

50



Lumber design values are in accordance with ANSI/TPI 1-2007 section 6.3  
These truss designs rely on lumber values established by others.

RE: ELIX-SISTRUNK - ROOF DESIGN INFO

**MiTek USA, Inc.**

6904 Parke East Blvd.  
Tampa, FL 33610-4115

**Site Information:**

Customer Info: SISTRUNK Project Name: SISTRUNK Model:  
Lot/Block: Subdivision:  
Address:  
City: COLUMBIA COUNTY State: FLORIDA

**Name Address and License # of Structural Engineer of Record, if there is one, for the building.**

Name: License #:  
Address:  
City: State:

**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: FBC2010 Design Program: OnLine Plus 30.0.014  
Wind Code: ASCE 7-10 Wind Speed: 120 mph Floor Load: N/A psf  
Roof Load: 40.0 psf

This package includes 2 individual, dated Truss Design Drawings and 0 Additional Drawings.  
With my seal affixed to this sheet, I hereby certify that I am the Truss Design Engineer and this index sheet conforms to 61G15-31.003, section 5 of the Florida Board of Professional Engineers Rules.

| No. | Seal#    | Truss Name | Date      |
|-----|----------|------------|-----------|
| 1   | T4589408 | R1         | 10/26/012 |
| 2   | T4589409 | R2GE       | 10/26/012 |



The truss drawing(s) referenced above have been prepared by MiTek Industries, Inc. under my direct supervision based on the parameters provided by Mayo Truss Company, Inc..

Truss Design Engineer's Name: Albani, Thomas

My license renewal date for the state of Florida is February 28, 2013.

**NOTE:** The seal on these drawings indicate acceptance of professional engineering responsibility solely for the truss components shown. The suitability and use of this component for any particular building is the responsibility of the building designer, per ANSI/TPI-1 Sec. 2.

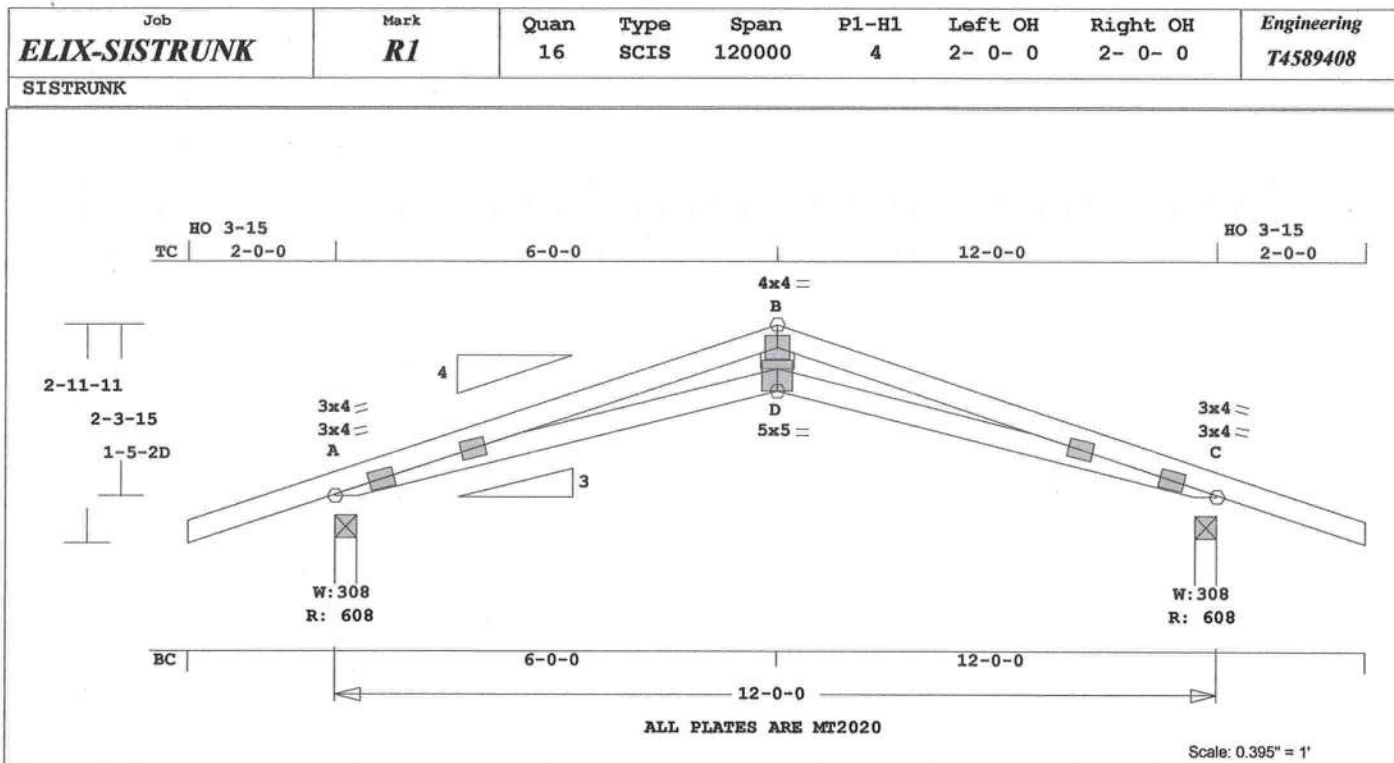


FL Cert. 6634

October 26, 2012

Albani, Thomas

1 of 1



Online Plus -- Version 30.0.014  
RUN DATE: 26-OCT-12

Southern Pine lumber design  
values are those effective

06-01-12 by SPIB//ALSC UON

CSI -Size- ----Lumber----

TC 0.41 2x 4 SP-#2  
BC 0.74 2x 4 SP-#2  
WB 0.16 2x 6 SP-#2

Brace truss as follows:

| O.C.     | From    | To       |
|----------|---------|----------|
| TC Cont. | 0- 0- 0 | 12- 0- 0 |
| or 36.0" | 0- 0- 0 | 12- 0- 0 |
| BC Cont. | 0- 0- 0 | 12- 0- 0 |
| or 84.0" | 0- 0- 0 | 12- 0- 0 |

| psf-Ld | Dead            | Live          |
|--------|-----------------|---------------|
| TC     | 10.0            | 20.0          |
| BC     | 10.0            | 0.0           |
| TC+BC  | 20.0            | 20.0          |
| Total  | 40.0            | Spacing 24.0" |
| Lumber | Duration Factor | 1.25          |
| Plate  | Duration Factor | 1.25          |
| Fb     | Fc              | Ft            |
| TC     | 1.15            | 1.10          |
| BC     | 1.10            | 1.10          |

Total Load Reactions (Lbs)

| Jt | Down | Uplift | Horiz- |
|----|------|--------|--------|
| A  | 608  |        | 19 R   |
| C  | 608  |        | 19 R   |

| Jt | Brg Size | Required |
|----|----------|----------|
| A  | 3.5"     | 1.5"     |
| C  | 3.5"     | 1.5"     |

Plus 21 Wind Load Case(s)  
Plus 1 UBC LL Load Case(s)  
Plus 1 DL Load Case(s)

| Membr                | CSI  | P Lbs  | Axl-CSI-Bnd |
|----------------------|------|--------|-------------|
| -----Top Chords----- |      |        |             |
| A -B                 | 0.41 | 2376 C | 0.10 0.31   |

MiTek® Online Plus™ APPROX. TRUSS WEIGHT: 56.6 LBS

B -C 0.41 2376 C 0.10 0.31

-----Bottom Chords-----

A -D 0.74 2334 T 0.49 0.25

D -C 0.74 2334 T 0.49 0.25

-----Webs-----

D -B 0.16 1243 T

TL Defl -0.43" in D -C L/315

LL Defl -0.17" in D -C L/793

Hx Disp LL DL TL

Jt C 0.11" 0.16" 0.27"

Shear // Grain in A -B 0.15

Plates for each ply each face.

Plate - MT20 20 Ga, Gross Area

Plate - MT2H 20 Ga, Gross Area

Jt Type Plt Size X Y JSI

A MT20 3.0x 4.0 7.4 2.5 0.53

A MT20 3.0x 4.0-7.4-2.5 0.26

B MT20 4.0x 4.0 Ctr Ctr 0.72

C MT20 3.0x 4.0-7.4 2.5 0.53

C MT20 3.0x 4.0 7.4-2.5 0.26

D MT20 5.0x 5.0 Ctr-1.1 0.67

REVIEWED BY:

MiTek Industries, Inc.

6904 Parke East Blvd.

Tampa, FL 33610

REFER TO ONLINE PLUS GENERAL

NOTES AND SYMBOLS SHEET FOR

ADDITIONAL SPECIFICATIONS.

NOTES:

Trusses Manufactured by:

Mayo Truss Co. Inc.

Analysis Conforms To:

FBC2010

TPI 2007

OH Loading

Soffit psf 2.0

This truss has been designed

for 20.0 psf LL on the B.C.

in areas where a rectangle

3- 6- 0 tall by

2- 0- 0 wide  
will fit between the B.C.  
and any other member.

Design checked for 10 psf non-  
concurrent LL on BC.

Wind Loads - ANSI / ASCE 7-10

Truss is designed as

Components and Claddings\*

for Exterior zone location.

Wind Speed: 120 mph

Risk Category : II

Mean Roof Height: 15-0

Exposure Category: B

Building Type: Enclosed

TC Dead Load: 6.0 psf

BC Dead Load: 6.0 psf

Max comp. force 2376 Lbs

Max tens. force 2334 Lbs

Connector Plate Fabrication

Tolerance = 20%

This truss is designed for a

creep factor of 1.5 which

is used to calculate total

load deflection.



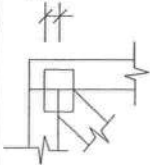
FL Cert. 6634





# ONLINE PLUS GENERAL NOTES & SYMBOLS

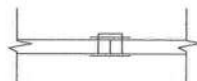
108



## PLATE LOCATION

Center plates on joints unless otherwise noted in plate list or on drawing. Dimensions are given in inches (i.e. 1 1/2" or 1.5") or IN-16ths (i.e. 108)

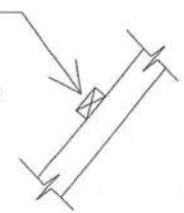
## FLOOR TRUSS SPLICE ( 3X2, 4X2, 6X2 )



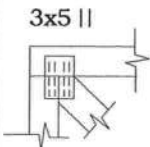
(W) = Wide Face Plate  
(N) = Narrow Face Plate

## LATERAL BRACING

Designates the location for continuous lateral bracing (CLB) for support of individual truss members only. CLBs must be properly anchored or restrained to prevent simultaneous buckling of adjacent truss members.



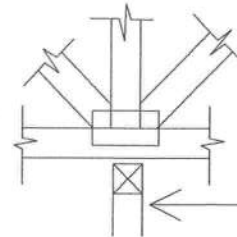
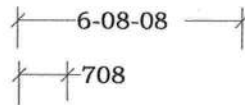
## PLATE SIZE AND ORIENTATION



The first dimension is the width measured perpendicular to slots. The second dimension is the length measured parallel to slots. Plate orientation, shown next to plate size, indicates direction of slots in connector plates.

## DIMENSIONS

All dimensions are shown in FT-IN-SX (i.e. 6'-8.5" or 6-08-08 ). Dimensions less than one foot are shown in IN-SX only (i.e. 708).



W = Actual Bearing Width (IN-SX)  
R = Reaction (lbs.)  
U = Uplift (lbs.)

## BEARING

When truss is designed to bear on multiple supports, interior bearing locations should be marked on the truss. Interior support or temporary shoring must be in place before trusses are installed. If necessary, shim bearings to assure solid contact with truss.

Metal connector plates shall be applied on both faces of truss at each joint. Center the plates, unless indicated otherwise. No loose knots or wane in plate contact area. Splice only where shown. Overall spans assume 4" bearing at each end, unless indicated otherwise. Cutting and fabrication shall be performed using equipment which produces snug-fitting joints and plates. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication and the attached truss designs are not applicable for use with fire retardant lumber and some preservative treatments. Nails specified on Truss Design Drawings refer to common wire nails, except as noted. The attached design drawings were prepared in accordance with " National Design Specifications for Wood Construction" (AF & PA ), " National Design Standard for Metal Plate Connected Wood Truss Construction" (ANSI/TPI 1), and HUD Design Criteria for Trussed Rafters.

Mitek Industries Inc. bears no responsibility for the erection of trusses, field bracing or permanent truss bracing. Refer to "Building Component Safety Information" (BCSI 1) as published by Truss Plate Institute, 218 North Lee Street, Suite 312, Alexandria, Virginia 22314. Persons erecting trusses are cautioned to seek professional advice concerning proper erection bracing to prevent toppling and " dominoing ". Care should be taken to prevent damage during fabrication, storage, shipping and erection. Top and bottom chords shall be adequately braced in the absence of sheathing or rigid ceiling, respectively. It is the responsibility of others to ascertain that design loads utilized on these drawings meet or exceed the actual dead loads imposed by the structure and the live loads imposed by the local building code or historical climatic records. When truss hangers are specified on the Truss Design Drawing, they must be installed per manufacturer's details and specifications.

FURNISH A COPY OF THE ATTACHED TRUSS DESIGN DRAWINGS TO ERECTION CONTRACTOR. IT IS THE RESPONSIBILITY OF THE BUILDING DESIGNER TO REVIEW THESE DRAWINGS AND VERIFY THAT DATA, INCLUDING DIMENSIONS & LOADS, CONFORM TO ARCHITECTURAL PLAN / SPECS AND THE TRUSS PLACEMENT DIAGRAM FURNISHED BY THE TRUSS MANUFACTURER.

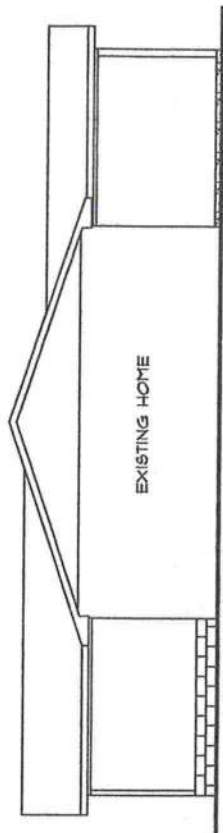
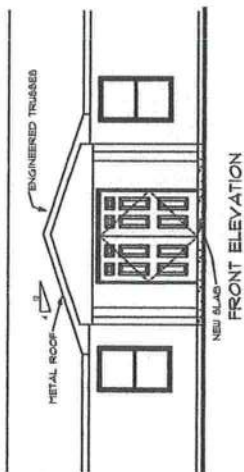


## MiTek USA, Inc.

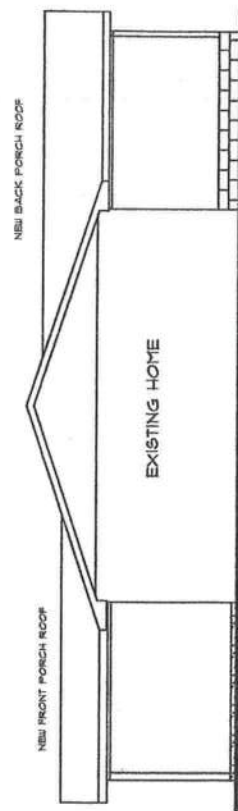
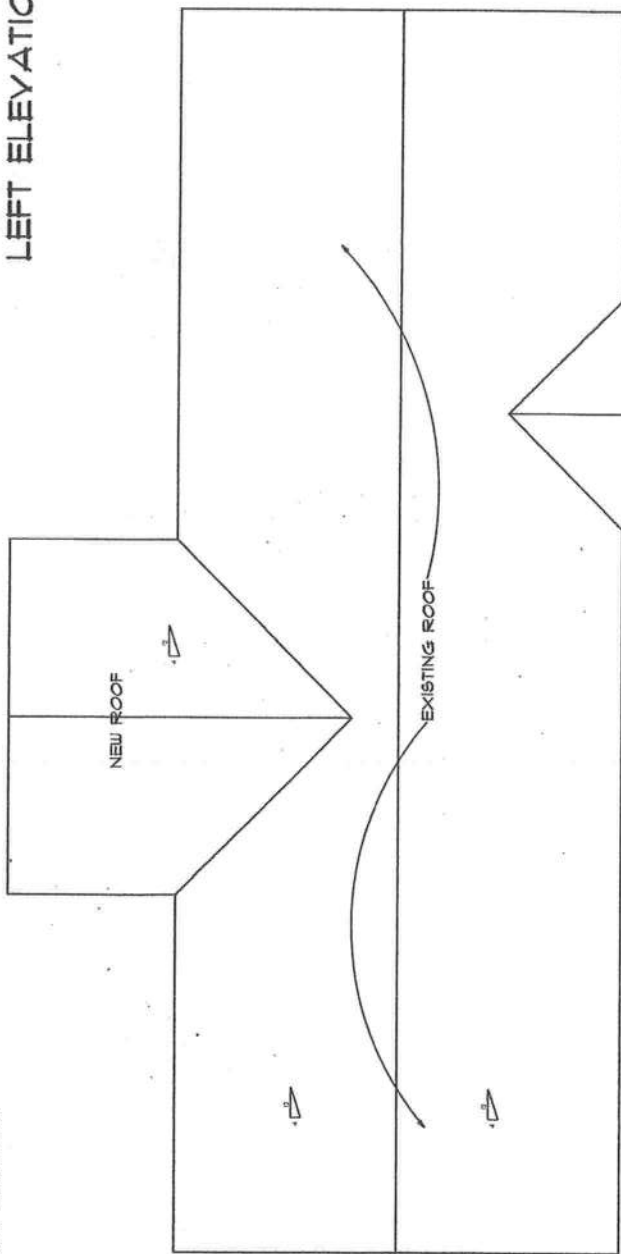
6904 Parke East Blvd.  
Tampa, FL 33610-4115

Tel: 813-972-1135  
Fax: 813-971-6117

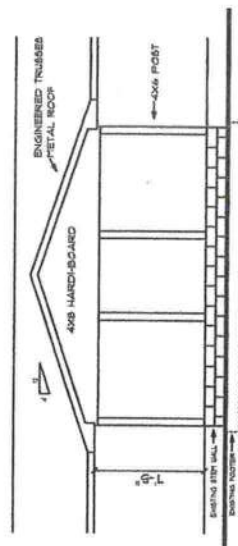




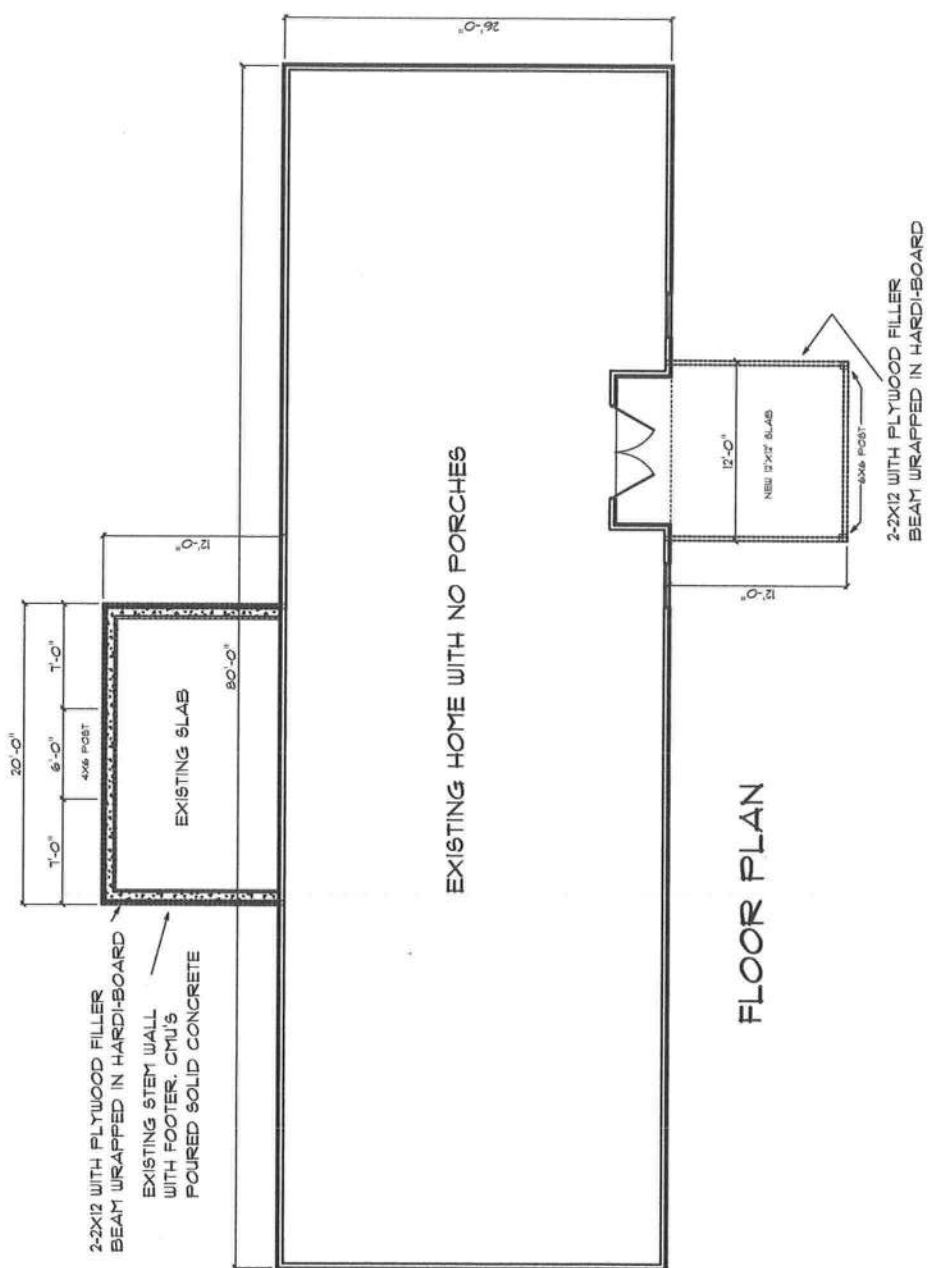
LEFT ELEVATION



RIGHT ELEVATION



BACK ELEVATION



E



Prepared for:

JASON ELIXSON CONSTRUCTION  
SISTRUNK PORCH ADDITION  
COLUMBIA COUNTY, FLORIDA

By:

Schafer Engineering, LLC

386-462-1340 / 352-375-6329



***NO COPIES ARE TO BE PERMITTED***

**SCHAFER ENGINEERING, LLC**  
7104 NW 42ND LANE \ GAINESVILLE FL. 32606  
PHONE: 386-462-1340 \ 352-375-6329

Trusses: Pre-engineered, pre-fabricated with the manufacturer's required bracing system installed.

Roof Sheathing: Type: OSB Size: 7/16" Fastener type nails: 8d / .113 Ring Shank  
Interior zone spacing: Interior: 6" Periphery: 4"  
Edge and end zone spacing: Interior: 6" Periphery: 4"

Double Top Plate: Type: Spruce Grade: #1 #2 Size: 2 x 4 Nail Spacing: 8" o.c.

Stud Type: Spruce Grade: #1 #2 Size: 2 x 4  
Interior stud spacing: 16" End stud spacing: 16"

Shear Wall Siding: Type: OSB Thickness: 7/16"  
6 ft Trans: Fastener 8d/131 Spacing: Int: 8 Edge: 4"  
6 ft Trans: Fastener 8d/131 Spacing: Int: 8 Edge: 4"

Allowable Unit Shear on Shear Walls: 314 pounds per linear foot  
Unit Shear Transferred from Diaphragm: Trans: 254 Long: 207

Wall Tension Transferred by: Siding Nails: 8d/131 @ 4" O.C. Edges

Foundation Anchor Bolts: Concrete Strength: 3000 psi Size: 1/2"

Washer: 2" Embedment: 7" Location of first anchor bolt from corner: 8"

Anchor Bolts @ 48" o.c. Model: A307 Loc. from corner: 8"

Type of Foundation: (1) - #5 rebar continuous required in bond beam.  
Floor Slab: 4" Cmu size: 8" x 16" Height: 24" Rein.: #5 at 72" o.c.

Monolithic Footing: Depth: 20" Bottom Width: 12 Rein.: 2 #5 rebars

Stemwall Footing: Width: 20 Depth: 10 Rein.: 2 #5 rebar

Interior Footings 16" Wide X 10" Deep with 2-#5 rebar continuous

Porch Columns: 6 x 6 x 8' syp pt @ Simpson CB66 \  
148" o.c. max spacing Column Fasteners: (2) LCE4 or equal

Special Comments: Install ceiling diaphragm on open porch using same size nail,  
same nail spacing and same grade material as roof sheathing.

**Notes:**

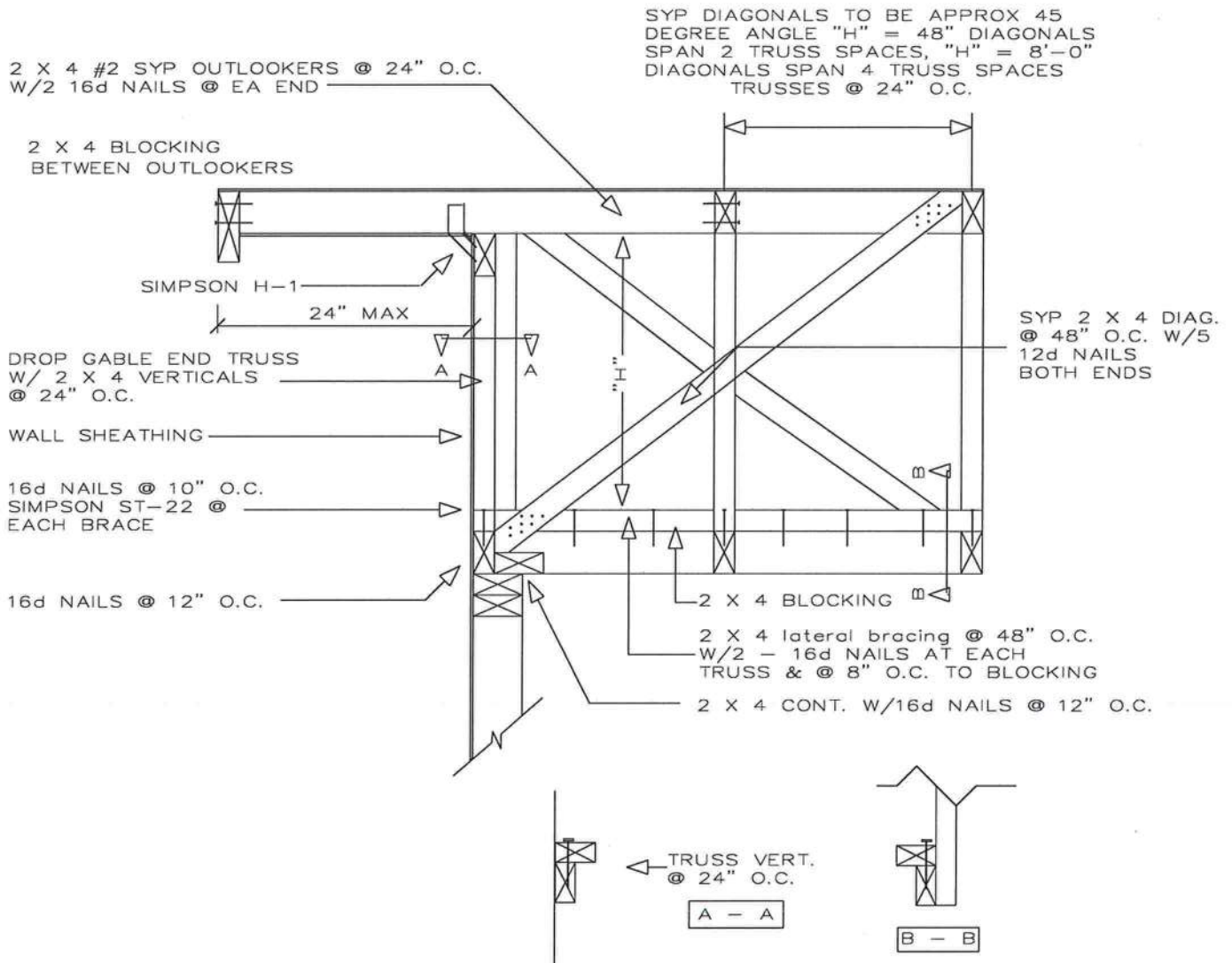
1. Balloon frame all gable ends unless accompanied by gable end detail
2. All trusses must bear on exterior walls and porch beams.
3. All walls to be nailed with same nailing pattern as the shear walls.
4. This wind load is not valid without a raised, embossed seal. (NO COPIES).
5. 1500 psf soil bearing pressure minimum.
6. Fiber mesh or WWM may be used in concrete slab. All steel must be grade 40 min.
7. Trusses must be installed and anchored in accordance to the truss engineering.
8. All headers spanning over 12' must be pre-engineered.
9. The foundation is for minimum design use, and may be increased.
10. Wind load is for one use only \ FBC-2010 \ No copies permitted

Bruce Schafer, P. E. #48984  
7104 NW 42ND LN  
GAINESVILLE, FL. 32606



# SCHAFER ENGINEERING, LLC

7104 NW 42ND LANE \ GAINESVILLE FL. 32606  
 PHONE: 386-462-1340 \ 352-375-6329



## TYPICAL GABLE END BRACING

*B. Schafer*  
 10-24-12

# SCHAFFER ENGINEERING, LLC

7104 NW 42ND LANE \ GAINESVILLE FL. 32606  
PHONE: 386-462-1340 \ 352-375-6329

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## TIE-DOWN TABLES

### HEADER STRAPPING

| Uplift Lbs | Top Connector | Rating Lbs | Bottom Connector | Rating Lbs |
|------------|---------------|------------|------------------|------------|
| to 455     | LSTA19        | 635        | H3               | 320        |
| to 910     | LSTA12        | 795        | 2-H3             | 640        |
| to 1265    | LSTA18        | 1110       | LTT19            | 1305       |
| to 1750    | 2-LSTA12      | 1810       | LTT20            | 1750       |
| to 2530    | 2-LSTA18      | 2530       | HD2A-2.5         | 2165       |
| to 2865    | 3-LSTA18      | 3255       | HD2A-3.5         | 2865       |
| to 3700    | 3-LSTA24      | 3880       | HD5A-3           | 3130       |

Total the uplift for each truss sitting on the header and divide by 2 to determine the uplift on the header. Use proper bolt anchors sufficient to support required uplift loads.

### TRUSSES \ GIRDERS

| Uplift Lbs | Top Connector | Bottom Connector | Rating Lbs |
|------------|---------------|------------------|------------|
| to 535     | H2.5A         | NA               |            |
| to 1015    | H10A          | NA               |            |
| to 1215    | TS22          | LTT19            | 1305       |
| to 1750    | 2-TS22        | LTT20            | 1750       |
| to 2570    | 2-TS22        | HD2A             | 2775       |
| to 3665    | 3-TS22        | HD5A             | 4010       |
| to 5420    | 2-MST37       | HTT22            | 5250       |
| to 9660    | 2-MST60       | HD10A            | 9540       |

Two 12d common toenails are required per truss for each bearing point into top plate.  
It is the contractors responsibility to provide a continuous load path from truss to foundation.

|            | TOP CONNECTOR | RATING LBS | BOTTOM CONNECTOR | RATING LBS |
|------------|---------------|------------|------------------|------------|
| BEAM SEATS | LSTA18        | 1110       | LTT19            | 1305       |
| POSTS      | 2-LSTA18      | 2220       | ABU44            | 2300       |

1. Simpson or equivalent hardware may be used.  
For nailing into spruce members, multiply table values by .86
2. See truss engineering for anchor uplift values.
3. This schedule is not meant to be a replacement to the specified values of any manufactures values.

Bruce Schofer, P. E. #48984  
7104 NW 42ND LN  
GAINESVILLE, FL. 32606

## Wind Load Design per ASCE 7-10

| User Input Data            |          |     |
|----------------------------|----------|-----|
| Structure Type             | Building |     |
| Basic Wind Speed (V)       | 135      | mph |
| Structural Category        | II       |     |
| Exposure                   | B        |     |
| Struc Nat Frequency (n1)   | 1        | Hz  |
| Slope of Roof (Theta)      | 18.4     | Deg |
| Type of Roof               | Gabled   |     |
| Eave Height (Eht)          | 8.00     | ft  |
| Ridge Height (RHt)         | 10.54    | ft  |
| Mean Roof Height (Ht)      | 9.52     | ft  |
| Width Perp. to Wind (B)    | 12.00    | ft  |
| Width Parallel to Wind (L) | 12.00    | ft  |
| Damping Ratio (beta)       | 0.01     |     |

Red values should be changed only through "Main Menu"

| Calculated Parameters       |      |
|-----------------------------|------|
| Type of Structure           |      |
| Height/Least Horizontal Dim | 0.79 |
| Flexible Structure          | No   |

| Calculated Parameters                            |          |    |
|--|----------|----|
| Importance Factor                                | 1        |    |
| Non-Hurricane, Hurricane (v=85-100 mph) & Alaska |          |    |
| Table C6-4 Values                                |          |    |
| Alpha =  | 7.000    |    |
| zg =   | 1200.000 |    |
|  |          |    |
|  |          |    |
|  |          |    |
| At =   | 0.143    |    |
| Bt =   | 0.840    |    |
| Am =   | 0.250    |    |
| Bm =   | 0.450    |    |
| Cc =   | 0.300    |    |
| l =  | 320.00   | ft |
| Epsilon =  | 0.333    |    |
| Zmin =   | 30.00    | ft |

| Gust Factor Category I: Rigid Structures - Simplified Method           |   |        |      |
|--|---|--------|------|
| Gust1  | For rigid structures (Nat Freq > 1 Hz) use 0.85   | 0.85   |      |
| Gust Factor Category II: Rigid Structures - Complete Analysis          |   |        |      |
| Zm   | Zmin  | 30.00  | ft   |
| lzm  | $Cc * (33/z)^{0.167}$   | 0.3048 |      |
| Lzm  | $l * (zm/33)^{Epsilon}$   | 309.99 | ft   |
| Q  | $(1/(1+0.63*((B+Ht)/Lzm)^{0.63}))^{0.5}$  | 0.9460 |      |
| Gust2  | $0.925 * ((1+1.7 * lzm * 3.4 * Q)/(1+1.7 * 3.4 * lzm))$                                 | 0.8932 |      |
| Gust Factor Category III: Flexible or Dynamically Sensitive Structures |   |        |      |
| Vhref  | $V * (5280/3600)$   | 198.00 | ft/s |
| Vzm  | $bm * (zm/33)^{Am} * Vhref$   | 87.00  | ft/s |
| NF1  | $NatFreq * Lzm / Vzm$   | 3.56   | Hz   |
| Rn   | $(7.47 * NF1) / (1 + 10.302 * NF1)^{1.667}$   | 0.0627 |      |
| Nh   | $4.6 * NatFreq * Ht / Vzm$  | 0.50   |      |
| Nb   | $4.6 * NatFreq * B / Vzm$   | 0.63   |      |
| Nd   | $15.4 * NatFreq * Depth / Vzm$  | 2.12   |      |
| Rh   | $1/Nh - (1/(2 * Nh^2) * (1 - Exp(-2 * Nh)))$  | 0.7344 |      |
| Rb   | $1/Nb - (1/(2 * Nb^2) * (1 - Exp(-2 * Nb)))$  | 0.6832 |      |
| Rd   | $1/Nd - (1/(2 * Nd^2) * (1 - Exp(-2 * Nd)))$  | 0.3616 |      |
| RR   | $((1/Beta) * Rn * Rh * Rb * (0.53 + 0.47 * Rd))^{0.5}$                                  | 1.4843 |      |
| gg   | $+(2 * LN(3600 * n1))^{0.5} + 0.577 / (2 * LN(3600 * n1))^{0.5}$                        | 4.19   |      |
| Gust3  | $0.925 * ((1 + 1.7 * lzm * (3.4^2 * Q^2 + GG^2 * RR^2)^{0.5}) / (1 + 1.7 * 3.4 * lzm))$ | 1.55   |      |

| Gust Factor Summary               |      |                          |      |
|-----------------------------------|------|--------------------------|------|
| Main Wind-force resisting system: |      | Components and Cladding: |      |
| Gust Factor Category:             | I    | Gust Factor Category:    | I    |
| Gust Factor (G)                   | 0.89 | Gust Factor (G)          | 0.89 |



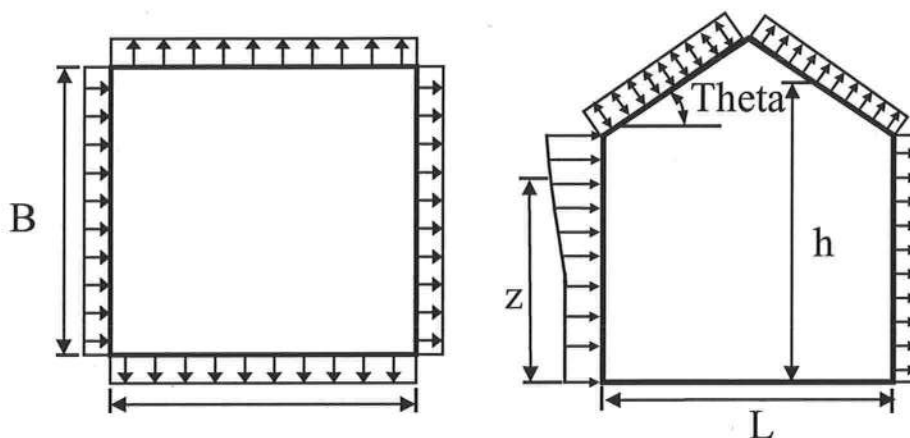
## Wind Load Design per ASCE 7-10

**6.5.12.2.1 Design Wind Pressure - Buildings of All Heights (Non-flexible)**

| Elev.<br>ft | K <sub>z</sub> | K <sub>zt</sub> | K <sub>d</sub> | q <sub>z</sub><br>lb/ft <sup>2</sup> | Pressure (lb/ft <sup>2</sup> ) |                   |
|-------------|----------------|-----------------|----------------|--------------------------------------|--------------------------------|-------------------|
|             |                |                 |                |                                      | Windward Wall*                 |                   |
|             |                |                 |                |                                      | +GC <sub>pi</sub>              | -GC <sub>pi</sub> |
| 15          | 0.70           | 1.00            | 1.00           | 32.69                                | 23.36                          | 23.36             |

**Figure 6-3 - External Pressure Coefficients, C<sub>p</sub>**

Loads on Main Wind-Force Resisting Systems



| Variable        | Formula   | Value | Units |
|-----------------|---|-------|-------|
| K <sub>h</sub>  | $2.01 \cdot (15/z_g)^{2/\alpha}$  | 0.57  |       |
| K <sub>ht</sub> | Topographic factor (Fig 6-2)  | 1.00  |       |
| Q <sub>h</sub>  | $.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d$ | 26.81 | psf   |

| Wall Pressure Coefficients, C <sub>p</sub>          |                |
|---|----------------|
| Surface   | C <sub>p</sub> |
| Windward Wall (See Figure 6.5.12.2.1 for Pressures) | 0.80           |

| Roof Pressure Coefficients, C <sub>p</sub> |      |
|--|------|
| Roof Area (sq. ft.)                        | -    |
| Reduction Factor                           | 1.00 |

| Description                                     | C <sub>p</sub> | Pressure (psf)    |                   |
|---|----------------|-------------------|-------------------|
|   |                | +GC <sub>pi</sub> | -GC <sub>pi</sub> |
| Leeward Walls (Wind Dir Parallel to 12 ft wall) | -0.50          | -11.97            | -11.97            |
| Leeward Walls (Wind Dir Parallel to 12 ft wall) | -0.50          | -11.97            | -11.97            |
| Side Walls                                      | -0.70          | -16.76            | -16.76            |
| Roof - Normal to Ridge (Theta ≥ 10)             |                |                   |                   |
| Windward - Max Negative                         | -0.67          | -16.09            | -16.09            |
| Windward - Max Positive                         | 0.00           | 0.00              | 0.00              |
| Leeward Normal to Ridge                         | -0.59          | -14.05            | -14.05            |
| Overhang Top                                    | -0.67          | -16.09            | -16.09            |
| Overhang Bottom                                 | 0.80           | 0.71              | 0.71              |
| Roof - Parallel to Ridge (All Theta)            |                |                   |                   |
| Dist from Windward Edge: 0 ft to 4.76 ft        | -1.13          | -27.17            | -27.17            |
| Dist from Windward Edge: 4.76 ft to 9.52 ft     | -0.78          | -18.74            | -18.74            |
| Dist from Windward Edge: 9.52 ft to 19.04 ft    | -0.62          | -14.78            | -14.78            |
|   | 0.00           | 0.00              | 0.00              |

## Wind Load Design per ASCE 7-10

\* Horizontal distance from windward edge

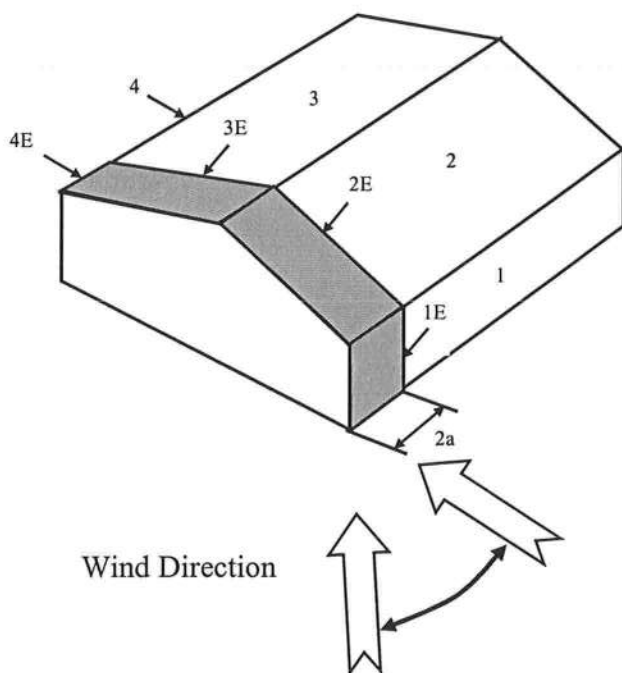
**Figure 6-4 - External Pressure Coefficients, GCpf**

Loads on Main Wind-Force Resisting Systems w/ Ht ≤ 60 ft

$$\begin{aligned}
 K_h &= 2.01 \cdot (15/z_g)^{2/\alpha} &= & 0.57 \\
 K_{ht} &= \text{Topographic factor (Fig 6-2)} &= & 1.00 \\
 Q_h &= 0.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d &= & 26.81
 \end{aligned}$$

| Case A  |       |       |       |          |             |             |
|---------|-------|-------|-------|----------|-------------|-------------|
| Surface | GCpf  | +GCpi | -GCpi | qh (psf) | Min P (psf) | Max P (psf) |
| 1       | 0.52  | 0     | 0     | 32.69    | 16.87       | 16.87       |
| 2       | -0.69 | 0     | 0     | 32.69    | -22.55      | -22.55      |
| 3       | -0.47 | 0     | 0     | 32.69    | -15.31      | -15.31      |
| 4       | -0.42 | 0     | 0     | 32.69    | -13.57      | -13.57      |
| 5       | 0.00  | 0     | 0     | 32.69    | 0.00        | 0.00        |
| 6       | 0.00  | 0     | 0     | 32.69    | 0.00        | 0.00        |
| 1E      | 0.78  | 0     | 0     | 32.69    | 25.49       | 25.49       |
| 2E      | -1.07 | 0     | 0     | 32.69    | -34.97      | -34.97      |
| 3E      | -0.67 | 0     | 0     | 32.69    | -22.00      | -22.00      |
| 4E      | -0.62 | 0     | 0     | 32.69    | -20.19      | -20.19      |
| 5E      | 0.00  | 0     | 0     | 32.69    | 0.00        | 0.00        |
| 6E      | 0.00  | 0     | 0     | 32.69    | 0.00        | 0.00        |

$$* p = q_h \cdot (GC_{pf} - GC_{pi})$$



## Wind Load Design per ASCE 7-10

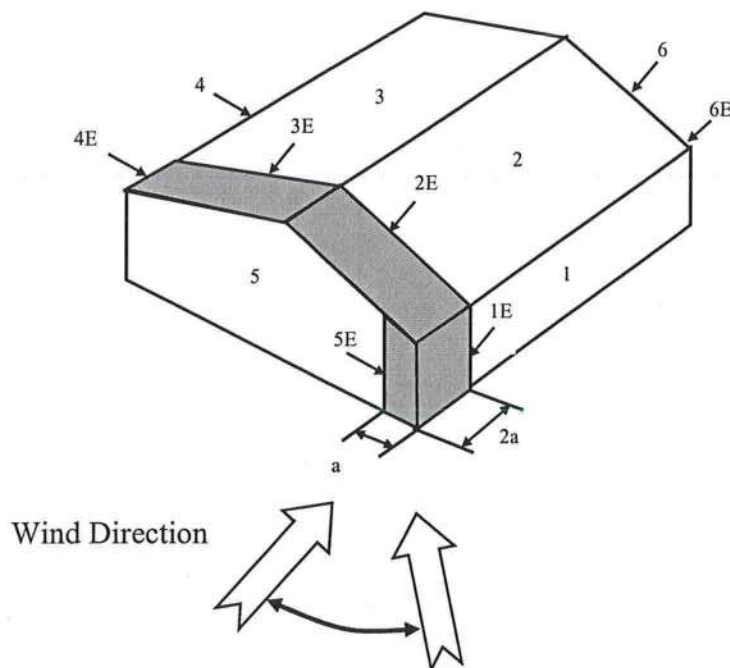
**Figure 6-4 - External Pressure Coefficients, GCpf**

Loads on Main Wind-Force Resisting Systems w/ Ht ≤ 60 ft

$$\begin{aligned}
 K_h &= 2.01 \cdot (15/z_g)^{(2/\alpha)} &= & 0.57 \\
 K_{ht} &= \text{Topographic factor (Fig 6-2)} &= & 1.00 \\
 Q_h &= 0.00256 \cdot (V)^2 \cdot \text{ImpFac} \cdot K_h \cdot K_{ht} \cdot K_d &= & 26.81
 \end{aligned}$$

| Case B  |       |       |       |             |                |                |
|---------|-------|-------|-------|-------------|----------------|----------------|
| Surface | GCpf  | +GCpi | -GCpi | qh<br>(psf) | Min P<br>(psf) | Max P<br>(psf) |
| 1       | -0.45 | 0     | 0     | 32.69       | -14.71         | -14.71         |
| 2       | -0.69 | 0     | 0     | 32.69       | -22.55         | -22.55         |
| 3       | -0.37 | 0     | 0     | 32.69       | -12.09         | -12.09         |
| 4       | -0.45 | 0     | 0     | 32.69       | -14.71         | -14.71         |
| 5       | 0.40  | 0     | 0     | 32.69       | 13.07          | 13.07          |
| 6       | -0.29 | 0     | 0     | 32.69       | -9.48          | -9.48          |
| 1E      | -0.48 | 0     | 0     | 32.69       | -15.69         | -15.69         |
| 2E      | -1.07 | 0     | 0     | 32.69       | -34.97         | -34.97         |
| 3E      | -0.53 | 0     | 0     | 32.69       | -17.32         | -17.32         |
| 4E      | -0.48 | 0     | 0     | 32.69       | -15.69         | -15.69         |
| 5E      | 0.61  | 0     | 0     | 32.69       | 19.94          | 19.94          |
| 6E      | -0.43 | 0     | 0     | 32.69       | -14.06         | -14.06         |

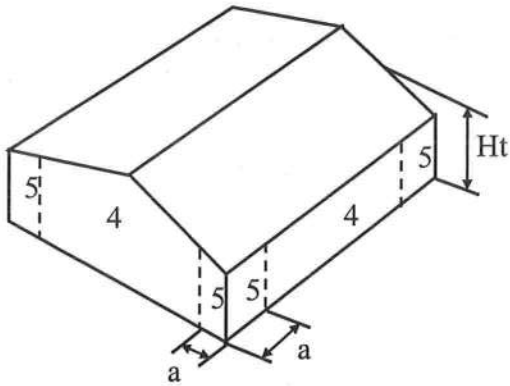
$$* p = q_h * (GC_{pf} - GC_{pi})$$

**Figure 6-5 - External Pressure Coefficients, GCp**

Loads on Components and Cladding for Buildings w/ Ht ≤ 60 ft



## Wind Load Design per ASCE 7-10



## Gabled Roof

10 < Theta <= 45

$$a = 1.2 \implies \boxed{3.00 \text{ ft}}$$
[illegible]

Note: \* Enter Zone 1 through 5, or 1H through 3H for overhangs.

**Table 6-7 Internal Pressure Coefficients for Buildings,  $C_{gpi}$**

| Condition      | Gcpi  |       |
|----------------|-------|-------|
|                | Max + | Max - |
| Open Buildings | 0.00  | 0.00  |

## Wind Load Design per ASCE 7-10

|                              |             |             |
|------------------------------|-------------|-------------|
| Partially Enclosed Buildings | 0.55        | -0.55       |
| Enclosed Buildings           | 0.18        | -0.18       |
| <b>Open Buildings</b>        | <b>0.00</b> | <b>0.00</b> |



1212-31





# Columbia County

## BUILDING DEPARTMENT



49

### Inspection Affidavit

RE: Permit Number: 30690

I Jason Elixson, licensed as a(n) Contractor\* /Engineer/Architect,  
(please print name and circle Lic. Type) FS 409 Building Inspector\*

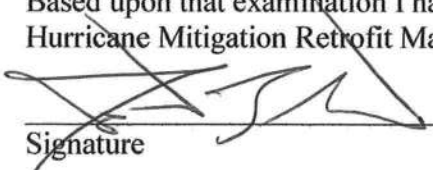
License #: CCC 1325779

On or about 12-30-2012, I did personally inspect the  
(Date & time)

☐ roof deck attachment ☒ secondary water barrier ☐ roof to wall connection

work at 359 SW Stewart Loop Lake City FL 32024  
(Job Site Address)

Based upon that examination I have determined the installation was done according to the Hurricane Mitigation Retrofit Manual (Based on 553.844 F.S.)

  
Signature

STATE OF FLORIDA  
COUNTY OF

Sworn to and subscribed before me this 1 day of May, 2013

By L. H. Hodson, Notary Public, State of Florida

Personally known ☒ or

Produced Identification ☐ Type of identification produced. \_\_\_\_\_

(Print, type or stamp name)

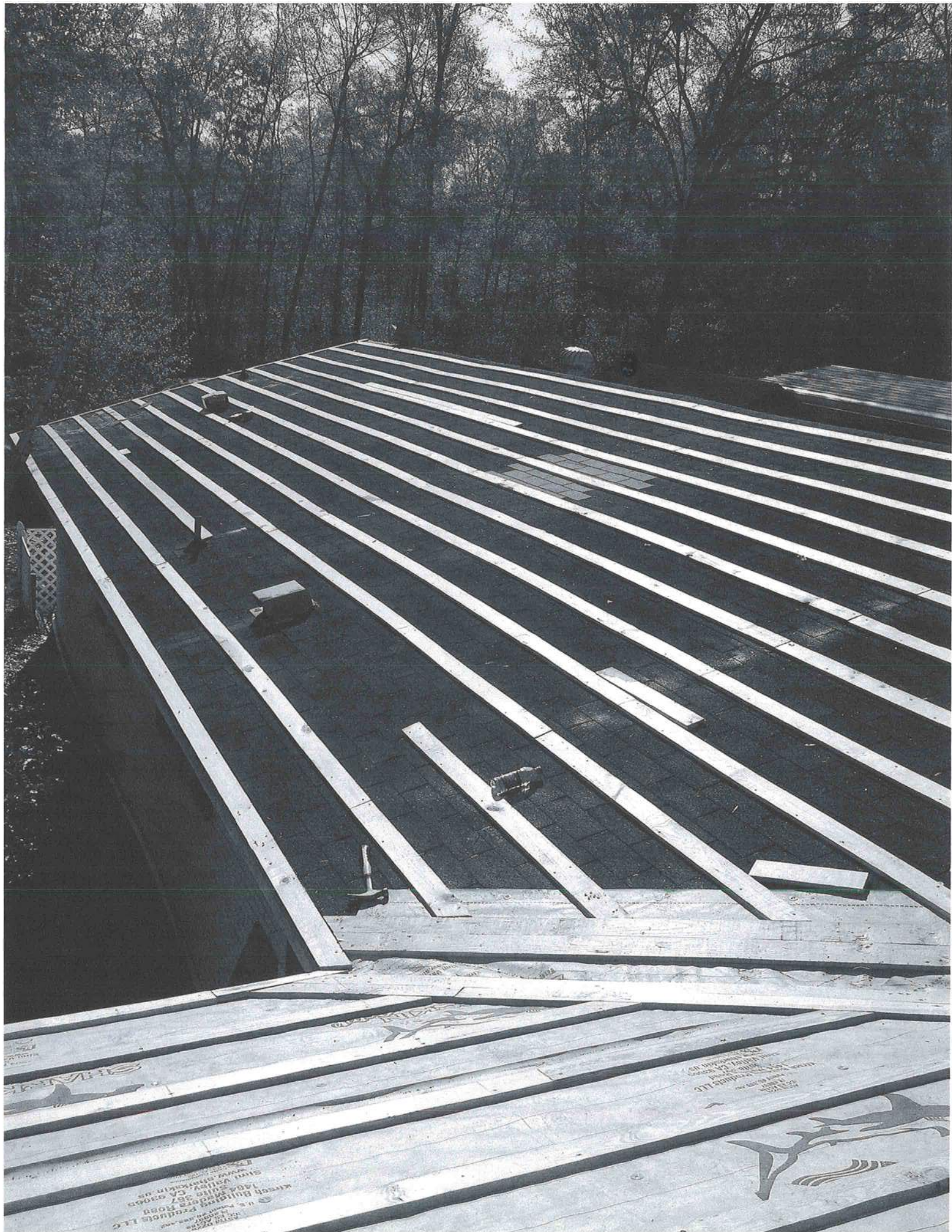


**\* Include photographs of each plane of the roof with the permit number clearly shown marked on the deck for each inspection. Place a tape measure next to the nailing pattern to show distance between nails.**

**\* Photographs must clearly show all work and have the permit number indicated on the roof.**

**\* Affidavit and Photographs must be provided when final inspection is requested.**











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• ESR Report 17  
• BOCA  
• SBOCI  
• Florida Building Co  
• ASTM D226  
• Texas Department of





