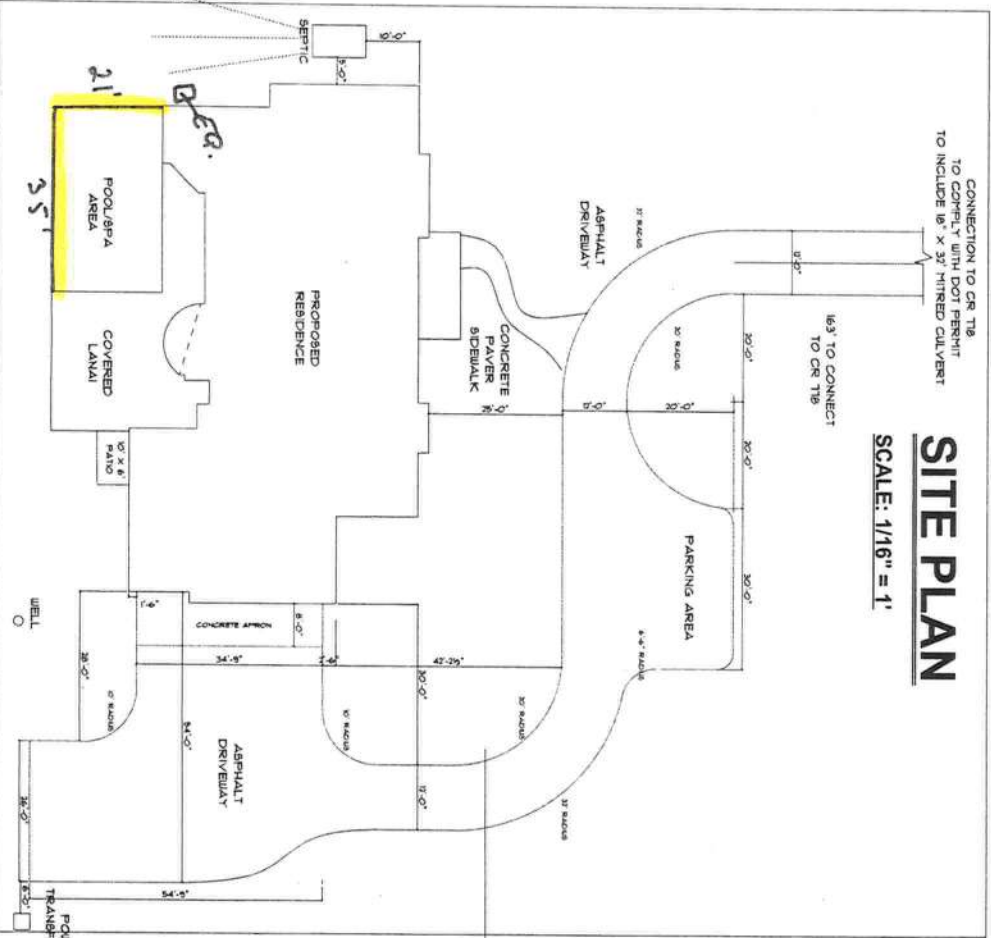
S 00°15'48" E
80.15'

N 89°55'25" E
698.08'

PARCEL 13

SITE PLAN

SCALE: 1/16" = 1'



60' INGRESS, EGRESS & PUBLIC UTILITIES EASEMENT
S.W. STERLING TERRACE
182.02'

PARCEL 12

PARCEL 2
10.54 AC. +/-

S 89°55'25" W 587.02'

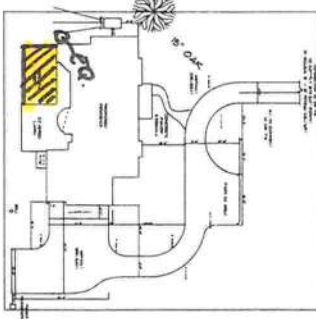
SET REBAR
30' E.

PARCEL 3

SITE PLAN

SCALE: 1" = 50'

PARCEL 1



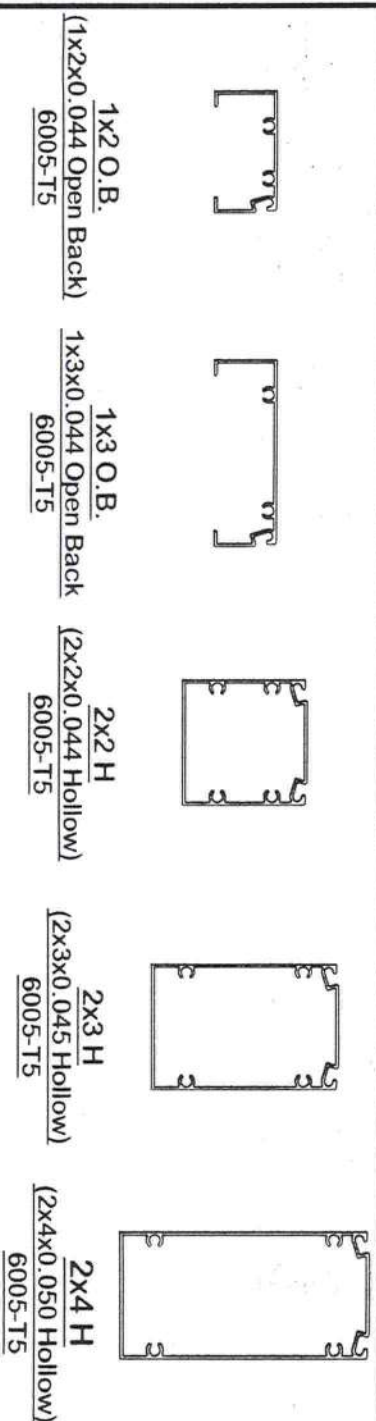
CUSTOMER: KEN AND BARBARA SWEENEY		SUBDIVISION: SUMMER'S ACRES				
CONTRACTOR: SUTTON FAMILY HOMES & MANAGEMENT CONSULTING, INC.		LOT: LOT 2				
6 SHEET NO.	PLAN NAME: KEN & BARBARIE'S DREAM HOUSE	AREA SUMMARY	ALL WORK SHALL COMPLY WITH APPLICABLE LOCAL CODES. THESE PLANS AND NOTES ARE THE PROPERTY AND SOLE RESPONSIBILITY OF SUTTON FAMILY HOMES AND MANAGEMENT CONSULTING, INC. USE OF THESE PLANS WITHOUT THE WRITTEN CONSENT OF SUTTON FAMILY HOMES AND MANAGEMENT CONSULTING, INC. IS PROHIBITED. THESE PLANS ARE SUBJECT TO MODIFICATION AS NECESSARY TO MEET CODE REQUIREMENTS OR TO FACILITATE MECHANICAL INSTALLATIONS OR TO INCORPORATE DESIGN IMPROVEMENTS. THE BUILDER RESERVES THE RIGHT TO MAKE ANY CHANGES FOR ANY REASON, AT ANY TIME, PROVIDED THEY COMPLY WITH THE CODE.	REVISION DATE:	DESIGNED BY:	PAGE CONTENT:
	GARAGE POSITION: GARAGE RIGHT	MAIN LIVING: 3244 SF	USE OF THESE PLANS WITHOUT THE WRITTEN CONSENT OF SUTTON FAMILY HOMES AND MANAGEMENT CONSULTING, INC. IS PROHIBITED. THESE PLANS ARE SUBJECT TO MODIFICATION AS NECESSARY TO MEET CODE REQUIREMENTS OR TO FACILITATE MECHANICAL INSTALLATIONS OR TO INCORPORATE DESIGN IMPROVEMENTS. THE BUILDER RESERVES THE RIGHT TO MAKE ANY CHANGES FOR ANY REASON, AT ANY TIME, PROVIDED THEY COMPLY WITH THE CODE.	08/06/2010	SUTTON FAMILY HOMES AND MANAGEMENT CONSULTING, INC. PO BOX 1198 NEWBERRY, FL 32669 PH (352) 318-9964 FAX (352) 472-9986	SITE PLAN
	SCALE: 1/4" = 1'-0"	GARAGE/MECH: 948 SF	ENTRY: 160 SF	08/13/2010		
	UNLESS OTHERWISE NOTED	LANAI: 800 SF	TOTAL: 5152 SF	08/21/2010		
				09/16/2010		
				09/29/2010-FINAL		

General Notes & Design Statement

- 1) This structure has been designed in accordance with the requirements of the 2007 FBC - Residential, Chapter 3, Section R301.2.1, with the 2009 supplements. Wind loading requirements were met in accordance with 2007 FBC-Building, Chapter 20 (Light Metal Alloys) - Table 2002.4 (DESIGN PRESSURES FOR ALUMINUM SCREEN ENCLOSURES).
- a. 1=0.77 for 110 MPH or higher 1=0.87 for 100 MPH
- b. Building Category = 1 (in accordance with 2007 FBC-Building Chapter 16 table 1604.5).
- c. Applicable Internal Pressure Coefficient: ± 0.00
- d. Design Pressure for Exterior Components & Cladding: $+14$ PSF
- e. Wind Speed is based on a 3 second gust wind speed. Wind speed and category are defined in the title block.
- 2) This structure is designed to be attached to block and wood frame structures of adequate structural capacity. The contractor shall verify that the host structure and foundation to which the aluminum structure attaches to is in good condition and meets all requirements of sufficient strength as set forth by the engineer of record. If there is a question of structural capacity then the owner, at his own expense, shall hire an architect or engineer to verify the structural capacity of the host structure.
- 3) The screen enclosures designed with this set of engineering connection details are not required to be sealed by an engineer in accordance with F.S. 489.113(9), provided they meet the following requirements: (1) Pool enclosures shall not exceed 16' in average height or a combined height and span of 50'. (2) Solid roofs (composite roofs or aluminum pan roofs) shall not exceed 16' in span. Structures that exceed the aforementioned requirements are to be signed and sealed by Frank Cleaton, JR, P.E.
- 4) The user of this generic engineering package is required to have **only one** signed and sealed letter of authorization from Frank Cleaton, JR, P.E. per job, allowing for the usage of this set of engineering. Copies of said letter can be made, provided they are used in conjunction with an individual signed and sealed letter.
- 5) Where super gutter is specified, the two available sizes of 5 in. and 7 in. can be used interchangeably, unless otherwise noted.
- 6) Screen wall and screen roofs are based on a 60% screen mesh density with a maximum density weave of 20x20 threads per square inch.
- 7) Actual wall thickness of members shall not be less than 0.040 in. Alloy of members is given in the "Member Definition List."
- 8) Concrete shall be a minimum 28 day compressive strength of 2500 PSI, and be in accordance with the requirements of ACI 318. Reinforcing steel shall have a minimum yield strength of 40,000 PSI (grade 40) and be provided with cover in accordance with ACI 318. If existing concrete slab/footing are deemed adequate, it may be incorporated into a new slab/footing by observing the following procedure:
- a. Clean and scabble all connecting edges
- b. Drill and epoxy embed #3 (MIN) reinforcing bar placed @ 24" O.C. mid depth. The rebar should be embedded a minimum of 4" (using Rawl R-KEA Epoxy Acrylate Resin System or approved equal), leaving 8" exposed to be incorporated into the new slab/footing.
- 9) Doors and their locations are incidental to the structural integrity of the design.
- 10) Knee Brace lengths are given by their horizontal and vertical displacements and not the actual cut length.
- 11) Screen Frame wall with guardrail are designed as follows:
- a. 20 lbs/LF in any direction at the top of the rail and will transfer loads to the supports of the structure.
- b. 200 lbs concentrated load at any point in any direction along the top
- c. A 1.33 stress increase is allowed per 1607.7.1.3 for working stress (allowable stress) design.
- 12) Screen mesh continuity along frame members is incidental to the structural integrity of the design, therefore each panel is not required to be fastened in place independent of other panels around it.
- 13) When using Self-Drilling TEK screws in lieu of S.M.S., longer screws must be used to compensate for drill head so that the required embedment length of threaded parts of the screw are in positive contact with the host or connected material. TEK screws and S.M.S. are used interchangeably. Aluminum Surfaces in contact with lime-mortar, concrete, or other masonry materials, shall be protected with alkali-resistant coatings such as heavy-bodied bituminous paint or water-white methacrylate laquer.
- 14) Unless otherwise noted, concrete anchors shall be placed no less than 2-1/2" from the edge of slab/footing or 5x the embedment of the fastener.
- 15) Any notes or design specifications inside the engineering details can be superseded by a site-specific design sealed by the Frank Cleaton, JR, P.E.
- 16) Minimum edge distance and center-to-center distances for fasteners are as follows:

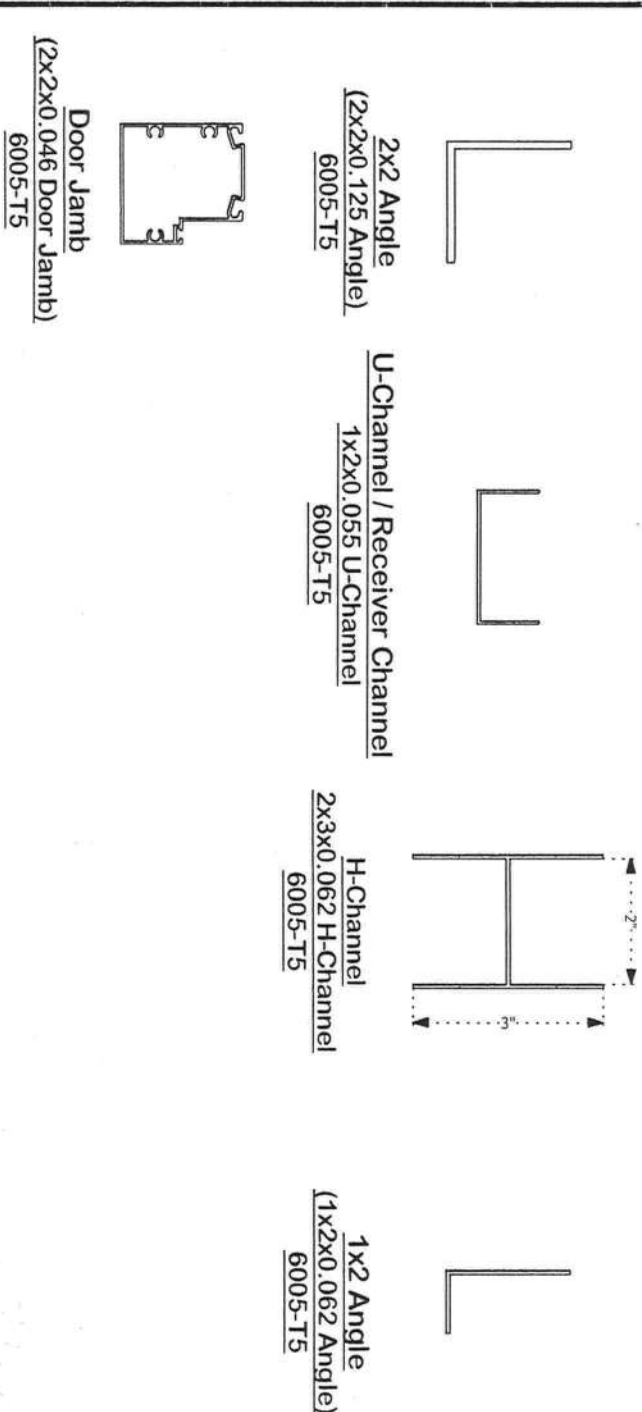
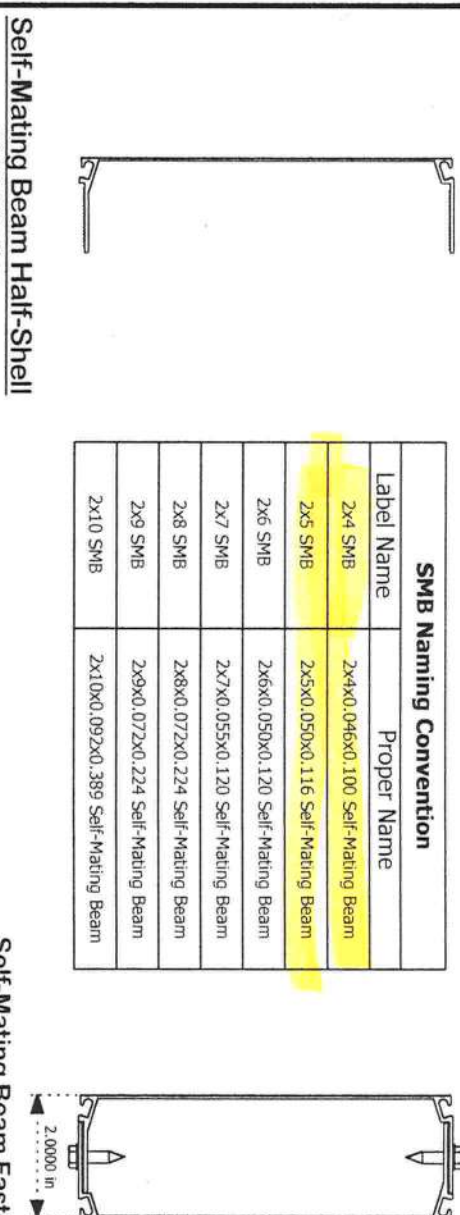
C-1022 Low Carbon Steel S.M.S. & Self-drilling (TEK) screws

Fastener	Nominal Diameter	Minimum Edge Distance	Minimum Center to Center Distance
#10	0.188	5/16"	1/2"
#12	0.219	3/8"	5/8"
#14	0.25	1/2"	7/8"



Fastener stitching along top and bottom at 24" O.C.
Size of SMS determined by depth of beam.
2x4 SMB - 2x7 SMB uses #10-0 x 0.75 S.M.S.
2x8 SMB - 2x10 SMB uses #14-0 x 0.75 S.M.S.

SMB Naming Convention	Proper Name
2x4 SMB	2x4x0.046x0.100 Self-Mating Beam
2x5 SMB	2x5x0.050x0.116 Self-Mating Beam
2x6 SMB	2x6x0.050x0.120 Self-Mating Beam
2x7 SMB	2x7x0.055x0.120 Self-Mating Beam
2x8 SMB	2x8x0.072x0.224 Self-Mating Beam
2x9 SMB	2x9x0.072x0.224 Self-Mating Beam
2x10 SMB	2x10x0.092x0.389 Self-Mating Beam



DAVIS & CLEATON ENGINEERING, INC.

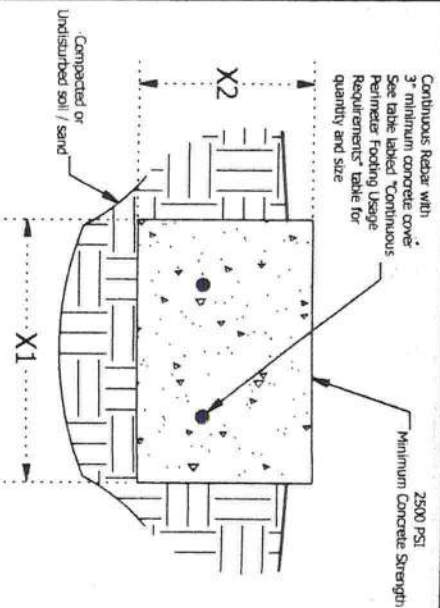
Civil
601 North Orlando Ave.
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2334

Sheet: D1

Wind Zone: 130 MPH Exposure: B

Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.

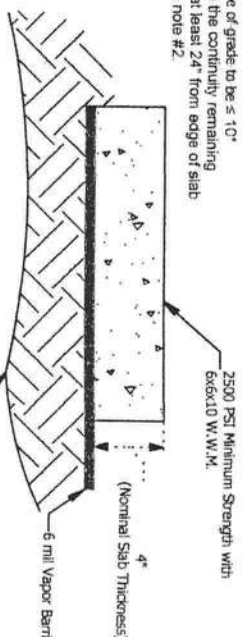
FRANK CLEATON, JR, P.E.
ENGINEER - FL LIC. 35816



Continuous Perimeter Footing

Continuous Perimeter Footing Usage Requirements					
Footprint Size	Rebar Size & Qty	100-130 MPH Exposure B	100-130 MPH Exposure C	100-130 MPH Exposure D	100-130 MPH Exposure E
4' x 4'	#3 2	15.2'	12.1'	12.1'	10.4'
6' x 6'	#3 2	23.0'	16.0'	16.2'	14.6'
8' x 8'	#3 2	30.0'	17.2'	17.2'	16.0'
10' x 10'	#3 2	36.0'	18.0'	18.0'	16.0'
12' x 12'	#3 2	41.2'	18.0'	18.0'	16.0'
14' x 14'	#3 2	44.2'	18.0'	18.0'	16.0'
16' x 16'	#3 2	44.2'	18.0'	18.0'	16.0'
18' x 18'	#3 2	44.2'	18.0'	18.0'	16.0'
20' x 20'	#3 2	44.2'	18.0'	18.0'	16.0'

Continuous Perimeter Footing Notes:
 1) "X1" and "X2" dimensions may be switched to accommodate for field conditions.
 2) If the span capabilities and the upright height capabilities are in conflict, the larger footing is to be used.
 3) Reinforcement bars to be grade 60 steel.
 4) Footing size is determined by using the average beam span or upright height of the adjoining roof or wall respectively.
 5) For side walls (non-bearing walls), use the width of the adjoining purlin for the "Max Beam Span" (which would typically be no more than 8' wide).



Typical Mono-Slab Foundation

Mono-Slab Turndown Footing Notes			
1) "X1" and "X2" dimensions may be switched to accommodate for field conditions.			
2) Slope of grade to be < 10° with the continuity remaining for at least 24" from edge of slab. Under these conditions the slab may be 4" above grade. If the grade is greater than 10° then a minimum 12" x 12" footing with (2) #5 rebars is to be used with a minimum 12" below grade.			
3) Row number 1 in the "Mono-Slab with Turndown Footing Requirements" table represents a monolithic slab with no turndown footing.			
4) If the span capabilities and the upright height capabilities are in conflict, the larger footing is to be used.			
5) Reinforcement bars to be grade 60 steel.			
6) Footing size is determined by using the average beam span or upright height of the adjoining roof or wall respectively.			
7) To determine "span" of side walls (non-bearing walls), use the width of the adjoining purlin for the "Max Beam Span" (which would typically be no more than 8' wide).			

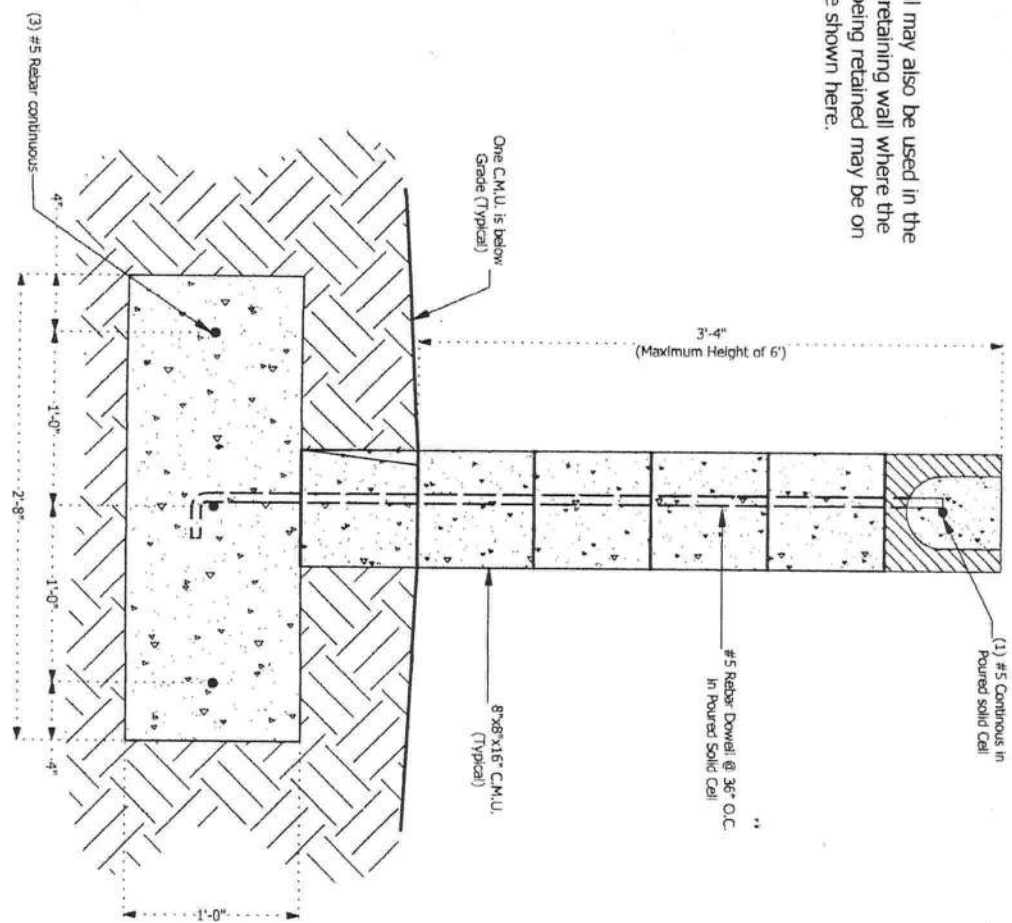
Typical 4" Mono-Slab			
Tributary Load Width of Columns	Max. Projection	Max. Upright Height	Max. Upright Height
4'	18.35'	16.0'	16.0'
5'	14.67'	12.23'	10.49'
6'	12.23'	10.49'	9.18'
7'	10.49'	9.18'	
8'	9.18'		

* 12'-0" Max. Upright Height

Mono Slab with Turndown Footing Requirements			
Turndown Size	Rebar Size & Qty	Tributary Load Width of Columns	Max. Projection
1x	#4	4'	41.05'
2x	#5	5'	36.72'
3x	#5	6'	33.52'
4x	#5	7'	31.03'
5x	#5	8'	29.03'

Mono Slab with Turndown Footing Requirements			
Turndown Size	Rebar Size & Qty	Tributary Load Width of Columns	Max. Projection
1x	#4	4'	41.05'
2x	#5	5'	36.72'
3x	#5	6'	33.52'
4x	#5	7'	31.03'
5x	#5	8'	29.03'

Note:
 This detail may also be used in the case of a retaining wall where the material being retained may be on either side shown here.



Knee Wall / Retaining Wall Section

SCALE: 1" = 1'-0"

If this box is circled then the foundation for the screen enclosure or screen room is pre-existing and has been verified by the contractor that it meets structural requirements and is in good condition. See Note #2 in Design Statement.

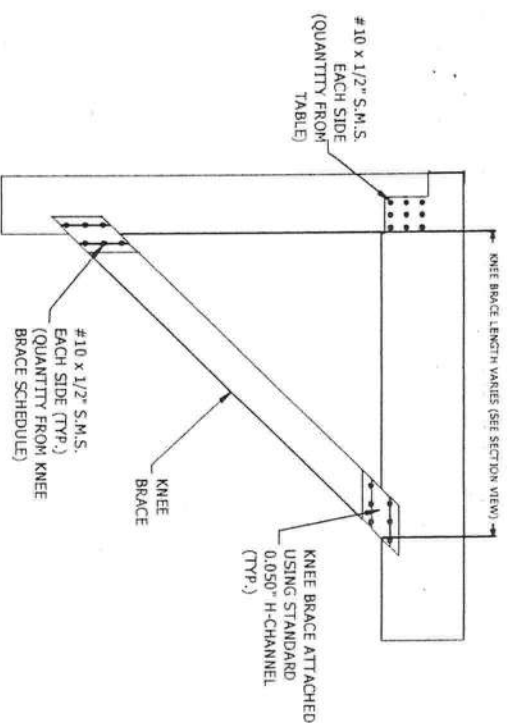
Existing Foundation

DAVIS & CLEATON ENGINEERING, INC.

601 North Orlando Ave
 Maitland, FL 32751
 PHONE: (407) 539-2353
 FAX: (407) 407-539-2334

DATE: 11/25/11

FRANK CLEATON, JR., P.E.
 BRIDGE - FL, UT, 35016



BEAM TO COLUMN

Knee Brace Schedule

Size	Length	Qty Per Flange
2x2x0.044	Up to 2'	2
2x3x0.050	2' to 4'	3
2x4x0.050	4' to 6'	4
2x4x 0.048; 0.100 SMB	6' to 7'	4
2x6x 0.050; 0.120 SMB	7' to 8'	6

Number of #10 S.M.S. Required

Beam Size	2x4	2x5	2x6	2x7	2x8	2x9	2x10
2x4	2	4	6	6	8	10	12
2x5	3	6	9	9	12	15	18
2x6	4	8	12	12	16	20	24
2x7	4	8	12	12	16	20	24
2x8	5	10	15	15	20	25	30
2x9	6	12	18	18	24	30	36
2x10	7	14	21	21	28	35	42

Number of #14 S.M.S. Required

Beam Size	2x4	2x5	2x6	2x7	2x8	2x9	2x10
2x4	N/A	2	2	3	4	5	6
2x5	2	2	4	4	6	6	8
2x6	2	4	6	8	10	12	14
2x7	3	4	8	8	10	12	14
2x8	4	6	10	10	12	14	16
2x9	5	6	12	12	14	16	18
2x10	6	8	14	14	16	18	20

#10 x 1-1/2" S.M.S. FASTENED EVERY 24" O.C. TO CONNECT 1x2 O.B. TO EAVE RAIL

RAIL

1x2 O.B.

PURLIN

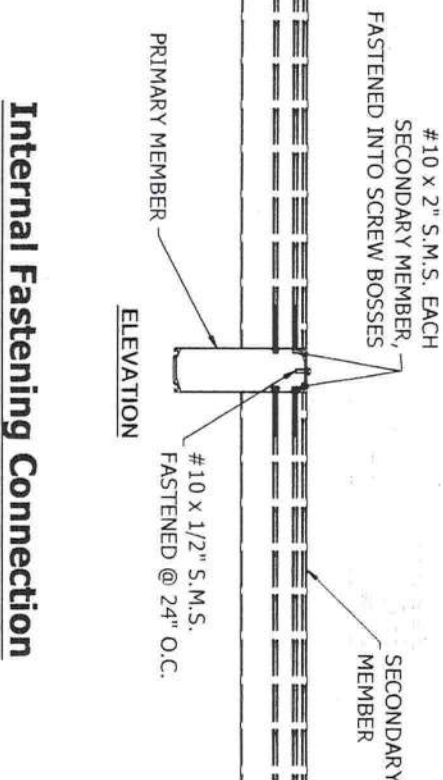
EAVE

2x6x0.075

GUSSET PLATE

#10 x 1/2" S.M.S. FASTENED INTO PURLIN AND BEAM (QUANTITY AS SHOWN) (TYP.)

COLUMN



Internal Fastening Connection

PURLIN TO COLUMN

BEAM SCHEDULE

Tributary Width	4'	5'	6'	7'	8'
2x4 SMB	20.4	18.9	17.3	16.0	14.9
2x5 SMB	27.3	24.4	22.3	20.6	19.3
2x6 SMB	31.8	28.9	26.4	24.4	22.6
2x7 SMB	36.2	33.3	30.4	28.1	26.3
2x8 SMB	47.1	43.7	41.2	38.1	37.3
2x9 SMB	55.9	51.9	48.8	46.4	44.4
2x10 SMB	66.0	59.9	56.4	53.5	51.2
2x5 TTB	28.5	26.0	23.7	22.0	20.5
2x7 TTB	36.5	35.7	33.4	30.9	28.9
2x9 TTB	51.1	47.5	44.7	42.4	40.6

1) Spans may be interpolated but not extrapolated
2) For anything smaller than a 2x4 (i.e. a 2x2 or 2x3) use the purlin table to determine spans.

Purlin Schedule (up to 130 MPH / Exposure B)

Tributary Width (ft)	4	4.5	5	5.5	6	6.5	7	7.5	8
2x2x0.044	8.0	8.0	8.0	8.0	8.0	8.0	7.9	7.7	7.5
2x3x0.050	13.7	13.1	12.8	12.4	12.0	11.7	11.4	11.1	10.8
2x3x0.060	15.3	14.7	14.3	13.8	13.4	12.9	12.4	11.9	11.4
2x4x0.050	17.0	17.3	16.8	16.1	15.8	15.1	14.4	13.7	13.0

Chair Rail Schedule

Tributary Width	4'	5'	6'	7'	8'
2x2x0.045	8.5	7.8	7.6	7.1	6.8
2x3x0.050	11.0	10.4	9.7	9.1	8.7
2x3x0.060	12.7	11.8	11.1	10.6	10.1
2x4x0.050	13.6	12.7	11.7	11.2	10.5
2x5x0.050	15.0	13.4	12.2	11.3	10.6

Column Schedule

Tributary Width	4.0'	4.5'	5.0'	5.5'	6.0'	6.5'	7.0'	7.5'	8.0'
2x2 H	6.2	5.8	5.5	5.1	4.8	4.6	4.2	3.9	3.3
2x3 H	8.1	7.8	7.3	6.9	6.7	6.4	6.1	5.9	5.5
3x2x0.070 H	9.7	9.1	8.8	8.4	8.0	7.8	7.2	7.0	6.4
2x4 H	10.7	10.0	9.7	9.2	8.8	8.6	7.9	7.7	7.0
2x4 SMB	13.9	13.1	12.4	11.8	11.3	10.9	10.5	10.1	9.8
2x5 SMB	17.2	16.2	15.3	14.6	14.0	13.5	13.0	12.5	12.1
2x6 SMB	19.6	18.5	17.6	16.7	16.0	15.4	14.8	14.3	13.9
2x7 SMB	22.0	20.7	19.7	18.8	18.0	17.3	16.6	16.1	15.5
2x8 SMB	30.3	28.9	27.4	26.1	25.0	24.0	23.2	22.4	21.7
2x9 SMB	36.0	34.6	33.2	31.6	30.3	29.1	28.0	27.1	26.2
2x10 SMB	41.5	39.9	38.5	37.0	35.4	34.0	32.6	31.7	30.7
2x5 TTB	18.2	17.1	16.3	15.5	14.8	14.2	13.7	13.3	12.8
2x7 TTB	24.2	22.8	21.6	20.6	19.7	18.9	18.2	17.6	17.1
2x9 TTB	32.8	30.9	29.3	27.9	26.7	25.7	24.8	23.9	23.2

This table applies to bearing and non-bearing walls for horizontal wind loads in design. Heights may be interpolated but not extrapolated.

Carry Beam Schedule for Screen Enclosure Roofs

Screen Enclosure Width	8'	12'	20'	24'	30'	36'	40'	44'	48'	52'
2x4 SMB	16.4	14.1	11.7	10.9	9.6	9.1	8.4	8.0	7.7	7.3
2x5 SMB	20.1	17.4	14.7	13.7	12.3	11.5	10.7	10.2	9.8	9.3
2x6 SMB	22.4	20.4	17.2	15.8	14.1	13.2	12.2	11.7	11.2	10.7
2x7 SMB	25.4	23.4	19.5	18.3	16.4	15.3	14.2	13.5	12.9	12.4
2x8 SMB	31.6	28.7	24.1	22.7	20.9	19.6	18.2	17.3	16.5	15.9
2x9 SMB	34.3	31.6	26.6	25.0	22.7	21.3	19.7	18.8	18.1	17.3
2x10 SMB	42.7	39.3	33.0	31.0	28.6	27.5	25.9	24.7	23.6	22.7
2x5 TTB	24.1	22.2	18.5	17.4	15.6	14.5	13.5	12.8	12.3	11.8
2x7 TTB	30.0	27.3	22.9	21.6	19.9	18.6	17.3	16.4	15.7	15.1
2x9 TTB	36.3	33.4	28.1	26.4	24.3	23.4	22.0	21.0	20.1	19.3

Spans may be interpolated but not extrapolated

Notes:

- 1) Beam member size is chosen by the span between the knee braces.
- 2) If there are no knee braces then the span is chosen by the distance of the beam length minus half the depth of each upright. (i.e., Beam Length - (half depth of Upright 1 + half depth of upright 2)).
- 3) Knee Brace length shall not exceed what is given in the Knee Brace schedule (i.e. 8' in horizontal or vertical distance) unless the site-specific layout has been approved and sealed by a licensed professional engineer.
- 4) Upright member size is chosen by the span from the ground to the bottom of the knee brace.
- 5) Chair rails that are attached to uprights through the web of the upright into every available screw boss of the chair rail, may be used as Guard Rails in screen enclosures provided that they are set at a height of between 18" & 48" and that they span no greater than what the Chair Rail Schedule identifies for each respective member.
- 6) The span tables shown are calculated for exposure B type terrain. If exposure C is needed, then use the multipliers as follows: With a height range of [0'-15': multiply span by 0.85 or fasten Self-Mating Beams together @ 12" O.C.], [15'-20': multiply span by 0.78 or fasten Self-Mating Beams together @ 12" O.C.], [20'-25': multiply span by 0.74 or fasten Self-Mating Beams together @ 8" O.C.], [25'-30': multiply span by 0.71 or fasten Self-Mating Beams together @ 6" O.C.].

DAVIS & CLEATON ENGINEERING, INC.

Civil
601 North Orlando Ave.
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2354

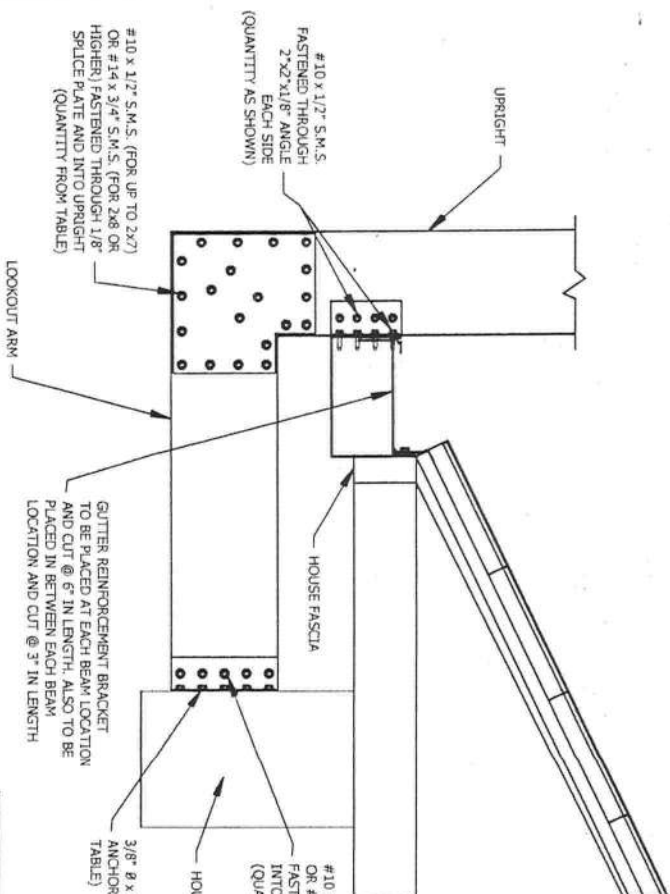
DATE

BRANK CLEATON, JR., P.E.
ENGINEER - FL LIC. 35818

Sheet: D3

Wind Zone: 130 MPH
Exposure: B

Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.



- Note:**
- 1) Super Gutter is optional.
 - 2) In cases where there is no super gutter, the 2x2x0.125" angle is still required and may attach directly to the fascia.
 - 3) 2x2x0.125" angle may attach to either the vertical upright or drop down to the horizontal arm from the fascia or super gutter.

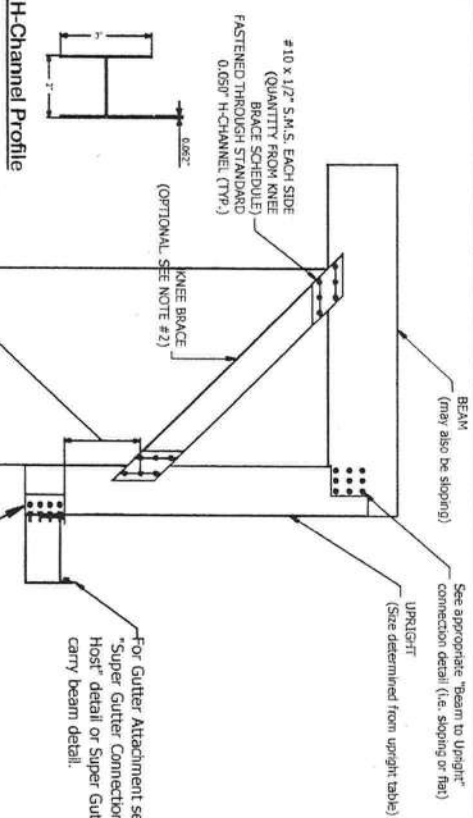
Number of Gussel Plate Screws

Upright Size	2x4	2x5	2x6	2x7	2x8	2x9	2x10
Qty of Screws	16	18	20	24	26	30	30

Number of Fasteners to Angle Clip

Upright Size	2x4	2x5	2x6	2x7	2x8	2x9	2x10
Qty of Screws	3	4	5	6	7	8	9

LOOKOUT ARM CONNECTION DETAIL

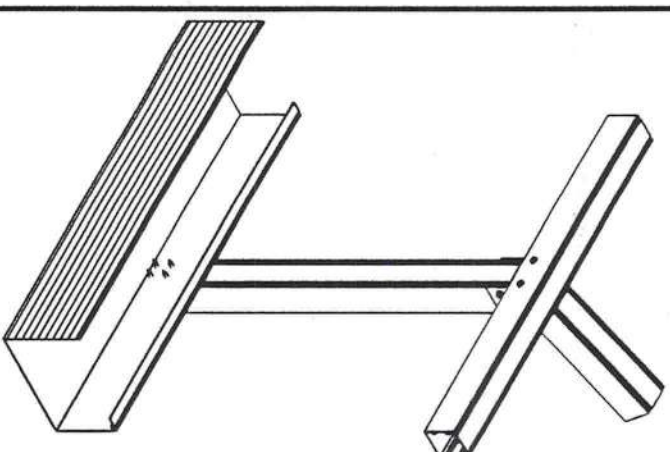


Knee Brace Schedule

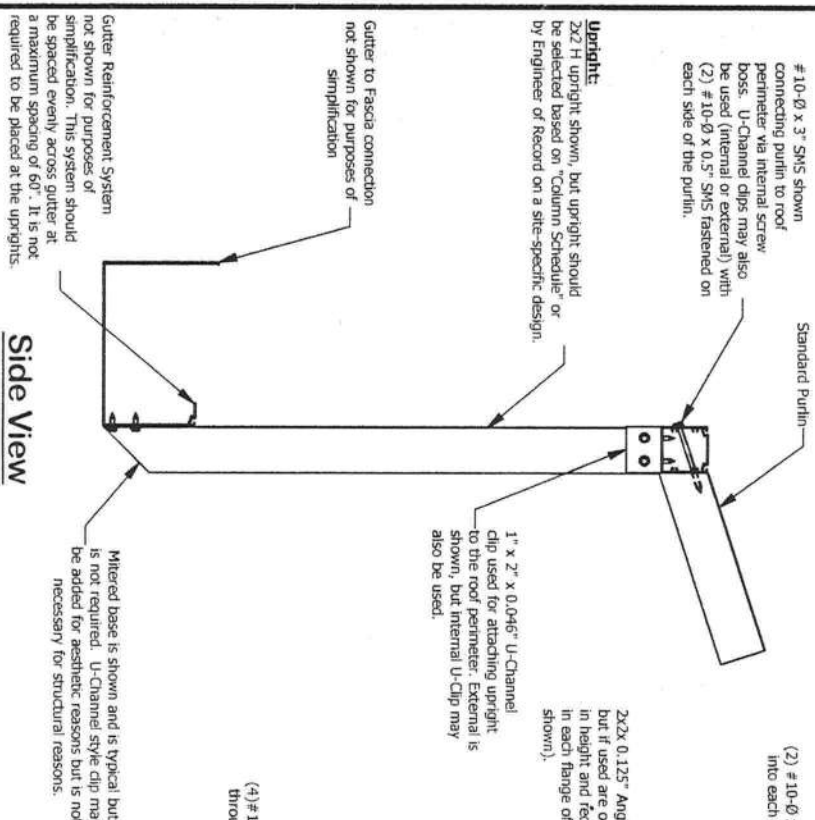
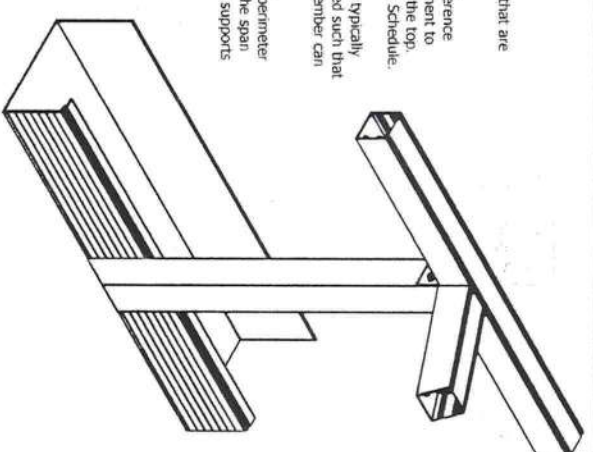
Size	Length	Qty Per Flange
2x2x0.044	Up to 2'	2
2x3x0.050	2' to 4'	3
2x4x0.050	4' to 6'	4
2x4x 0.048x 0.100 SMB	6' to 7'	4
2x6x 0.050x 0.120 SMB	7' to 8'	6

- Note:**
- 1) Super Gutter may be 5' or 7'.
 - 2) The Knee Brace (K.B.) is optional and is only used to qualify a transom wall as being braced to the host structure. When the transom wall is braced to the host structure, requirements for diagonal bracing in the roof change accordingly. See the detail labeled "Diagonal Roof Bracing Plan" for diagonal roof bracing rules.

TRANSOM UPRIGHT TO SUPER GUTTER CONNECTION DETAIL

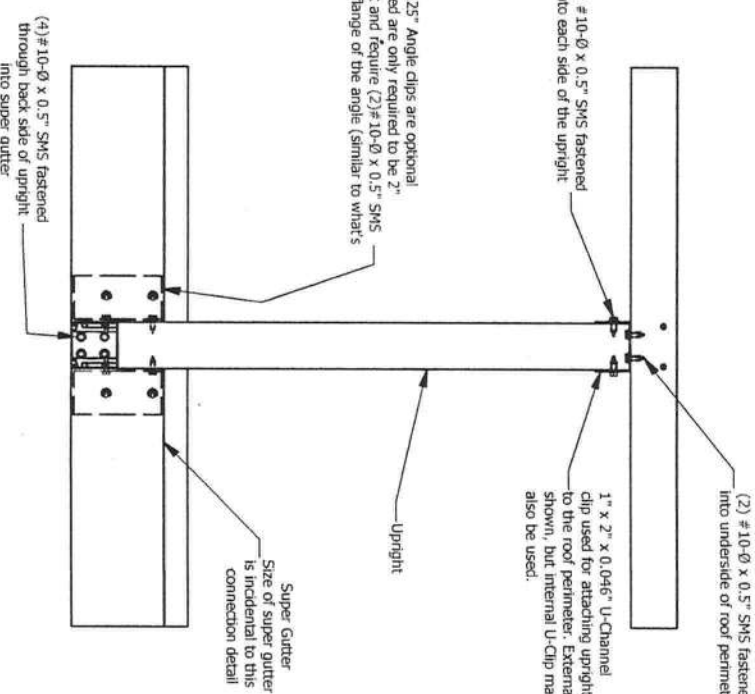


- Notes:**
- 1) This connection is only good for non-load bearing transom walls that are 60" in height or less from the top lip of the super gutter.
 - 2) For "non-load bearing" transom walls that are taller in height, reference the "Transom Upright to Super Gutter Connection Detail" for attachment to the super gutter and the "Purlin to Column" detail for attachment to the top. Upright member size would also be determined by using the Column Schedule.
 - 3) The upright is shown lining up with a purlin in this detail. This is typically how it's installed, but is not required. The uprights need to be spaced such that the span between them does not exceed what the roof perimeter member can span according to the "Beam Schedule" table.
 - 3) This type of connection is used to break up the span of the roof perimeter member. If the roof perimeter member is large enough to support the span on its own (i.e. a 2x4 SMB spanning a 12' distance) then the upright supports are not necessary and this detail is not required.



Side View

Front View (From Inside Cage - Without Purlin Shown)



NON-LOAD BEARING TRANSOM WALL CONNECTION

DAVIS & CLEATON ENGINEERING, INC.

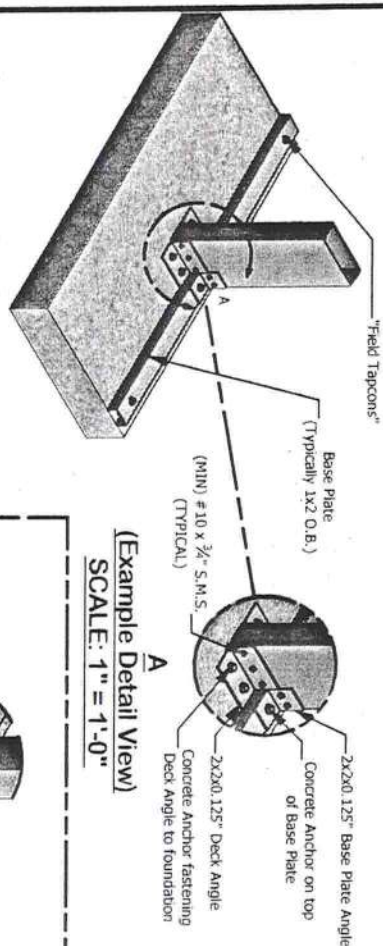
Civil

601 North Orlando Ave.
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2334

Sheet: D4
Wind Zone: 130 MPH
Exposure: B

Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.

DATE: 11/25/11
FRANK CLEATON, JR., P.E.
ENGINEER - FL LIC. 35816



(Example Detail View)
SCALE: 1" = 1'-0"

- Notes:
- 1) "Field Anchors" are to be $\frac{1}{2}$ " ϕ tapcon with a $1\frac{1}{2}$ " minimum embedment into concrete foundation. Max Spacing is 48" O.C.
 - 2) Unless specified on a sealed site-specific drawing, minimum edge distance from the center of the tapcon to the edge of the concrete deck is $2\frac{1}{2}$ " or 5 times the embedment depth, whichever is greater. Minimum embedment depth is $1\frac{1}{4}$ " into concrete foundation.
 - 3) Quantity of fasteners for both steel metal screws and tapcons is to match what is shown in the detail views below. Pattern of sheet metal screws may be different than what is shown as long as sheet metal screws maintain a minimum spacing of $\frac{3}{4}$ " and a maximum spacing of $1\frac{1}{2}$ " with a minimum $\frac{1}{4}$ " edge distance. Tapcon patterns may not differ from what is shown.
 - 4) Sheet metal screws are to be a minimum of #10 ϕ x $\frac{1}{2}$ ". The larger S.M.S. may be used, but the quantity is to remain the same.
 - 5) Columns may sit on top of brick pavers but the tapcons must penetrate through the bricks and into the concrete foundation beneath with the minimum embedment of $1\frac{1}{4}$ ".

Column to Deck (Example)
SCALE: 3/4" = 1'-0"



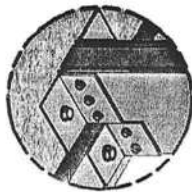
2x4 Column (1/4" Anchors)
SCALE: 1 1/2" = 1'-0"



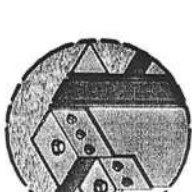
2x4 Column (3/8" Anchors)
SCALE: 1 1/2" = 1'-0"



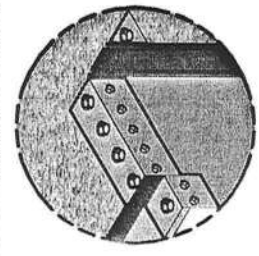
2x2 Column (1/4" Anchors)
SCALE: 1 1/2" = 1'-0"



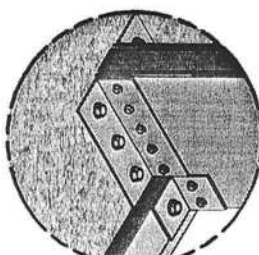
2x5 Column (1/4" Anchors)
SCALE: 1 1/2" = 1'-0"



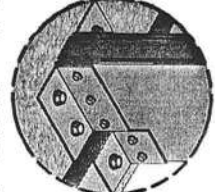
2x5 Column (3/8" Anchor)
SCALE: 1 1/2" = 1'-0"



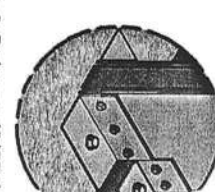
2x8 Column (1/4" Anchors)
SCALE: 1 1/2" = 1'-0"



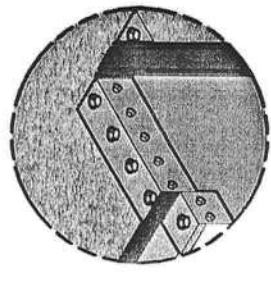
2x8 Column (3/8" Anchors)
SCALE: 1 1/2" = 1'-0"



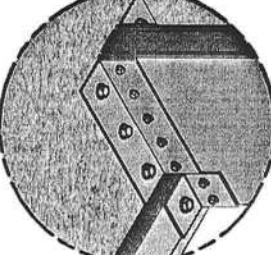
2x6 Column (1/4" Anchors)
SCALE: 1 1/2" = 1'-0"



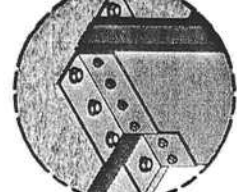
2x6 Column (3/8" Anchors)
SCALE: 1 1/2" = 1'-0"



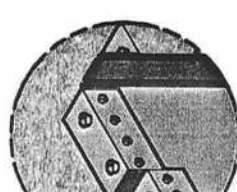
2x9 Column (1/4" Anchors)
SCALE: 1 1/2" = 1'-0"



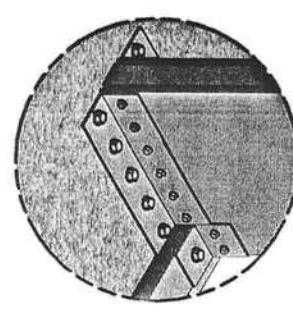
2x9 Column (3/8" Anchors)
SCALE: 1 1/2" = 1'-0"



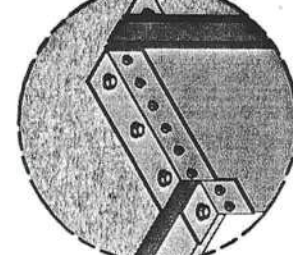
2x7 Column (1/4" Anchor)
SCALE: 1 1/2" = 1'-0"



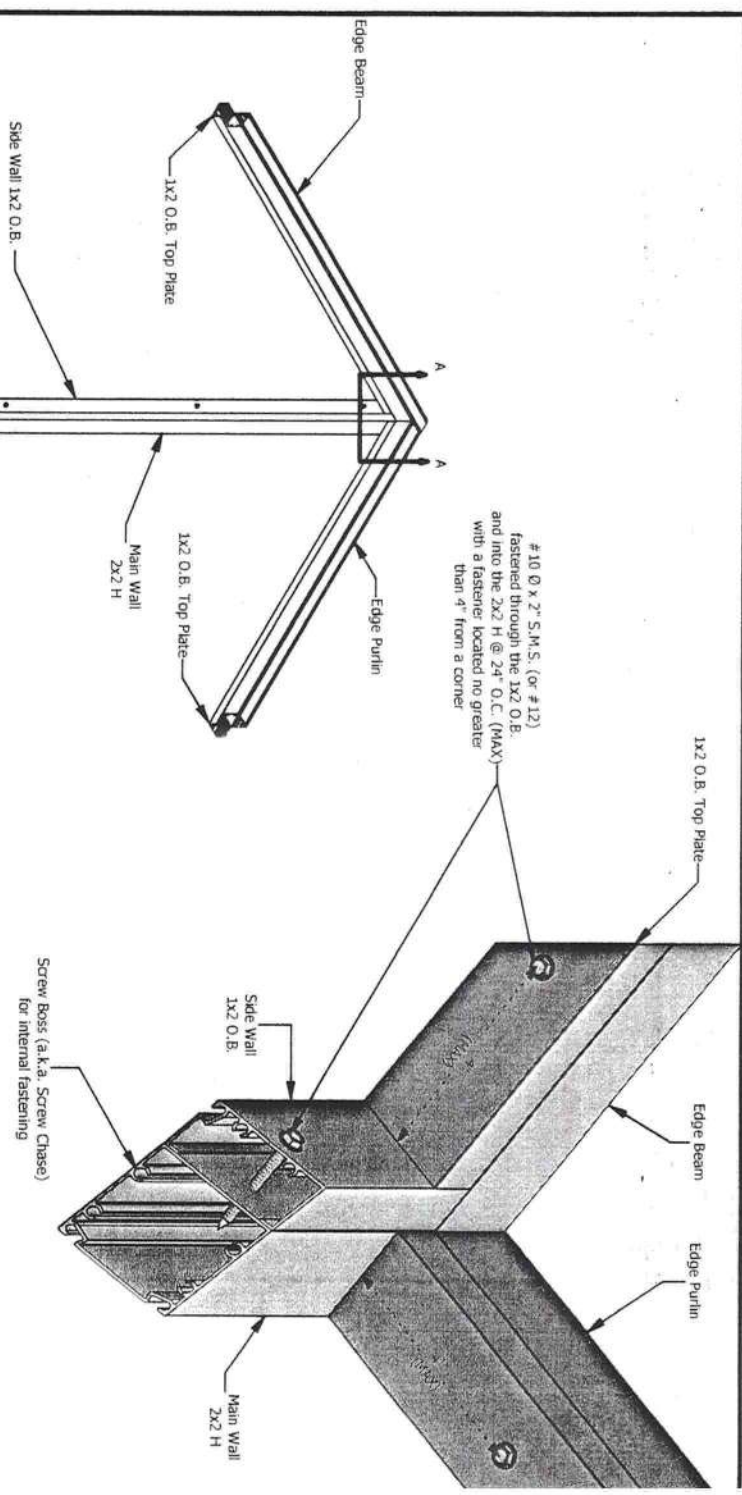
2x7 Column (3/8" Anchors)
SCALE: 1 1/2" = 1'-0"



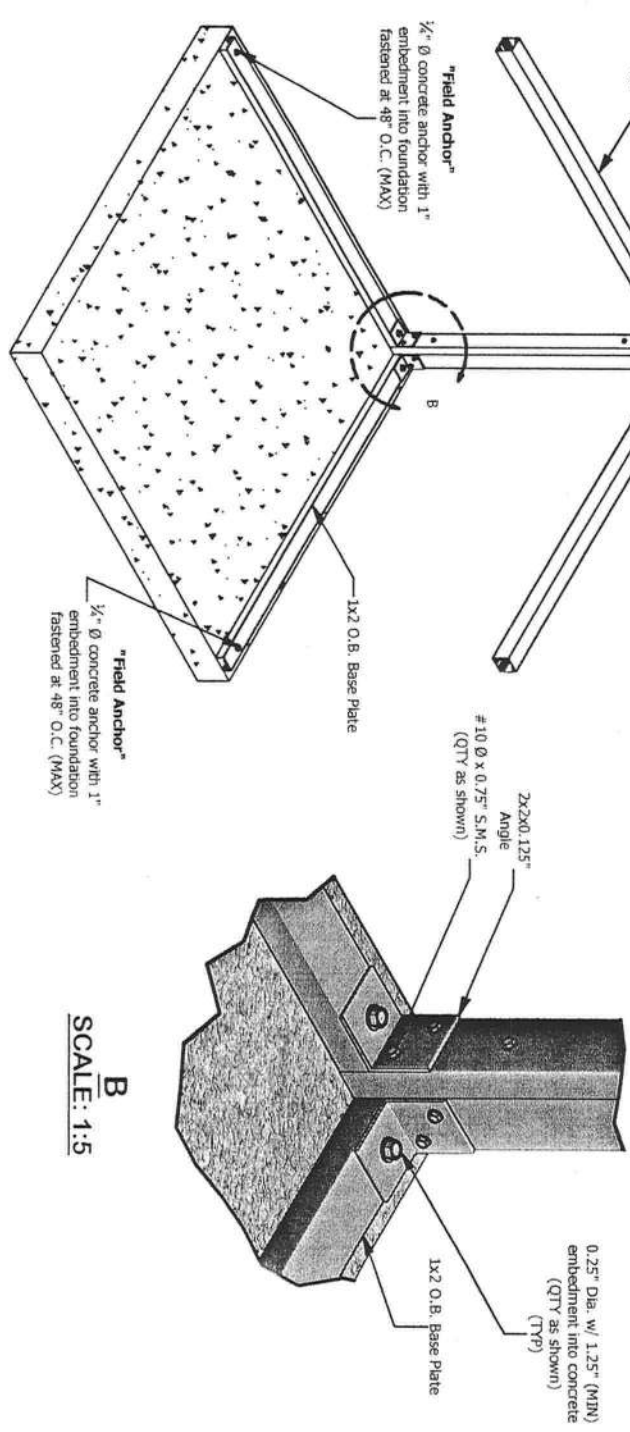
2x10 Column (1/4" Anchors)
SCALE: 1 1/2" = 1'-0"



2x10 Column (3/8" Anchors)
SCALE: 1 1/2" = 1'-0"



SECTION: A-A
SCALE: 1:3



SCALE: 1:5

Main Wall To Side Wall Connection

DAVIS & CLEATON ENGINEERING, INC.

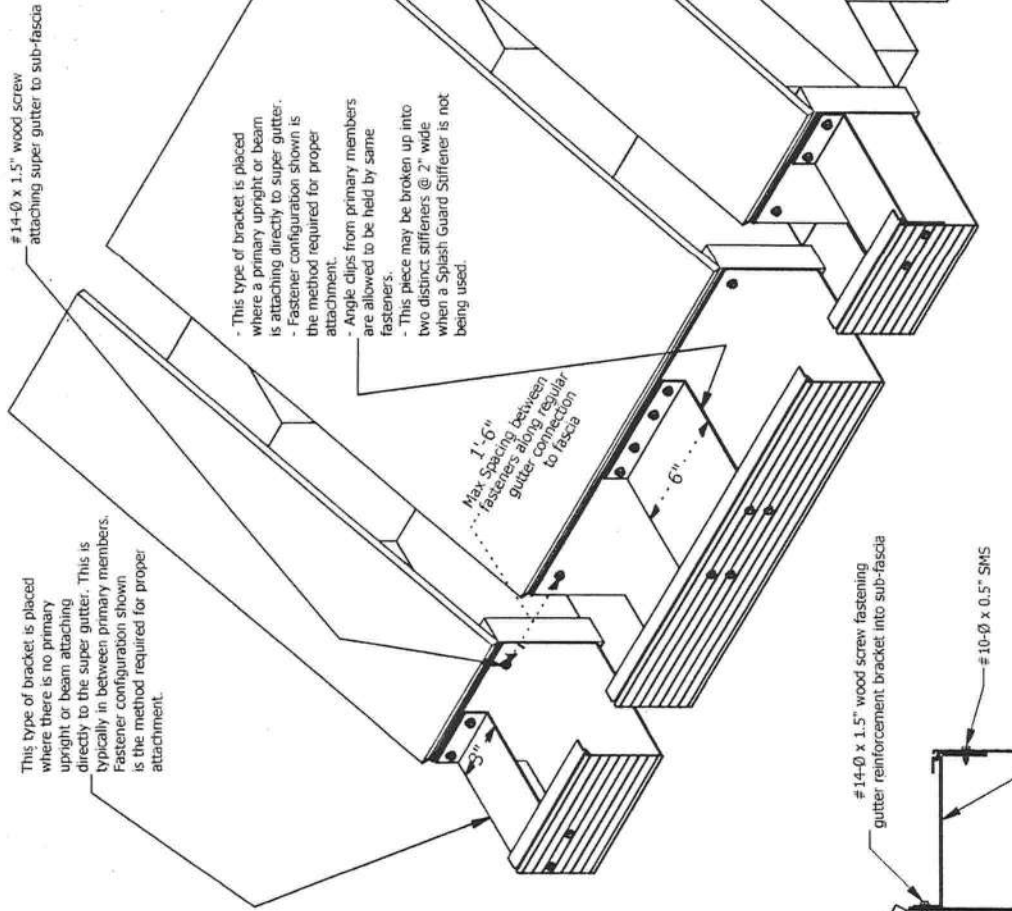
Civil
Structural
601 North Orlando Ave.
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2334

Sheet: D6

Wind Zone: 130 MPH
Exposure: B

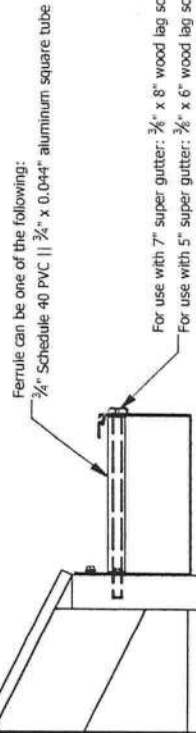
Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.

DATE: 11/25/11
FRANK CLEATON, JR., P.E.
ENGINEER - FL LIC. 35816



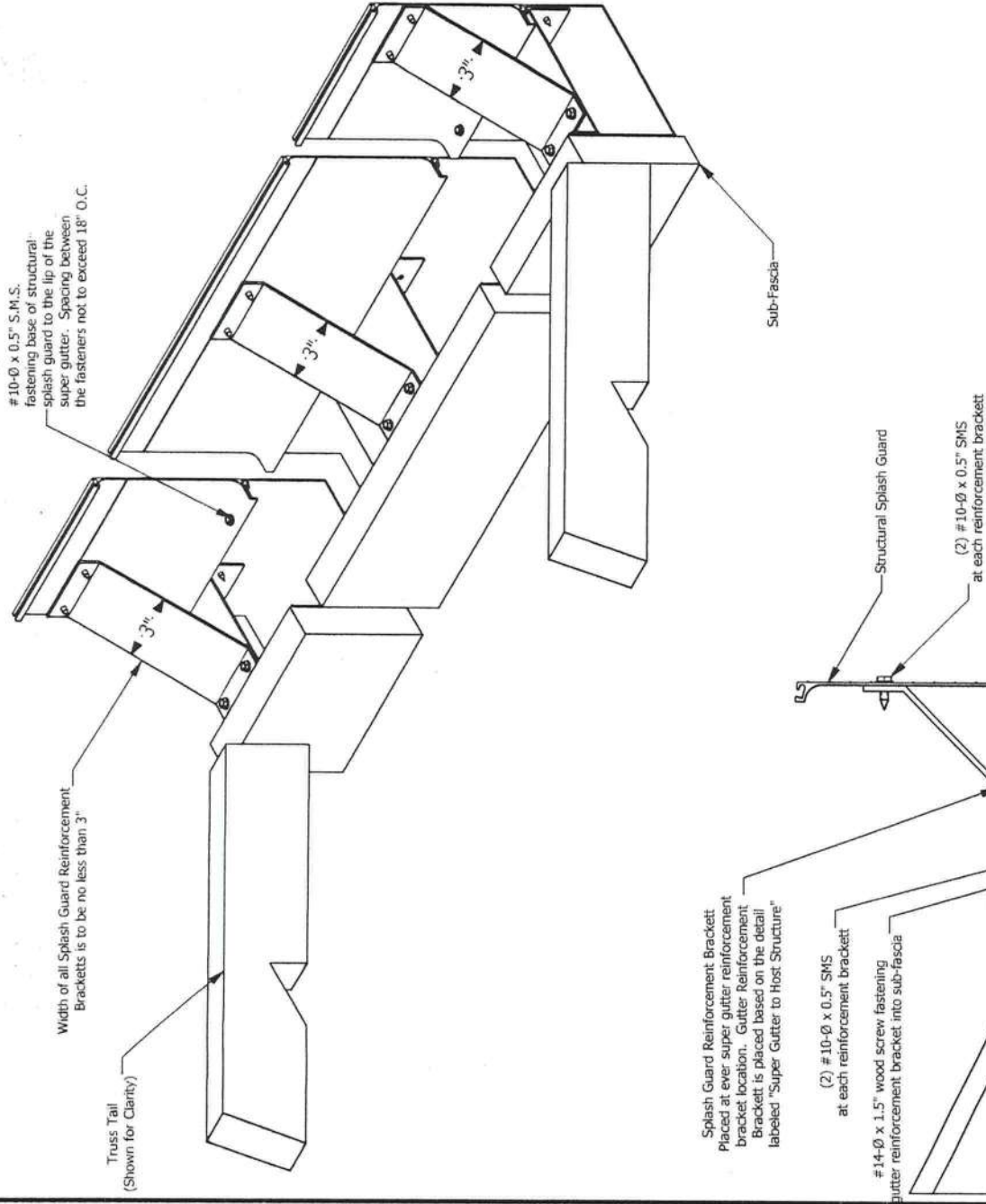
- Notes:**
- 1) Fascia shown is a plumb cut fascia. If the fascia is square cut (perpendicular to the roof pitch) then the super gutter may have something behind it (i.e. "L-Angle" or wood wedge) to keep it plumb. This component is incidental to the structural intention of this design.
 - 2) For a run of super gutter that non-load bearing, the max spacing of gutter reinforcement brackets is 60".
 - 3) For a run of super gutter that has a structural or load bearing component attaching to it and there is a continuous load across the super gutter without primary load points (i.e. beam or upright) then the maximum spacing between the gutter reinforcement brackets is 48".
 - 4) Gutter may be attached to a conventional wood framed wall in the same manner that is shown in this detail. If the wall is a C.M.U. then replace the #14-Ø wood screws with 0.25"-Ø x 1.25" Tapcons (or equivalent). This connection shall also remain the same for a super gutter attaching to a carry beam where the wood lag screws are replaced by #10-Ø x 0.75" S.M.S.
 - 5) When the super gutter is being used for structural purposes (i.e. structural support members attach to it) then the fasteners that attach to the fascia must penetrate into the sub-fascia at a minimum of 1 in. embedment.

Standard Gutter Stiffener (as shown in Isometric view)



Alternate Gutter Stiffener

Super Gutter Connection to Host Structure



Notes:

- 1) All notes from the detail labeled "Super Gutter to Host Structure" carry over here.
- 2) The Structural Splash Guard is an option used to create a greater area for attachment of structural members as well as provide splash-over protection for certain types of roofs.
- 3) If the contractor circles this note item, then it is not their intention to use the Structural Splash Guard for structural purposes and may omit the Splash Guard Reinforcement Bracket from their installation. If this is the intention, then they may not use the Structural Splash Guard to provide support for frame members of any type. Alternatively, the contractor may attach the Structural Splash Guard to frame members that are already fully supported in order to install the splash guard.

Structural Splash Guard Connection

DAVIS & CLEATON ENGINEERING, INC.

Civil
 Structural
 601 North Orlando Ave
 Maitland, FL 32751
 PHONE: (407) 539-2353
 FAX: (407) 407-539-2334

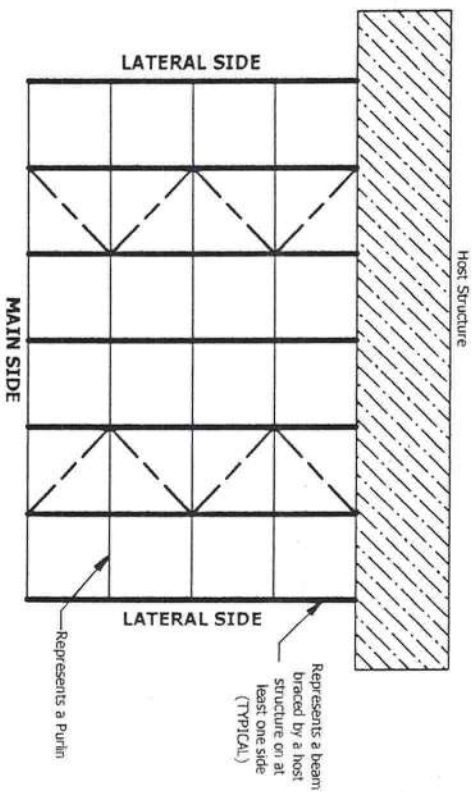
Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2005 supplements, as well as the ASCE 7-05.

Wind Zone: 130 MPH
 Exposure: B

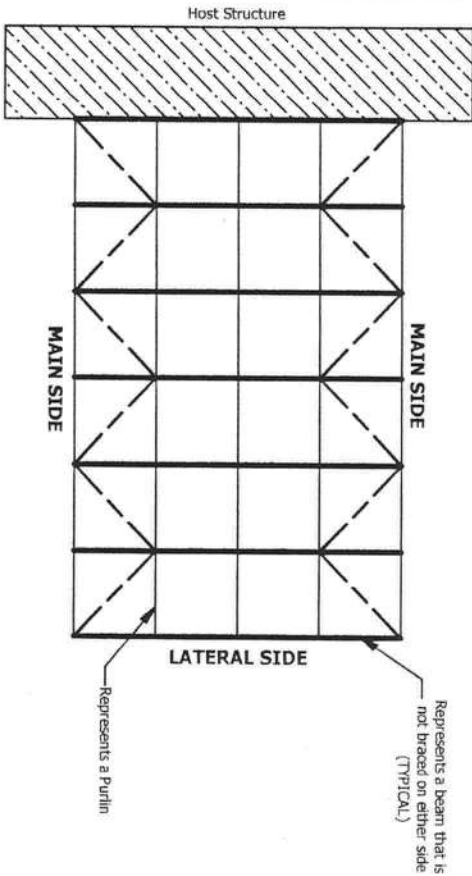
Sheet:
 D7

DATE

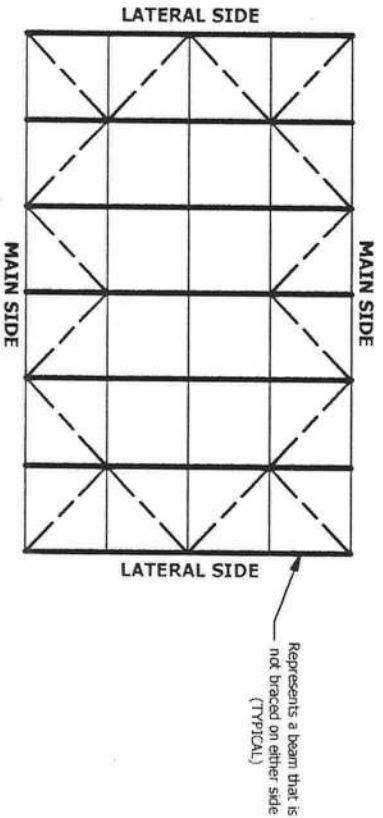
FRANK CLEATON, JR., P.E.
 Engineer - FL LIC. 35816



Diagonal Bracing: Braced on Main Side
SCALE: 1/16" = 1'-0"



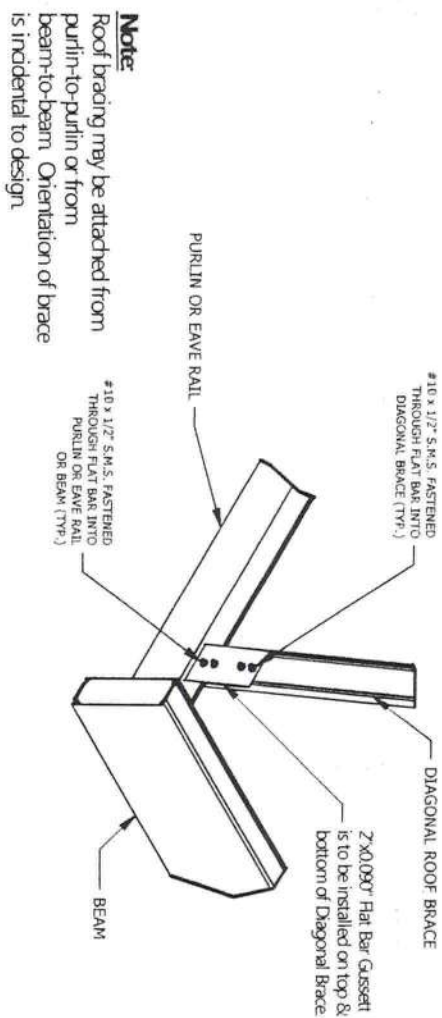
Diagonal Bracing: Braced On Lateral Side
SCALE: 1/16" = 1'-0"



Diagonal Bracing: All Sides Unbraced
SCALE: 1/16" = 1'-0"

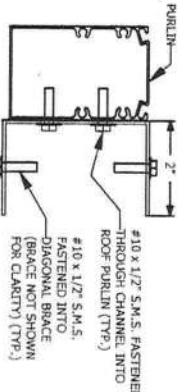
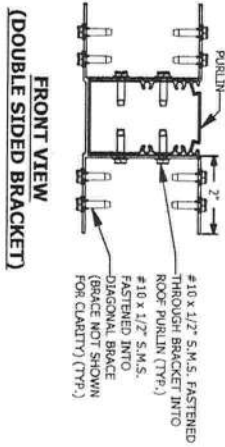
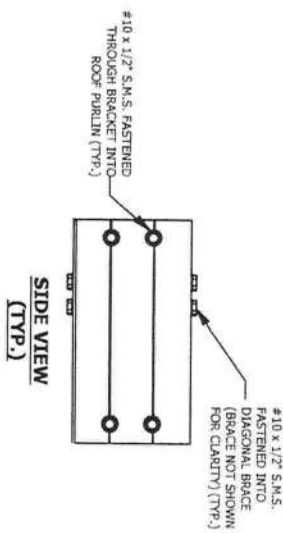
Notes:

- 1) Roof bracing may be placed in either the first or second bay on each side of the enclosure where applicable.
- 2) The orientation (i.e. direction) of each individual diagonal brace is incidental to the structural integrity of the design.
- 3) If there are an odd number of panels, a brace in the center may be omitted.
- 4) Any enclosure that is braced on both a "main side" and a "lateral side" does not require roof bracing.
- 4) In order for a side (main side or lateral side) to be considered "braced", the beam or row of purlins must terminate into the host structure or be supported by a screen wall no greater than 12" above the host structure. If the wall height is greater than 12" there must be a knee brace going from the roof member down to the upright with the bottom of that knee brace no higher than 6" above the host structure.



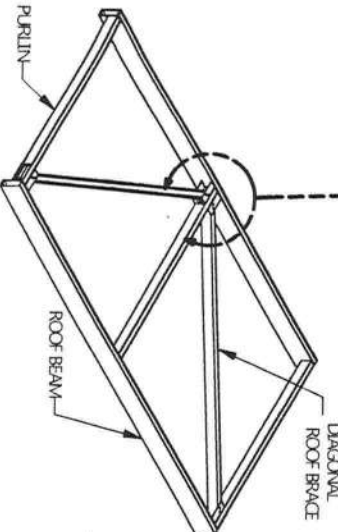
Diagonal Brace Gusset Attachment

Note:
Roof bracing may be attached from purlin-to-purlin or from beam-to-beam. Orientation of brace is incidental to design.



FRONT VIEW (SINGLE SIDED BRACKET)

ALTERNATE DIAGONAL BRACE CONNECTION (C-CHANNEL)



Diagonal Brace Channel Bracket

DAVIS & CLEATON ENGINEERING, INC.

Civil

Structural

601 North Orlando Ave.
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2334

Design conforms to the IRC 2003 Building and the IRC 2003 Residential, with the 2009 supplements, as well as the ASCE 7-05.

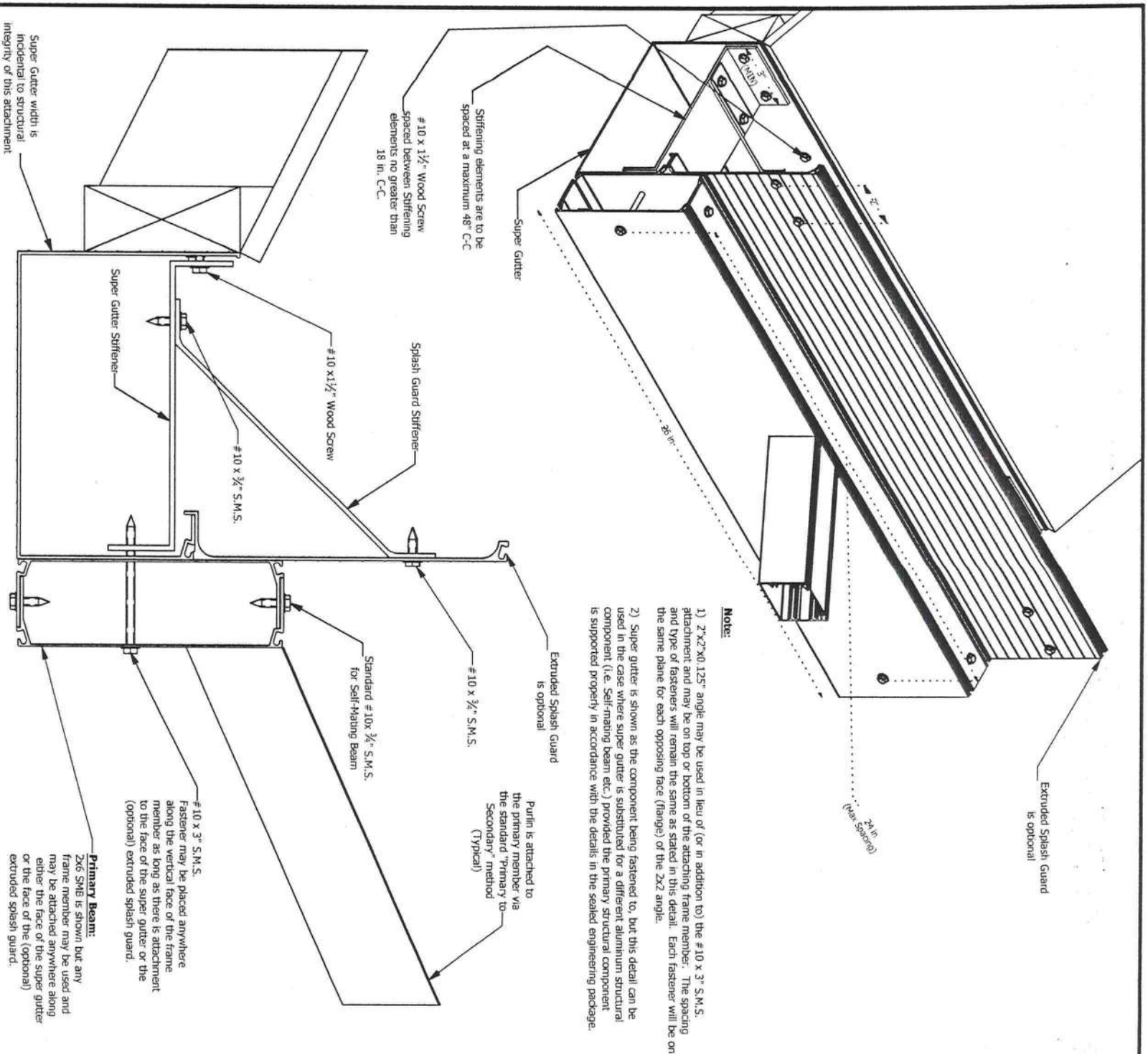
FRANK CLEATON, JR., P.E.
ENGINEER - FL LIC. 35816

DATE

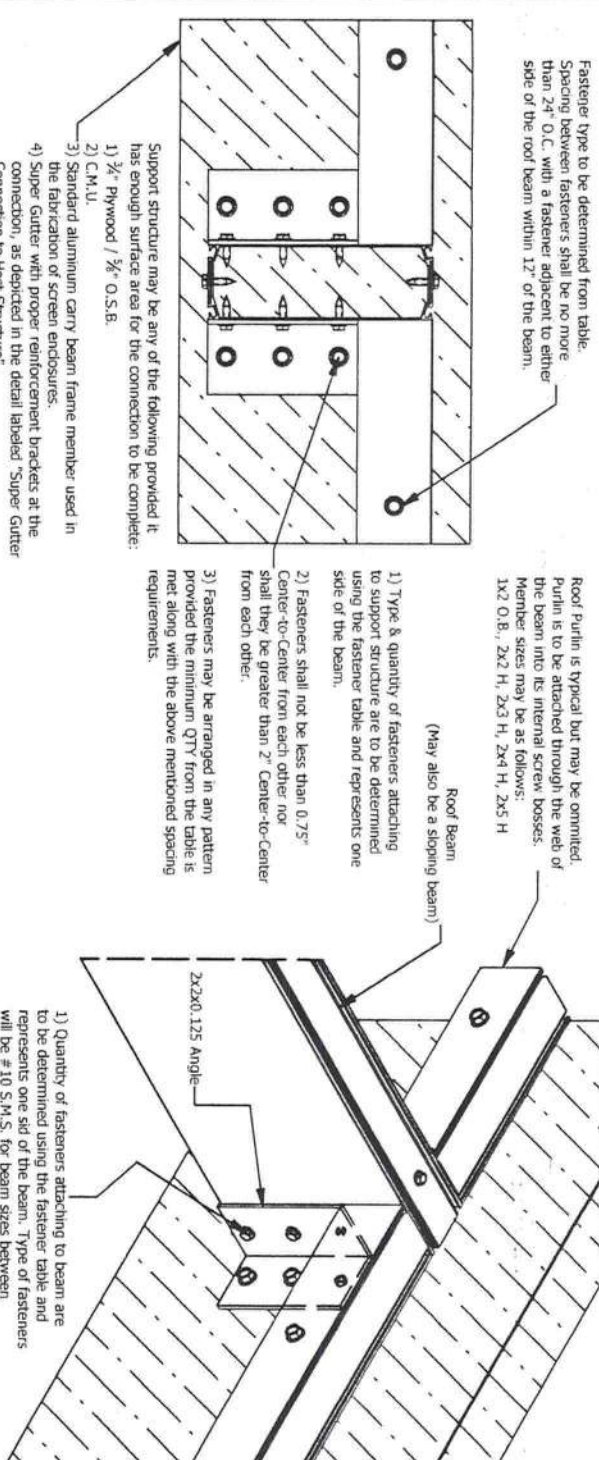
Sheet:

D8

Wind Zone: 130 MPH
Exposure: B



Parallel Frame Member to Super Gutter



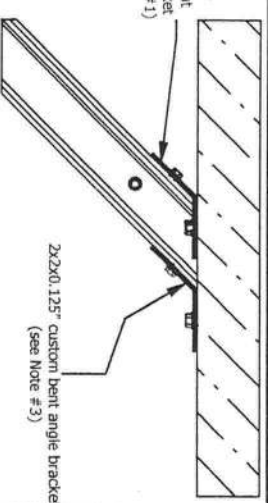
Beam to Support Structure

- 1) U-channel may be used in lieu of 2x2 angle clips on either side of the beam as long as the thickness of the U-Channel being used is greater than or equal to the thickness of the beam to which it is attaching.
- 2) If there is a purlin attaching to the beam and its presence provides minimal room to achieve the minimum fastener requirements then an additional minimum 15° angle may be used going from the beam to the purlin with the fasteners penetrating the purlin and the angle to attach to the host structure.

Beam to Host Structure Fastener Requirements					
Minimum Quantity of Specified Fasteners (One side)					
Beam Size	Fasteners to Beam		Fasteners to C.M.U. Host Structure		Fasteners to Wood Host Structure
	#10 S.M.S.	#14 S.M.S.	0.25"Ø Tapcons	0.375"Ø Tapcons	
2x2 H	2	2	1	1	2
2x3 H	2	2	1	1	2
2x4 H	2	2	1	1	2
2x4 SMB	2	2	1	1	2
2x5 SMB	3	3	1	1	3
2x6 SMB	3	3	2	1	3
2x7 SMB	4	4	3	2	4
2x8 SMB	5	5	4	3	5
2x9 SMB	5	5	4	3	5
2x10 SMB	6	6	5	3	6
N/A	N/A	N/A	1.25" 1.5"	1.25" 1.5"	1.5" 1.5"

Minimum Embedment Depths (inches)

Angled Beam to Support Structure (Plan View)



Notes:

- 1) Acute side of beam may be notched to allow for the 2x2x0.125" custom bent angle bracket to slide in between the beam and support structure. The fabrication method to achieve this would be to simply attach the angle bracket to the beam prior to installing the beam half-steel, provided the acute side of the beam is installed first. This would allow for the fasteners to be installed into the support structure prior to the installation of the obtuse side of the beam.
- 2) If the fabrication method shown here cannot be achieved, then a secondary 2x2x0.125" angle must be installed beneath the beam. Type and Qty of fasteners should reference the row labeled "2x2 HF in the Fastener Requirements" table.
- 3) A custom bent 2x2x0.125" angle must always be installed on the obtuse side of the beam.
- 4) All other notes and specifications from the "Straight Beam to Support Structure" detail apply to this detail.

DAVIS & CLEATON ENGINEERING, INC.

Civil

Structural
601 North Orlando Ave.
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2334

Sheet:
D9

Wind Zone: 130 MPH
Exposure: B

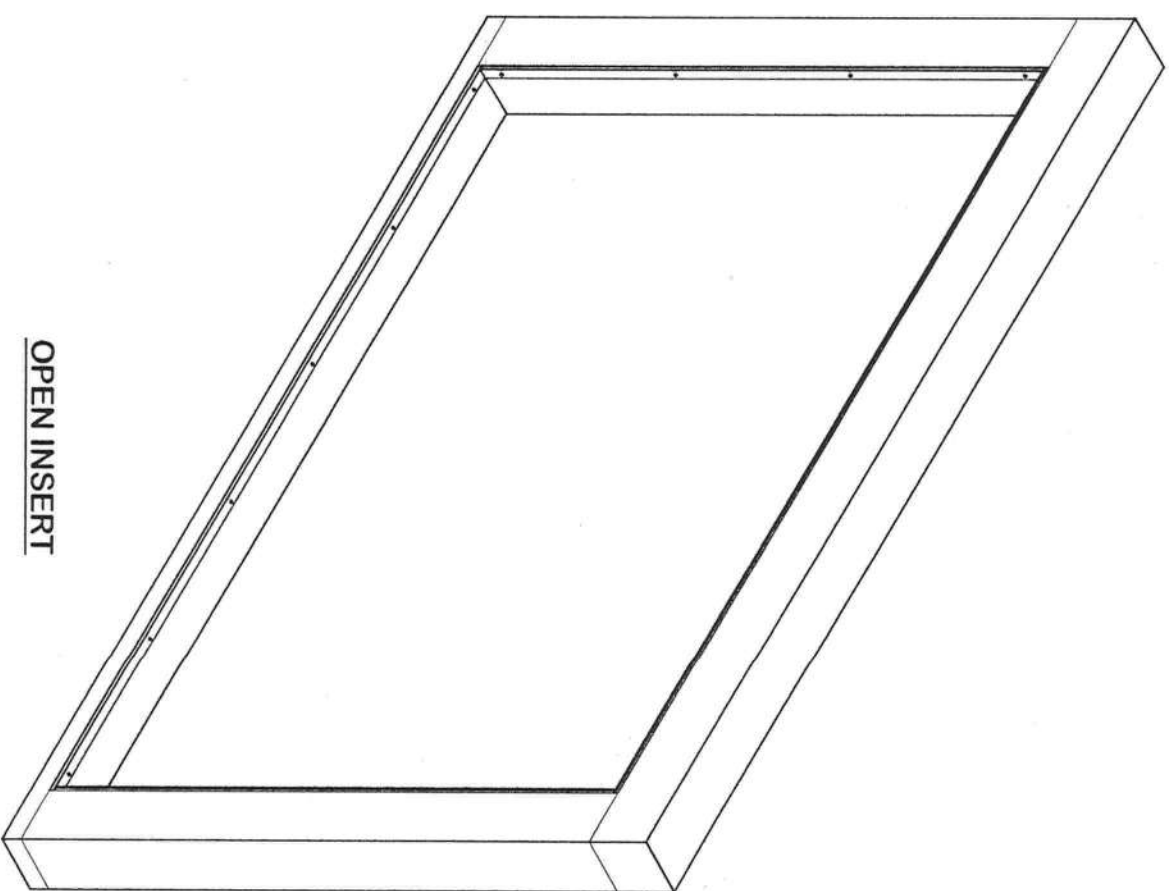
Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.

FRANK CLEATON, JR., P.E.
ENGINEER - EL 117 35816

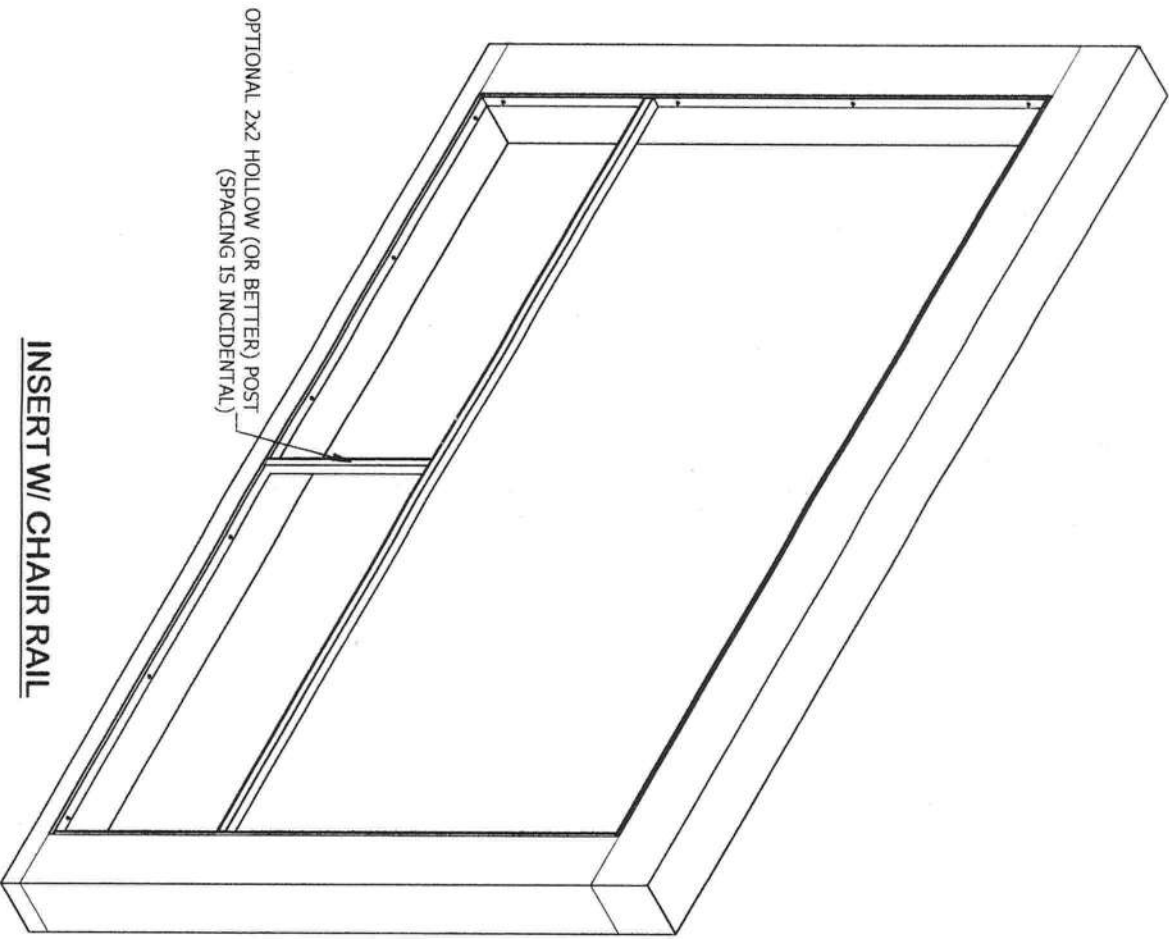
4/10/2019 10:00 AM

Screen Insert Notes:

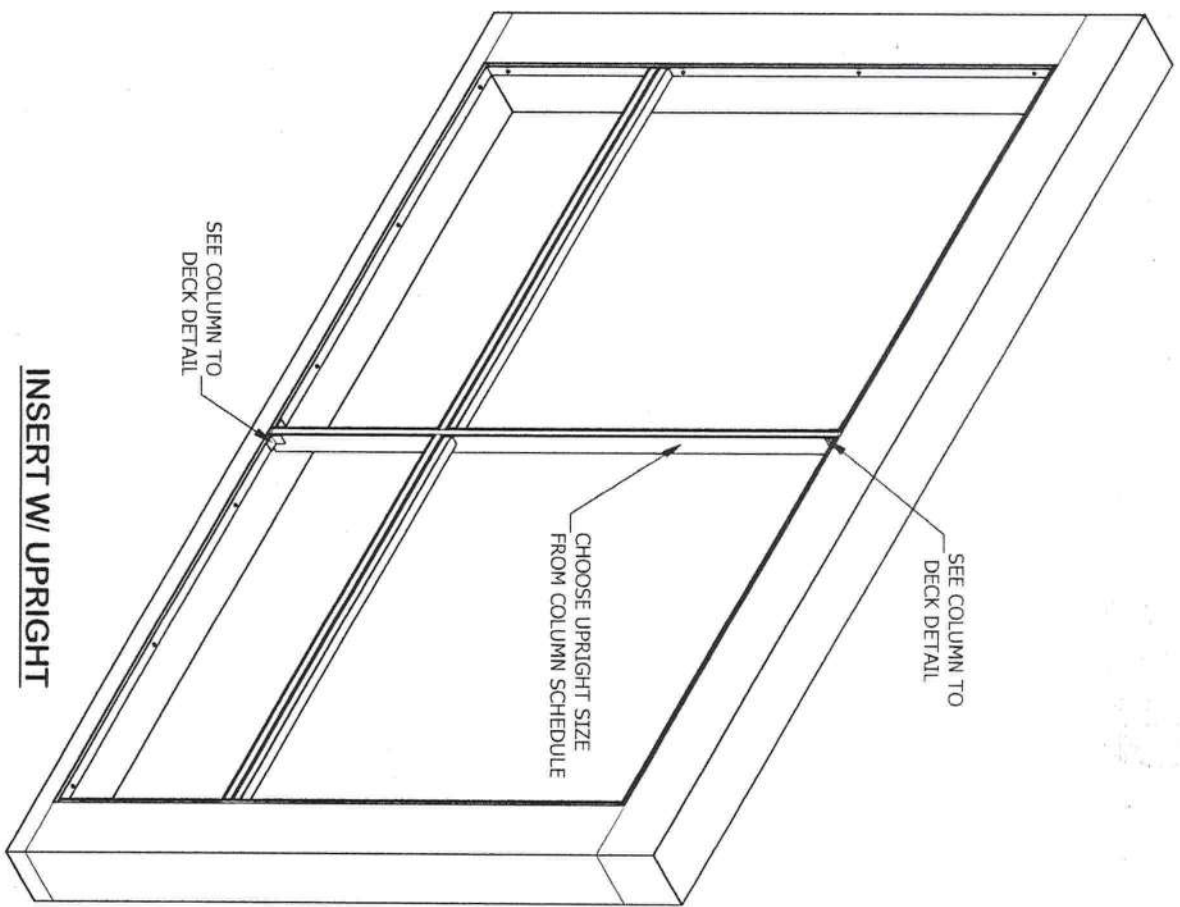
- 1) Inserts are framed in by 1"x2" O.B., 1/2" x 2" O.B., or 1"x3" O.B. members.
- 2) Framing members are fastened to a C.M.U. using 1/4" Ø concrete anchors with a minimum 1 1/4" embedment.
- 3) Framing members are fastened to a wood framed wall using a (MIN) #10 wood screw with a (MIN) 1" embedment.
- 4) Framing members that are fastened to an aluminum framed member will use a (MIN) #10 S.M.S.
- 5) Framing members are fastened @ max. 36" O.C., regardless of C.M.U., wood, or to another aluminum frame member.
- 6) There shall be a fastener within 4" of every 90° corner or upright in either direction but not required to be in both directions.
- 7) Inserts may be as large as desired, the type of insert used is chosen by the designer and is incidental to structural integrity



OPEN INSERT

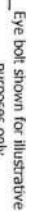
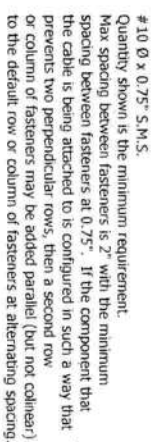


INSERT W/ CHAIR RAIL



INSERT W/ UPRIGHT

<p>Sheet: D10</p> <p>Wind Zone: 130 MPH</p> <p>Exposure: B</p>	<p>DAVIS & CLEATON ENGINEERING, INC.</p> <p>Civil</p> <p>Structural</p> <p>601 North Orlando Ave.</p> <p>Maitland, FL 32751</p> <p>PHONE: (407) 539-2353</p> <p>FAX: (407) 407-539-2334</p>	<p>Design conforms to the IRC 2007 Building and the IRC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.</p> <p>DATE 11/25/11</p> <p>DAVIS & CLEATON, JR., P.E.</p> <p>Engineer - FL LIC. 35816</p>
--	--	---



(Shown after being mechanically pressed)



1) To determine the quantity of cables needed for a screen wall braced on one side by a host structure take the total square footage of the braced wall and divide by 250. Round the calculated value to the closest whole number and subtract one. It is intended to not have a cable on a wall that is less than 250 S.F.

- 2) To determine the quantity of cables needed for an unbraced screen wall, take the total square footage of the unbraced wall and divide by 250. Round the calculated value to the closest whole number and multiply by 2. It is required that an unbraced screen wall have an equal amount of cables opposing each other.
Example: $535 \text{ S.F.} / 250 = 2.14 \rightarrow \text{rounds to } 2 \rightarrow 2 \times 2 = 4 \text{ cables (2 pairs of opposing cables)}$
Example: $780 \text{ S.F.} / 250 = 3.12 \rightarrow \text{rounds to } 3 \rightarrow 3 \times 2 = 6 \text{ cables (3 pairs of opposing cables)}$
 - 3) Any one of the approved cable-to-deck attachments shown may be used. Field conditions will dictate the type of attachment used and may change dynamically from the original design intent. This has no bearing on the design or the structural integrity of the enclosure and therefore is allowed to be done, as long as one of the approved attachment details is utilized.
 - 4) Cables may attach through pavers as long as the minimum concrete embedment of $1\frac{1}{4}"$ is achieved by using a longer tapcon.
 - 5) Minimum concrete edge distance for all concrete fasteners is $2\frac{1}{4}"$.
- Cables should be at a 45° angle to the vertical uprights ($\pm 15^\circ$).

Single Loop

Flat Bar Plate

Camelback Clip Bracket



3/8" Cable with approved loop
(Typical)

1/8" Cable with approved loop
(Typical)

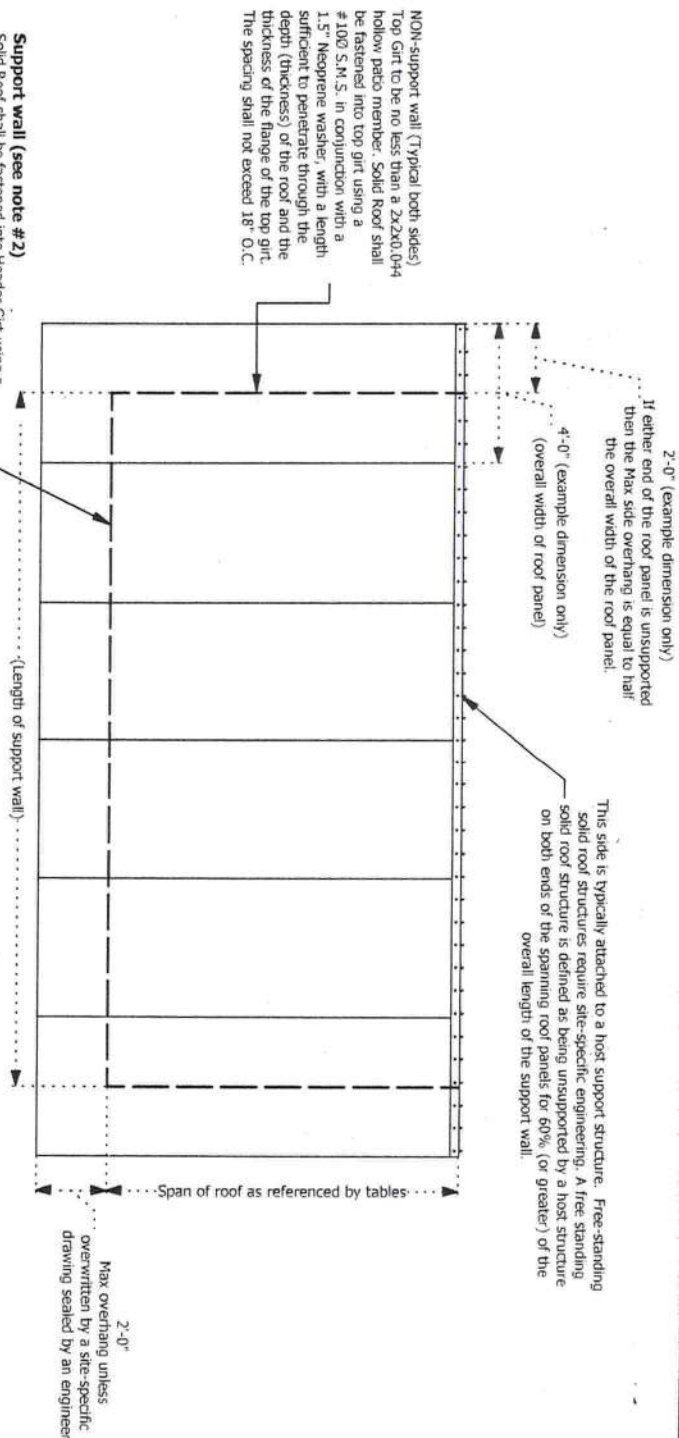
$\frac{1}{8}$ " Cable with approved loop

$\frac{1}{8}$ " (T) 6063-T6 Aluminum
(or equivalent)

5/16" Ø Stainless Steel

Camelback Clip Bracket

Sheet: D11	Wind Zone: 130 MPH Exposure: B	Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.	<div>DAVIS & CLEATON ENGINEERING, INC.</div> <div>Civil</div> <div>Structural</div> <div>601 North Orlando Ave Maitland, FL 32751 PHONE: (407) 539-2353 FAX: (407) 407-539-2334</div>	<div>DATE</div> <div>4/25/11</div>	<div>FRANK CLEATON, JR. P.E. ENGINEER - FL LIC. 38516</div>
---------------	-----------------------------------	---	---	------------------------------------	---



Support wall (see note #2)
Solid Roof shall be fastened into Header Girt using a #100 S.M.S. in conjunction with a 1.5" Neoprene washer with a length sufficient to penetrate through the depth (thickness) of the roof and the thickness of the flange of the Header Girt or Carry Beam. The spacing along an Elite roof shall not exceed 8" O.C., and along a pan roof shall not exceed 4" O.C.

Solid Aluminum Roof Plan View

SCALE 3/16" = 1'-0"

Notes:

- 1) The plan view in this detail shows an Elite composite roof but the same rules apply to an aluminum pan roof unless otherwise noted.
- 2) There are two types of walls: Support Walls and Non-Support Walls. The Support Wall will consist of a Header Girt supporting the solid roof that can either run continuously across the entire length of the wall with intermittent support from columns (See "Independent Post to Carry Beam" detail) or be broken up to span between the support columns via being internally fastened into screw bosses through the web of the support columns (See "Primary Member to Secondary Member" detail). Non-Support Walls (A.K.A. side walls) are not used to support the roof and therefore are not required to maintain a Header Girt.

Note:
The Elite roof span tables were produced in accordance with the allowable loads given in the Florida Product Approval of the Elite Aluminum Corporation's Composite Roof Panel. The Florida Product Approval number for this roof panel product is FL-#7561-R1.

Aluminum Pan (3" Riser) Span Table

Wind Type	3"x12"x0.024"	Effective Span (ft)	3"x12"x0.030"
100	11.0	11.9	15.1
110	10.8	11.7	13.7
120	9.8	10.9	12.8
123	9.5	10.8	12.6
130	9.2	10.5	12.2
140-1	8.8	9.5	11.6
140-2	8.8	9.5	11.6
150	8.4	9.0	11.0

Carry Beam / Header Girt Schedule for Solid Roofs Only

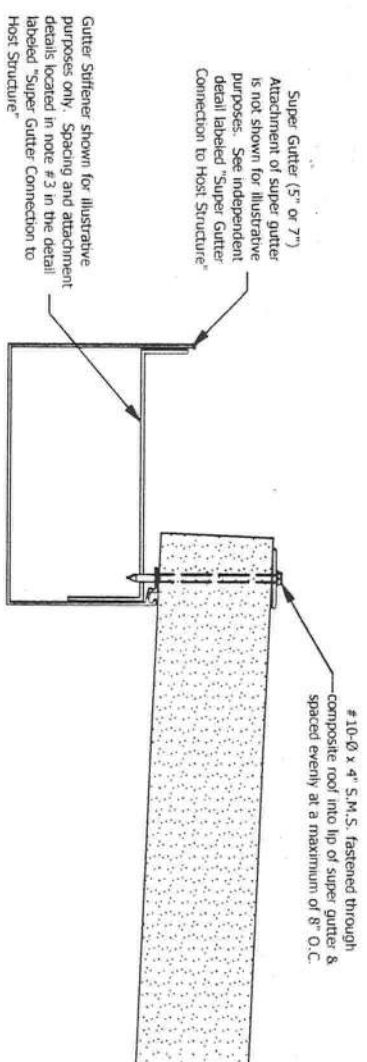
Composite Roof Span	4	5	6	7	8	9	10	11	12	14	16	20
2x2 H	7.6	7.1	6.5	6.0	5.8	5.6	5.4	5.2	5.0	4.6	4.3	4.0
2x3 H	10.7	9.9	9.1	8.4	8.2	7.8	7.5	7.3	6.9	6.4	6.0	5.6
2x4 H	11.6	10.7	9.9	9.1	8.9	8.5	8.2	7.9	7.5	7.0	6.5	6.1
2x5 H	14.4	13.4	12.5	12.0	11.4	11.1	10.6	10.3	9.9	9.1	8.6	8.1
2x4 SMB	12.4	11.6	10.9	10.2	9.5	9.0	8.6	8.2	7.8	7.2	6.7	6.3
2x5 SMB	15.4	14.2	13.5	12.5	11.7	11.0	10.5	10.0	9.5	8.9	8.3	7.8
2x6 SMB	18.0	16.6	15.1	13.9	13.1	12.5	11.7	11.2	10.6	9.9	9.2	8.8
2x7 SMB	20.1	17.9	16.4	15.2	14.1	13.4	12.7	12.1	11.6	10.7	10.0	9.4
2x8 SMB	25.5	23.6	22.3	21.2	20.2	19.6	18.8	18.1	17.2	15.9	14.9	14.0
2x9 SMB	28.0	25.9	24.5	23.3	22.1	21.0	19.8	18.9	18.0	16.6	15.6	14.8
2x10 SMB	34.8	32.4	30.4	28.9	27.7	26.7	25.7	25.0	24.2	23.0	21.9	20.9

Elite Aluminum Corporation Composite Roof Span Table (2" Core Density Foam) (Rise/Run Proportions Approved #17561-R1)

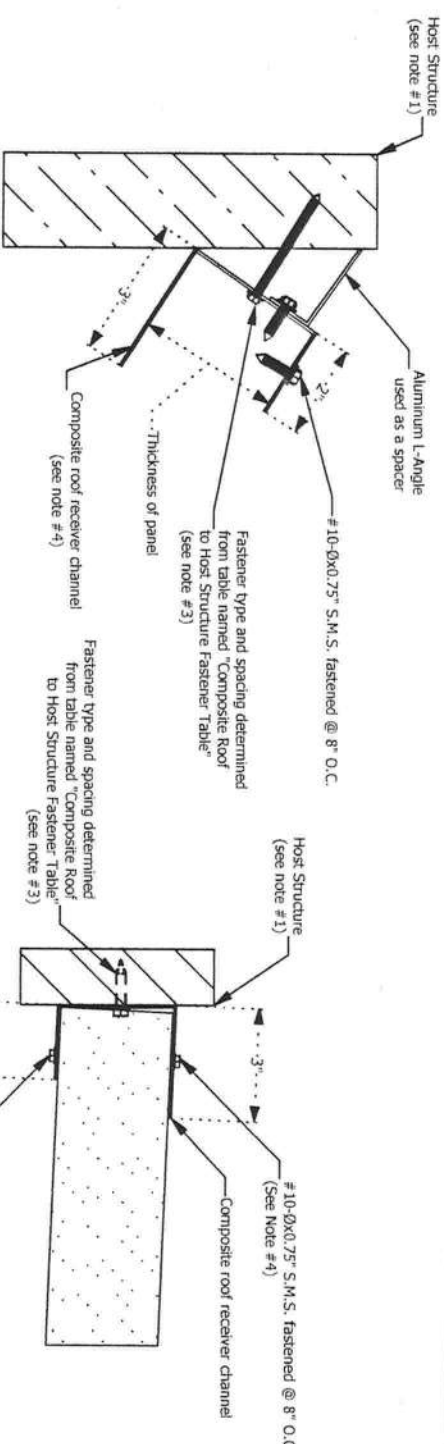
Roof and Span Thickness	3"x48"x0.024"	3"x48"x0.030"	4"x48"x0.024"	4"x48"x0.030"	6"x48"x0.024"	6"x48"x0.030"
100 B	21'-1"	24'-9"	23'-1"	26'-7"	28'-7"	33'-3"
100 C 100 B	19'-5"	22'-9"	21'-3"	24'-5"	26'-5"	30'-6"
110 C 120 B	18'-2"	21'-1"	19'-7"	22'-6"	24'-6"	28'-3"
120 C 130 B	15'-6"	19'-3"	18'-2"	20'-10"	22'-6"	26'-8"
130 C 140 B	12'-7"	15'-0"	14'-0"	16'-3"	17'-5"	20'-2"

Elite Aluminum Corporation Composite Roof Span Table (2" Core Density Foam) (Rise/Run Proportions Approved #17561-R1)

Roof and Span Thickness	3"x48"x0.024"	3"x48"x0.030"	4"x48"x0.024"	4"x48"x0.030"	6"x48"x0.024"	6"x48"x0.030"
100 B	23'-1"	27'-2"	25'-4"	29'-3"	31'-6"	36'-4"
100 C 110 B	21'-2"	24'-11"	23'-4"	26'-11"	29'-0"	33'-5"
110 C 120 B	19'-7"	23'-2"	21'-8"	25'-1"	28'-6"	31'-1"
120 C 130 B	18'-1"	21'-2"	19'-11"	22'-9"	24'-8"	28'-3"
130 C 140 B	14'-0"	16'-3"	15'-3"	17'-8"	18'-3"	22'-1"



Composite Roof to Top of Super Gutter



Receiver Attachment at a Steep Pitch

Composite Roof to Face of Host Structure

Notes:

- 1) The term host structure is used synonymously with any structural component that the composite roof can attach to. This is including, but not limited to, the face of a carry beam, house fascia, house wall, and the face of super gutter.
- 2) The type of fastener that is attaching to the host structure is to be determined by the "Composite Roof to Host Structure Fastener Requirements".
- 3) Sheet Metal Screws and Wood Lag Screws (only) that attach into the host structure through the receiver channel must contain a 1.5" washer. If a washer is not used, then the type of fasteners mentioned in this note are to be doubled-up. They should be installed in a vertical pattern, evenly spaced between the top and bottom flange of the receiver channel.
- 4) The fasteners that attach the composite roof to the long flange of the receiver channel are only required where there is sufficient room for installation. For example, if the composite roof is installed under a house overhang to the house wall, or when the roof is in a steep pitch and the bottom is inaccessible. Sufficient room is defined as 24" of space between the top of the composite roof and the bottom of the object covering that area. Anything less than that would constitute insufficient room and therefore not require that the top flange of the receiver channel be fastened.

Composite Roof to Host Structure Fastener Requirements

Maximum Spacing of Specified Fasteners (inches)						
Roof Thickness	Fasteners to Beam		Fasteners to CMU Host Structure		Fasteners to Wood Host Structure	
	#10 S.M.S.	#14 S.M.S.	1/4" Tapcons	3/8" Tapcons	#10 Wood Screw	#14 Wood Screw
3"	8	12	18	24	8	12
4"	6	8	12	18	6	8
5"	4	6	8	12	4	6
6"	4	6	8	12	4	6
N/A	N/A	N/A	1.25 "	1.25 "	1 "	1 "

Minimum Embedment Depth (inches)

Minimum Embedment Depths (inches)

DAVIS & CLEATON ENGINEERING, INC.

Civil

Structural
601 North Orlando Ave
Maitland, FL 32751
PHONE: (407) 539-2333
FAX: (407) 407-539-2334

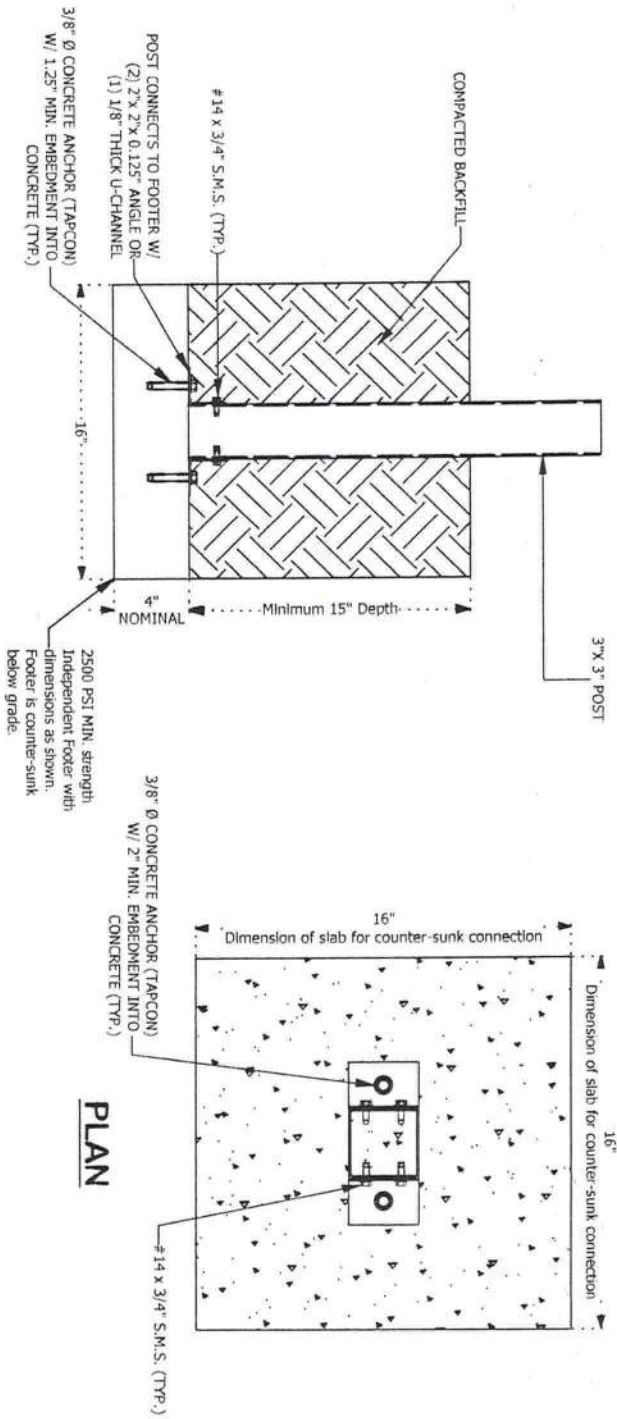
FRANK CLEATON, JR., P.E.
Engineer - FL Lic. 35816

Sheet: D12

Wind Zone: 130 MPH
Exposure: B

Design conforms to the IRC 2007 Building and the IRC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.

DATE 11/25/11



Counter-Sunk Post (Elevation)

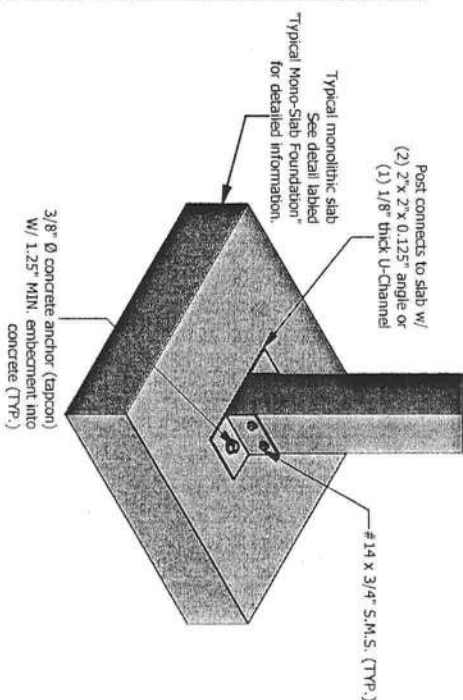
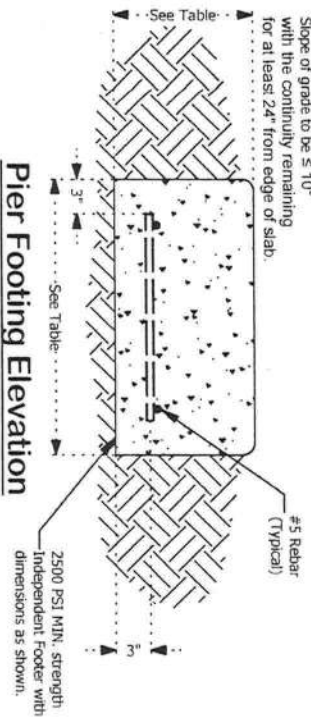
Required Pier Footing

Isolated Footing Dimensions	Allowable Uplift Rating (lbs.)	Maximum Allowable Roof Area in Ft. ²	Required #5 Rebar
1-0" x 1'-0" x 1'-0"	150	4.00	1 Each Way
1-6" x 1'-6" x 1'-6"	1,709	13.47	2 Each Way
2-0" x 2'-0" x 1'-9"	1,050	27.56	3 Each Way
2-3" x 2'-3" x 2'-0"	1,519	39.06	4 Each Way
2-6" x 2'-6" x 2'-3"	2,156	56.25	5 Each Way
2-9" x 2'-9" x 2'-6"	2,836	76.56	6 Each Way
3-0" x 3'-0" x 2'-9"	3,713	95.06	7 Each Way
3-3" x 3'-3" x 3'-0"	4,901	132.25	8 Each Way

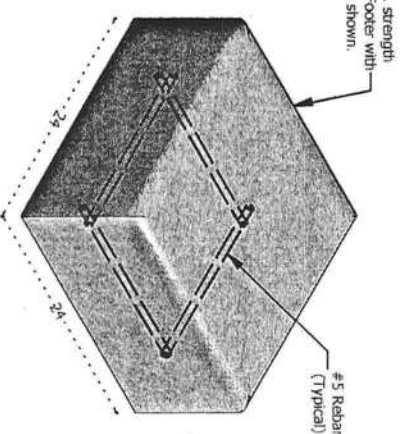
To Determine Total Uplift Rating:

$$\text{Maximum Allowable Roof Area (Ft. }^2\text{)} \times 37.5\text{PSF} = \text{Actual Uplift Rating (lbs.)}$$

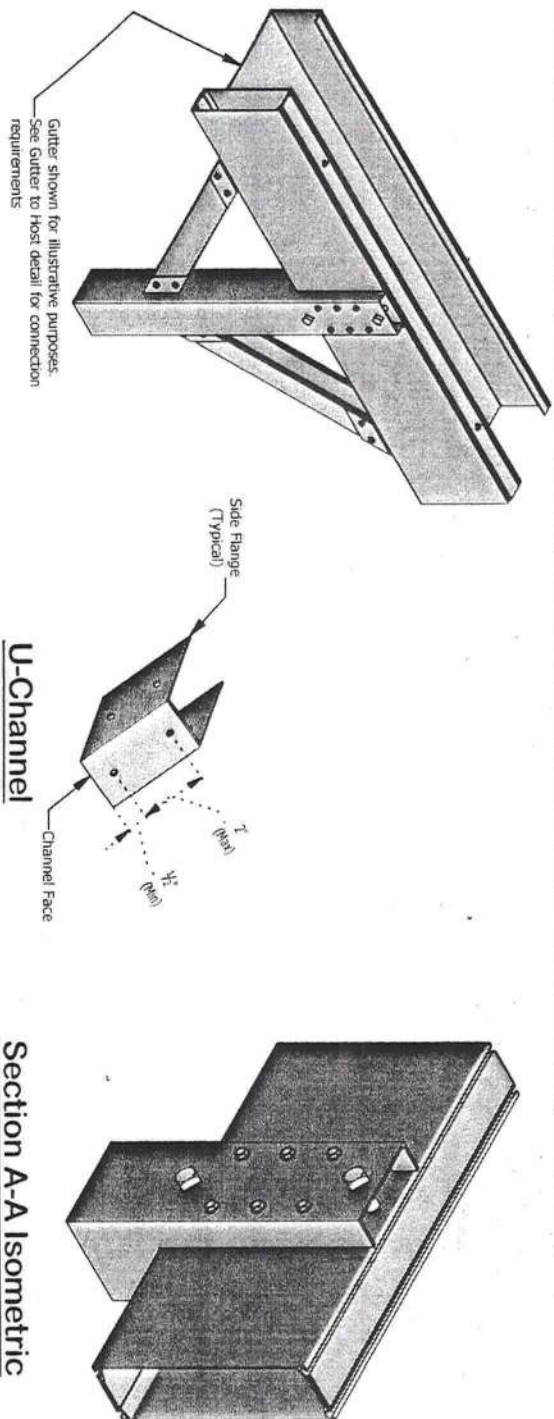
Slope of grade to be $\leq 10^\circ$ for the continuously remaining for at least 24" from edge of slab.



Independent Post to Monolithic Slab



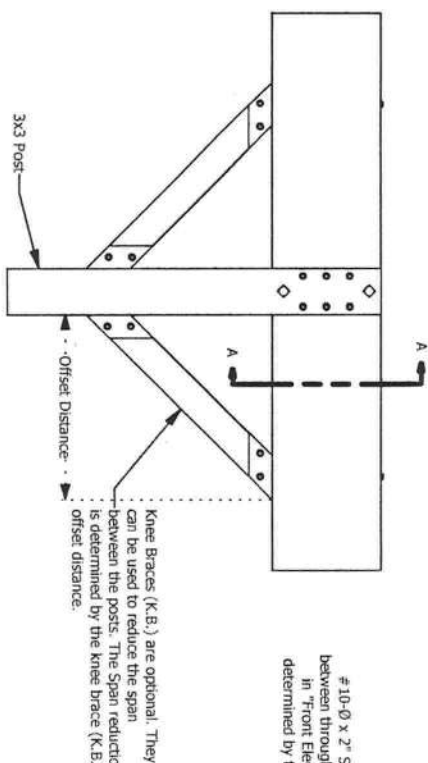
Pier Footing Isometric



General Isometric

U-Channel

Section A-A Isometric



Front Elevation

Section: A - A

Field Fasteners	Qty of Field Fasteners
2x4	0
2x5	2
2x6	4
2x7	6
2x8	6
2x9	8
2x10	8

Knee Brace Schedule			
Size	Length	Qty Per Flange	
2x2x0.044	Up to 2'	2	
2x3x0.050	2' to 4'	3	
2x4x0.050	4' to 6'	4	
2x4x 0.048x 0.100 S.M.B.	6' to 7'	4	
2x6x 0.050x 0.120 S.M.B.	7' to 8'	6	

Notes

- 1) The notch in the 3x3 post is shown as a side notch but a centered notch is also allowable. In that case the field fasteners would be required to be installed on both sides of the notch and the through bolts would be required to penetrate both sides of the notch through the beam.
- 2) The (optional) knee braces are shown being attached with U-Channel but H-Channel is also acceptable. The size of the knee brace and the quantity of fasteners is given in the "Knee Brace Schedule".
- 3) Height and type of 3x3 post is determined by the appropriate tables called "Column Schedule for Solid Roof / Screen Enclosure Combo". In the event that there is no solid roof or no screen enclosure then take the minimum span given in the table for the non-existent component.

Independent Post to Beam Connection

Sheet: D13

Wind Zone: 130 MPH

Exposure: B

Design conforms to the FSC 2007 Building and the FSC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.

DATE: 1/25/11

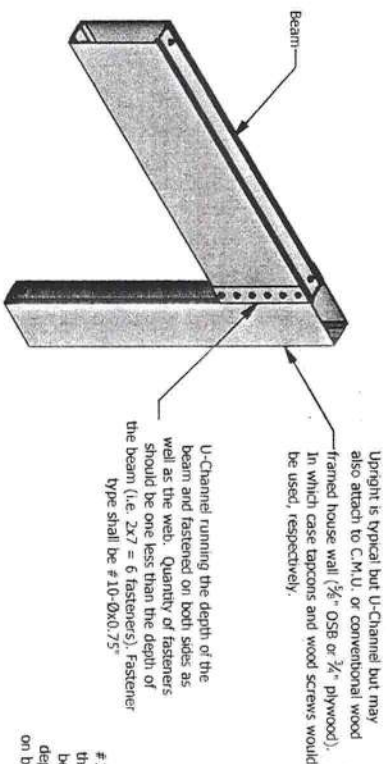
FRANK CLEATON, JR., P.E.
ENGINEER - FL LIC. 35816

DAVIS & CLEATON ENGINEERING, INC.

Civil

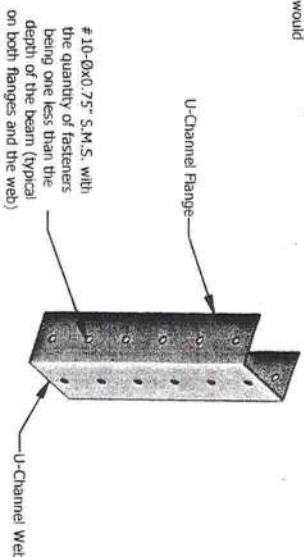
Structural

601 North Orlando Ave.
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2334



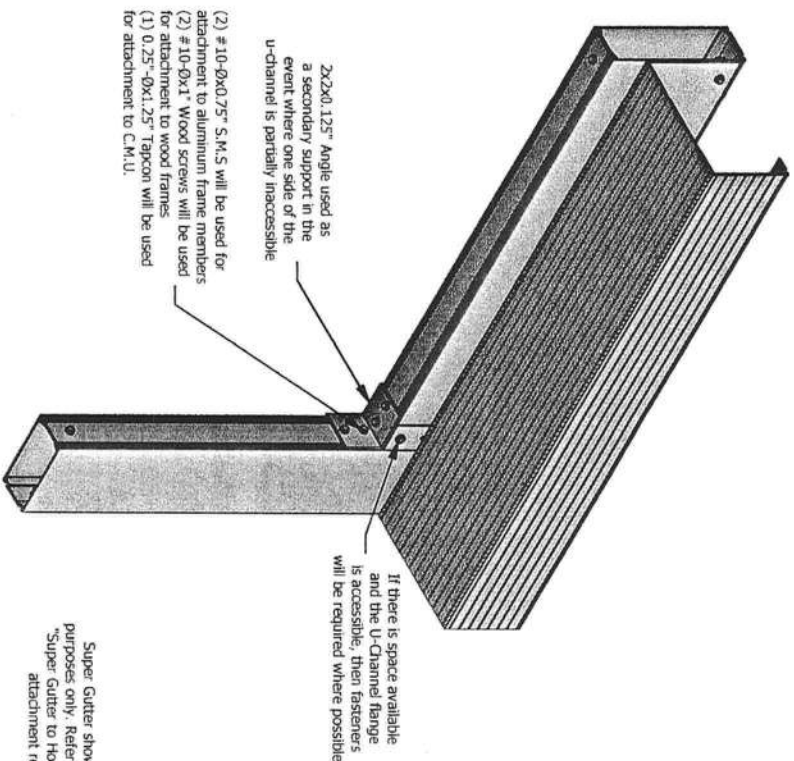
Standard Beam to U-Channel Connection

(Shown from Isometric Top)



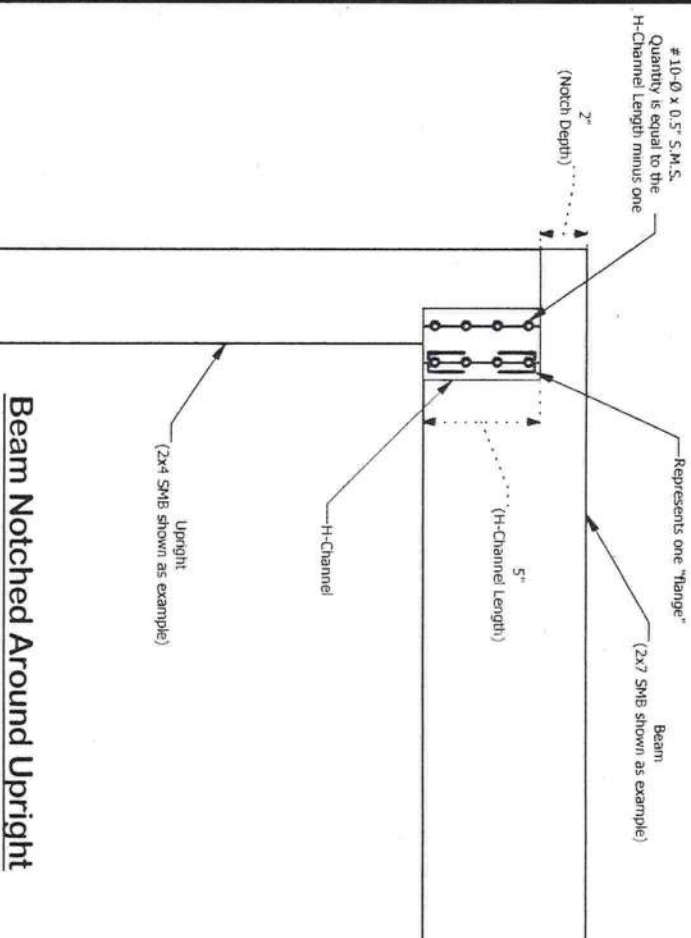
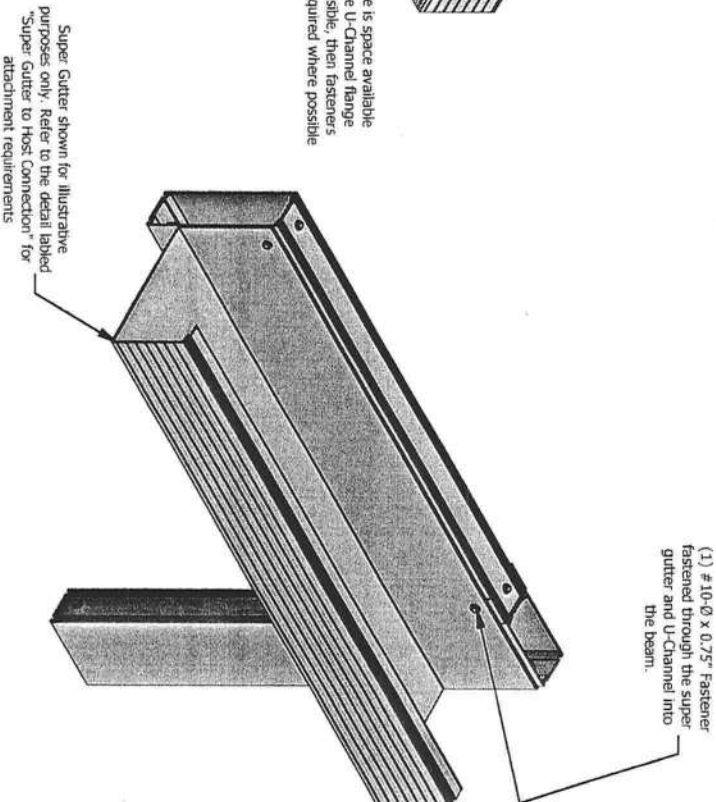
U-Channel

(Isolated for clarity)



Beam to U-Channel w/ Gutter

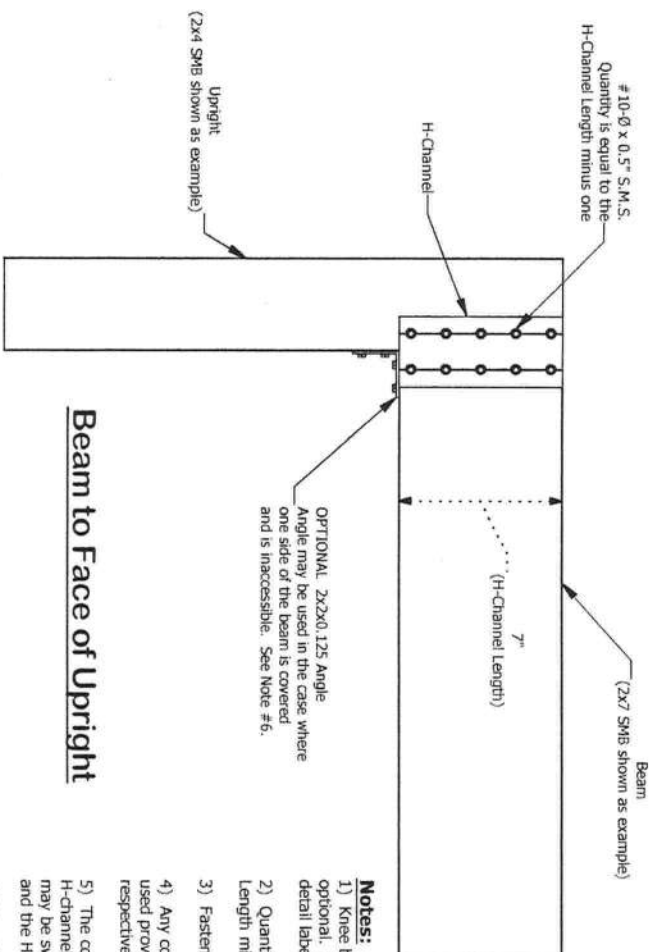
(Shown from Isometric Bottom)



Beam Notched Around Upright

Notes:

- 1) H-Channel length will be equal to the beam length minus the notch depth.
- 2) Knee braces may be used in addition to this connection but are optional. For information about a knee brace connection, please see the detail labeled "Knee Brace Connection".
- 3) Quantity of screws on each flange must be equal to the H-Channel length minus one (as shown in the detail).
- 4) Fasteners in H-Channel may be #14-0 x 0.5" also.
- 5) Any combination of frame members for the upright and beam may be used provided they are in the Beam Schedule and Upright Schedule respectively.
- 6) H-Channel configuration and frame-notch shown is in a vertical vector with the beam being notched. The vector may also be horizontal with the upright notched ONLY if the upright depth is larger than the beam depth.
- 7) An Optional 2x2x0.125 angle may be used in cases where one side of the beam is inaccessible. See note #6 in the detail below labeled "Beam to Face of Upright".



Beam to Face of Upright

Notes:

- 1) Knee braces may be used in addition to this connection but are optional. For information about a knee brace connection, please see the detail labeled "Knee Brace Connection".
- 2) Quantity of screws on each flange must be equal to the H-Channel length minus one (as shown in the detail).
- 3) Fasteners in H-Channel may be #14-0 x 0.5" also.
- 4) Any combination of frame members for the upright and beam may be used provided they are in the Beam Schedule and Upright Schedule respectively.
- 5) The configuration shown is the beam butting into the upright with the H-Channel "Length" being driven by the beam depth. This configuration may be switched to have the upright butting into the bottom of the beam and the H-Channel "Length" being driven by the upright depth.
- 6) The 2x2x0.125 angle is used in lieu of one inaccessible side of beam. Two #10-0x0.75 fasteners should be used on each flange of the angle bracket. If the inaccessible side is only partially covered, then fasteners should be installed where possible.

Beam to Upright (H-Channel)

DAVIS & CLEATON ENGINEERING, INC.

Civil

601 North Orlando Ave.
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2334

DATE

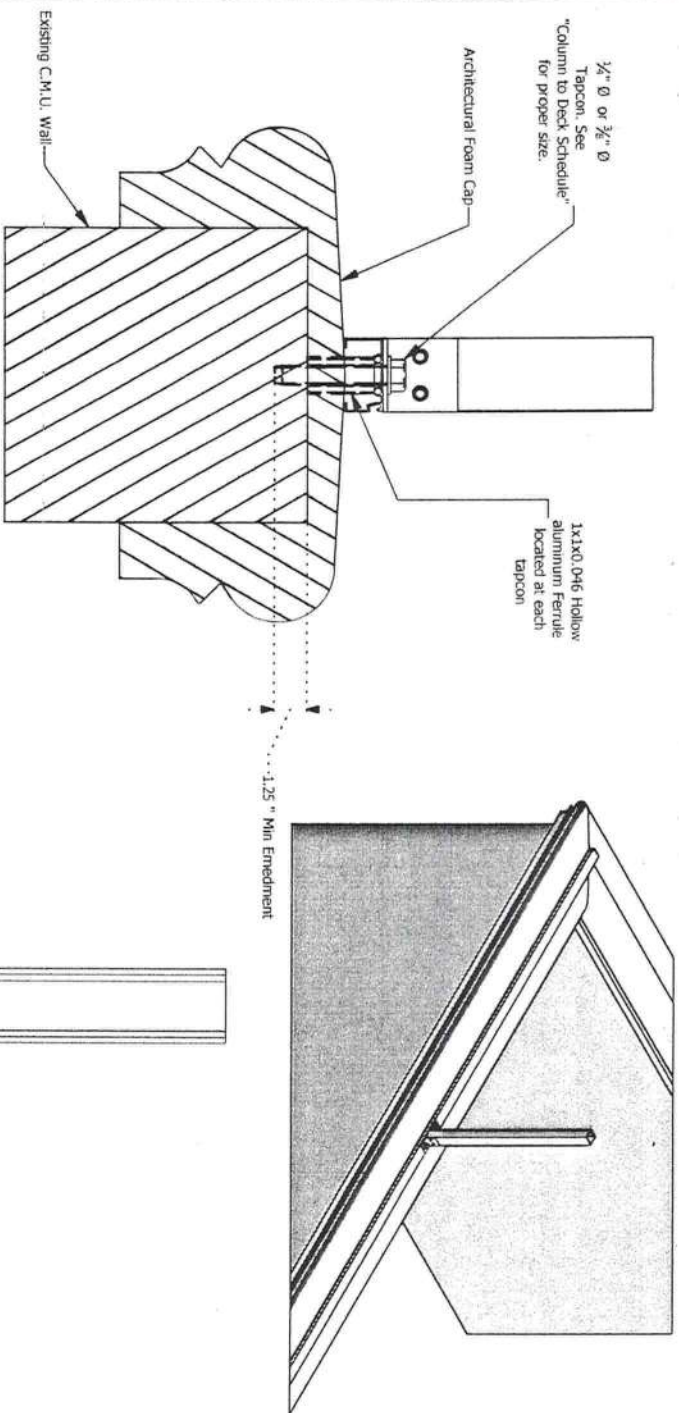
FRANK CLEATON, JR., P.E.
ENGINEER - FL, L.C. 35816

Sheet:

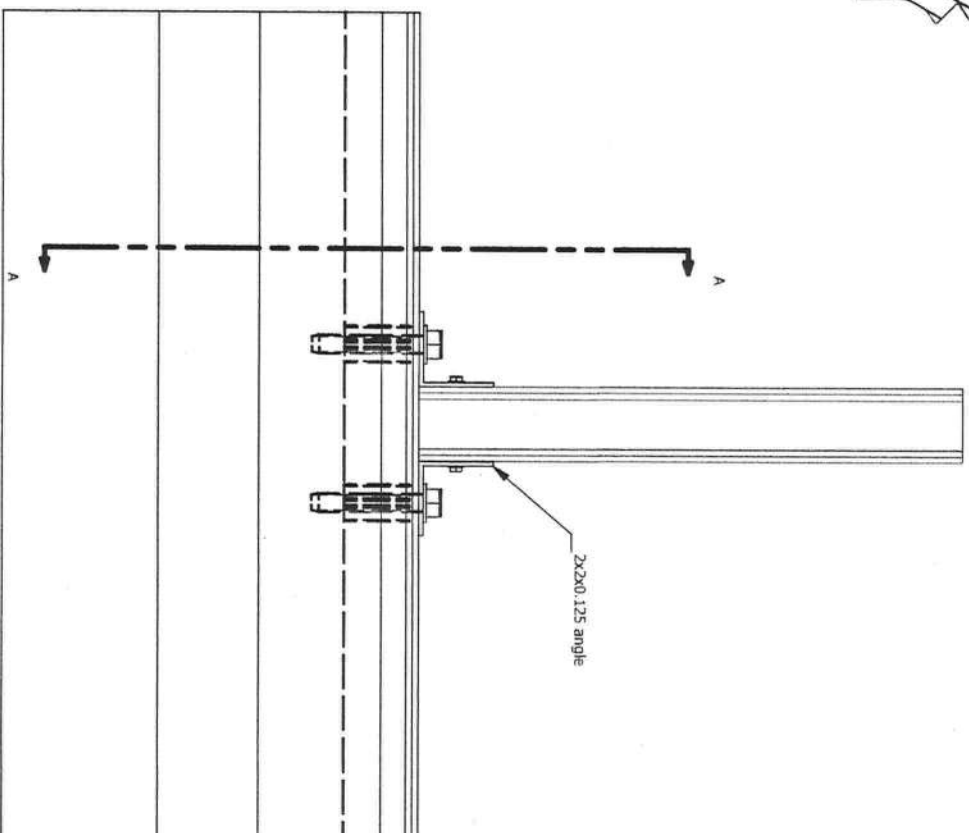
D14

Wind Zone: 130 MPH
Exposure: B

Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.



SECTION A-A

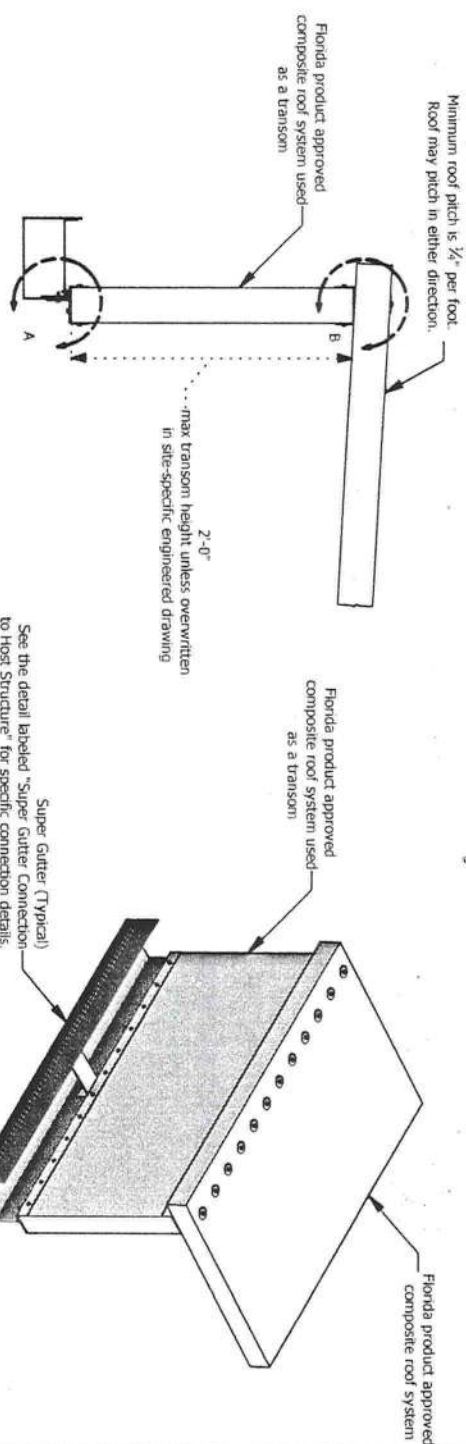


Front View

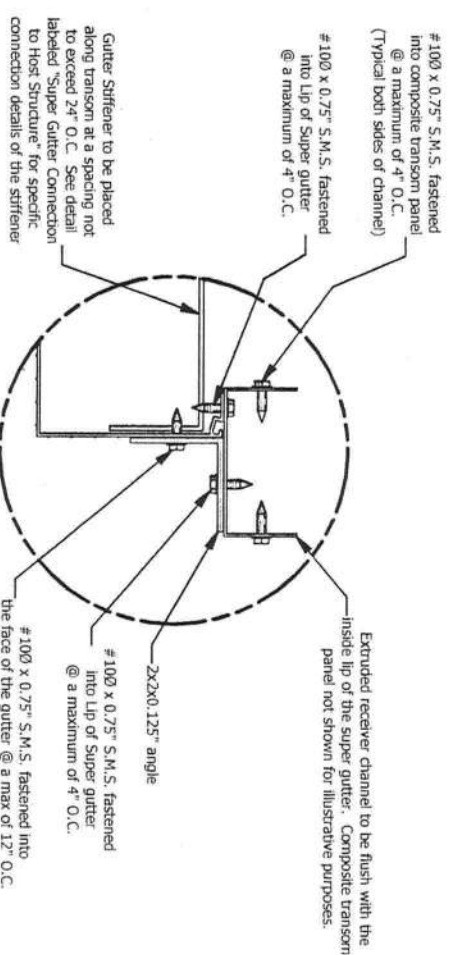
Notes:

- 1) Tapcons in between each upright may be spaced at 36" O.C. (MAX) with a 1x10-046 Hollow aluminum Fennie support (as shown in the detail).

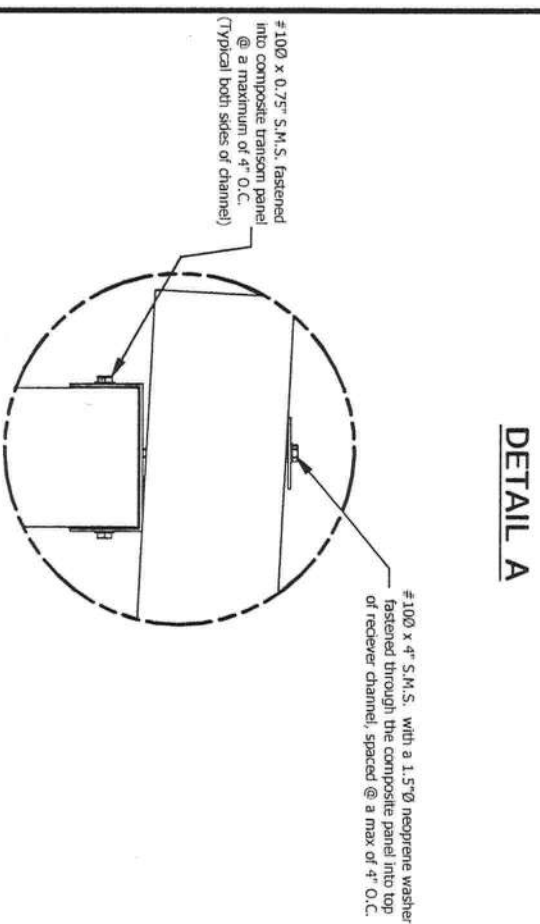
Screen Enclosure Base Attachment to Foam Capped Wall



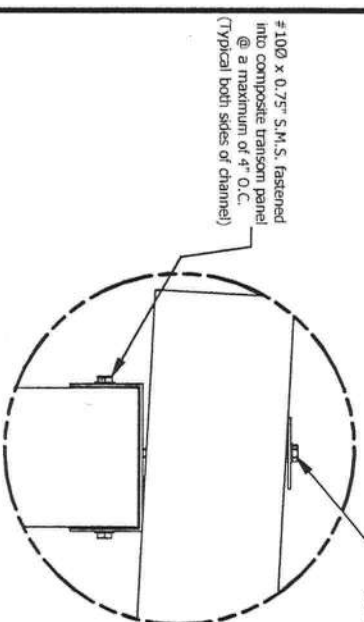
Top Isometric View



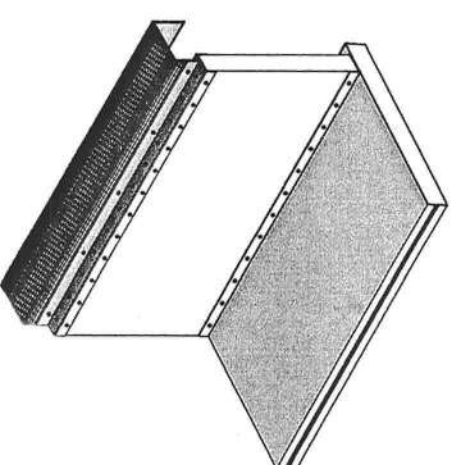
Side Elevation



DETAIL A



DETAIL B



Bottom Isometric

Composite Panel Transom Detail

DAVIS & CLEATON ENGINEERING, INC.

Civil

601 North Orlando Ave
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2334

DATE

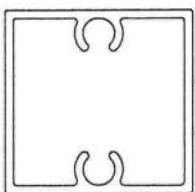
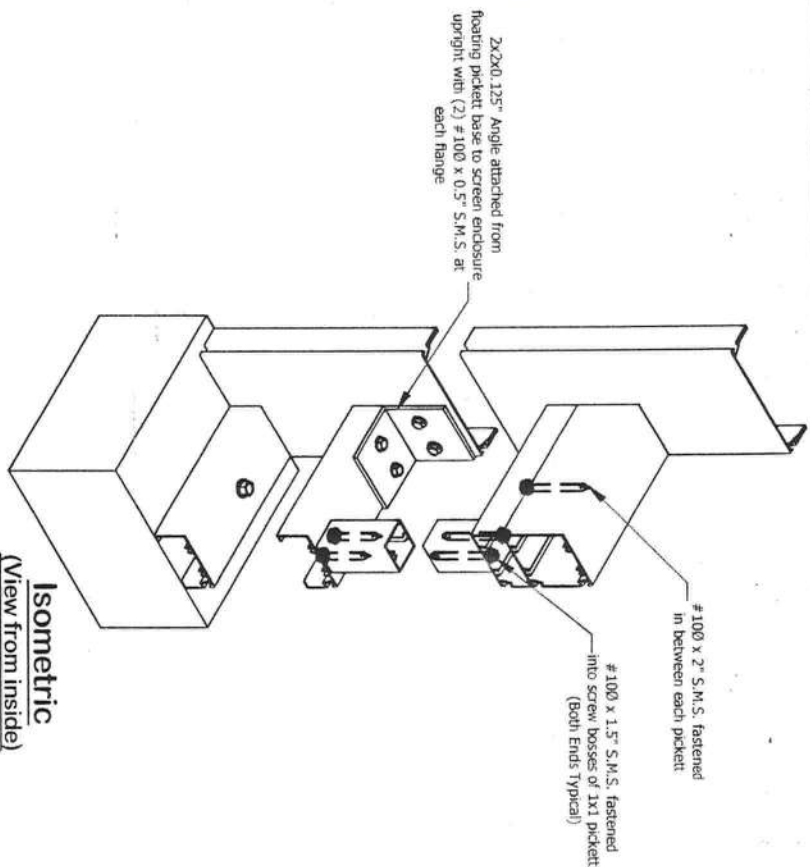
11/25/11

FRANK CLEATON, JR., P.E.
ENGINEER - FL LIC. 35816

Sheet: D15

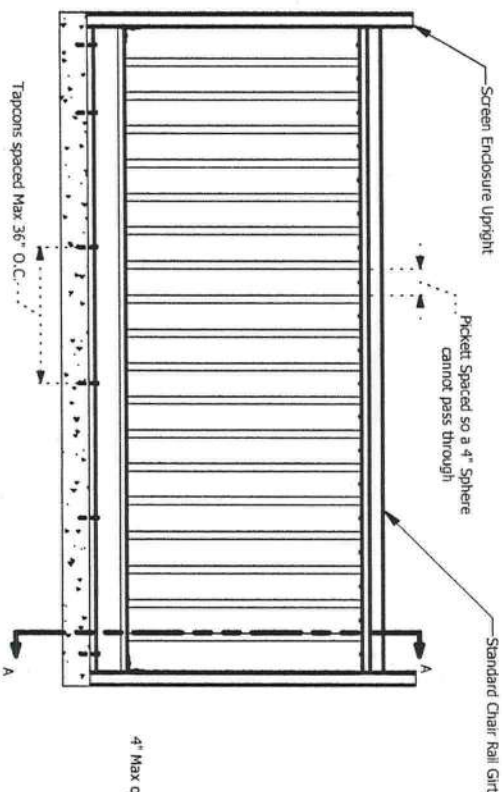
Wind Zone: 130 MPH
Exposure: B

Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2009 Amendments, as well as the ASCE 7-05.



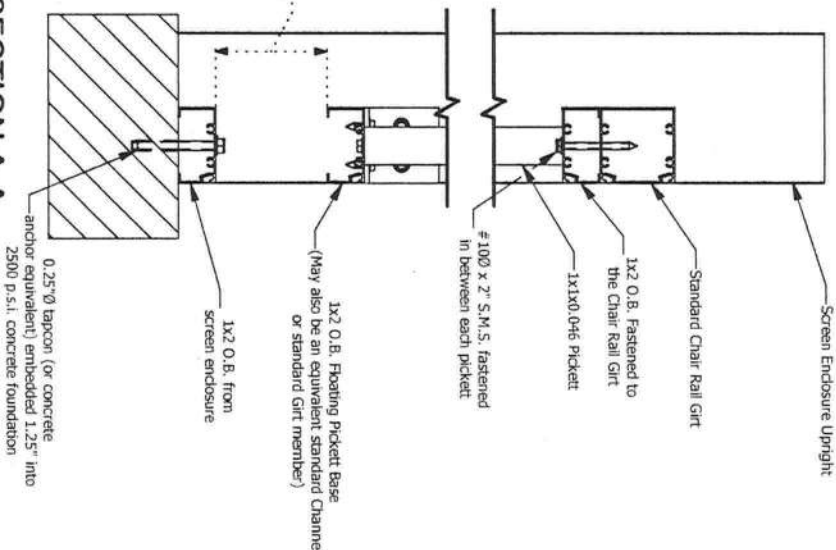
1x1x0.046 Pickett Profile

**Isometric
(View from inside)**

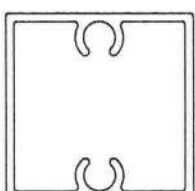
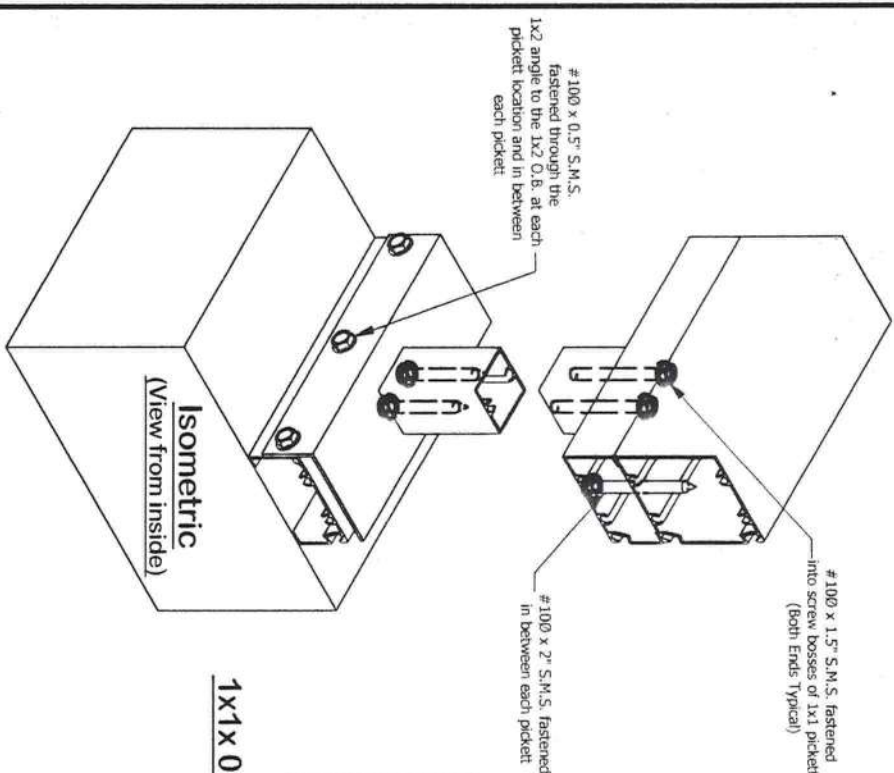


- Notes:**
- 1) This method may be incorporated into any aluminum framed screen wall (including framed in openings in a house).
 - 2) The size of the Chair rail (a.k.a. guard rail) may be chosen from the Girt Schedule.
 - 3) Brick Pavers may be under the 1x2 O.B. sole plate as long as the tapcons attach to the concrete footer or deck underneath them meeting the minimum embedment requirements of 1 1/4 inch.

SECTION A-A

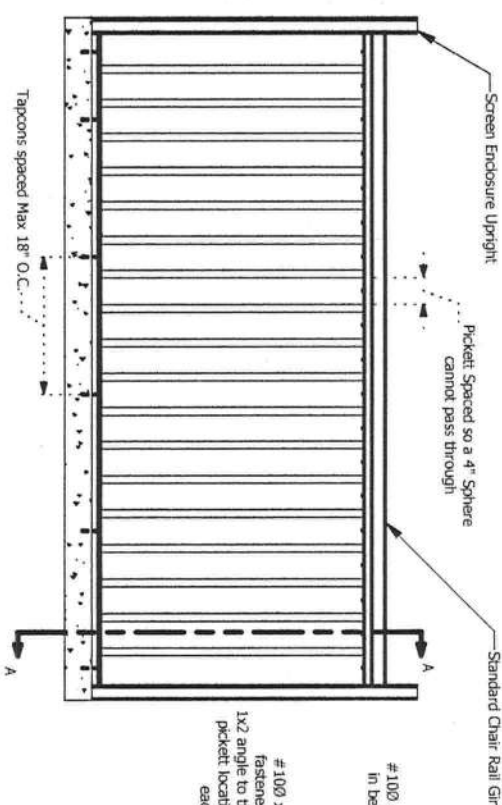


Detail: Retro-Fit Pickett into Screen Wall (Floating Pickett Base)



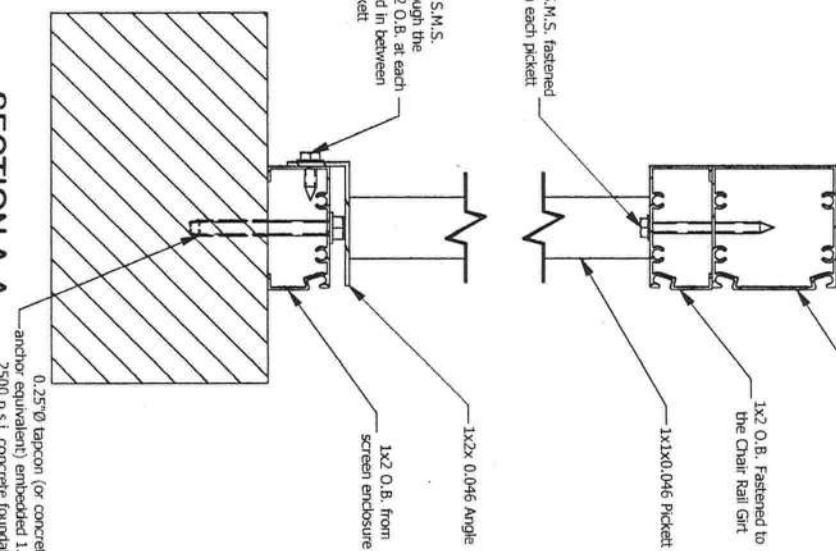
1x1x0.046 Pickett Profile

**Isometric
(View from inside)**



- Notes:**
- 1) This method may be incorporated into any aluminum framed screen wall (including framed in openings in a house).
 - 2) The size of the Chair rail (a.k.a. guard rail) may be chosen from the Girt Schedule.
 - 3) Brick Pavers may be under the 1x2 O.B. sole plate as long as the tapcons attach to the concrete footer or deck underneath them meeting the minimum embedment requirements of 1 1/4 inch.

SECTION A-A



Detail: Retro-Fit Pickett into Screen Wall (1x2 Angle Base)

DAVIS & CLEATON ENGINEERING, INC.

Civil

Structural
601 North Orlando Ave.
Maitland, FL 32751
PHONE: (407) 539-2353
FAX: (407) 407-539-2334

DATE

11/25/11

Design conforms to the FBC 2007 Building and the FBC 2007 Residential, with the 2009 supplements, as well as the ASCE 7-05.

FRANK GLEATON, JR. P.E.
ENGINEER - FL Lic. 35816

Sheet: D16

Wind Zone: 130 MPH
Exposure: B

3x3x0.060 Column Schedule for Solid Roof / Screen Enclosure Combo

Spanning Roof Width (F)	Maximum Height (F)											
	8	10	12	14	16	18	20	22	24	26		
Column Tributary Width Spacing (F)												
8	20.0	19.8	19.6	19.4	19.2	19.0	18.8	18.6	18.4	18.2		
10	19.6	19.4	19.2	19.0	18.8	18.6	18.4	18.2	18.0	17.8		
12	19.2	19.0	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.4		
14	18.8	18.6	18.4	18.2	18.0	17.8	17.6	17.4	17.2	17.0		
16	18.4	18.2	18.0	17.8	17.6	17.4	17.2	17.0	16.8	16.6		
18	17.9	17.7	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1		
20	17.5	17.3	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7		
22	17.1	16.9	16.7	16.5	16.3	16.1	15.9	15.7	15.5	15.3		
24	16.7	16.5	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9		
26	16.3	16.1	15.9	15.7	15.5	15.3	15.1	14.9	14.7	14.5		

Composite Roof Span of 6'

Heights may be interpolated, but not extrapolated

3x3x0.060 Column Schedule for Solid Roof / Screen Enclosure Combo

Column Tributary Width Spacing (F)	Cover And Spacing (F)	Maximum Roof (F)									
		8	10	12	14	16	18	20	22	24	26
6		11.6	12.6	17.4	17.2	17.0	16.8	16.6	16.4	16.2	16.0
10		16.8	16.6	16.4	16.2	16.0	15.8	15.6	15.4	15.2	15.0
16		15.2	15.7	15.5	15.3	15.1	14.9	14.7	14.5	14.3	14.1
14		14.9	14.7	14.5	14.3	14.1	13.9	13.7	13.5	13.3	13.1
12		14.6	13.8	13.6	13.4	13.2	13.0	12.8	12.6	12.4	12.2
8		13.0	12.8	12.6	12.4	12.2	12.0	11.8	11.6	11.4	11.2
20		12.0	11.8	11.6	11.4	11.2	11.0	10.8	10.6	10.4	10.2
22		11.1	10.9	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.3
24		10.1	9.9	9.7	9.5	9.3	9.1	8.9	8.7	8.5	8.3
26		9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.7	7.5	7.3

Heights may be interpolated, but not extrapolated

3x3x0.092 Column Schedule for Solid Roof / Screen Enclosure Combo

Column Tributary Width Spacing [Ft]	Minimum Height [Ft]											
	8	10	12	14	16	18	20	22	24	26		
8	26.9	20.7	20.6	20.5	20.3	20.2	20.1	19.9	19.8	19.7		
10	26.6	20.5	20.3	20.2	20.1	19.9	19.8	19.7	19.5	19.4		
12	26.3	20.2	20.0	19.9	19.8	19.7	19.5	19.4	19.3	19.1		
14	26.0	19.9	19.8	19.6	19.5	19.4	19.2	19.1	19.0	18.9		
16	25.8	19.8	19.5	19.4	19.2	19.1	19.0	18.8	18.7	18.5		
18	25.5	19.4	19.2	19.1	19.0	18.8	18.7	18.6	18.4	18.3		
20	25.2	19.1	19.0	18.8	18.7	18.6	18.4	18.3	18.2	18.0		
22	25.0	18.8	18.7	18.6	18.4	18.3	18.2	18.0	17.9	17.8		
24	24.7	18.7	18.4	18.3	18.2	18.0	17.9	17.8	17.6	17.5		
26	24.4	18.3	18.1	18.0	17.9	17.8	17.5	17.5	17.4	17.2		

Heights may be interpolated, but not extrapolated.

3x3x0.092 Column Schedule for Solid Roof / Screen Enclosure Combo

Column Tributary Width Spacing (ft)	Maximum Ridge (ft)										Slope Roof Tributary Width (ft)					
	8	10	12	14	15	18	20	22	24	26						
8	13.4	15.3	15.1	15.0	14.9	14.7	14.6	14.5	14.4	14.2						
10	14.8	16.6	16.5	16.4	16.2	16.1	16.0	15.8	15.7	15.5						
12	16.1	18.0	17.9	17.6	17.5	17.3	17.2	17.1	17.0	16.8						
14	17.5	19.4	19.2	19.1	19.0	18.8	18.7	18.5	18.5	18.3						
16	18.9	20.7	20.6	20.5	20.3	20.2	20.1	19.9	19.9	19.7						
18	20.2	21.9	21.8	21.6	21.7	21.6	21.4	21.3	21.3	21.1						
20	21.6	23.3	23.2	23.1	23.0	22.8	22.8	22.6	22.6	22.4						
22	22.9	24.6	24.7	24.6	24.4	24.2	24.1	23.9	23.8	23.6						
24	24.3	25.9	26.1	25.9	25.8	25.7	25.5	25.4	25.3	25.1						
26	25.7	27.2	27.3	27.1	27.0	26.8	26.7	26.5	26.4	26.2						

Heights may be interpolated, but not extrapolated

3x3x0.060 Column Schedule for Solid Roof / Screen Enclosure Combo

Column Tributary Width Spacing (ft)	Maximum Design (ft)											
	8	10	12	14	16	18	20	22	24	26	28	30
8	10.5	10.7	10.5	10.3	10.1	9.9	9.7	9.5	9.3	9.1	8.9	8.7
10	10.2	10.0	10.0	9.7	9.4	9.2	9.0	8.8	8.6	8.4	8.2	8.0
12	9.7	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.7	7.5	7.3
14	9.0	8.6	8.4	8.2	8.0	7.8	7.6	7.4	7.2	7.0	6.8	6.6
16	8.2	7.8	7.6	7.4	7.2	7.0	6.8	6.6	6.4	6.2	6.0	5.8
18	7.5	7.3	7.1	6.9	6.7	6.5	6.3	6.1	5.9	5.7	5.5	5.3
20	6.8	6.6	6.4	6.2	6.0	5.8	5.6	5.4	5.2	5.0	4.8	4.6
22	6.1	5.9	5.7	5.5	5.3	5.1	4.9	4.7	4.5	4.3	4.1	3.9
24	5.4	5.2	5.0	4.8	4.6	4.4	4.2	4.0	3.8	3.6	3.4	3.2
26	4.7	4.5	4.3	4.1	3.9	3.7	3.5	3.3	3.1	2.9	2.7	2.5

Heights may be interpolated, but not extrapolated.

3x3x0.060 Column Schedule for Solid Roof / Screen Enclosure Combo

Sawyer Roof Pitching Width (ft)	Maximum Height (ft.)									
	8	10	12	14	16	18	20	22	24	26
8	16.7	18.5	19.3	19.1	18.9	18.7	18.5	18.3	18.1	14.6
10	16.5	18.3	19.1	14.9	14.7	14.5	14.3	14.1	13.9	13.7
12	14.2	14.0	13.8	13.6	13.4	13.2	13.0	12.8	12.6	12.4
14	13.0	12.8	12.6	12.4	12.2	12.0	11.8	11.6	11.4	11.2
16	11.7	11.5	11.3	11.1	10.9	10.7	10.5	10.3	10.1	9.9
18	10.5	10.3	9.1	9.9	9.7	9.5	9.3	9.1	8.9	8.7
20	9.3	9.1	8.9	8.7	8.5	8.3	8.1	7.9	7.7	7.5
22	8.0	7.8	7.6	7.4	7.2	7.0	6.8	6.6	6.4	6.2
24	6.8	6.6	6.4	6.2	6.0	5.8	5.6	5.4	5.2	5.0
26	5.6	5.4	5.2	5.0	4.8	4.6	4.4	4.2	4.0	3.7

Figures may be interpolated, but not extrapolated.

3x3x0.092 Column Schedule for Solid Roof / Screen Enclosure Combo

Down Roof Pitch (in/ft)	8	10	12	14	16	18	20	22	24	26
8	25.1	25.6	26.4	26.7	26.6	26.2	25.7	25.2	24.7	24.5
16	16.7	17.5	18.4	19.3	19.1	19.0	18.5	18.2	17.6	17.5
12	19.2	19.1	19.0	18.8	18.7	18.6	18.4	18.2	18.2	18.0
14	18.6	18.6	18.5	18.4	18.2	18.1	18.0	17.8	17.7	17.6
16	18.3	18.2	18.1	17.9	17.8	17.7	17.5	17.3	17.3	17.1
18	17.9	17.7	17.6	17.5	17.3	17.2	17.1	16.9	16.8	16.7
20	17.4	17.3	17.1	17.0	16.9	16.8	16.6	16.5	16.4	16.3
22	17.0	16.8	16.7	16.6	16.4	16.3	16.2	16.0	15.9	15.8
24	16.6	16.4	16.2	16.1	16.0	15.8	15.7	15.6	15.5	15.3
26	16.1	15.5	15.6	15.7	15.5	15.4	15.3	15.1	15.0	14.9

Heights may be interpolated, but not extrapolated.

[illegible]

Maximum Height (ft)										
Column Tributary Width Spacing (#)	8	10	12	14	16	18	20	22	24	26
8	18.7	18.5	18.4	18.3	18.2	18.0	17.9	17.8	17.6	17.5
10	17.9	17.7	17.6	17.5	17.3	17.2	17.1	16.9	16.6	16.7
12	17.1	16.9	16.8	16.7	16.5	16.4	16.3	16.1	16.0	15.8
14	16.2	16.1	16.0	15.8	15.7	15.6	15.4	15.3	15.2	15.1
16	15.4	15.3	15.2	15.0	14.9	14.8	14.6	14.5	14.4	14.3
18	14.6	14.5	14.3	14.2	14.1	13.9	13.8	13.6	13.7	13.6
20	13.8	13.7	13.5	13.4	13.3	13.1	13.0	12.9	12.7	12.6
22	13.0	12.8	12.7	12.6	12.5	12.3	12.2	12.1	11.9	11.8
24	12.2	12.0	11.9	11.8	11.6	11.5	11.4	11.2	11.1	11.0
26	11.3	11.2	11.1	11.0	10.8	10.7	10.6	10.4	10.3	10.2

Composite Roof Span of 18'

Results may be interpolated but not extrapolated

3x3x0.125 Column Schedule for Solid Roof / Screen Enclosure Combo

Down Roof Pitch, Slope (%)	Maximum Span, Ft (%)									
	8	10	12	14	16	18	20	22	24	26
8	29.7	20.6	20.5	20.4	20.3	20.2	20.1	20.0	19.9	19.8
10	20.4	20.3	20.2	20.1	20.0	19.9	19.8	19.7	19.6	19.5
12	20.0	19.9	19.8	19.7	19.6	19.5	19.4	19.3	19.2	19.1
14	19.7	19.6	19.5	19.4	19.3	19.2	19.1	19.0	18.9	18.8
16	19.4	19.3	19.2	19.1	19.0	18.9	18.8	18.7	18.6	18.5
18	19.0	18.9	18.8	18.7	18.6	18.5	18.4	18.3	18.2	18.1
20	18.7	18.6	18.5	18.4	18.3	18.2	18.1	18.0	17.9	17.8
22	18.3	18.2	18.1	18.0	17.9	17.8	17.7	17.6	17.5	17.4
24	18.0	17.9	17.8	17.7	17.6	17.5	17.4	17.3	17.2	17.1
26	17.7	17.6	17.5	17.4	17.3	17.2	17.1	17.0	16.9	16.8

Meagles may be interpreted, but not extrapolated.

4x4x0.125 Column Schedule for Solid Roof / Screen Enclosure Combo

Span/Roof Pitch (ft)	Minimum Span (ft)											
	8	10	12	14	16	18	20	22	24	26	28	30
Column Tributary Width Spacing (ft)	8	21.2	21.1	21.0	20.9	20.8	20.8	20.7	20.7	20.7	20.7	20.5
	10	20.9	20.6	20.8	20.8	20.7	20.6	20.5	20.5	20.4	20.3	20.3
	12	20.7	20.5	20.5	20.4	20.4	20.3	20.2	20.1	20.1	20.0	20.0
	14	20.4	20.3	20.3	20.2	20.1	20.0	20.0	20.0	19.9	19.8	19.7
	16	20.2	20.1	20.0	19.9	19.8	19.8	19.7	19.6	19.5	19.4	19.3
	18	19.9	19.8	19.8	19.7	19.6	19.5	19.5	19.4	19.3	19.2	19.1
Composite Roof Span of 10'	20	19.7	19.6	19.5	19.4	19.4	19.3	19.2	19.1	19.0	19.0	18.7
	22	19.4	19.3	19.2	19.2	19.1	19.0	19.0	18.9	18.8	18.7	18.6
	24	19.1	19.1	19.0	18.9	18.8	18.8	18.7	18.6	18.5	18.4	18.3
	26	18.9	18.8	18.8	18.7	18.6	18.5	18.5	18.4	18.3	18.2	18.1
	28	18.6	18.6	18.5	18.4	18.3	18.3	18.2	18.1	18.0	17.9	17.8
	30	18.3	18.3	18.2	18.1	18.0	18.0	17.9	17.8	17.7	17.6	17.5

thought's *why* be interpreted, but not *not* interpreted

Carry Beam Schedule for Solid Roof / Screen Enclosure Combo

Member Type	Effective Span (ft.)											
	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	28'	
2x4 SMB	70.1	9.4	8.8	8.4	8.0	7.7	7.3	6.8	6.2	5.6		
2x5 SMB	12.5	11.6	11.0	10.4	9.9	9.5	9.0	8.2	7.7	7.1		
2x6 SMB	17.4	16.7	16.4	15.9	15.5	15.1	14.6	14.5	13.6	12.9		
2x7 SMB	18.3	18.6	17.8	17.4	17.2	16.7	16.4	16.5	15.5	14.8		
2x8 SMB	23.6	23.1	22.5	21.9	21.2	20.9	20.5	20.1	19.4	18.9		
2x9 SMB	26.0	24.3	24.0	23.5	22.8	22.0	21.6	21.1	20.5	19.7		
2x10 SMB	31.6	31.0	30.3	29.7	29.3	28.7	27.9	27.2	26.4	25.9		
2x6 TTB	16.3	17.5	17.1	16.6	16.2	15.6	15.4	14.6	14.5	13.6		
2x7 TTB	21.7	21.0	20.5	20.0	19.4	19.1	18.5	18.0	17.5	17.0		
2x8 TTB	27.7	26.6	26.1	25.5	25.1	24.6	24.0	23.4	22.7	22.4		

Composite Roof Span of 6'

Carry Beam Schedule for Solid Roof / Screen Enclosure Combo

Zero End Span (ft.)	Effective Span (ft.)										Member Type
	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'	
2x4 SWS	7.6	7.4	6.9	6.6	6.3	6.1	5.6	5.3	4.6	4.6	
2x6 SWS	9.9	9.2	8.6	8.2	7.6	7.5	7.1	6.5	6.1	5.6	
2x6 SWS	13.7	13.2	12.9	12.5	12.2	11.9	11.7	11.4	10.9	10.1	
2x7 SWS	15.2	14.7	14.1	13.7	13.3	13.2	12.9	12.5	12.2	11.7	
2x8 SWS	16.6	16.2	15.7	17.3	16.7	16.5	16.1	15.6	15.3	14.9	
2x8 SWS	19.7	19.1	18.9	18.5	18.0	17.4	17.0	16.6	16.1	15.5	
2x10 SWS	25.1	24.4	23.9	23.4	23.1	22.6	22.0	21.4	20.6	20.4	
2x6 TFS	14.4	13.6	13.4	13.1	12.7	12.5	12.1	11.7	11.4	10.9	
2x7 TFS	17.1	16.6	16.1	15.6	15.3	15.0	14.6	14.2	13.6	13.4	
2x8 TFS	21.8	21.1	20.6	20.1	19.6	19.4	18.9	18.4	17.9	17.6	

Composite Roof Span of 14'

Carry Beam Schedule for Solid Roof / Screen Enclosure Combo

Knee and Foot Dimensions	Member Type									
	8"	10"	12"	14"	16"	18"	20"	22"	24"	26"
	Effective Span (ft.)									
2x4 SHB	0.9	0.2	7.8	7.4	7.1	6.8	6.5	6.0	5.5	5.2
2x6 SHB	11.1	10.3	9.7	9.2	8.8	8.4	8.0	7.3	6.8	6.3
2x8 SHB	15.4	14.8	14.1	13.7	13.4	13.0	12.8	12.2	11.4	10.9
2x10 SHB	17.1	16.5	15.8	15.4	15.2	14.8	14.5	14.1	13.7	13.1
2x12 SHB	20.5	20.4	19.9	19.5	19.4	18.8	18.5	18.1	17.6	17.2
2x6 SHB	22.1	21.5	21.2	20.6	20.2	19.5	19.1	18.7	18.1	17.7
2x8 SHB	28.2	27.4	26.8	26.3	25.5	25.4	24.7	24.1	23.4	22.9
2x10 SHB	36.2	35.5	35.1	34.7	34.1	33.6	33.1	32.8	32.1	31.8
2x12 SHB	39.2	38.6	38.1	37.7	37.2	36.5	36.4	35.8	35.5	35.0
2x8 TTB	24.5	23.7	23.1	22.5	22.2	21.8	21.2	20.7	20.1	19.6

Composite Roof Span of 10'

Carry Beam Schedule for Solid Roof / Screen Enclosure Combo

Member Type	Effective Span (ft)									
	8'	10'	12'	14'	16'	18'	20'	22'	24'	26'
2x4 SWS	7.0	6.6	6.2	5.8	5.6	5.4	5.1	4.7	4.3	4.1
2x4 SWS	6.6	6.1	5.7	5.3	5.0	4.6	4.3	3.8	3.4	3.0
2x6 SWS	12.2	11.7	11.5	11.3	10.6	10.6	10.4	10.1	9.6	9.0
2x4 SWS	13.6	13.0	12.5	12.2	12.0	11.7	11.3	11.1	10.6	10.3
2x6 SWS	18.5	18.1	15.7	15.3	14.6	14.6	14.3	14.1	13.6	13.2
2x6 SWS	17.5	17.0	16.7	16.4	16.0	15.4	15.1	14.6	14.3	13.7
2x6 SWS	22.3	21.6	21.2	20.8	20.5	20.1	19.5	19.0	18.5	18.1
2x6 TRB	12.8	12.2	11.9	11.6	11.3	11.1	10.7	10.3	9.8	9.3
2x6 TRB	15.2	14.7	14.3	14.0	13.6	13.4	13.0	12.6	12.2	11.9
2x6 TRB	19.4	18.7	18.2	17.9	17.5	17.2	16.7	16.4	15.9	15.6

ELITE PANEL SPAN TABLES

Shown for information purposes only

3' x 0024 x 1 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	16.17	15.76	15.03	14.10
20	13.44	13.44	12.82	10.35
30	10.78	10.78	9.41	6.60
40	9.22	9.22	6.60	2.85
50	8.17	8.17	3.79	-
60	7.40	6.39	0.98	-
70	6.81	4.51	-	-
80	6.33	2.64	-	-

3' x 0032 x 1 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	17.50	17.50	16.91	15.96
20	16.64	15.96	14.06	12.16
30	15.17	14.06	11.21	8.36
40	13.69	12.16	8.36	4.56
50	12.22	10.26	5.51	0.76
60	10.75	8.36	2.66	-
70	9.27	6.46	-	-
80	7.80	4.56	-	-

3' x 0024 x 2 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	19.33	18.95	18.31	17.66
20	18.11	17.66	16.36	15.06
30	16.80	16.36	14.41	12.46
40	15.49	15.06	12.46	9.86
50	14.18	13.76	10.51	7.26
60	12.87	12.46	8.57	4.67
70	11.57	11.16	6.62	2.07
80	10.26	9.86	4.67	-

3' x 0030 x 2 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	20.11	20.03	19.42	18.81
20	19.02	18.81	17.58	16.35
30	17.93	17.58	15.73	13.89
40	16.83	16.35	13.89	11.43
50	15.74	15.12	12.05	8.97
60	14.64	13.89	10.21	6.52
70	13.55	12.66	8.36	4.06
80	12.46	11.43	6.52	1.60

4' x 0024 x 1 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	19.00	19.00	17.17	16.53
20	15.01	15.01	15.01	13.95
30	12.50	12.50	12.50	11.38
40	10.97	10.97	10.97	8.80
50	9.92	9.92	9.44	6.22
60	9.13	9.13	7.51	3.64
70	8.52	8.52	5.58	1.07
80	8.02	8.02	3.64	-

4' x 0032 x 1 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	20.50	20.50	20.11	19.24
20	19.61	19.24	17.49	15.74
30	18.17	17.49	14.87	12.24
40	16.72	15.74	12.24	8.74
50	15.28	13.99	9.62	5.25
60	13.84	12.24	7.00	1.75
70	12.40	10.49	4.38	-
80	10.95	8.74	1.75	-

4' x 0024 x 2 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	21.97	21.97	21.52	20.97
20	20.77	20.77	19.86	18.76
30	19.57	19.57	18.21	16.55
40	18.36	18.36	16.55	14.34
50	17.16	17.16	14.89	12.13
60	15.96	15.96	13.24	9.93
70	14.75	14.75	11.58	7.72
80	13.55	13.55	9.93	5.51

4' x 0030 x 2 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	24.17	24.17	24.17	24.17
20	23.64	23.64	23.41	23.11
30	22.57	22.57	21.90	21.01
40	21.51	21.51	20.39	18.91
50	20.45	20.45	18.88	16.80
60	19.39	19.39	17.37	14.70
70	18.33	18.33	15.86	12.59
80	17.26	17.26	14.35	10.49

6' x 0024 x 1 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	23.00	21.24	21.47	20.85
20	18.06	18.06	18.06	18.06
30	15.13	15.13	15.13	15.13
40	13.34	13.34	13.34	13.34
50	12.10	12.10	10.91	-
60	11.17	11.17	8.43	-
70	10.44	10.44	5.95	-
80	9.85	9.85	3.47	-

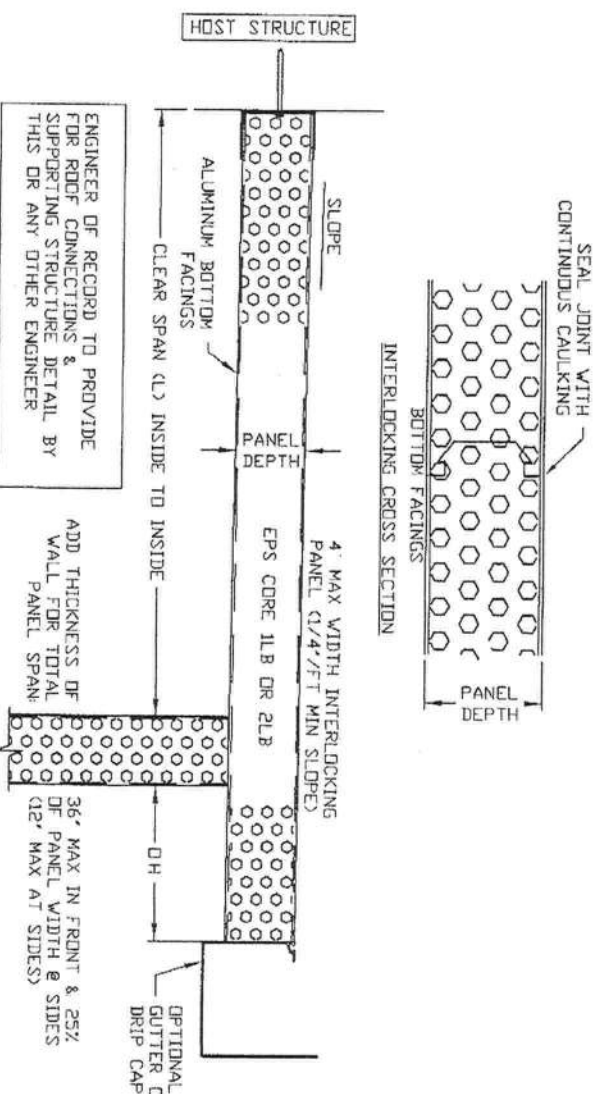
6' x 0032 x 1 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	24.00	24.00	24.00	23.42
20	23.34	23.34	21.92	20.22
30	22.10	21.63	19.42	17.02
40	20.86	20.05	17.02	13.82
50	19.62	18.47	14.62	10.62
60	18.38	16.99	12.22	7.42
70	17.14	15.30	9.82	4.22
80	15.91	13.72	7.42	1.02

6' x 0024 x 2 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	23.93	23.93	23.88	23.60
20	23.20	23.20	23.03	22.46
30	22.47	22.47	22.18	21.33
40	21.75	21.75	21.33	20.20
50	21.02	21.02	20.49	19.07
60	20.29	20.29	19.64	17.94
70	19.57	19.57	18.79	16.81
80	18.84	18.84	17.94	15.68

6' x 0030 x 2 - LB EPS PANELS (ALLOWABLE CLEAR SPAN CHARTS)				
ALLOWABLE LOAD (PSF)	MAX ALLOWABLE SPAN (FT)			
	L/80	L/120	L/180	L/240
10	24.00	24.00	24.00	23.84
20	23.65	23.65	23.34	22.84
30	22.94	22.94	22.59	21.85
40	22.23	22.23	21.85	20.85
50	21.53	21.53	21.10	19.86
60	20.82	20.82	20.36	18.87
70	20.11	20.11	19.61	17.87
80	19.40	19.40	18.87	16.88

GENERAL NOTES

- Composite panels shall be constructed using type 3003-H14 aluminum facings, 1 or 2 PCF ASTM C-578 carpenter brand EPS adhere to aluminum facings with Ashland Chemical 2020D ISO grip. Fabrication to be by Elite panel products only in accordance with approved fabrication methods.
- Elite roof panels maintain a UL 1715 (int) class 'B' (ext) rating and are NER-501 approved.
- This specification has been designed and shall be fabricated in accordance with the requirements of the 2007 Florida Building Code, composite panels comply with Chapter 7 Section 719, Chapter 8 Section 803, Class A interior finish, and Chapter 26 Section 2603. All local building code amendments shall be adhered to as required.
- The designer shall determine by accepted engineering practice the allowable loads for site specific load conditions (including load combinations) using the data from the allowable loads tables and spans in this approval.
- Deflection limits and allowable spans have been listed to meet 2007 FBC including the HVHZ. In HVHZ, this product shall be used in structures "not to be considered living areas" per Section 1613 unless impact resistance in accordance to the HVHZ requirements are met.
- Safety factor of 2.0 has been used to develop allowable loads and spans from testing in accordance to the Guidelines for Aluminum Structures Part I and conforms to the 2007 FBC Chapter 16 and 20.
- Testing has been conducted in accordance to ASTM E7-05: Strength Test of Panels for Building Construction.
- Reference test reports: HEI1-05-1988, HEI1-06-2104, HEI1-06-2066, HEI1-06-2067, HEI1-05-1002, HEI1-06-2107, HEI1-05-1987, HEI1-06-2069, HEI1-06-2070, HEI1-06-2071, HEI1-05-1994, HEI1-05-1991, HEI1-06-2072, HEI1-06-2073, HEI1-06-2074, HEI1-05-1996, HEI1-05-1989, HEI1-05-1993, HEI1-05-1985, HEI1-05-1995, HEI1-05-1990, HEI1-05-1997, HEI1-05-2037, HEI1-05-2029, HEI1-05-2039, HEI1-05-2030, HEI1-05-2041, HEI1-05-2048, HEI1-05-2036, HEI1-05-2031, HEI1-05-2038, HEI1-05-2065, HEI1-05-2040, HEI1-05-2042.
- Linear interpolation shall be allowed for figures within the tables shown.
- Panels with fan beams shall be considered equivalent to similar panels without fan beams. Design professionals may include the strength of the fan beam to exceed shown figures as part of site-specific engineering.



EPS ROOF PANEL/ SPAN DESCRIPTION

DO KIM
& ASSOCIATES, LLC
CONSULTING
STRUCTURAL
ENGINEERS

PO BOX 10039
Tampa, FL 33679
Tel: (813) 374-0321
Fax: (813) 374-0322

Rev/Date	Description
001/2006	ISSUED FOR PRODUCT APPROVAL
002/2007	ISSUED FOR 2007 PRODUCT APPROVAL

Elite Aluminum Corporation
4650 Lyons Technology Parkway
Coconut Creek, FL 33073
EPS FOAM CORE COMPOSITE PANELS
ALUMINUM/ALUMINUM SKIN
FLORIDA STATEWIDE PRODUCT APPROVAL

DRAWN BY:	DVK
CHECKED BY:	DVK
SCALE:	AS SHOWN
DATE:	9/19/06

DO KIM & ASSOCIATES, LLC
FLA REG. NUMBER 43497
P.O. BOX 10039
Tampa, FL 33679

Drawing No. - FL-1001

SHEET 1 OF 1