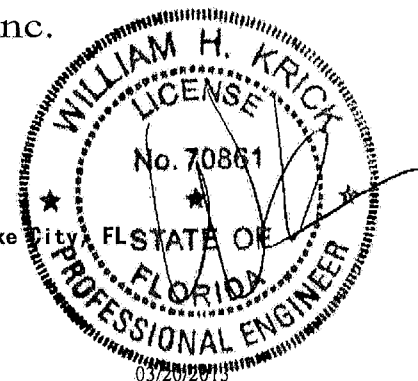


# ITW Building Components Group, Inc.

1950 Marley Drive Haines City, FL 33844  
 Florida Engineering Certificate of Authorization Number 0 278  
 Florida Certificate of Product Approval # FL1999  
 Page 1 of 1 Document ID IUUP487-Z0220133321



Truss Fabricator **Anderson Truss Company**  
 Job Identification **13-105--Trademark Construction McDuffie Residence -- Lake City**  
 Truss Count **44**  
 Model Code **Florida Building Code 2010**  
 Truss Criteria **FBC2010Res/TPI-2007(STD)**  
 Engineering Software **Alpine Software, Version 10.03.**  
 Structural Engineer of Record **The identity of the structural EOR did not exist as of**  
 Address **the seal date per section 61015-31.003(5a) of the FAC**  
 Minimum Design Loads **Roof - 37.0 PSF @ 1.25 Duration**  
**Floor - N/A**  
**Wind - 120 MPH ASCE 7-10 -Closed**

## Notes

1. Determination as to the suitability of these truss components for the structure is the responsibility of the building designer/engineer of record, as defined in ANSI/TPI 1
2. The drawing date shown on this index sheet must match the date shown on the individual truss component drawing.
3. As shown on attached drawings; the drawing number is preceded by: HCUSR487

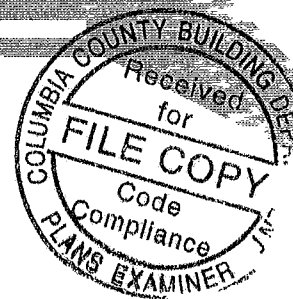
William H Krick  
 -Truss Design Engineer-

1950 Marley Drive  
 Haines City, FL 33844

Details: BRCLBSUB-12015EC1-GBLLETIN-GABRST10-PB140-VAL16010-VAL140-12030EC1-

| #  | Ref         | Description   | Drawing# | Date     |
|----|-------------|---------------|----------|----------|
| 1  | 09646-A     | 47'4" Stepdow | 13079042 | 03/20/13 |
| 2  | 09647-A1    | 47'4" Stepdow | 13079043 | 03/20/13 |
| 3  | 09648-A1PB  | 17'3"15 Com   | 13079044 | 03/20/13 |
| 4  | 09649-A2    | 47'4" Stepdow | 13079045 | 03/20/13 |
| 5  | 09650-A2PB  | 17'3"15 Ste   | 13079046 | 03/20/13 |
| 6  | 09651-A3    | 47'4" Stepdow | 13079047 | 03/20/13 |
| 7  | 09652-A3PB  | 17'3"15 Ste   | 13079048 | 03/20/13 |
| 8  | 09653-A3PB2 | 17'3"15 St    | 13079049 | 03/20/13 |
| 9  | 09654-A3PB3 | 17'3"15 St    | 13079050 | 03/20/13 |
| 10 | 09655-AS    | 35'10" Stepdo | 13079051 | 03/20/13 |
| 11 | 09656--B    | 21'8" Common  | 13079052 | 03/20/13 |
| 12 | 09657--B1   | 21'8" Common  | 13079053 | 03/20/13 |
| 13 | 09658--B2   | 18'7" Common  | 13079054 | 03/20/13 |
| 14 | 09659--BDG  | 21'8" Gable   | 13079055 | 03/20/13 |
| 15 | 09660--C    | 13'2" Common  | 13079056 | 03/20/13 |
| 16 | 09661--CDG  | 13'2" Gable   | 13079057 | 03/20/13 |
| 17 | 09662-CG    | 13'2" Common  | 13079058 | 03/20/13 |
| 18 | 09663--CJ1  | 1' Jack       | 13079059 | 03/20/13 |
| 19 | 09664--CJ3  | 3' Jack       | 13079060 | 03/20/13 |
| 20 | 09665--CJ5  | 5' Jack       | 13079061 | 03/20/13 |
| 21 | 09666--D    | 9'10" Common  | 13079062 | 03/20/13 |
| 22 | 09667--DDG  | 9'10" Gable   | 13079063 | 03/20/13 |
| 23 | 09668--EJ7  | 7' End Jack   | 13079064 | 03/20/13 |
| 24 | 09669-EJ7A  | 7' End Jack   | 13079065 | 03/20/13 |
| 25 | 09670-H11AE | 31'6" Spec    | 13079066 | 03/20/13 |
| 26 | 09671-H11AW | 47'4" Spec    | 13079067 | 03/20/13 |
| 27 | 09672-H13AE | 31'6" Spec    | 13079068 | 03/20/13 |
| 28 | 09673-H13AW | 47'4" Spec    | 13079084 | 03/20/13 |
| 29 | 09674-H15AE | 31'6" Spec    | 13079069 | 03/20/13 |
| 30 | 09675-H15AW | 47'4" Step    | 13079085 | 03/20/13 |
| 31 | 09676-H17AE | 31'6" Mono    | 13079070 | 03/20/13 |
| 32 | 09677-H17PB | 16'6" Step    | 13079071 | 03/20/13 |
| 33 | 09678-H19AE | 35'10" Ste    | 13079072 | 03/20/13 |
| 34 | 09679-H7AE  | 31'6" Mono    | 13079073 | 03/20/13 |
| 35 | 09680-H7AW  | 47'4" Speci   | 13079074 | 03/20/13 |
| 36 | 09681-H9AE  | 31'6" Mono    | 13079075 | 03/20/13 |

| #  | Ref        | Description   | Drawing# | Date     |
|----|------------|---------------|----------|----------|
| 37 | 09682-H9AW | 47'4" Speci   | 13079076 | 03/20/13 |
| 38 | 09683-HJ7  | 9'10"13 Hip   | 13079077 | 03/20/13 |
| 39 | 09684-V1   | 16'3"8 Valley | 13079078 | 03/20/13 |
| 40 | 09685-V2   | 13'2"3 Valley | 13079079 | 03/20/13 |
| 41 | 09686-V3   | 10'0"14 Valle | 13079080 | 03/20/13 |
| 42 | 09687-V4   | 6'11"8 Valley | 13079081 | 03/20/13 |
| 43 | 09688-V5   | 3'10"3 Valley | 13079082 | 03/20/13 |
| 44 | 09689-VDG  | 19'4"14 Vali  | 13079083 | 03/20/13 |





120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 13 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl(+/-)=0 18

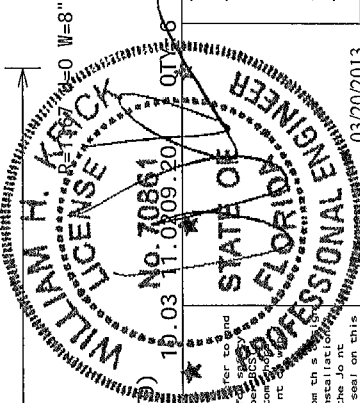
Wind loads and reactions based on MWFRS with additional C&C member design

(a) Continuous lateral bracing equally spaced on member

Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

MMFRS loads based on trusses located at least 15 00 ft from roof edge



W=8 M=0 Q=0 R=1367

FL/-/4/-/-/R/- Scale = .125"/Ft.

[illegible]



|           |     |           |
|-----------|-----|-----------|
| Top chord | 2x4 | SP_#1_12A |
| Bot chord | 2x4 | SP_#1_12A |
| Webbs     | 2x4 | SP_#3_12A |

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 13 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCPI(+/-)=0 18

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

(a) Continuous lateral bracing equally spaced on member

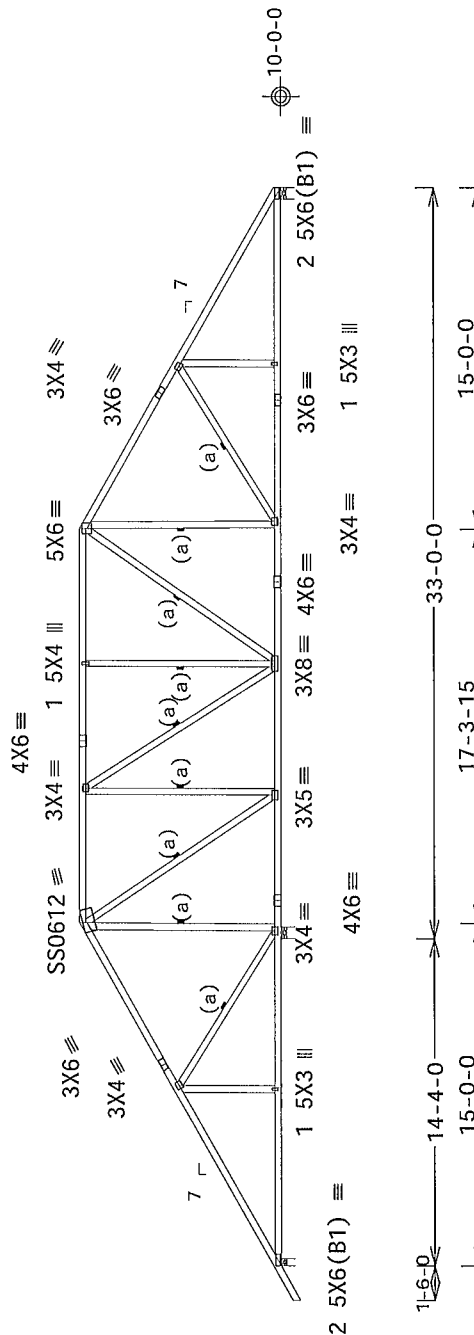
In lieu of structural panels use purlins to brace all flat TC @ 24" OC

Bottom chord checked for 10 00 psf non-concurrent live load

**WARNING** Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below.

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

MMWFRS loads based on trusses located at least 15 00 ft from roof edge



WILLIAM H. KRUCK  
LICENSE  
No. 70861  
10 03.11.0909.20  
STATE OF FLORIDA  
PROFESSIONAL ENGINEER

03/20/2013

PLT TYP 18 Gauge HS, Wave

Design Crit FBC2010Res/TP1-2007(ST) FT/RT=10%(0%)/0(0)

Scale = .125"/Ft.

|         |          |                      |
|---------|----------|----------------------|
| TC LL   | 20.0 PSF | REF R487 -- 9649     |
| TC DL   | 7.0 PSF  | DATE 03/20/13        |
| BC DL   | 10.0 PSF | DRW HCUR487 13079045 |
| BC LL   | 0.0 PSF  | HC-ENG WHK/WHK       |
| TOT. LD | 37.0 PSF | SEQN- 69633          |
| DUR FAC | 1.25     |                      |
| SPACING | 24.0"    | JREF - 1UUP487_Z02   |

(13-105--Trademark Construction McDuffie Residence -- Lake City, FL - A2PB 17'3'15 Stepdown Hip)

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

120 mph wind, 21.45 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9.00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=2.0 psf GCPI (+/-)=0.18

Wind loads and reactions based on MWFRS with additional C&C member design

Special loads

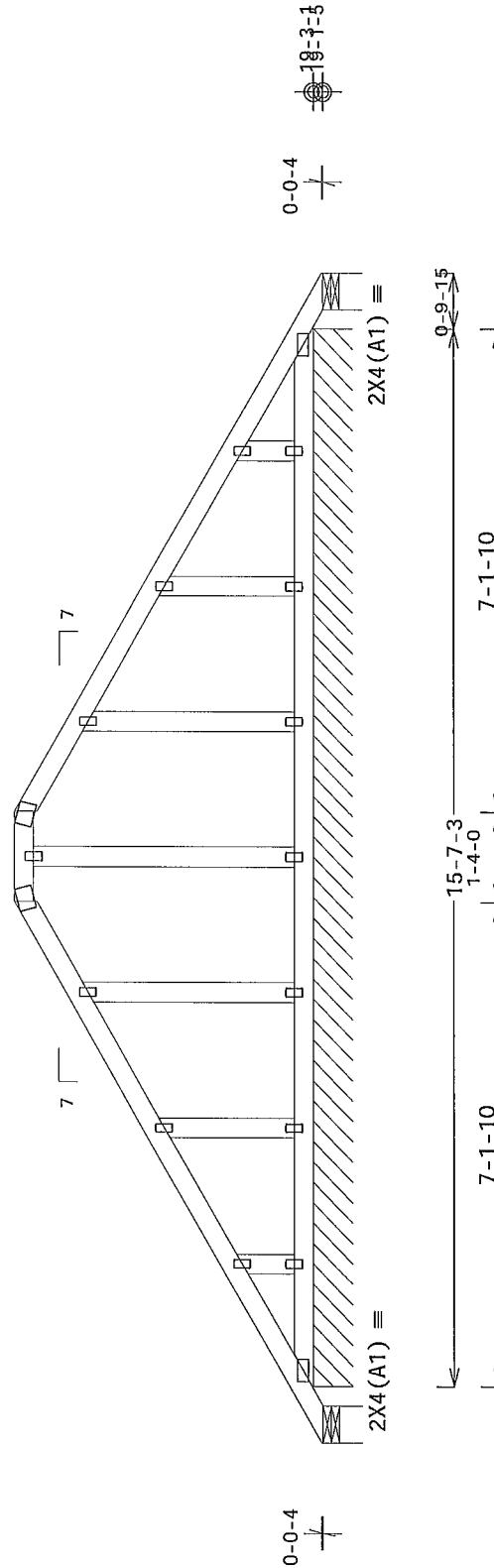
-----Lumber  
TC- From Dur Fac =1.25 / Plate Dur Fac =1.25  
56 plf at -0.83 to 56 plf at 7.13  
TC- From 56 plf at 7.13 to 56 plf at 8.47  
BC- From 56 plf at 8.47 to 56 plf at 16.43  
BC- From 4 plf at -0.83 to 4 plf at 16.43

In lieu of structural panels or rigid ceiling use purlins to brace all flat TC @ 24" OC, all BC @ 24" OC

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

MWFRS loads based on trusses located at least 21.45 ft from roof edge

3X4 = 3X4 =



R=17 Rw=48 U=35 W=6.517'  
RL=74R=0.4 PLF U=4 PLF W=15-7-3

Note All Plates Are 1 5X3 Except As Shown

Design Crit FBC2010Res/TP1-2007(S) FT/RT=10%(0%)/0(0)

PLT TYP Wave

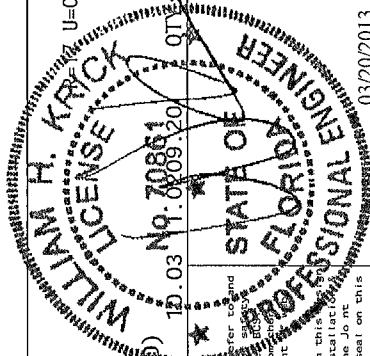
\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET

FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

Trusses require extreme care in handling. Do not install and brace until all bracing is in place. Do not install and brace until all bracing is in place. Do not install and brace until all bracing is in place.

ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design. ITWBCG shall not be responsible for any deviation from this design. ITWBCG shall not be responsible for any deviation from this design.

ALP INC.  
ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278



|          |          |        |             |          |
|----------|----------|--------|-------------|----------|
| TC LL    | 20.0 PSF | REF    | R487--      | 9650     |
| TC DL    | 7.0 PSF  | DATE   | 03/20/13    |          |
| BC DL    | 10.0 PSF | DRW    | HCUSR487    | 13079046 |
| BC LL    | 0.0 PSF  | HC-ENG | WHK/WHK     |          |
| TOT.LD   | 37.0 PSF | SEQN   | 69634       |          |
| DUR.FAC. | 1.25     |        |             |          |
| SPACING  | 24.0"    | JREF   | 1UUP487_Z02 |          |

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with '12A" use design values approved 1/5/2012 by ALSC

Right cantilever is exposed to wind

(a) Continuous lateral bracing equally spaced on member

Truss passed check for 20 psf additional bottom chord live load in areas with 42'-high x 24'-wide clearance

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

WWFERS loads based on trusses located at least 15 00 ft from roof edge

1120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 13 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCPI(+/-)=0 18

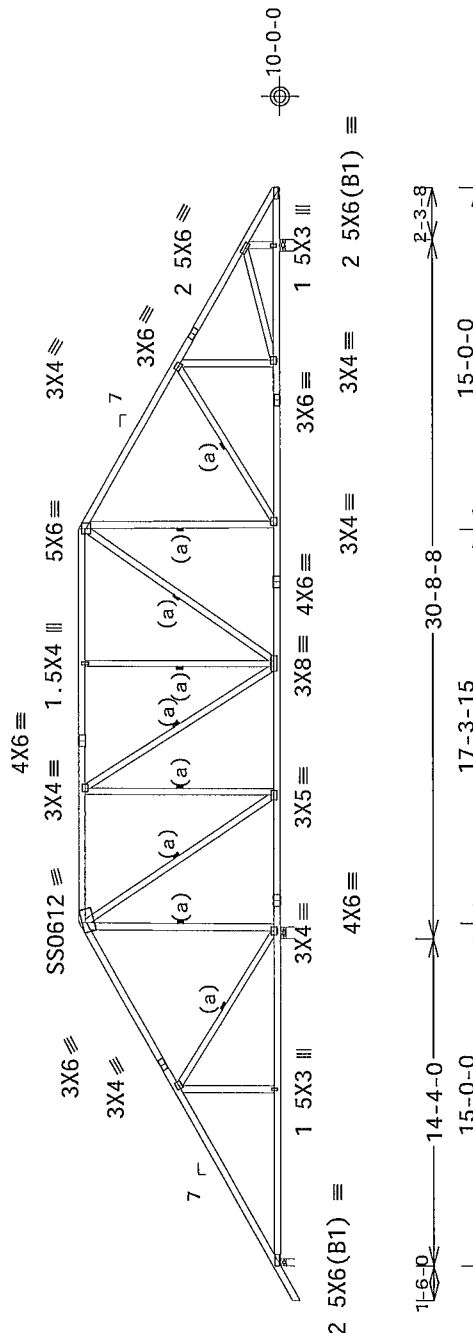
Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

In lieu of structural panels use purlins to brace all flat TC @ 24" OC

Bottom chord checked for 10 00 psf non-concurrent live load

**WARNING** Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See 'WARNING' note below.



R=574 U=0 W=3 5"  
RI=150/-158

$R=2118 \quad I=0 \quad W=6'$

PLT TYP. 18 Gauge HS, Wave

Design Crit. FBC2010Res/TPI-2007(STB)  
FT/RT=10%(0%)/0(0)

Scale = .125"/Ft.

|          |          |                       |
|----------|----------|-----------------------|
| TC LL    | 20 0 PSF | REF R487-- 9651       |
| TC DL    | 7 0 PSF  | DATE 03/20/13         |
| BC DL    | 10.0 PSF | DRW HCURS487 13079047 |
| BC LL    | 0.0 PSF  | HC-ENG WHK/WHK        |
| TOT.LD.  | 37.0 PSF | SEQN- 69635           |
| DUR FAC. | 1 25     |                       |
| SPACING  | 24 0"    | JREF- 1UUP487_Z02     |

"WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS  
\*\*\*IMPORTANT\*\*\*  
Trusses require extreme care in fabricating handling shipping installing and bracing per to and follow the latest edition of BCSP (Building Component Safety Information) by TPI and WCA for all practices prior to performing these tasks. The truss manufacturer must have a properly attached structural sheath ng and bottom chord bracing system. Trusses shall have a properly attached r d ceiling Load ons shown for permanent lateral restraint of walls shall have bracing installed per BCSI sect gns B7 or B10 as appl cable

ITW Building Components Group Inc. (TWBCG) shall not be responsible for any dev at on from this design. All connections will conform with the ANSI/TPI 1-1 for hand ng sh p ng nailing on metal decking.

Apply plates to each face of trusses and posts t on as show above and on the Jo nt uceals untails unless noted otherw s Refer to draw gns 160A-Z for standard plate pos t ons A seal on th s drawing no caries acceptance of profess eng near ng responsibility solely for the des gn draw ng The su tabil ty and use of th s des gn for any structure is the responsibility of the user. Does your Project Des gner permit TWBGS? This job s approved by TWBGS. Call Twbseng.com TPI www.tpi.net.org WTCA www.abcdindustry.com

TDC www.usasafe.org

03/20/2013

ALPINE

ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0 278





(13-105--Trademark Construction McDuffie Residence -- Lake City, FL - A3PB2 17 3'15 Stepdown Hip)

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

120 mph wind, 20 29 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=2 0 psf GCpl (+/-)=0 18

Wind loads and reactions based on MMFRS with additional C&C member design

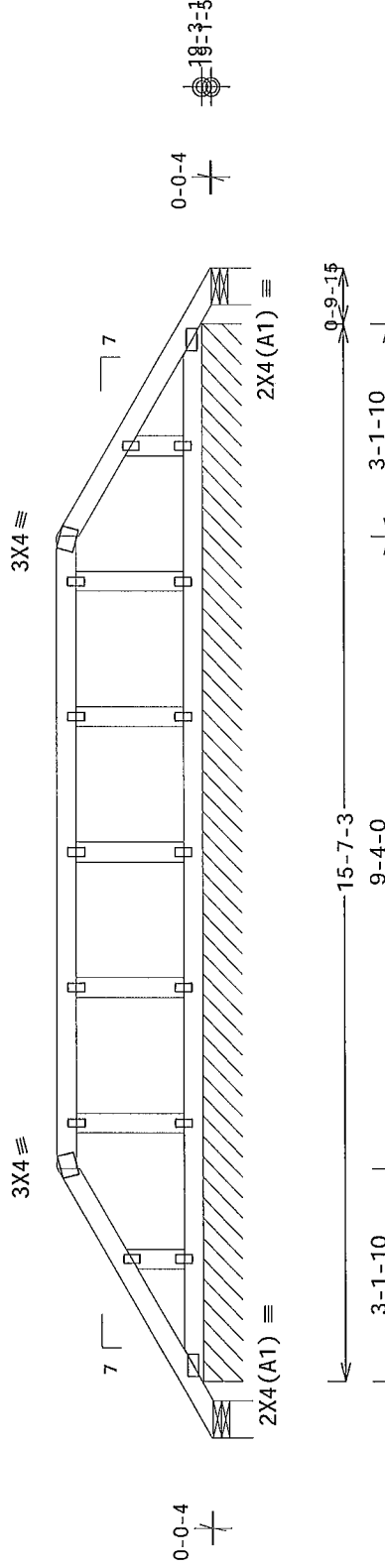
Special loads

-----Lumber Dur Fac =1 25 / Plate Dur Fac =1 25)  
TC- From 56 plf at -0 83 to 56 plf at 3 13  
TC- From 56 plf at 3 13 to 56 plf at 12 47  
TC- From 56 plf at 12 47 to 56 plf at 16 43  
BC- From 4 plf at -0 83 to 4 plf at 16 43

In lieu of structural panels or rigid ceiling use purlins to brace all flat TC @ 24' OC, all BC @ 24' OC

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50

MMFRS loads based on trusses located at least 10 14 ft from roof edge



R=16 Rw=27 U=15 W=6 518  
RL=35R=08 PLF U=10 PLF W=15-7-3

Note All Plates Are 1.5X3 Except As Shown

Design Crit FBC2010Res/TPI-2007(STB)  
FT/RT=10%(0%)/0(0)

PLT TYP. Wave

Scale =.375"/Ft

|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          |         |          |        |                   |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|---------|----------|--------|-------------------|
| <b>ALPINE</b><br>rtr Building Components Group Inc.<br>Haines City, FL 33844<br>FL COA #0278 | <b>**WARNING**</b> READ AND FOLLOW ALL NOTES ON THIS SHEET<br><b>**IMPORTANT**</b> FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS<br>Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCS1 (Building Component Safety) information on bracing and detailing. Unless noted otherwise, top chord shall have proper y attached structural sheathing and bottom chord shall have bracing installed per BCS1 section 83, B7 or B10 as applicable.<br>ITW Building Components Group, Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the truss in conformance with ANSI/TPI 1 or for handling, shipping, installing or bracing of trusses. Apply plates to each face of truss and position as shown above and on the Joint Data is unless noted otherwise. Refer to drawings 1604-2 for standard plate position. A seal on this drawing or cover page stating this drawing is intended for use in the design of any structure is the responsibility of the user. The suitability and use of this design for any structure is the responsibility of the user. For more information on ITWBCG products and services, visit our website at www.itwbcg.com. TPI www.tpi.net or MTCA www.sbcindustry.com. ICC www.iccsafe.org |          | TC LL   | 20 0 PSF | REF    | R487-- 9653       |
|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          | TC DL   | 7 0 PSF  | DATE   | 03/20/13          |
|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          | BC DL   | 10 0 PSF | DRW    | HCUSR487 13079049 |
|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          | BC LL   | 0 0 PSF  | HC-ENG | WHK/WHK           |
|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |          | TOT.LD. | 37 0 PSF | SEQN-  | 69637             |
|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | DUR.FAC. | 1.25    |          |        |                   |
|                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | SPACING  | 24.0"   |          |        | JREF- 1UUP487_Z02 |



|     |       |     |           |
|-----|-------|-----|-----------|
| Top | chord | 2x4 | SP_#1_12A |
| Bot | chord | 2x4 | SP_#1_12A |
|     | webs  | 2x4 | SP_#3_12A |

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpi(+/-)=0 18

Lumber grades designated  
1/5/2012 by ALSC

Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

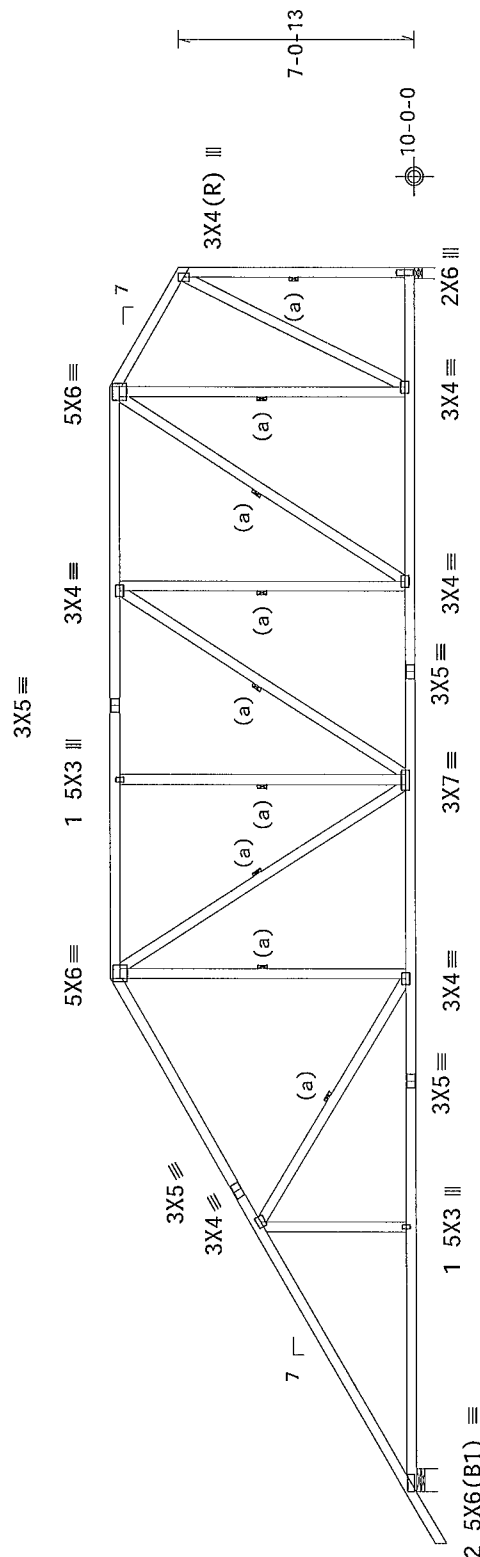
Right end vertical not exposed to wind pressure

(a) Continuous lateral bracing equally spaced on member

In lieu of structural panels use purlins to brace all flat TC @ 24" OC

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50



1-6-0

17-3-15  
17-3-6-0-1

35-10-0 Over 2 Supports

R=1465 I=0 W=8"

RL=115/-77

PLT TYP. Wave

Design Crit.: FBC2010Res/TP1-2007(S&amp;D)

$$FT/RT=10\%(0\%)/0(0)$$

Scale = .1875"/Ft

TC 11 20 0 BCE

DEF PA87 -- 9655

TC DL 7.0 PSF

DATE 03/20/13

|  |   |   |
|--|---|---|
|  | D | C |
|  | L | B |

סמך

79 DL 10.0 PSF

DRW ACUSK48/ 130/9051

BC LL 0.0 PSF

HC-ENG WHK/WHK

TOT ID 37 0 PSE

SEON- 69639

101. LD. 37.0151

[illegible]

DUR. FAC. 1.25

---

SPACING 24.0"

JREF- 1UUP487\_Z02

1000

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840. 84

1000

100

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl(+/-)=0 18

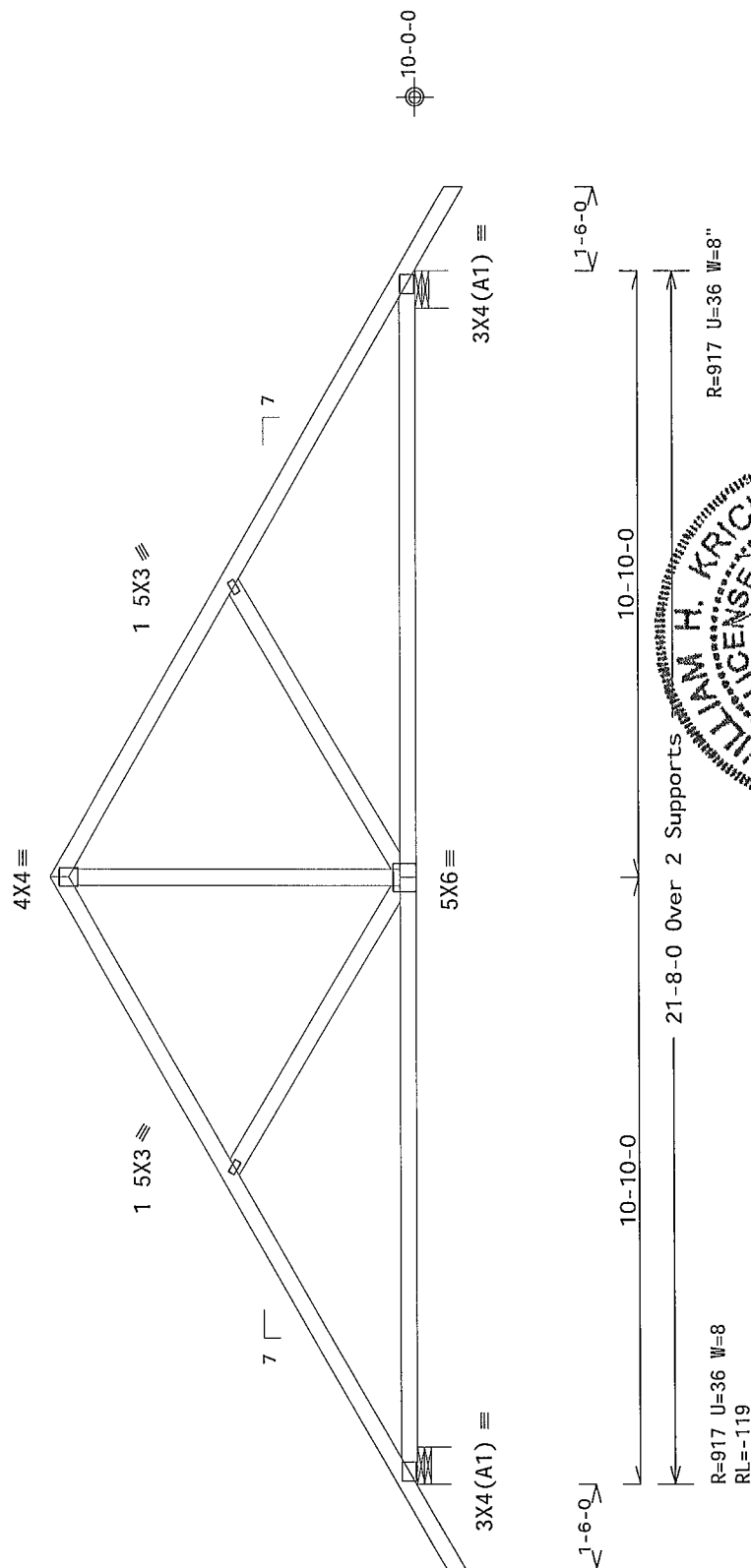
Lumber grades designated with "12A" use design values approved 11/5/2012 by ALSC

Roof overhang supports 2 00 psf soffit load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

Wind loads and reactions based on MWFRS with additional C&C member design

Bottom chord checked for 10 00 psf non-concurrent live load



Design Crit: FBC2010Res/TPI -2007 (STD)  
 FT/RT=10%(0%)/0(0)

|          |       |       |        |             |          |
|----------|-------|-------|--------|-------------|----------|
| TC LL    | 20.0  | PSF   | REF    | R487--      | 9656     |
| TC DL    | 7.0   | PSF   | DATE   | 03/20/13    |          |
| BC DL    | 10.0  | PSF   | DRW    | HCUR487     | 13079052 |
| BC LL    | 0.0   | PSF   | HC-ENG | WHK/WHK     |          |
| TOT.LD.  | 37    | 0 PSF | SEQN-  | 69640       |          |
| DUR.FAC  | 1.25  |       |        |             |          |
| SPAC ING | 24.0" |       | JREF-  | 1UUP487_Z02 |          |

[illegible]

**ALPINE**

**ITTW Building Components Group Inc.**  
 Haines City, FL 33844  
 FL COA #0 278

(13-105--Trademark Construction McDuffie Residence -- Lake City, FL - B1 21'8" Common)

Top chord 2x4 SP M-30  
Bot chord 2x4 SP #1\_12A  
Webs 2x4 SP #3\_12A

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 4 50 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpi (+/-)=0 18

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Left cantilever is exposed to wind

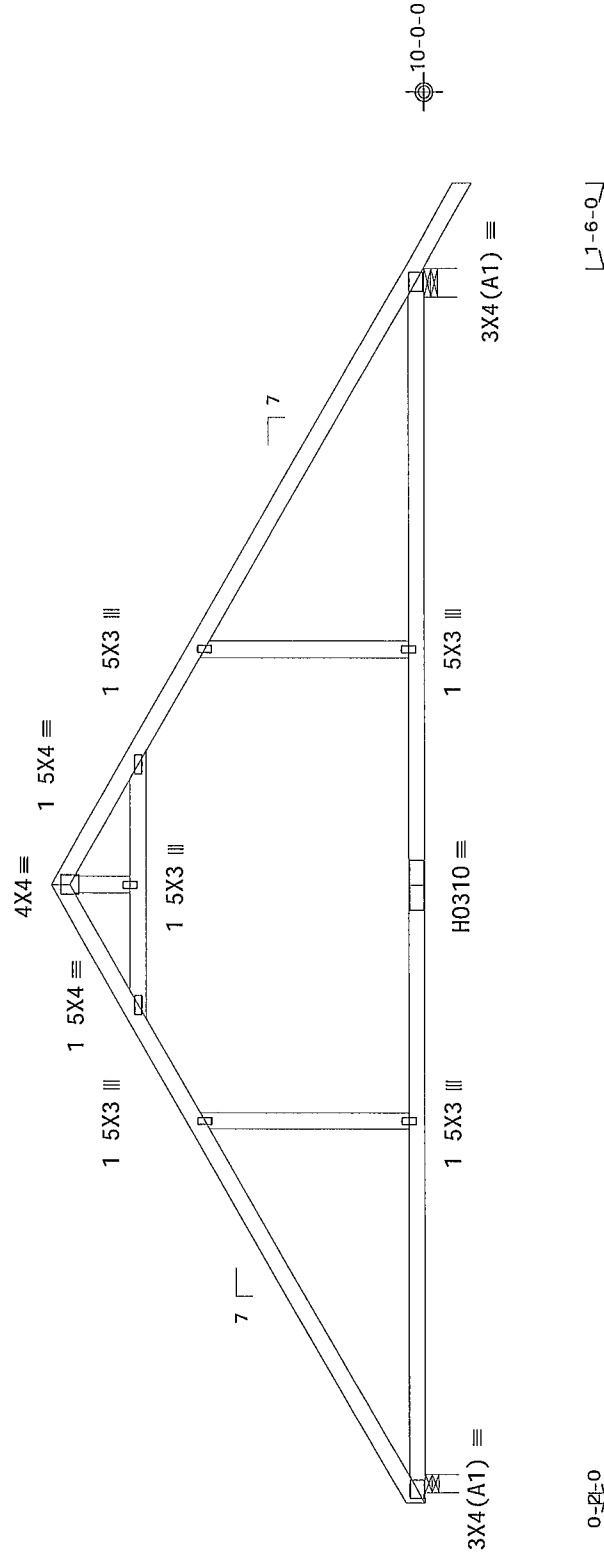
Roof overhang supports 2 00 psf soffit load

Calculated horizontal deflection is 0 15' due to live load and 0 15' due to dead load

Truss passed check for 20 psf additional bottom chord live load in areas with 42"-high x 24"-wide clearance

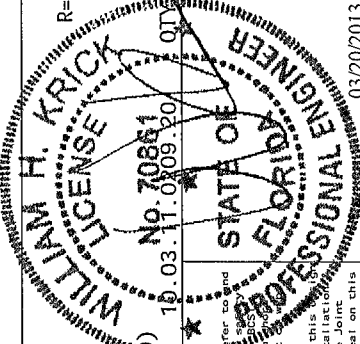
Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50



PLT TYP 20 Gauge HS, Wave  
Design Crit. FBC2010Res/TP1-2007(SIP)  
FT/RT=10%(0%)/0(0)

Scale = .3125"/Ft.  
REF R487-- 9657  
DATE 03/20/13  
DRW HCUSR487 13079053  
HC-ENG WHK/WHK  
SEQN- 69641  
JREF- 1UUP487\_Z02



ALPINE  
ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278

WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. For safety of the structure, the contractor shall follow the instructions on the truss and bracing details. The contractor shall be responsible for the proper installation of the truss and bracing. The contractor shall be responsible for the proper installation of the truss and bracing. The contractor shall be responsible for the proper installation of the truss and bracing.

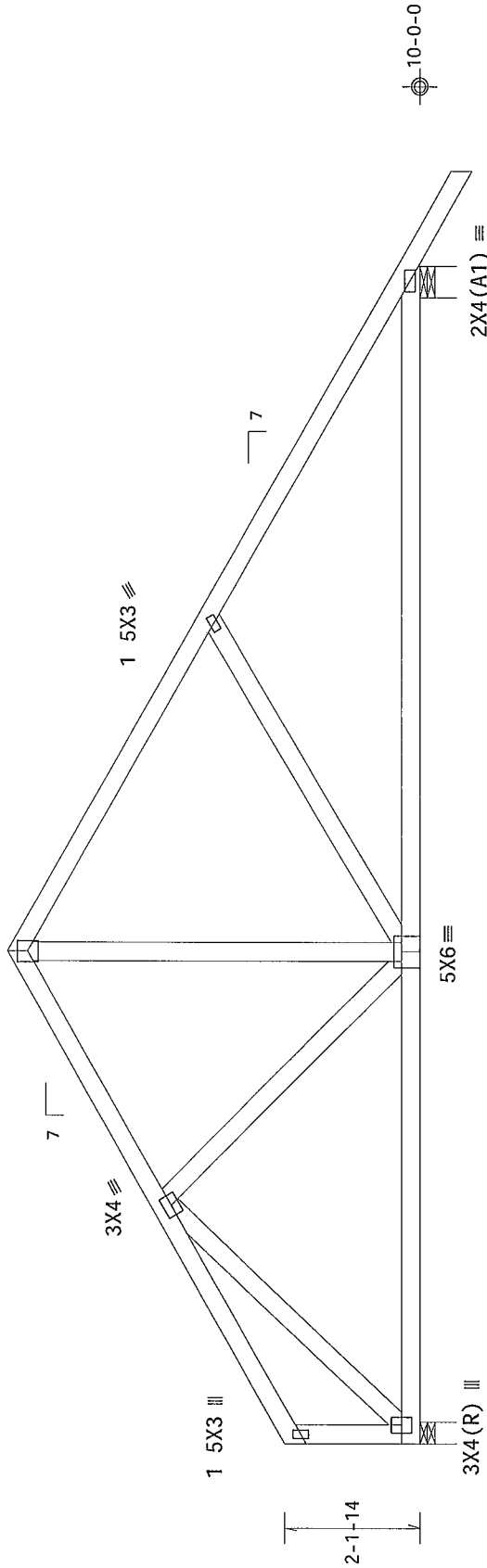
Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Left end vertical not exposed to wind pressure

Bottom chord checked for 10 00 psf non-concurrent live load

MMWFRS loads based on trusses located at least 15 00 ft from roof edge  
AVA —



7-9-0

18-7-0 Over 2 Supports

R=698 U=0 W=4'  
RL=89/-96

PLT TYP. Wave

Design Crit: FBC2010Res/TPI-2007(SID)  
FT/RT=10%(0%)/0(0)

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS**

Trawlers require extreme care in fabricating and installing rig and brace ng  
to follow the best advice of BSI (Bu id ing Component Safety Information by TPI and WCA)  
practices noted otherwise. Topchord shall have properly attached structural sheath ng and bottom  
shall have a properly attached rig d ce l ng . Locat ons shown for permanent lateral restra nt  
have bracing installed per BSI sect ns 83. 87 or 810 as appl cable

# ALPINE

ITW Building Components Group Inc.

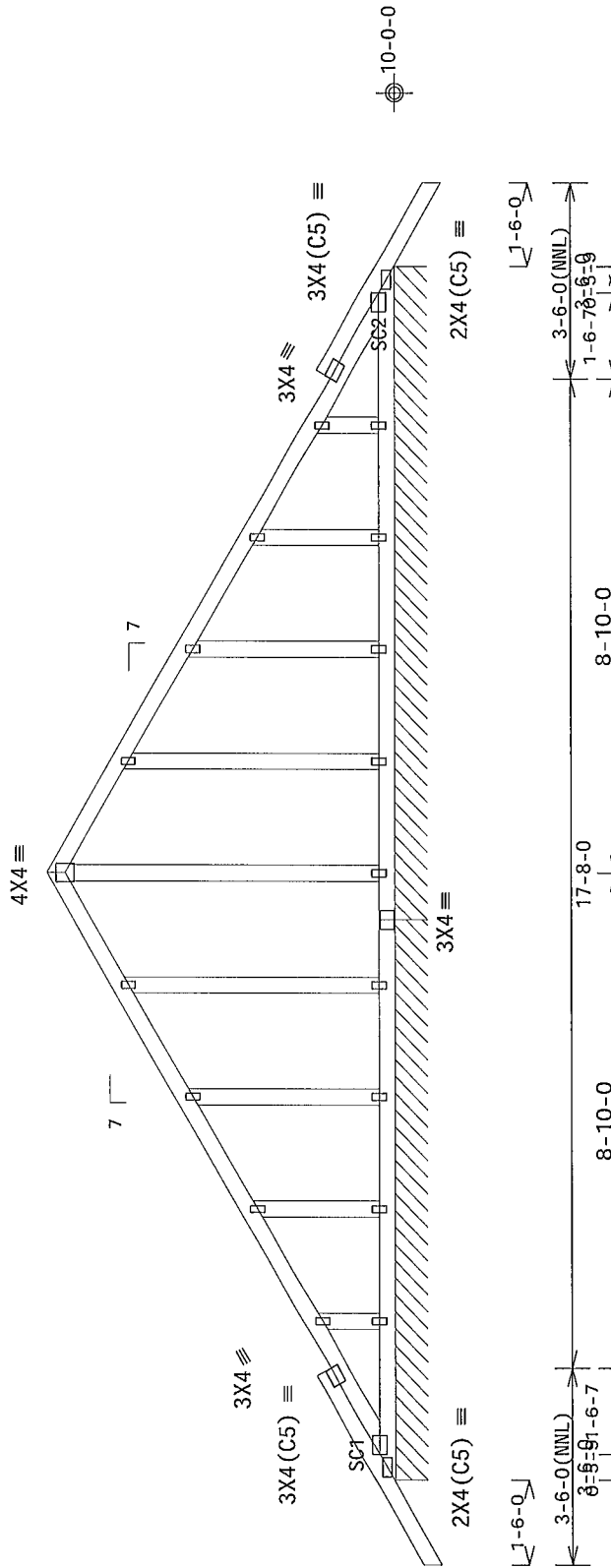
Haines City, FL 33844  
FL COA #0278

Scale = .375"/Ft.

|         |      |       |        |             |          |
|---------|------|-------|--------|-------------|----------|
| TC LL   | 20.0 | PSF   | REF    | R487--      | 9658     |
| TC DL   | 7.0  | PSF   | DATE   | 03/20/13    |          |
| BC DL   | 10   | 0 PSF | DRW    | HCUSR487    | 13079054 |
| BC LL   | 0.0  | PSF   | HC-ENG | WHK/WHK     |          |
| TOT.LD  | 37.0 | PSF   | SEQN-  | 69642       |          |
| DUR FAC | 1.25 |       |        |             |          |
| SPACING | 24   | 0"    | JREF-  | 1UUP487_Z02 |          |

JREF- 1UUP487\_Z02

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A  
Stack Chord SC1 2x4 SP\_#1\_12A Stack Chord SC2 2x4 SP\_#1\_12A  
Lumber grades designated with 12A" use design values approved 1/5/2012 by ALSC  
Gable end supports 8" max rake overhang  
Stacked top chord must NOT be notched or cut in area (NNL) Dropped top chord braced at 24" o c intervals Attach stacked top chord (SC) to dropped top chord in noticable area using 3x4 tie-plates 24 o c Center plate on stacked/dropped chord interface, plate length perpendicular to chord length Splice top chord in noticable area using 3x6  
120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl(+/-)=0 18  
Wind loads and reactions based on MWFRS with additional C&C member design  
Roof overhang supports 2 00 psf soffit load  
See DWGS A12015ENC100212, GBLLET100212, & GABRST100212 for more requirements  
Bottom chord checked for 10 00 psf non-concurrent live load  
Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50



21-8-0 Over 2 Supports

R=86 PLF U=6 PLF W=10-0-0  
RL=12/-12 PLF

Note All Plates Are 1 5X3 Except As Shown  
Design Crit: FBC2010Res/TP1-2007(Std)  
FT/RT=10%(0%)/0(0)

PLT TYP. Wave

Scale = .3125"/Ft.

FL/-4/-4/-R/-

REF R487-- 9659

DATE 03/20/13

DRW HCUSR487 13079055

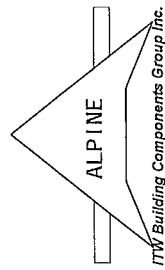
HC-ENG WHK/WHK

SEQN- 69643

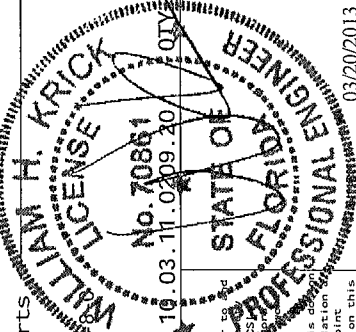
JREF- 1UUP487\_Z02

\*\*\*WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing, and bracing. Follow the latest edition of BCSI (Building Components Safety Institute) Manual for Trusses. Unless noted otherwise, all trusses shall be installed in accordance with the BCSI Manual. The top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached r g d ceiling. Locations shown for permanent lateral restraint shall have bracing installed per BCSI sections B3, B7 or B10 as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design. Any failure to build the truss in conformance with ANSI/TPI 1 or for handling, shipping, installation, or bracing of trusses. Apply plates to each face of truss and position as shown above and on the Joint Data is unless noted otherwise. Refer to drawings for standard plate positions. A seal on this drawing is provided for the designer's use. The seal is not a seal of the designer. The seal is the responsibility of the Building Designer per ANSI/TPI 1 Sec 2. For more information see This Job's general notes page ITW BCG www.itwbcg.com TPI www.tpi.net org WTCA www.abindustry.com ICC www.iccsafe.org



Haines City, FL 33844  
FL COA #0278



(13-105--Trademark Construction McDuffie Residence -- Lake City, FL - C 13 2" Common)

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpi(+/-)=0 18

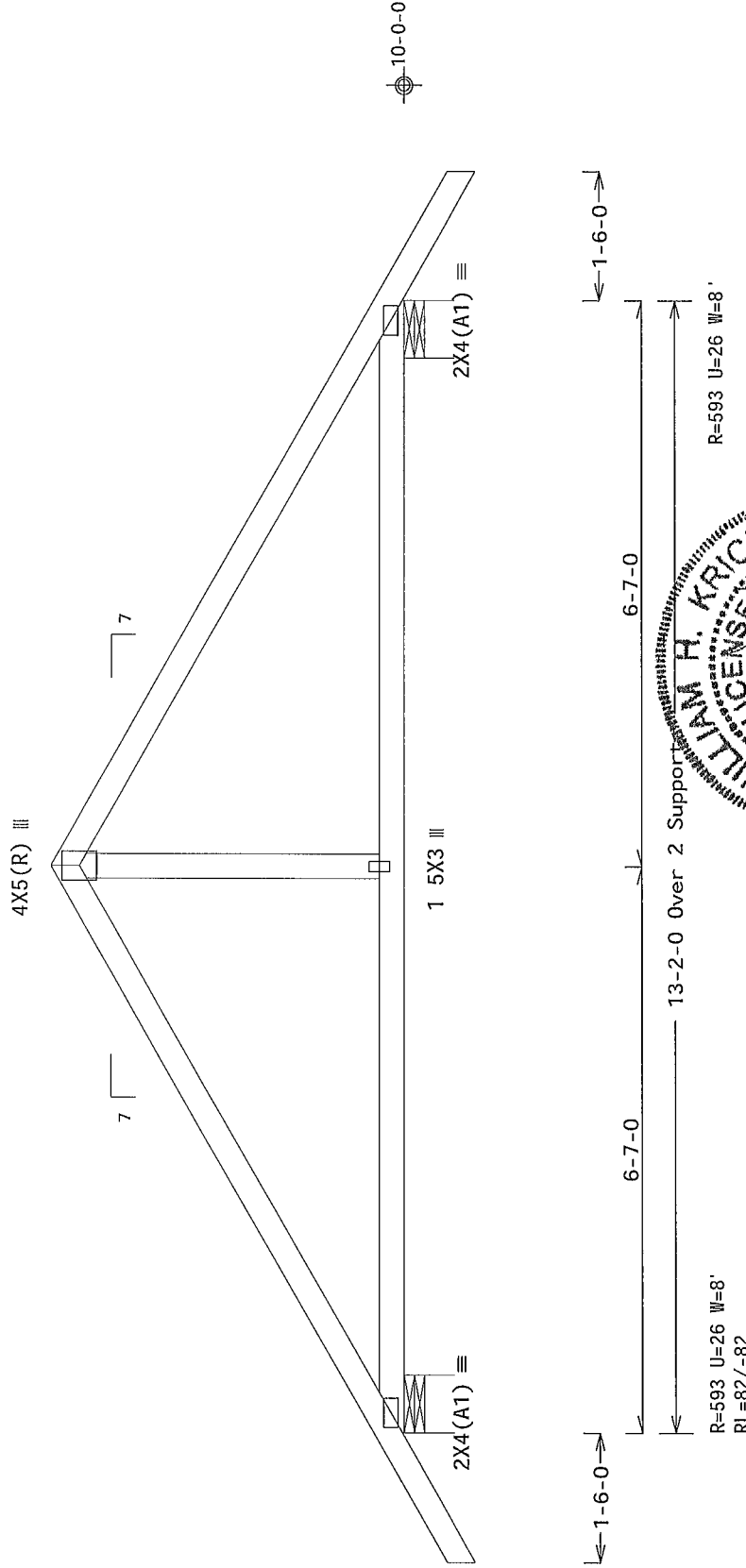
Lumber grades designated with 12A use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50



PLT TYP Wave

Design Crit: FBC2010Res/TPI-2007(S) FT/RT=10%(0%)/0(0)

FL/-4/-/-/R/-

Scale = 5"/Ft

|         |          |        |                 |
|---------|----------|--------|-----------------|
| TC LL   | 20 0 PSF | REF    | R487-- 9660     |
| TC DL   | 7 0 PSF  | DATE   | 03/20/13        |
| BC DL   | 10 0 PSF | DRW    | HCU487 13079056 |
| BC LL   | 0 0 PSF  | HC-ENG | WHK/WHK         |
| TOT.LD  | 37 0 PSF | SEQN-  | 69644           |
| DUR FAC | 1 25     |        |                 |
| SPACING | 24 0"    | JREF-  | 1UUP487_Z02     |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS  
Trusses require extreme care in fabricating, shipping, installing, and bracing. Follow the layout and erection instructions carefully. Do not alter the design without the approval of the designer. The designer is not responsible for any errors or omissions in the design or construction. The designer is not responsible for any damage to property or persons resulting from the use of the design. The designer is not responsible for any liability of the building designer per ANSI/TPI 1 Sec 2. For more information see general notes page ITW B03 www.itwbg.com TPI www.tpinet.org WDA www.sbcindustry.com

**\*\*IMPORTANT\*\*** Trusses require extreme care in fabricating, shipping, installing, and bracing. Follow the layout and erection instructions carefully. Do not alter the design without the approval of the designer. The designer is not responsible for any errors or omissions in the design or construction. The designer is not responsible for any damage to property or persons resulting from the use of the design. The designer is not responsible for any liability of the building designer per ANSI/TPI 1 Sec 2. For more information see general notes page ITW B03 www.itwbg.com TPI www.tpinet.org WDA www.sbcindustry.com

03/20/2013

ALPINE  
ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278



120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl (+/-)=0 18

Stack Chord SC1 2x4 SP\_#1\_12A    Stack Chord SC2 2x4 SP\_#1\_12A

Stack Chord SC1 2x4 SP\_#1\_12A Stack Chord SC2 2x4 SP\_#1\_12A

stack 01010 301 10x7 3F\_1#\_1  
stack 01010 306 10x7 3F\_1#\_1

Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

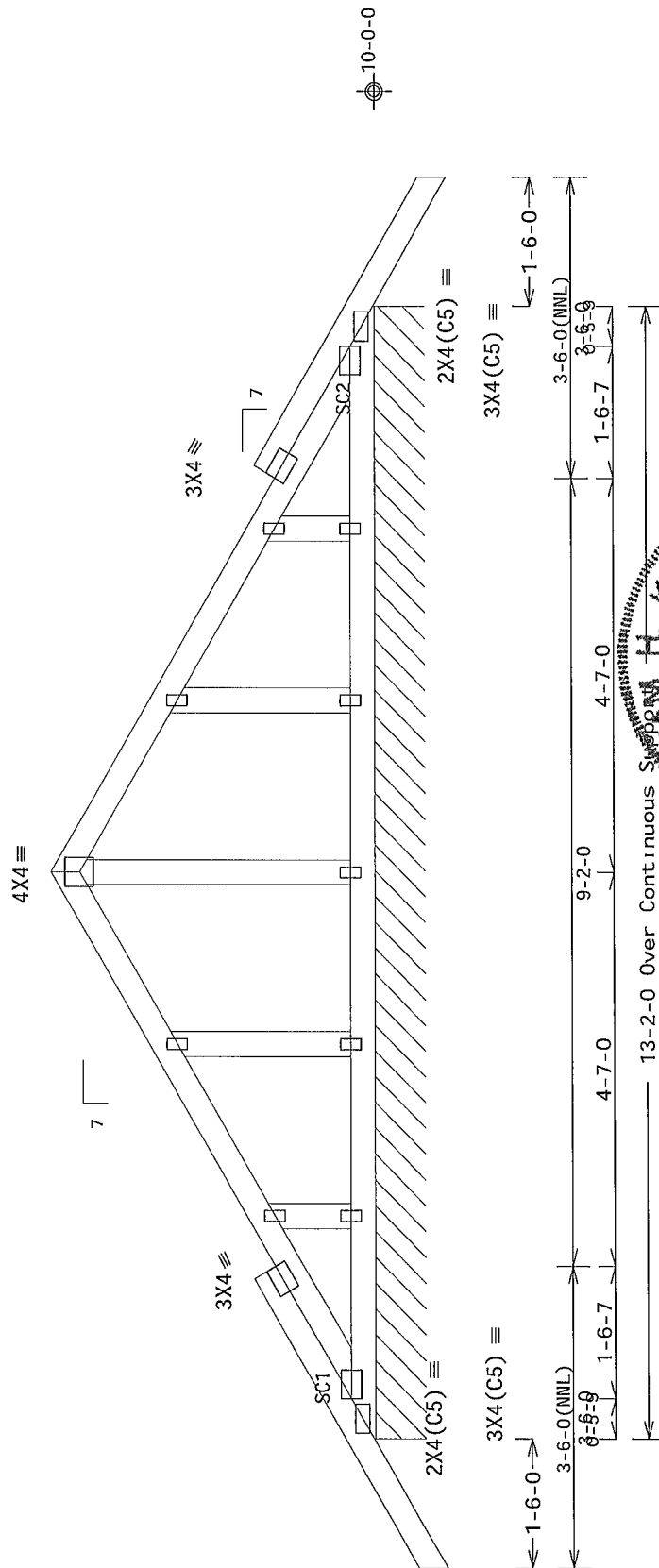
See DWGS A12015ENC100212, GBLLETIN0212, & GABRST100212 for more requirements

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

Roof overhang supports 2 00 psf soffit load

Stacked top chord must NOT be notched or cut in area (NNL) Dropped top chord braced at 24' o c intervals Attach stacked top chord (SC) to dropped top chord in noticable area using 3x4 tie-plates 24' o c Center plate on stacked/dropped chord interface, plate length perpendicular to chord length Splice top chord in noticable area using 3x6



R=90 PLF U=4 PLF W=13-2-0  
RI=6/-6 PLF

Note All Plates Are 1 5X3 Except As Shown

| Design Crit | FBC2010Res/TP1-2007 (STP) | FT/RT=10%(0%)/0(0) |
|-------------|---------------------------|--------------------|
| Design Crit | FBC2010Res/TP1-2007 (STP) | FT/RT=10%(0%)/0(0) |

PLT\_TYP Wave

FL/-/4/-/-/R/-  
Scale = .5"/Ft.

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!**

**\* IMPORTANT \***  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS  
HEAD AND FOLLOW ALL NOTES ON THIS SHEET!  
\* WARNING \*

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03202013

03/20/2013

TOT LD 37.0 H

SEOM-

69

545

ITW Building Components Group Inc.

James City, HI 33841

FL COA #0 278

Top chord 2x4 SP #1\_12A  
Bot chord 2x6 SP #2\_12A  
Webs 2x4 SP #3\_12A

Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

Special loads

-----Lumber Dur Fac = 1.25 / Plate Dur Fac = 1.25  
TC- From 56 plf at -1.50 to 56 plf at 6.58  
TC- From 56 plf at 6.58 to 56 plf at 13.17  
BC- From 5 plf at -1.50 to 5 plf at 0.00  
BC- From 20 plf at 0.00 to 20 plf at 7.06  
BC- From 10 plf at 7.06 to 10 plf at 11.06  
BC- From 20 plf at 11.06 to 20 plf at 13.17  
BC- 2574 05 lb Conc Load at 7.06  
BC- 1099 37 lb Conc Load at 9.06  
BC- 1095 82 lb Conc Load at 11.06

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

2 COMPLETE TRUSSES REQUIRED

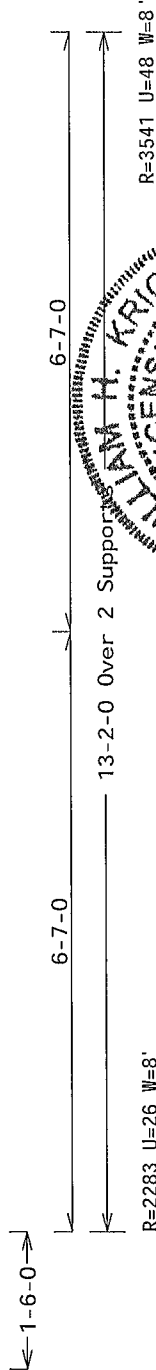
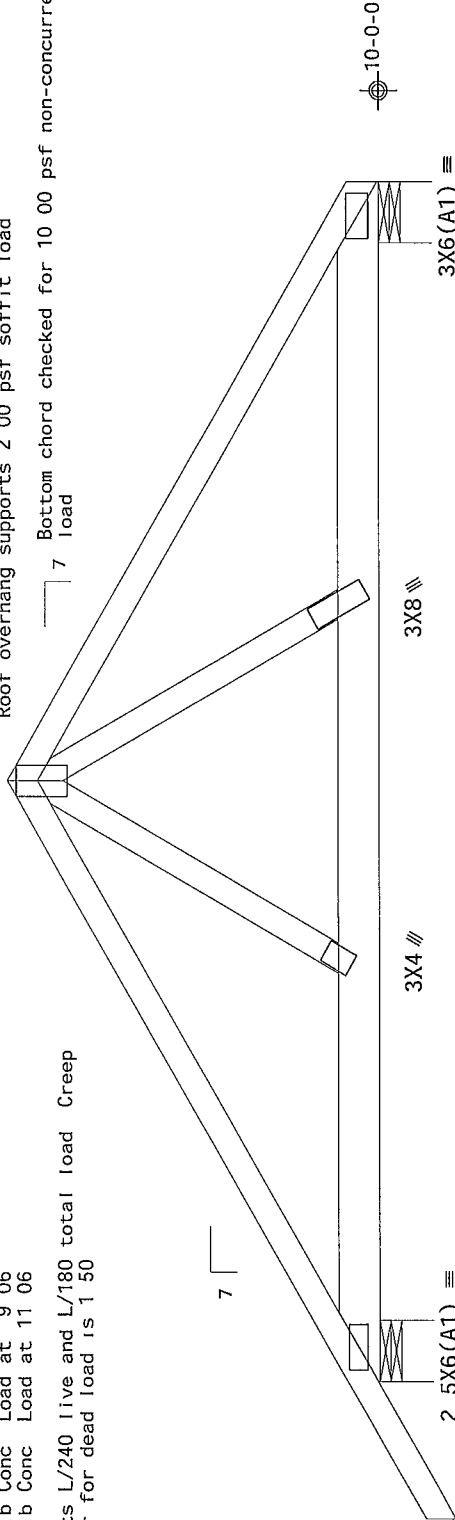
Nail Schedule 0 131 x3 nails  
Top Chord 1 Row @ 12 00" o c  
Bot Chord 1 Row @ 4 25" o c  
Webs 1 Row @ 4 0 c  
Use equal spacing between rows and stagger nails in each row to avoid splitting

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3.5 psf, wind BC DL=5.0 psf GCpl(+/-)=0.18

Wind loads and reactions based on MWFRS with additional C&C member design

4X7 (R) Roof overhang supports 2.00 psf soffit load

7 Bottom chord checked for 10.00 psf non-concurrent live load



Design Crit FBC2010Res/TPI-2007(STB)  
FT/RT=10%(0%)/0(0)

Scale = .5"/Ft.

PLT TYP Wave

|                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    |          |             |     |        |          |          |
|---------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|----------|-------------|-----|--------|----------|----------|
| <div><div><div>ALPINE</div><div>ITW Building Components Group Inc.</div><div>Hanes City, FL 33844</div><div>FL COA #0 278</div></div></div> | <b>**IMPORTANT**</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>**WARNING**</b> |          |             |     |        |          |          |
|                                                                                                                                             | FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                    |          |             |     |        |          |          |
|                                                                                                                                             | Trusses require extreme care in fabricating, handling, shipping, installing, and bracing. For new trusses, the fabricator shall provide temporary bracing per design. For existing trusses, the fabricator shall provide temporary bracing per design. The fabricator shall have a properly attached rigid ceiling. Local ones shown for permanent lateral restraint of the truss shall have bracing installed per BCSI section 83, 87 or 810 as applicable.                                                                                                                                                                                                                                               |                    |          |             |     |        |          |          |
|                                                                                                                                             | ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design. The fabricator shall be responsible for the design, installation, and use of this design for any structure. The responsibility of the Building Designer per ANSI/TPI 1 Sec 2. For more information see the general notes page ITW-BCG www.tpinet.org WTCA www.abindustry.com LOC www.ecsafe.org                                                                                                                                                                                                                                                                                                   |                    |          |             |     |        |          |          |
|                                                                                                                                             | any failure to build the trusses in conformance with ANSI/TPI 1 or for handling, shipping, installation, and bracing of trusses. Apply plates to each face of truss and standard as shown above and on the Joist Details unless noted otherwise. Refer to drawings 160A-Z for standard plate position. A seal on this drawing or cover page listing this drawing indicates acceptance of professional engineering and responsibility solely for the design shown. This design is for use only for the structure shown. The responsibility of the Building Designer per ANSI/TPI 1 Sec 2. For more information see the general notes page ITW-BCG www.tpinet.org WTCA www.abindustry.com LOC www.ecsafe.org |                    |          |             |     |        |          |          |
|                                                                                                                                             | 03/20/2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |          |             |     |        |          |          |
|                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    | TC LL    | 20.0        | PSF | REF    | R487--   | 9662     |
|                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    | TC DL    | 7.0         | PSF | DATE   | 03/20/13 |          |
|                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    | BC DL    | 10.0        | PSF | DRW    | HCUSR487 | 13079058 |
|                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    | BC LL    | 0.0         | PSF | HC-ENG | WHK/WHK  |          |
|                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    | TOT LD   | 37.0        | PSF | SEQN-  | 69670    |          |
|                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    | DUR. FAC | 1.25        |     |        |          |          |
|                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    | SPACING  | 24.0"       |     |        |          |          |
|                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                    | JREF-    | 1UUP487_Z02 |     |        |          |          |

(13-105--Trademark Construction McDuffie Residence -- Lake City, FL - CJ1 1 Jack)

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A

Lumber grades designated with "12A use design values approved 1/5/2012 by ALSC

Roof overhang supports 2 00 psf soffit load

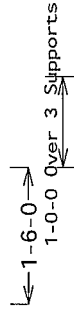
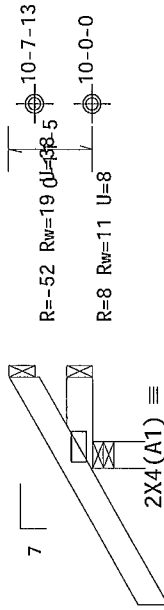
Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl(+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

Bottom chord checked for 10 00 psf non-concurrent live load

Provide ( 2 ) 16d common nails(0 162"x3 5"), toe nailed at Top chord  
Provide ( 2 ) 16d common nails(0 162"x3 5"), toe nailed at Bot chord



R=232 U=30 W=3 5"  
RL=24

PLT TYP Wave

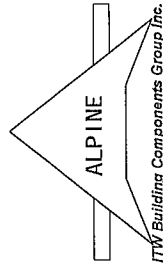
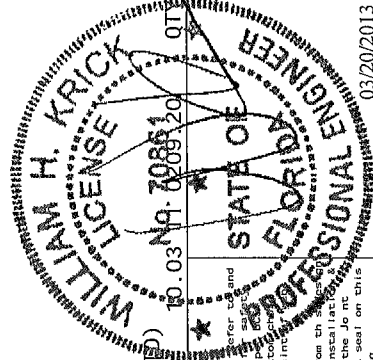
Design Crit FBC2010Res/TPI-2007(STB)

FT/RT=10%(0%)/0(0)

FL/-/4/-/R/-

Scale =.5"/Ft

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET  
**\*\*IMPORTANT\*\*** FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS  
Trusses require extreme care in fabricating, handling, shipping, installing, and bracing. Follow the latest edition of BCSI (Building Components Safety Information) by TPI and WICA for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint shall have bracing installed per BCSI sections B3, B7 or B10 as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from the design of trusses. Apply places of trusses in accordance with ANSI/TPI 1 or for handling, shipping, installing, bracing, or trusses. Each face of trusses shall be marked with a BCSI 1600-2 for standard plates and a seal on this drawing or cover page indicating the suitability and use of this design for any structure. The responsibility of the Building Designer per ANSI/TPI 1 Sec 2. For more information see general notes page ITW-B06 www.itwbcg.com TPI www.tpinet.org WICA www.sbcindustry.com ICC www.iccsafe.org



Haines City, FL 33844  
FL COA #0278

|          |          |        |             |          |
|----------|----------|--------|-------------|----------|
| TC LL    | 20.0 PSF | REF    | R487--      | 9663     |
| TC DL    | 7.0 PSF  | DATE   | 03/20/13    |          |
| BC DL    | 10.0 PSF | DRW    | HCUSR487    | 13079059 |
| BC LL    | 0.0 PSF  | HC-ENG | WHK/WHK     |          |
| TOT.LD   | 37.0 PSF | SEQN-  | 69646       |          |
| DUR.FAC. | 1.25     |        |             |          |
| SPACING  | 24.0"    | JREF-  | 1UUP487_Z02 |          |

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A

Lumber grades designated with 12A use design values approved 1/5/2012 by ALSC

Roof overhang supports 2 00 psf soffit load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpi(+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

Bottom chord checked for 10 00 psf non-concurrent live load

Provide ( 2 ) 16d common nails(0 162"x3 5"), toe nailed at Top chord  
Provide ( 2 ) 16d common nails(0 162"x3 5"), toe nailed at Bot chord

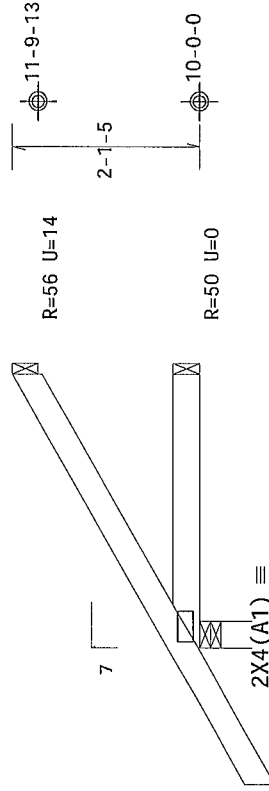


Diagram of a continuous beam with three supports. The beam is divided into two equal spans of 16 feet each. The left span is labeled "1-6-0" and the right span is labeled "3-0-0 Over 3 Supports".

R=240 U=11 W=3 5  
RL=43/-23

PLT TYP: Wave

Design Crit. FBC2010Res/TPI -2007 (STD)

Scale = 5" / Ft.

|           |       |     |        |          |          |
|-----------|-------|-----|--------|----------|----------|
| TC LL     | 20.0  | PSF | REF    | R487--   | 9664     |
| TC DL     | 7.0   | PSF | DATE   | 03/20/13 |          |
| BC DL     | 10.0  | PSF | DRW    | HCUSR487 | 13079060 |
| BC LL     | 0.0   | PSF | HC-ENG | WHK/WHK  |          |
| TOT. LD.  | 37.0  | PSF | SEQN-  | 69647    |          |
| DUR. FAC. | 1.25  |     |        |          |          |
| SPACING   | 24.0" |     | JREF-  | 1UUP487  | Z02      |

03/20/2013

**ITW Building Components Group Inc.**  
Haines City, FL 33844  
FL COA #0 278

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 4 50 ft from roof edge, RISK CAT 11, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpi(+/-)=0 18

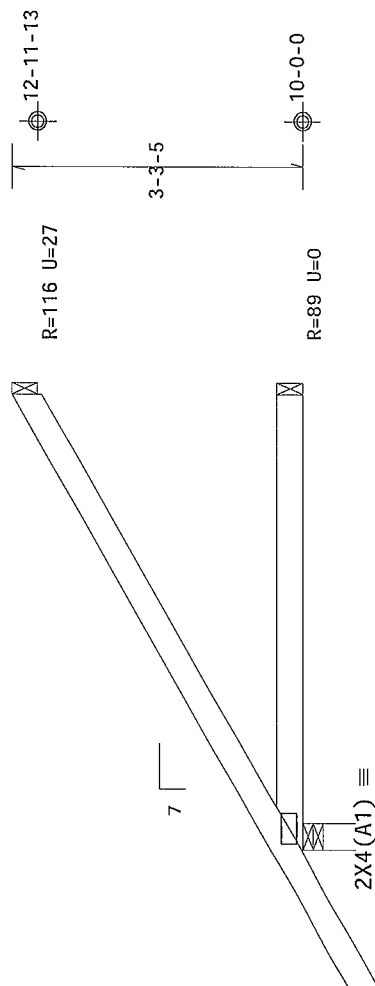
Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load  
factor for dead load is 1.50



$\leftarrow 1-6-0 \rightarrow$        $\leftarrow 5-0-0 \rightarrow$  Over 3 Supports       $\leftarrow$   
 R=304 U=6 W=3 5  
 RL=62/-27

PLT TYP. Wave

Design Crit. FBC2010Res/TPI -2007(ST)

FL/-/4/-/-/R/-  
Scale = .5"/Ft.

|          |      |     |                       |
|----------|------|-----|-----------------------|
| TC LL    | 20.0 | PSF | REF R487-- 9665       |
| TC DL    | 7.0  | PSF | DATE 03/20/13         |
| BC DL    | 10.0 | PSF | DRW HCUSR487 13079061 |
| BC LL    | 0    | PSF | HC-ENG WHK/WHK        |
| TOT LD   | 37.0 | PSF | SEQN- 69648           |
| DUR.FAC. | 1.25 |     |                       |
| SPACING  | 24   | 0"  | JREF- 1UUP487_Z02     |

STATE OF FLORIDA  
PROFESSIONAL ENGINEER  
No. 13589  
03/20/2013

03/20/2013

drawing or cover page listing the drawing indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of the design for any structure is the responsibility of the Building Designer per ANSI/TP1-1 Sec 2. For more information on this job's general notes page 1TW-80G www.tbwbg.com TPI www.tpi.net.org WTCA www.sbcindustry.com ICC www.iccsafe.org

ITW Building Components Group Inc.  
Haines City FL 33844  
FL COA #0278

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl(+/-)=0 18

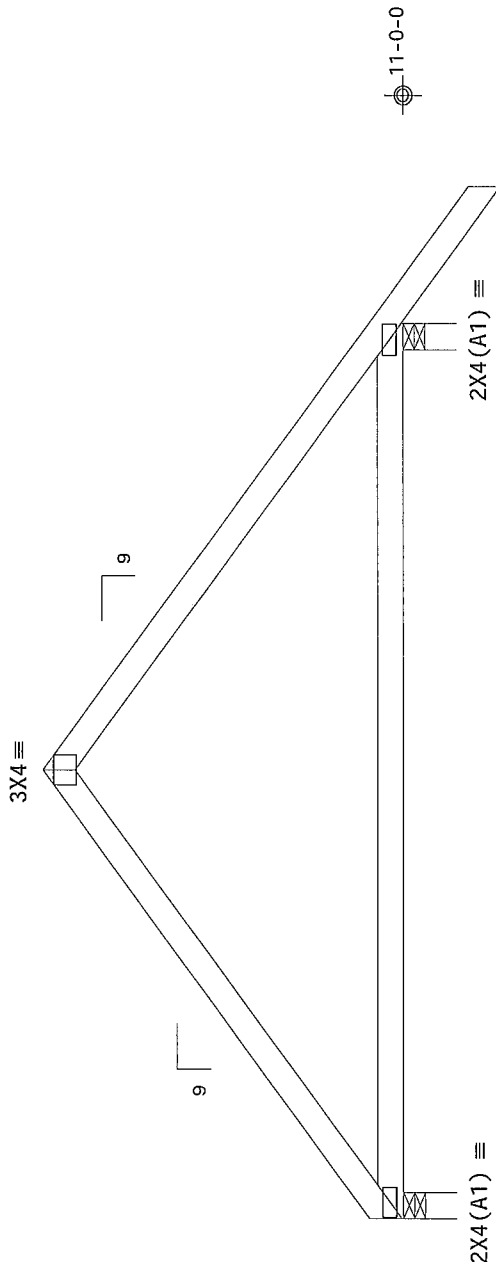
Lumber grades designated with "12A use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50



1-6-0

4-11-0

9-10-0 Over 2 Supports

D-372 11-1 W-3 5"

RL=85/-74

PLT TYP. Wave

Design Crit. FBC2010Res/TP1 -2007(STD)  
FT/RT=10%(0%)/0(0)

Scale = .5"/Ft.

FL/-/4/-/-/R/-

17 02 09 20 01TV

1020

 $ET/RT = 10\%(0\%) / 0(0)$ 

## Design and

Split T TVP Wave

♦♦ IMPORTANT ♦♦

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!**

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2000

**NOTES ON THIS SHEET!**  
**FOR INSTALLERS**

NG\*\* READ AND FOLLOW  
THIS DESIGN TO ALL CONTR

**\*\*IMPORTANT\*\***



**ALPINE**

*ITTW Building Components Group Inc.*

[illegible]

03/20/2013  
FLORIDA PROFESSIONAL ENGINEER

Refer to the  
for  
under  
from  
ent of  
in this design  
installation &  
the Joint  
seal on this

shall provide temporary bracing and attached structural sheathing and sheathing shall be permanent lateral resistance shown for permanent lateral resistance as applicable

care in fabricating  
or BCSI (Building Components Inc.)  
performing these functions.  
The proposed chord shall have properties  
achieved by grinding. Located per BCSI sections B3.1  
Group Inc. (ITWBCG) shall ensure conformance with all  
plates to each face of the chord. Refer to drawing set

Trusses require extra bracing to follow the latest ed t unless noted otherwise se shall have a properly a shall have bracing inst



Haines City, FL 33844  
FL COA #0 278

the responsibility of  
general notes page ITW  
CC [www.iccsafe.org](http://www.iccsafe.org)

Haines City, FL 33844  
FL COA #0278

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A  
Stack Chord SC1 2x4 SP\_#1\_12A Stack Chord SC2 2x4 SP\_#1\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

See DWGS A12015ENC100212, GBLLET1N0212, & GABRST100212 for more requirements

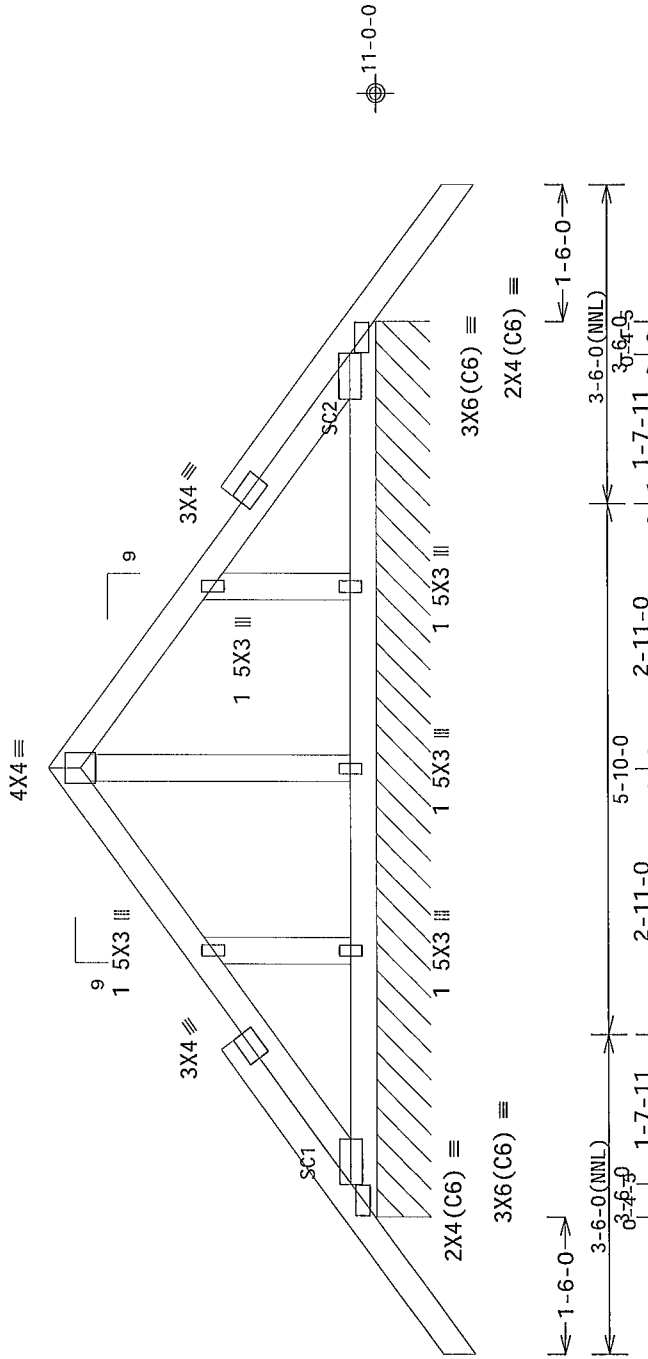
Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

Stacked top chord must NOT be notched or cut in area (NNL) Dropped top chord braced at 24" o c intervals Attach stacked top chord (SC) to dropped top chord in notchable area using 3x4 tie-plates 24" o c Center plate on stacked/dropped chord interface, plate length perpendicular to chord length Splice top chord in notchable area using 3x6

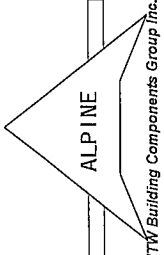


R=97 PLF U=3 PLF W=9-10-0  
RL=10/-10 PLF

PLT TYP. Wave

Design Crit. FBC2010Res/TPI-2007(SD)  
FT/RT=10%(0%)/0(0)

Scale =.5"/Ft.

|                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |         |                                                                                                                    |        |             |          |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|--------------------------------------------------------------------------------------------------------------------|--------|-------------|----------|
| <br>ITW Building Components Group Inc.<br>Haines City FL 33844<br>FL COA #0278 | **IMPORTANT**<br>Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Installer shall follow the instructions provided on the truss and on the joint. Unless noted otherwise, the top chord shall have properly attached structural sheathing and bracing. The truss shall have bracing installed per BCSI sections 83, 87 or 810 as applicable. ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this specification. Refer to drawings for details. Unless noted otherwise, the truss shall be installed in accordance with the manufacturer's instructions. The installer shall be responsible for the design and use of the truss for any structure. This job is the responsibility of the installer. For more information, see the general notes page ITW-B00 www.itwbcg.com TPI www.tpinst.org WCA www.sbcindustry.com ICC www.ccsafe.org |         | **WARNING** READ AND FOLLOW ALL NOTES ON THIS SHEET<br>FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS |        | 03/20/2013  |          |
|                                                                                                                                                                     | FL/RT=10%(0%)/0(0)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |         | 03/20/2013                                                                                                         |        | 03/20/2013  |          |
|                                                                                                                                                                     | 03/20/2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         | 03/20/2013                                                                                                         |        | 03/20/2013  |          |
|                                                                                                                                                                     | 03/20/2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         | 03/20/2013                                                                                                         |        | 03/20/2013  |          |
|                                                                                                                                                                     | 03/20/2013                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |         | 03/20/2013                                                                                                         |        | 03/20/2013  |          |
| TPI                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | TC LL   | 20 0 PSF                                                                                                           | REF    | R487--      | 9667     |
| TPI                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | TC DL   | 7.0 PSF                                                                                                            | DATE   | 03/20/13    |          |
| TPI                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BC DL   | 10 0 PSF                                                                                                           | DRW    | HCSR487     | 13079063 |
| TPI                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | BC LL   | 0.0 PSF                                                                                                            | HC-ENG | WHK/WHK     |          |
| TPI                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | TOT LD  | 37 0 PSF                                                                                                           | SEQN-  | 69650       |          |
| TPI                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | DUR FAC | 1 25                                                                                                               |        |             |          |
| TPI                                                                                                                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | SPACING | 24 0"                                                                                                              | JREF-  | 1UUP487_Z02 |          |

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A

Lumber grades designated with '12A use design values approved 1/5/2012 by ALSC

Roof overhang supports 2 00 psf soffit load

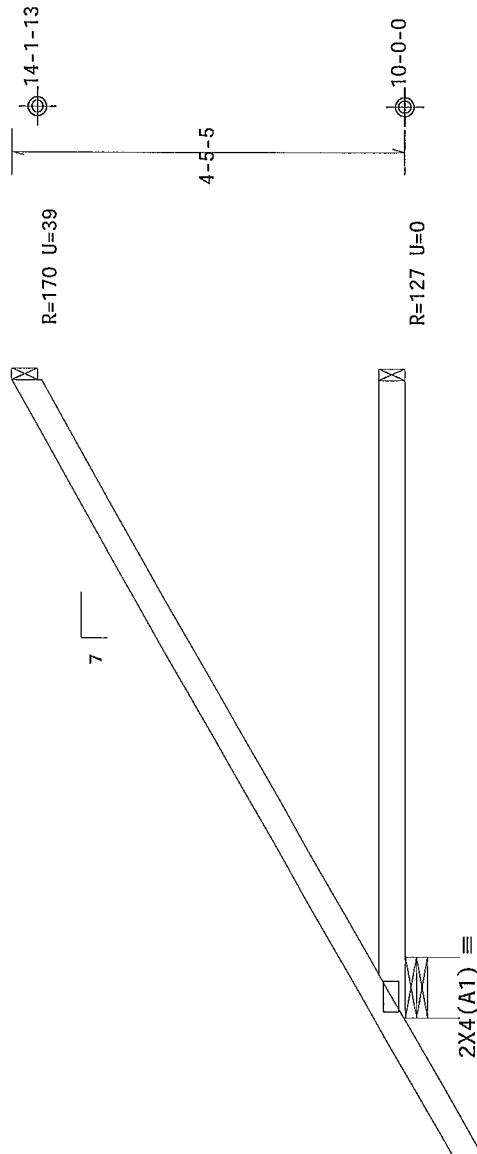
Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located  
wind within 4 50 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf,  
wind BC DL=5 0 psf GCpl(+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

Bottom chord checked for 10 00 psf non-concurrent live load

|               |                                 |                         |
|---------------|---------------------------------|-------------------------|
| Provide ( 2 ) | 16d common nails(0 162 x3 5 )   | toe nailed at Top chord |
| Provide ( 2 ) | 16d common nails(0 162" x3 5' ) | toe nailed at Bot chord |



1-6-0

7-0-0 Over 3 Supports

R=376 U=2 W=8

RL=81/-32

PLT TYP Wave

Design Crit. FBC2010Res/TPI-2007(ST6)  
FT/RT=10%(0%)/0(0)

Scale = .5"/Ft

TC 11 20 0 PSE

PFF P487 9668

|   |   |   |   |   |   |   |   |   |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |    |     |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 | 43 | 44 | 45 | 46 | 47 | 48 | 49 | 50 | 51 | 52 | 53 | 54 | 55 | 56 | 57 | 58 | 59 | 60 | 61 | 62 | 63 | 64 | 65 | 66 | 67 | 68 | 69 | 70 | 71 | 72 | 73 | 74 | 75 | 76 | 77 | 78 | 79 | 80 | 81 | 82 | 83 | 84 | 85 | 86 | 87 | 88 | 89 | 90 | 91 | 92 | 93 | 94 | 95 | 96 | 97 | 98 | 99 | 100 |
|---|---|---|---|---|---|---|---|---|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|----|-----|

|      |             |
|------|-------------|
| DATE | 02/09/12    |
| TIME | 1407-- 3000 |

7.0 PSF

DATE 03/20/13

BC DL 10.0 PSF

DRW HCUSR487 13079

BC LL 0.0 PSF

HC-ENG WHK/WHK

|     |    |    |   |     |
|-----|----|----|---|-----|
| TOT | 10 | 37 | 0 | DCE |
|-----|----|----|---|-----|

NO39 606A

101.27: 37.0 F31

07:101 37:0

|          |      |
|----------|------|
| DUR.FAC. | 1.25 |
|----------|------|

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**\*\*\*WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!**

**IMPORTANT:** FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.

Trusses require extreme care in fabricating handling and bracing. Follow the latest code of BOSI (Building Component Safety Information) by TPI and WTCIA for bracing. Installers shall provide temporary bracing per manufacturer's instructions. Trusses shall have properly attached structural sheathing and bottom chord shall have a properly attached roof sheathing. Trusses shall have a properly attached lateral bracing. Trusses shall be installed in accordance with the manufacturer's instructions.

**I**TW Buil Inc Components Group Inc (ITWBCC) shall not be responsible for any deviation from this document. The user shall be responsible for ensuring that the design and construction of the system meets the requirements of the applicable standards and regulations. The user shall also be responsible for ensuring that the system is installed and maintained in accordance with the manufacturer's instructions.

ALPINE

ITW Building Components Group Inc.

Haines City, FL 33844

FL COA #0 278

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Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Roof overhang supports 2 00 psf soffit load

Bottom chord checked for 10 00 psf non-concurrent live load

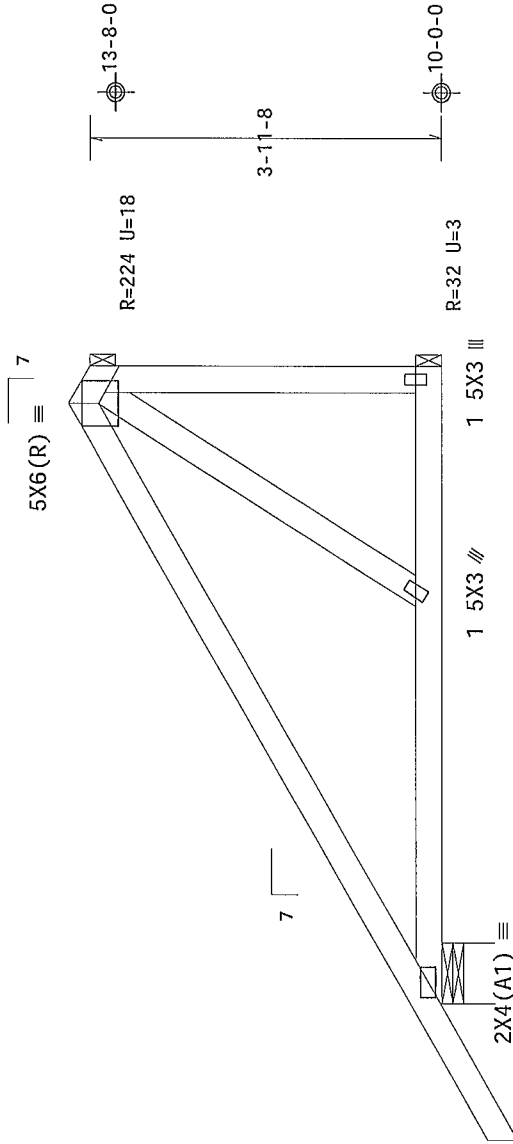
Provide ( 2 ) 16d common nails(0 162"x3 5"), toe nailed at Top chord  
Provide ( 2 ) 16d common nails(0 162"x3 5"), toe nailed at Bot chord

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 4 50 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpi(+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

Right end vertical not exposed to wind pressure

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50



1-6-0  
6-7-0  
0-5-0  
7-0-0 Over 3 Supports  
R=369 U=4 W=8"  
RL=76/-32

Design Crit: FBC2010Res/TPI-2007(SD)  
FT/RT=10%(0%/0/0)

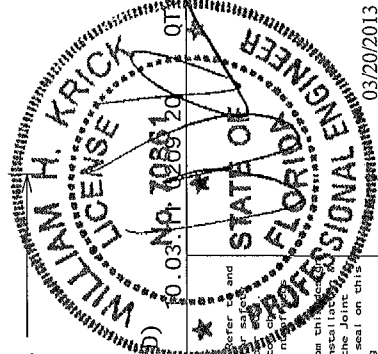
PLT TYP. Wave

Scale =.5"/Ft.

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ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278



Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Roof overhang supports 2 00 psf soffit load

(a) Continuous lateral bracing equally spaced on member

In lieu of structural panels use purlins to brace all flat TC @ 24'

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50

Negative reaction(s) of -234# MAX (See below) from a non-wind load case requires uplift connection

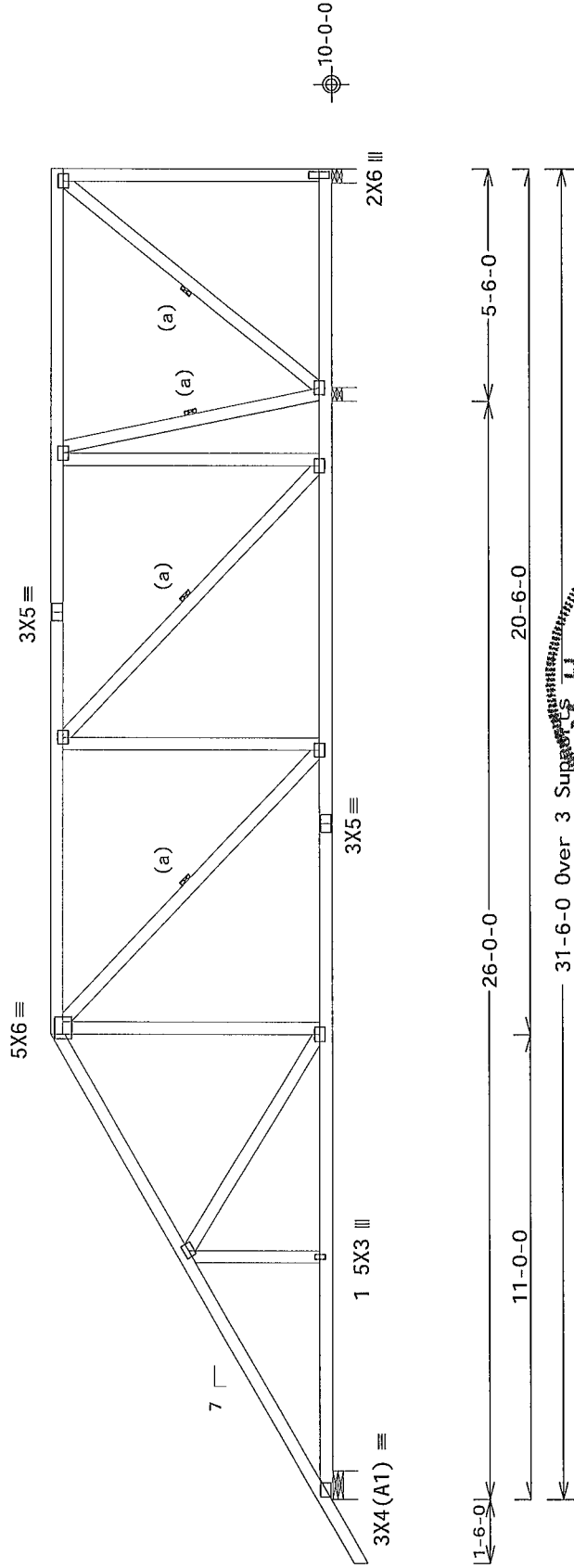
120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9 00 ft from roof edge, RISK CAT 11, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCp1(+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

Right end vertical not exposed to wind pressure

Bottom chord checked for 10 00 psf non-concurrent live load

MWFRS loads based on trusses located at least 7 50 ft from roof edge



R=1038 U=31 W=8'  
RL=120/-42

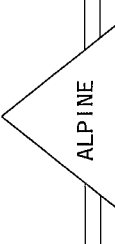
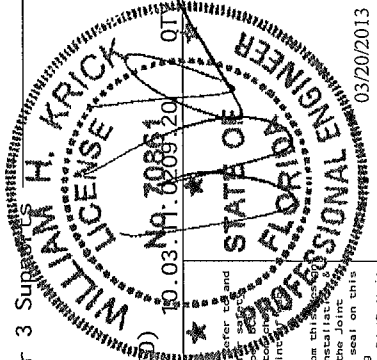
R=1602 U=87 W=4"  
R=26/-234 U=75 W=4"

Note: All Plates Are 3X4 Except As Shown.

PLT TYP. Wave

Design Crit FBC2010Res/TPI-2007(SD)

Scale = .25"/Ft.

|                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |          |        |                  |
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| <br>ITW Building Components Group Inc.<br>Haines City, FL 33844<br>FL COA #0278 | **IMPORTANT**<br>FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS<br>Trusses require extreme care in fabricating, handling, shipping, installing, and bracing. Follow the latest edition of BCSI (Building Component Safety) information on by TPI and WCA. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraints shall have bracing installed per BCSI section 83, 87 or 810 as applicable.<br>ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design for any reason. Apply proper bracing and install in accordance with the design shown. Do not alter or modify the design shown. Refer to drawings 150A-2 for standard plate positions. A seal on this drawing or cover page listing this design shall not be used for any other project. The responsibility of the building designer per ANSI/TPI 1 Sec 2. For more information see This Job's general notes page. ITW-BCG www.tbcbg.com TPI www.tpi.net WCA www.sbcindustry.com |          |        |                  |
|                                                                                                                                                                      | **WARNING** READ AND FOLLOW ALL NOTES ON THIS SHEET                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |          |        |                  |
|                                                                                                                                                                      | TC LL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 20.0 PSF | REF    | R487 -- 9670     |
|                                                                                                                                                                      | TC DL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 7.0 PSF  | DATE   | 03/20/13         |
|                                                                                                                                                                      | BC DL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 10.0 PSF | DRW    | HCSR487 13079066 |
|                                                                                                                                                                      | BC LL                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | 0.0 PSF  | HC-ENG | WHK/WHK          |
|                                                                                  | TOT LD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 37.0 PSF | SEQN   | 69653            |
|                                                                                                                                                                      | DUR FAC                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 1 25     |        |                  |
|                                                                                                                                                                      | SPACING                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 24.0"    | JREF   | 1UUP487_Z02      |

Top chord 2x4 SP #1\_12A  
Bot chord 2x4 SP #1\_12A  
Webs 2x4 SP #3\_12A

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 6 50 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl (+/-)=0 18

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

(a) Continuous lateral bracing equally spaced on member

In lieu of structural panels use purlins to brace all flat TC @ 24'

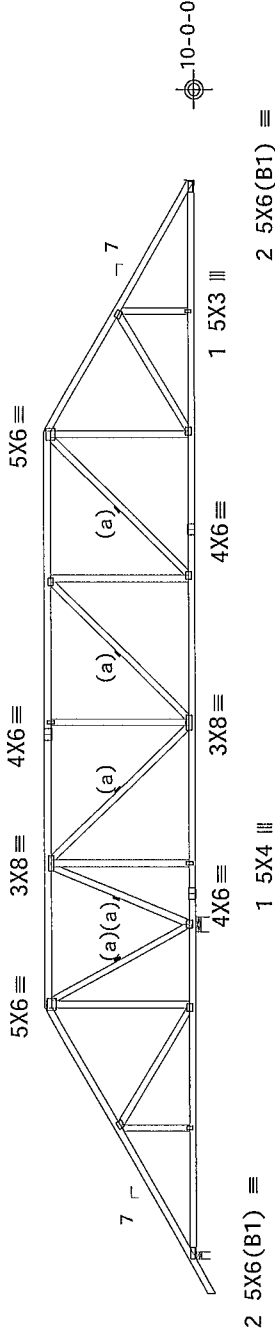
Bottom chord checked for 10 00 psf non-concurrent live load

**WARNING** Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See 'WARNING' note below

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50

MWFRS loads based on trusses located at least 7 50 ft from roof edge

1 5X4 |||



1 5X3 |||

1'-6-0 14'-4-0 11'-0-0 25'-4-0 33'-0-0 11'-0-0

47'-4-0 Over 3 Supports

R=451 U=15 W=3 5"

RL=113/-120

R=2333 U=95 W=8"

Note All Plates Are 3X4 Except As Shown.

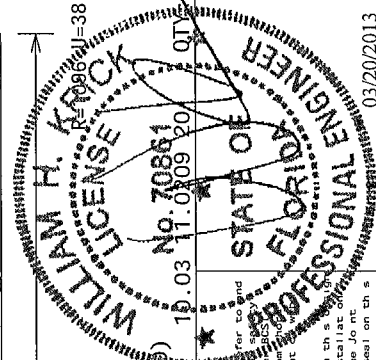
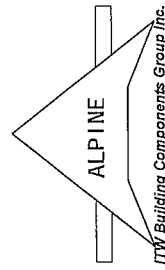
Design Crit. FBC2010Res/TPI-2007(S) FT/RT=10%(0%)/0(0)

Scale = .125"/Ft.

PLT TYP Wave

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET!

**\*\*IMPORTANT\*\*** FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS. Trusses require extreme care in fabricating, handling, shipping, installing, and bracing. Follow the latest edition of the BCSI (Building Component Safety) Information System (BCSI) for all details. Unbraced trusses shall have a properly attached structural sheathing and bottom chord bracing installed per BCSI sections B3, B7, or B10 as applicable. ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design for any reason. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 100-2 for standard plate positions. A seal on this drawing or cover page is required for the use of this design for any structure. The responsibility of the Building Designer per ANSI/TPI 1 Sec 2. For more information see general notes page ITW-BCG www.itwbcg.com TPI www.tpi.net org WTCA www.sbcindustry.com ICC www.iccsafe.org



|          |          |        |                  |
|----------|----------|--------|------------------|
| TC LL    | 20 0 PSF | REF    | R487 -- 9671     |
| TC DL    | 7 0 PSF  | DATE   | 03/20/13         |
| BC DL    | 10 0 PSF | DRW    | HCSR487 13079067 |
| BC LL    | 0 0 PSF  | HC-ENG | WHK/WHK          |
| TOT LD.  | 37 0 PSF | SEQN-  | 69654            |
| DUR FAC. | 1.25     |        |                  |
| SPACING  | 24 0"    | JREF-  | 1UUP487_Z02      |

03/20/2013



Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Roof overhang supports 2 00 psf soffit load

In lieu of structural panels use purlins to brace all flat TC @ 24" OC

**WARNING** Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 13 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl(+/-)=0 18

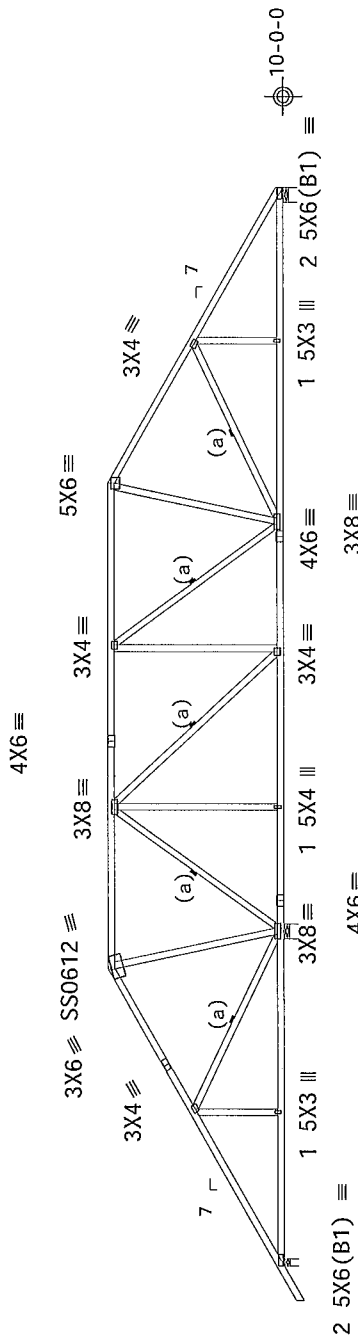
Wind loads and reactions based on MWFRS with additional C&C member design

(a) Continuous lateral bracing equally spaced on member

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

MWFRS loads based on trusses located at least 7 50 ft from roof edge



Technical drawing of a bridge section showing dimensions and a license plate. The drawing includes a top view with dimensions: 14'-4" (left), 13'-0" (middle), 21'-4" (right), and 33'-0" (total). Below these are two horizontal lines representing the bridge deck, with a dimension of 47'-4" Over 3 Supports. A license plate is shown on the right side, reading "R-2299 U=80 W=8". The license plate also features the text "WILLIAM H. KROCK" and "ILLINOIS LICENSE".

14'-4" 13'-0" 21'-4" 33'-0"

47'-4" Over 3 Supports

R-2299 U=80 W=8"

WILLIAM H. KROCK  
ILLINOIS LICENSE

PLT TYP. 18 Gauge HS,Wave

Design Crit FBC2010Res/TPI-2007(ST  
FT/RT=10%(0%)/0(0))

FL/-/4/-/-/R/-  
Scale = .125"/Ft.

|         |       |     |        |          |          |
|---------|-------|-----|--------|----------|----------|
| TC LL   | 20.0  | PSF | REF    | R487 --  | 9673     |
| TC DL   | 7.0   | PSF | DATE   | 03/20/13 |          |
| BC DL   | 10.0  | PSF | DRW    | HCUSR487 | 13079084 |
| BC LL   | 0.0   | PSF | HC-ENG | WHK/WHK  |          |
| TOT. LD | 37.0  | PSF | SEQN-  | 69656    |          |
| DUR FAC | 1     | 25  |        |          |          |
| SPACING | 24.0" |     | JREF-  | 1UUP487  | Z02      |

STATE OF FLORIDA  
PROFESSIONAL ENGINEER

ALPINE

ITW Building Components Group Inc.

Haines City, FL 33827  
FL COA #0278

Top chord 2x4 SP #1\_12A  
Bot chord 2x4 SP #1\_12A  
Webs 2x4 SP #3\_12A

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9 00 ft from roof edge. RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCp1(+/-)=0 18

Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

Right end vertical not exposed to wind pressure

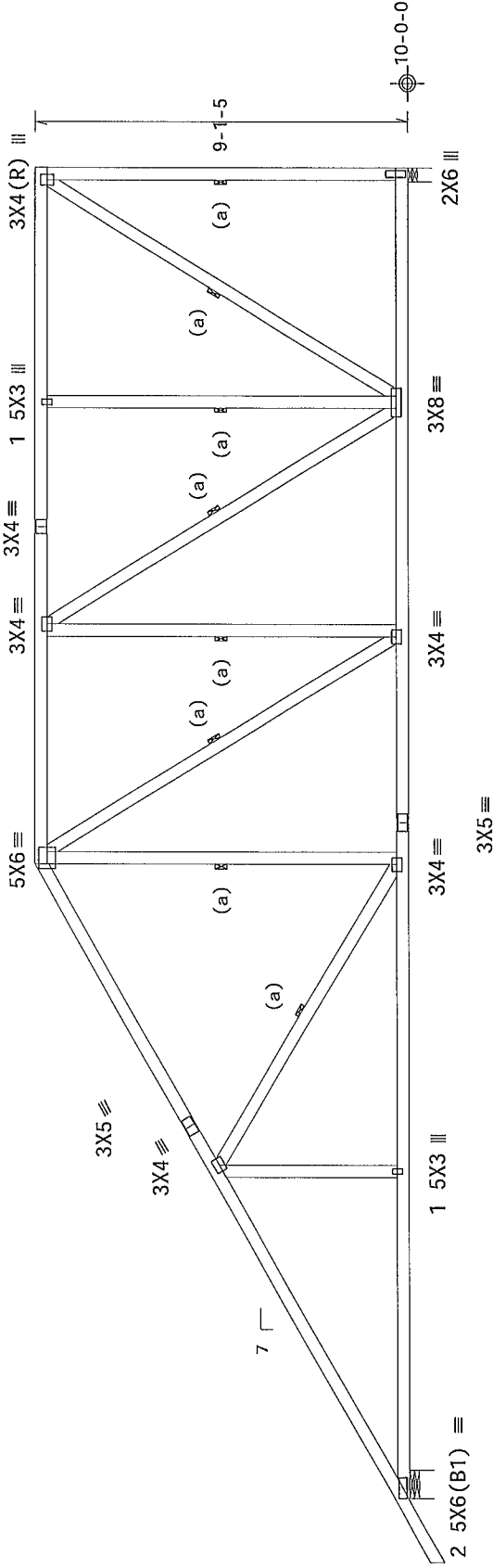
(a) Continuous lateral bracing equally spaced on member

In lieu of structural panels use purlins to brace all flat TC @ 24"

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50

MWFRS loads based on trusses located at least 15 00 ft from roof edge



1-6-0

15-0-0

16-6-0

31-6-0 Over 2 Supports

R=1300 U=0 W=8

RL=106/-51

Design Crit FBC2010Res/TP1-2007(STB)  
FT/RT=10%(0%)/0(0)

FL/-4/-/-/R/- Scale = .25"/Ft

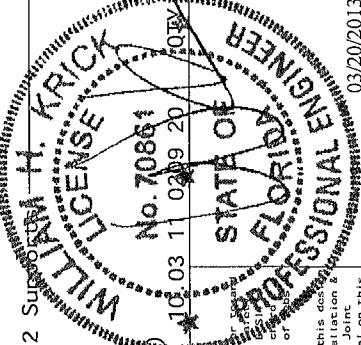
PLT TYP Wave

\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

\*\*IMPORTANT\*\*  
Trusses require extreme care in fabricating, handling, shipping, installing, and bracing. The fabricator must follow the latest edition of the ITW Building Components Group Inc. (ITWBCG) for any deviation from this design. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly attached rigid ceiling. Locations shown for permanent lateral restraint of the truss shall have bracing installed per BCS1 section 83, 87 or 810 as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design for any failure to build the truss in conformance with ANSI/TP1 1 or for handling, shipping, installation, or bracing of trusses. Apply plates to each face of trusses and position as shown above and on the Joint Detail. Unless noted otherwise, refer to drawings 1000-2 for standard plate positions and details. The responsibility of the Building Designer per ANSI/TP1 1 Section 2 for more information see the general notes page. ITW BCG www.tbwg.com TP1 www.tp1inst.org WTCA www.sbeindustry.com ICC www.iccsafe.org

ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278



|         |          |        |             |          |
|---------|----------|--------|-------------|----------|
| TC LL   | 20.0 PSF | REF    | R487 --     | 9674     |
| TC DL   | 7 0 PSF  | DATE   | 03/20/13    |          |
| BC DL   | 10.0 PSF | DRW    | HCUSR487    | 13079069 |
| BC LL   | 0.0 PSF  | HC-ENG | WHK/WHK     |          |
| TOT.LD. | 37.0 PSF | SEQN-  | 69657       |          |
| DUR FAC | 1 25     |        |             |          |
| SPACING | 24.0"    | JREF-  | 1UUP487_Z02 |          |

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

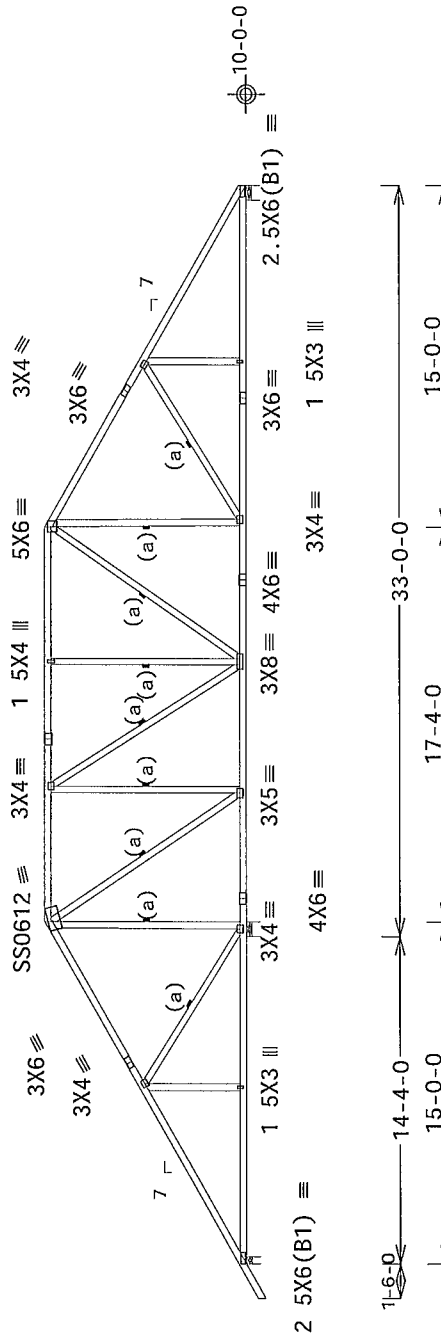
Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Roof overhang supports 2 00 psf soffit load

In lieu of structural panels use purlins to brace all flat TC @ 24' OC

**WARNING** Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below

4X6 ≡



R=542 U=0 W=3 5"  
RL=150/-158

P-2046 11-0 W-8:

PLT TYP 18 Gauge HS, Wave

Design Crit FBC2010Res/TPI-2007 (STD)

FL/-/4/-/-/R/-  
Scale = .125"/Ft.

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET.**  
**\*\*IMPORTANT\*\* FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS**

g and bracing (Refer to and  
TPI and WTCA)  
Temporary bracing per  
sheathing and bottom chord  
lateral restraint number

ITW Building Components Group Inc. (ITWBCG) shall be responsible for any deviation from the approved design and construction of the trusses. ITWBCG shall conform with ANSI/TPI 1 for handling, shipping, installing and placing of the trusses. Apply plates to each face of trusses and posts on as shown above and on the joint. Details are subject to change without notice. Refer to drawngs TBOA-2 For standard plate positions. A seal on this drawing or cover page listing this drawing and cautions acceptance of professional engineer and responsibility for the design shown. The sub 1 ty and use of this design for any structure is the responsibility of the user. All drawings are the property of ITWBCG. This job is for the use of the user only. ITWBCG www.itwbcg.com TPI www.tpi.net.org WTCA www.structure.com  
CC www.licenseart.org

|          |          |                   |
|----------|----------|-------------------|
| BC LL    | 0.0 PSF  | HC-ENG WHK/WHK    |
| TOT.LD.  | 37 0 PSF | SEQN- 69658       |
| DUR.FAC. | 1.25     |                   |
| SSPACING | 24.0"    | JREF- 1UUP487_Z02 |

03/20/2013

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278





(13-105--Trademark Construction McDuffie Residence -- Lake City FL - H17PB 16 6' Stepdown Hip)

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

120 mph wind, 19 70 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9 00 ft from roof edge, RISK CAT II EXP B, wind TC DL=3 5 psf, wind BC DL=2 0 psf GCpl(+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

Refer to DWG PB1400310 for piggyback details

Special loads

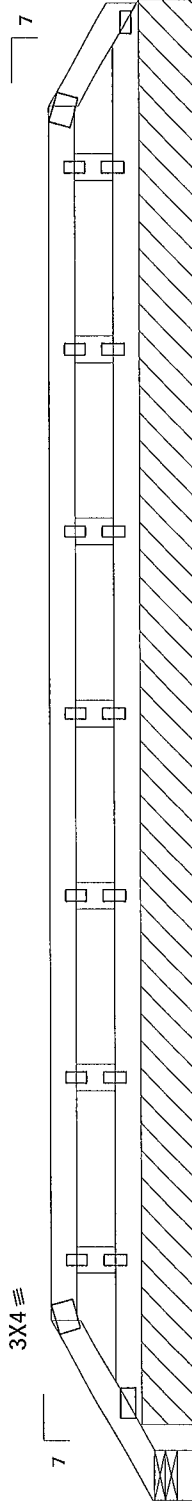
-----Lumber Dur Fac =1 25 / Plate Dur Fac =1 25)  
TC- From 56 plf at -0 83 to 56 plf at 1 13  
TC- From 56 plf at 1 13 to 56 plf at 14 47  
TC- From 56 plf at 14 47 to 56 plf at 15 60  
BC- From 4 plf at -0 83 to 4 plf at 15 60

In lieu of structural panels or rigid ceiling use purlins to brace all flat TC @ 24" OC, all BC @ 24" OC

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50

MWFRS loads based on trusses located at least 9 85 ft from roof edge

3X4 ≡



0-0-4

19-3-5

1-1-10

13-4-0

1-2-0

R=15 Rw=16 U=2 W=6 518"

R=61 PLF U=12 PLF W=15-7-10

Note: All Plates Are 1 5X3 Except As Shown

Design Crit FBC2010Res/TP1-2007 (S19)

FT/RT=10%(0%)/0(0)

PLT TYP Wave

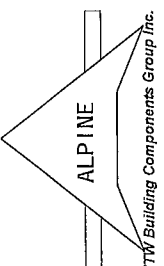
16 03 11 03 09 20

No. 70861

15 03 11 03 09 20

FL/-4/-/-R/-

Scale =.5"/Ft.

|                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                         |                                                                                                                 |
|-------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| <br>Hanes City, FL 33844<br>FL COA #0278 | <b>**WARNING**</b> READ AND FOLLOW ALL NOTES ON THIS SHEET!<br><b>**IMPORTANT**</b> FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS<br>Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety) Information by TPI and WTC. Refer to drawings 180A-2 for standard plate positions. A seal on this drawing or cover page listing this design and dates acceptance of professional engineer is the responsibility of the Building Designer per ANSI/TPI 1 Sec 2. For more information see general notes page ITW-B06 www.tbog.com TPI www.tpi.net org WTC www.sbcindustry.com<br>ITW Building Components Group Inc.<br>03/20/2013 | TC LL 20 0 PSF<br>TC DL 7 0 PSF<br>BC DL 10.0 PSF<br>BC LL 0 0 PSF<br>TOT LD 37.0 PSF<br>DUR FAC. 1.25<br>SPACING 24 0" | REF R487-- 9677<br>DATE 03/20/13<br>DRW HCUSR487 13079071<br>HC-ENG WHK/WHK<br>SEQN- 69660<br>JREF- 1UUP487_Z02 |
|                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                         |                                                                                                                 |

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCp1(+/-)=0 18

Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

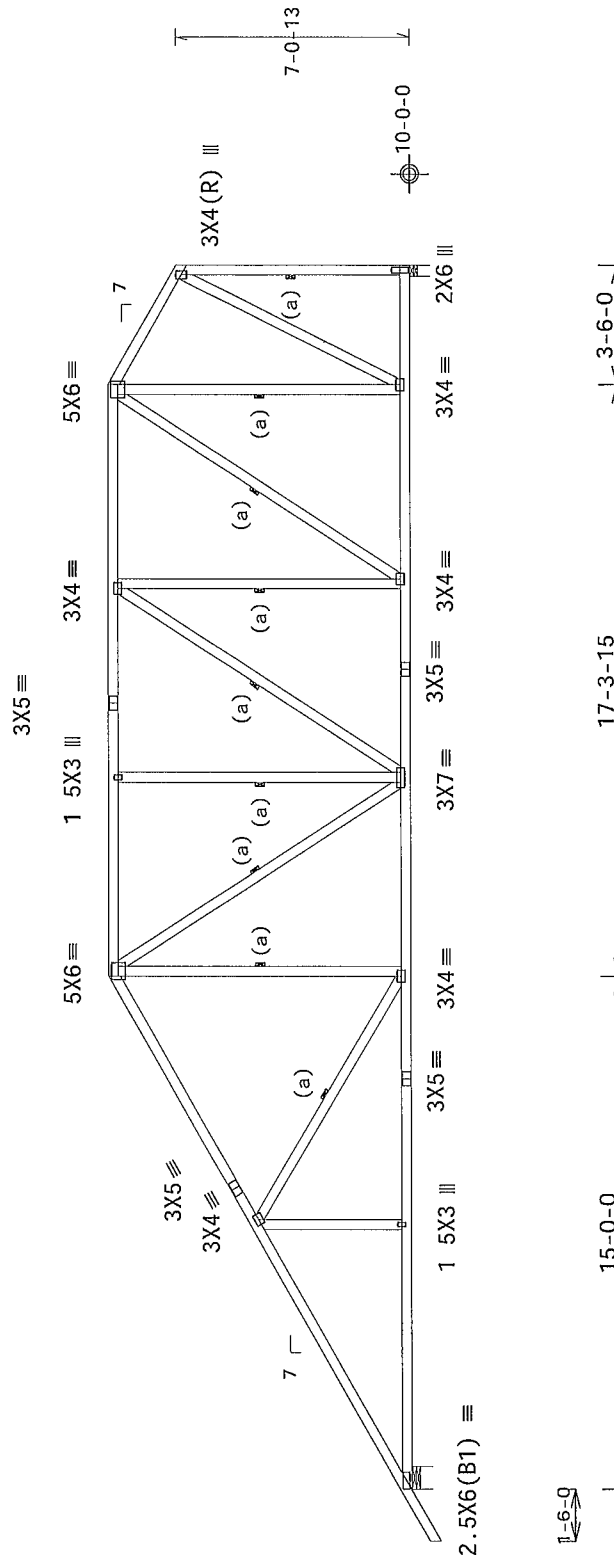
Right end vertical not exposed to wind pressure

(a) Continuous lateral bracing equally spaced on member

In lieu of structural panels use purlins to brace all flat TC @ 24" OC

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50



6-9-0

35-10-0 Over 2 Supports

R=1465 U=0 W=8  
RL=115/-77

R=1358 U=0 W=4"

PLT TYP. Wave

Design Crit: FBC2010Res/TPI-2007 (STD)

Scale = .1875"/Ft.

RFF R487-- 9678

DATE 03/20/13

DATE 03/20/13

DRW HCUSR487 13079072

HC-ENG WHK/WHK

SEQN- 69661

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INDEX 11111D407 702

REF - 100P48/\_Z0Z

—

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A W6 2x4 SP\_#1\_12A  
Lumber grades designated with '12A' use design values approved  
1/5/2012 by ALSC  
120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located  
anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC  
DL=5 0 psf GCpl(+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member  
design

Right cantilever is exposed to wind

Roof overhang supports 2 00 psf soffit load

(a) Continuous lateral bracing equally spaced on member

Bottom chord checked for 10 00 psf non-concurrent live load

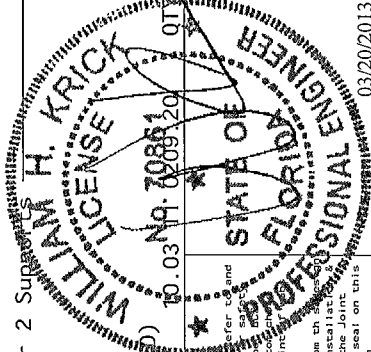
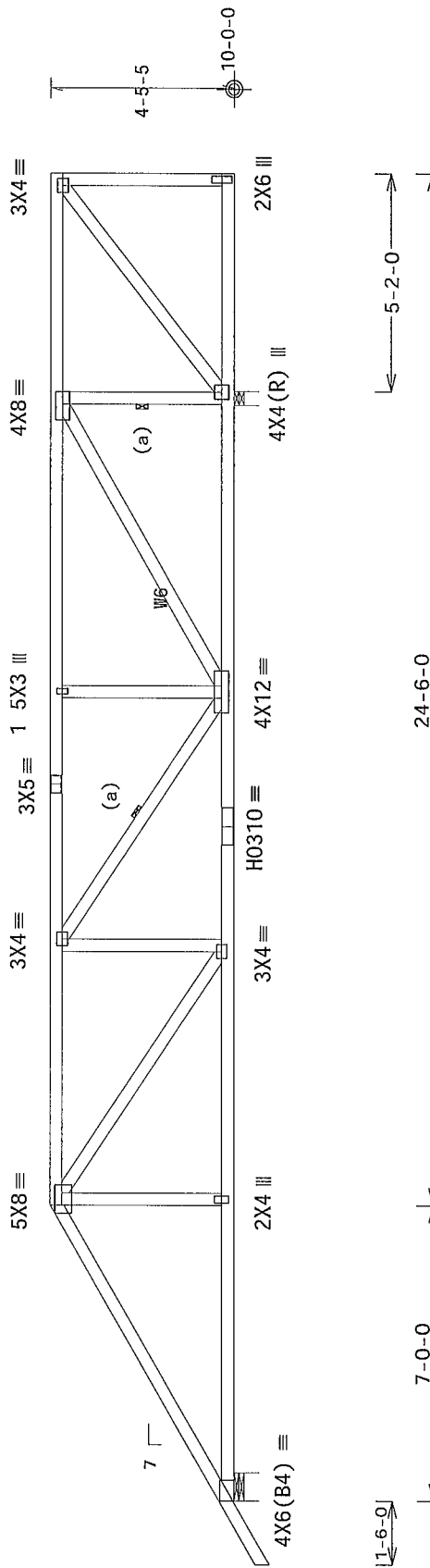
### Special loads

-----Lumber-----  
Dur Fac = 1 25 / Plate Dur Fac = 1 25)  
TC- From 56 plf at -1 50 to 56 plf at 7 00  
TC- From 28 plf at 7 00 to 28 plf at 17 00  
TC- From 28 plf at 17 00 to 28 plf at 31 50  
BC- From 5 plf at -1 50 to 5 plf at 0 00  
BC- From 20 plf at 0 00 to 20 plf at 7 03  
BC- From 10 plf at 7 03 to 10 plf at 16 00  
BC- From 10 plf at 16 00 to 10 plf at 31 50  
TC- 255 07 lb Conc Load at 7 03  
TC- 169 84 lb Conc Load at 9 06, 11 06, 13 06, 15 06  
17 06, 19 06, 21 06, 23 06, 25 06, 27 06, 29 06, 31 06  
BC- 461 61 lb Conc Load at 7 03  
BC- 127 38 lb Conc Load at 9 06, 11 06, 13 06, 15 06  
17 06, 19 06, 21 06, 23 06, 25 06, 27 06, 29 06, 31 06

Right end vertical not exposed to wind pressure

In lieu of structural panels use purlins to brace all flat TC @ 24"

Deflection meets L/240 live and L/180 total load Creep increase  
factor for dead load is 1 50



|                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                             |                       |
|-----------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| PLT TYP. 20 Gauge HS, Wave                                                                                            | Design Crit FBC2010Res/TPI-2007(SD)<br>FT/RT=10%(0%)/0(O)                                                                                                                                                                                                                                                                                                                                   | Scale = .25"/Ft.      |
| ***WARNING*** READ AND FOLLOW ALL NOTES ON THIS SHEET.<br>FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS | Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the manufacturer's instructions for details. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. | REF R487-- 9679       |
| ***IMPORTANT***                                                                                                       | Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the manufacturer's instructions for details. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. | DATE 03/20/13         |
|                                                                                                                       | Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the manufacturer's instructions for details. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. | DRW HCUSR487 13079073 |
|                                                                                                                       | Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the manufacturer's instructions for details. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. | HC-ENG WHK/WHK        |
|                                                                                                                       | Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the manufacturer's instructions for details. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. | SEQN- 69671           |
|                                                                                                                       | Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the manufacturer's instructions for details. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. | DUR FAC 1 25          |
|                                                                                                                       | Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the manufacturer's instructions for details. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. | SPACING 24.0"         |
|                                                                                                                       | Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the manufacturer's instructions for details. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. Trusses shall be installed in accordance with the manufacturer's instructions. | JREF- 11UUP487_Z02    |

ALPINE  
ITW Building Components Group Inc.  
Haines City FL 33844  
FL COA #0278

Top chord 2x4 SP\_#1\_12A T2 2x6 SP\_#1\_Dense\_12A  
T3, T4 2x6 SP\_#2\_12A  
Bot chord 2x6 SP\_#2\_12A  
Webs 2x4 SP\_#3\_12A W5, W7 2x4 SP\_#1\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

(a) Continuous lateral bracing equally spaced on member

#1 hip supports 7-0-0 jacks with no webs

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

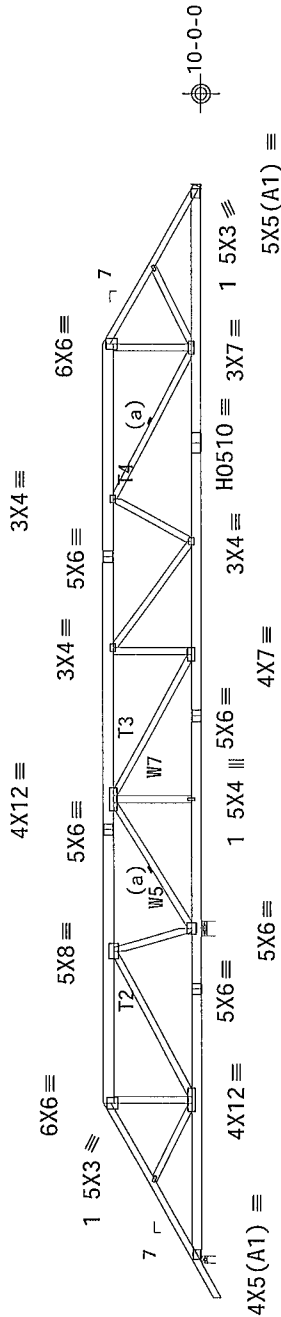
120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCp1(+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

In lieu of structural panels use purlins to brace all flat TC @ 24" OC

**WARNING** Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below



1'-6-0" 14'-4-0" 33'-0-0" 7'-0-0" 33'-4-0" 47'-4-0" Over 3 Supports

The elevation view shows the bridge deck with a total length of 144 feet. The dimensions are as follows: 1'-6-0" for the first section, 14'-4-0" for the second, 33'-0-0" for the third, 7'-0-0" for the fourth, 33'-4-0" for the fifth, and 47'-4-0" for the sixth section over three supports. The bridge deck is shown with a cross-section of 7'-0-0" and a total width of 33'-4-0". The bridge is supported by three piers, with the first pier located 14'-4-0" from the left end, the second pier located 48'-8-0" from the left end, and the third pier located 96'-0-0" from the left end.

R=255 I=27 W=3 5' R=5053 I=125 W=8"

PIT TYP 20 Gauge HS Wave

Design Crit. FBC2010Res/TP1-2007(ST12)  
FT/RT=10%(0%)/0(0)

FL/-/4/-/-/R/-/  
Scale = .125"/Ft.

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!**

**\*IMPORTANT\***

FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS.

Trusses require extreme care in fabricating handling and bracing. Follow the latest edition of BSI's Building Component Safety Information on by TPI and WITCA for details on how to brace trusses. Truss installers shall provide temporary bracing per the manufacturer's instructions. Truss installers shall have properly attached structural sheathing and bottom chord bracing installed prior to erecting the roof deck. Truss installers shall also have properly installed per BSI's sections 87, 89 or 910, as applicable.

[illegible]

A circular professional engineer seal for the State of Florida. The outer ring contains the text "STATE OF FLORIDA" at the top and "PROFESSIONAL ENGINEER" at the bottom. Inside the ring, the number "12586" is prominently displayed. Below the number, the text "EXPIRATION DATE 03/20/2013" is visible. The seal is partially obscured by a grid pattern.

03/20/2013

|          |       |                   |
|----------|-------|-------------------|
| DUR.FAC. | 1.25  |                   |
| SPACING  | 24.0" | JREF- 1UUP487_Z02 |

Hanes City, FL 33844  
FL COA #0 278

(13-105--Trademark Construction McDuffie Residence -- Lake City, FL - H9AE 31'6" Mono Hip)

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Right cantilever is exposed to wind

Roof overhang supports 2 00 psf soffit load

In lieu of structural panels use purlins to brace all flat TC @ 24'

MWFRS loads based on trusses located at least 7 50 ft from roof edge

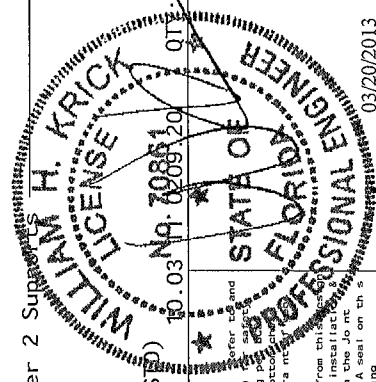
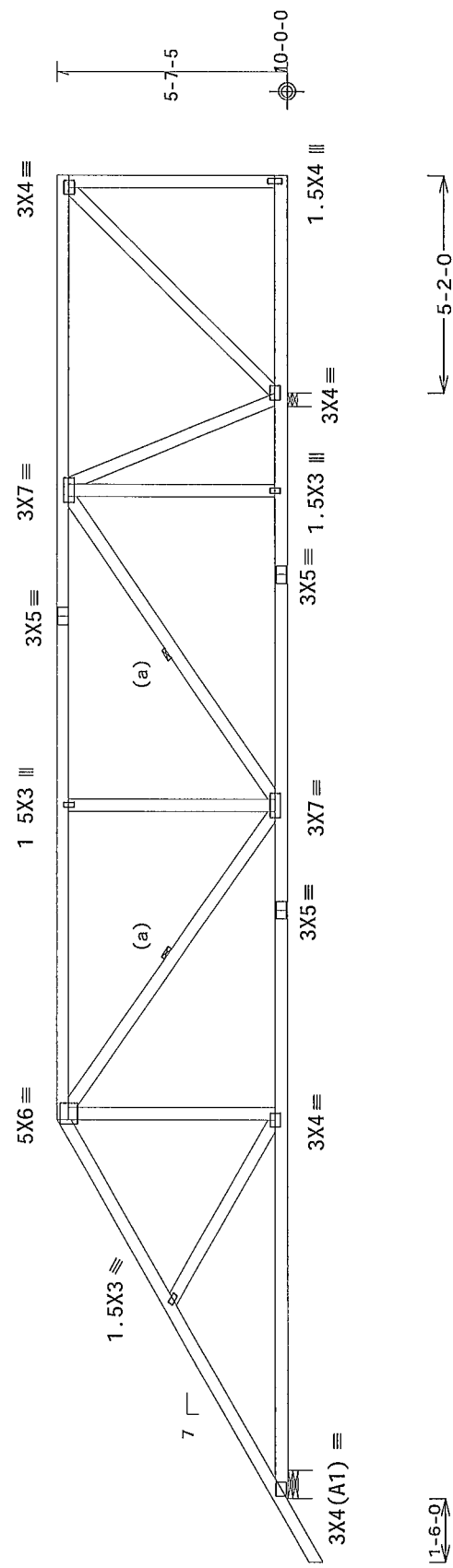
Wind loads and reactions based on MWFRS with additional C&C member design

Right end vertical not exposed to wind pressure

(a) Continuous lateral bracing equally spaced on member

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50



R=1428 U=98 W=4"

PLT TYP Wave

Design Crit FBC2010Res/TP1-2007 (SD) FT/RT=10%(0%)/0(0)

|          |          |                |                   |
|----------|----------|----------------|-------------------|
| TC LL    | 20 0 PSF | FL/-/4/-/-/R/- | Scale = .25"/Ft   |
| TC DL    | 7 0 PSF  | REF            | R487-- 9681       |
| BC DL    | 10 0 PSF | DATE           | 03/20/13          |
| BC LL    | 0 0 PSF  | DRW            | HCU8R487 13079075 |
| TOT LD.  | 37.0 PSF | HC-ENG         | WHK/WHK           |
| DUR FAC. | 1.25     | SEQN-          | 69662             |
| SPACING  | 24.0"    | JREF-          | 1UUP487_Z02       |

\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET! FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

\*\*IMPORTANT\*\* Trusses require extreme care in fabricating, handling, shipping, installing, and bracing. Follow the latest edition of BCSI (Building Components Safety Information) by TPI and WTC. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have bracing installed per BCSI section 8.5.7 or 8.10 as applicable. ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design. Any failure to build the truss in accordance with ANSI/TPI 1 or for handling, shipping, installing, or bracing shall be the responsibility of the contractor. Details unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. A seal on this drawing or cover page listing this drawing indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this design for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec 2. For more information on seal, the general notes page, ITW-800 www.itwbcg.com TPI www.tpinet.org WTC www.sabinindustry.com LOC www.cesare.org

ALPINE

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278

|     |       |     |           |
|-----|-------|-----|-----------|
| Top | chord | 2x4 | SP_#1_12A |
| Bot | chord | 2x4 | SP_#1_12A |
|     | Wbs   | 2x4 | SP_#3_12A |

1120 mph wind, 15 00 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 6 50 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl(+/-)=0 18

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Wind loads and reactions based on MWFRS with additional C&C member design

Roof overhang supports 2 00 psf soffit load

(a) Continuous lateral bracing equally spaced on member

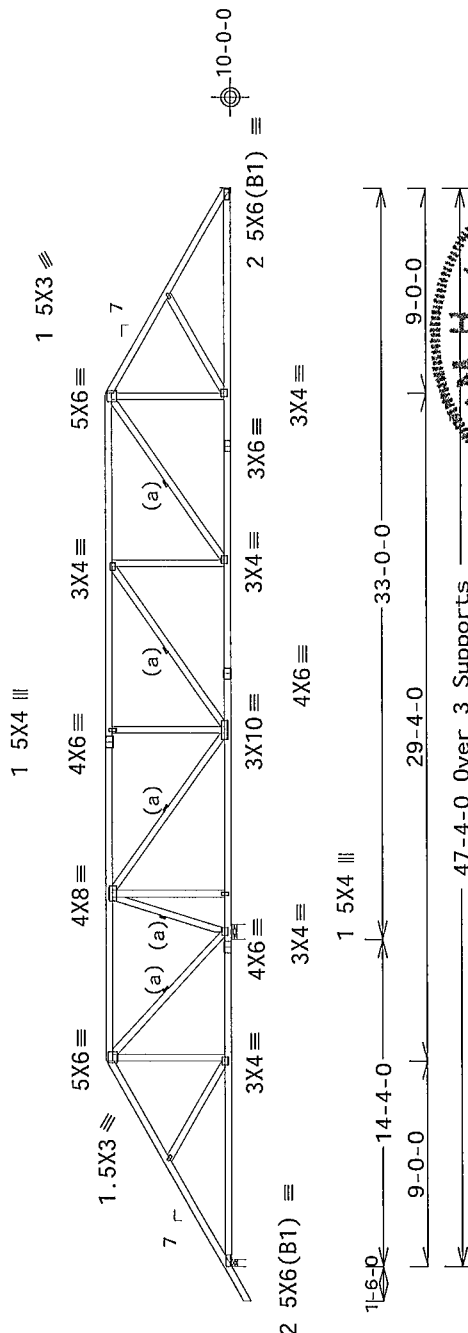
In lieu of structural panels use purlins to brace all flat TC @ 24" OC

Bottom chord checked for 10 00 psf non-concurrent live load

**WARNING** Furnish a copy of this DWG to the installation contractor. Special care must be taken during handling, shipping and installation of trusses. See "WARNING" note below

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

WFRS loads based on trusses located at least 7 50 ft from roof edge



R=475 U=8 W=3 5' R=2310 U=107 W=8'

PLT TYP. Wave

Design Crit: FBC2010Res/TPI-2007(STG)  
FT/RT=10%(0%)/0(0)

Scale = .125"/Ft.

|          |       |     |        |             |          |
|----------|-------|-----|--------|-------------|----------|
| TC LL    | 20.0  | PSF | REF    | R487--      | 9682     |
| TC DL    | 7.0   | PSF | DATE   | 03/20/13    |          |
| BC DL    | 10.0  | PSF | DRW    | HCUSR487    | 13079076 |
| BC LL    | 0.0   | PSF | HC-ENG | WHK/WHK     |          |
| TOT. LD. | 37.0  | PSF | SEQN-  | 69663       |          |
| DUR. FAC | 1.25  |     |        |             |          |
| SPACING  | 24.0" |     | JREF-  | 1UUP487_Z02 |          |

STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER  
No. 12586  
03/20/2013

**ITW Building Components Group Inc.**  
Haines City, FL 33844  
FL COA #0 278

Haines City, FL 33844  
FL COA #0278

(13-105--Trademark Construction McDuffie Residence -- Lake City, FL - HJ7 9'10"13 Hip Jack Girder)

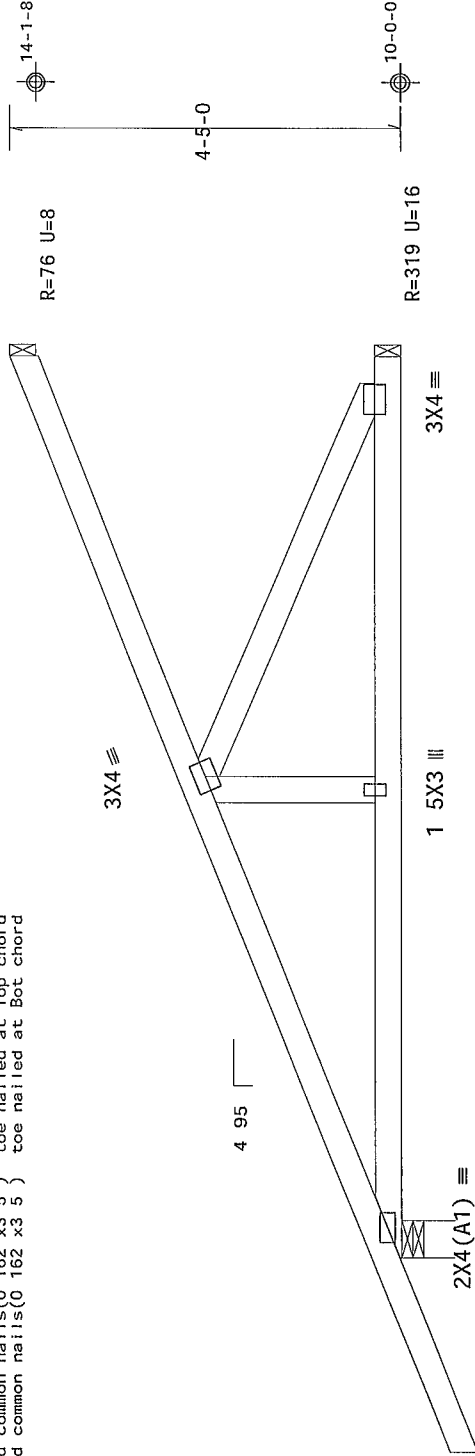
Top chord 2x4 SP #1-12A  
Bot chord 2x4 SP #1-12A  
Webs 2x4 SP #3-12A  
Lumber grades designated with 12A use design values approved  
1/5/2012 by ALSC  
120 mph wind 15 00 ft mean hgt ASCE 7-10 CLOSED bldg Located  
anywhere in roof RISK CAT II, EXP B wind TC DL=3.5 psf wind BC  
DL=5.0 psf GCpl(+/-)=0.18  
Wind loads and reactions based on MMFRS with additional C&C member  
design

Bottom chord checked for 10 00 psf non-concurrent live load  
Deflection meets L/240 live and L/180 total load Creep increase  
factor for dead load is 1.50

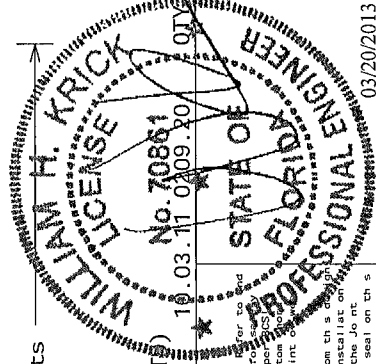
Provide { 2 } 16d common nails(0 162 x3 5 } toe nailed at Top chord  
Provide { 3 } 16d common nails(0 162 x3 5 } toe nailed at Bot chord

Special loads  
-----  
Lumber Dur Fac =1.25 / Plate Dur Fac =1.25  
TC- From 0 pif at -2 12 to 55 pif at 0 00  
BC- From 0 pif at 0 00 to 2 pif at 0 00  
BC- From 0 pif at -2 12 to 4 pif at 0 00  
TC- From 2 pif at 0 00 to 2 pif at 9 90  
TC- 34 50 lb Conc Load at 1 48  
TC- 112 23 lb Conc Load at 4 31  
BC- 231 20 lb Conc Load at 7 13  
BC- 15 56 lb Conc Load at 1 48  
BC- 100 05 lb Conc Load at 4 31  
BC- 178 17 lb Conc Load at 7 13

Roof overhang supports 2 00 psf soffit load



2-1-7  
9-10-13 Over 3 Supports  
R=323 U=95 W=4 95'



Design Crit FBC2010Res/TPI-2007(ST)  
FT/RT=10%(0%)/0(0)

Scale =.5"/Ft.

PLT TYP. Wave

ALPINE  
ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0 278

\*\*\*WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS  
Trusses require extreme care in fabricating, handling, shipping, installing, and bracing. Follow the layout and erection instructions carefully. Do not alter the design without written approval. Unless noted otherwise, the top chord shall have properly attached structural sheathing and bottom chord shall have properly attached r/gid ceiling. Locations shown for permanent lateral restraint shall have bracing installed per BCSI sections B3, B7 or B10 as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design. Any failure to build the truss in conformance with ANSI/TPI 1 or for handling, shipping, installing, or bracing of trusses. Apply plates to each face of truss and position as shown above and on the Joint. Do not is unless noted otherwise. Refer to drawings 1600-Z for standard plate positions. A seal on this drawing will indicate the date of the design. The suitability and use of this design for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec 2. For more information on see general notes page. ITW BCG www.itwbcg.com TPI www.tpi.net org WTCA www.sbcindustry.com ICC www.ccsafe.org

|          |          |        |             |          |
|----------|----------|--------|-------------|----------|
| TC LL    | 20 0 PSF | REF    | R487--      | 9683     |
| TC DL    | 7.0 PSF  | DATE   | 03/20/13    |          |
| BC DL    | 10 0 PSF | DRW    | HCUSR487    | 13079077 |
| BC LL    | 0.0 PSF  | HC-ENG | WHK/WHK     |          |
| TOT LD.  | 37.0 PSF | SEQN-  | 69673       |          |
| DUR FAC. | 1 25     |        |             |          |
| SPACING  | 24.0"    | JREF-  | 1UUP487_Z02 |          |

|     |       |     |           |
|-----|-------|-----|-----------|
| Top | chord | 2x4 | SP_#1_12A |
| Bot | chord | 2x4 | SP_#1_12A |
|     | webs  | 2x4 | SP_#3_12A |

120 mph wind, 16 56 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCp1 (+/-)=0 18

Lumber grades designated  
1/5/2012 by ALSC

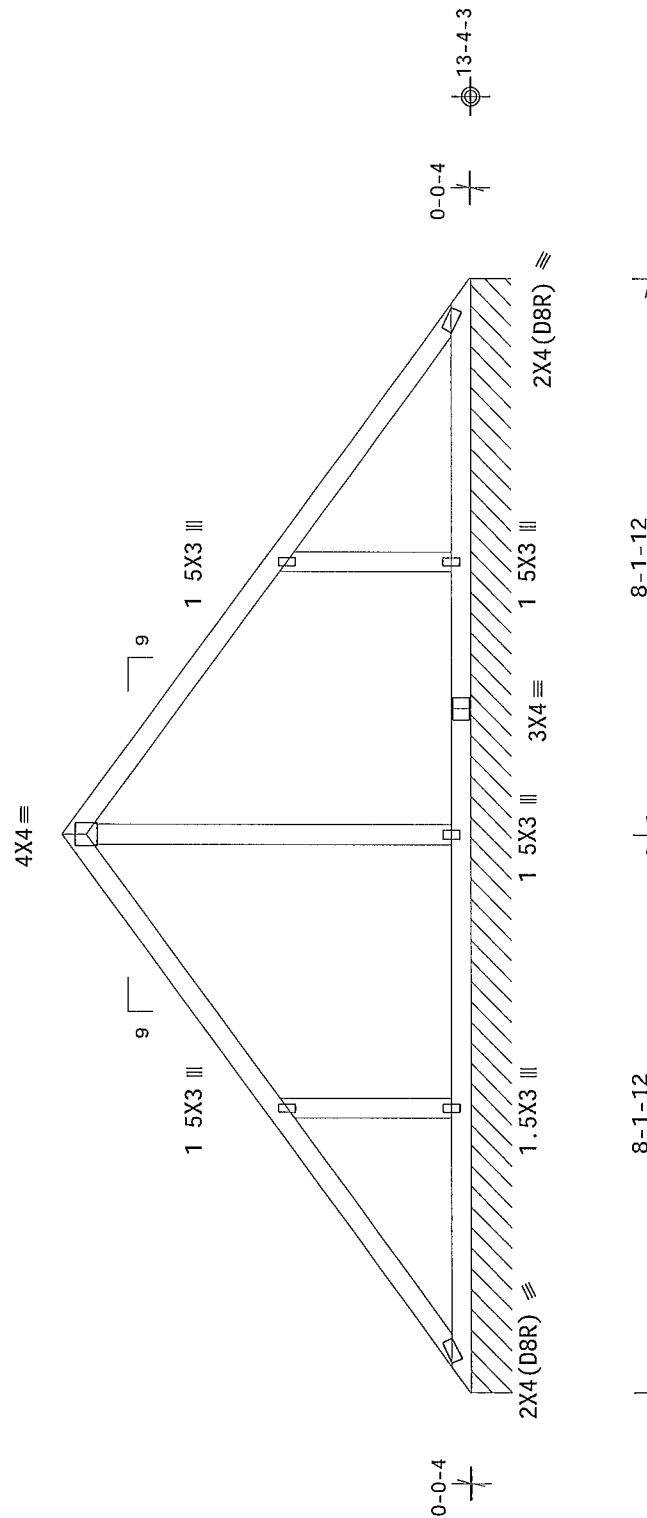
Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

See DWG VAL160100212 for valley details

UNIFORM loads based on trusses located at least 16 56 ft from roof edge



R=77 PLF U=0 PLF W=16-3-8  
RL=6/-6 PLF

16-3-8 Over Continuous Support

8-1-12

1

PLT TYP Wave

| Design Crit | FBC2010Res/TPI-2007(STP) | FT/RT=10%(0%)/0(0) |
|-------------|--------------------------|--------------------|
| Design Crit | FBC2010Res/TPI-2007(STP) | FT/RT=10%(0%)/0(0) |

FL/-/4/-/-/R/-  
Scale = .375"/Ft

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!**  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

|       |          |
|-------|----------|
| TC LL | 20.0 PSF |
|-------|----------|

REF R487-- 9684

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. The following information is provided for the purpose of assisting the fabricator and erector in the proper installation of BCSI (Building Component Systems) information on by TPI and WIGA. The fabricator should refer to the BCSI literature for more detailed information on the proper installation of the trusses. The erector should refer to the BCSI literature for more detailed information on the proper installation of the trusses. The fabricator should refer to the BCSI literature for more detailed information on the proper installation of the trusses. The erector should refer to the BCSI literature for more detailed information on the proper installation of the trusses.

| Condition | 7.0 PSF | 10.0 PSF |
|-----------|---------|----------|
| TC DL     |         |          |
| BC DL     |         |          |

|      |                   |
|------|-------------------|
| DATE | 03/20/13          |
| DRW  | HCUSR487 13079078 |

**ITW Building Components Group Inc.** (ITWBCG) states its responsibility for any deviation from this drawing may result in voiding of the manufacturer's warranty. The manufacturer shall be responsible for ensuring conformance with ANSI/TPI-1 or for handling shipping installation and erection of trusses. Apply places to each face of truss and position as shown above and on the Joint Plate. If no trusses are used, otherwise Refer to drawings 160A-2 for standard plate positions. A seal on this drawing or cover page listing this drawing number is required by the design engineer. The suitability and use of this design for any structure is the responsibility of the Building Designer. Please refer to drawings 160B-1 and 160C-1 for more information on seal placement. In S.J.O.s applications, please specify the following: ITWBCG Seal ANSI/TPI-1 Sec 2.1. More information can be found at [www.itwbcg.com](http://www.itwbcg.com). TPI: [seal@tpi.com](mailto:seal@tpi.com), [www.tpi.com](http://www.tpi.com)

|          |          |
|----------|----------|
| BC LL    | 0.0 PSF  |
| TOT.LD.  | 37 0 PSF |
| DUR.FAC. | 1.25     |
| SPACING  | 24.0"    |

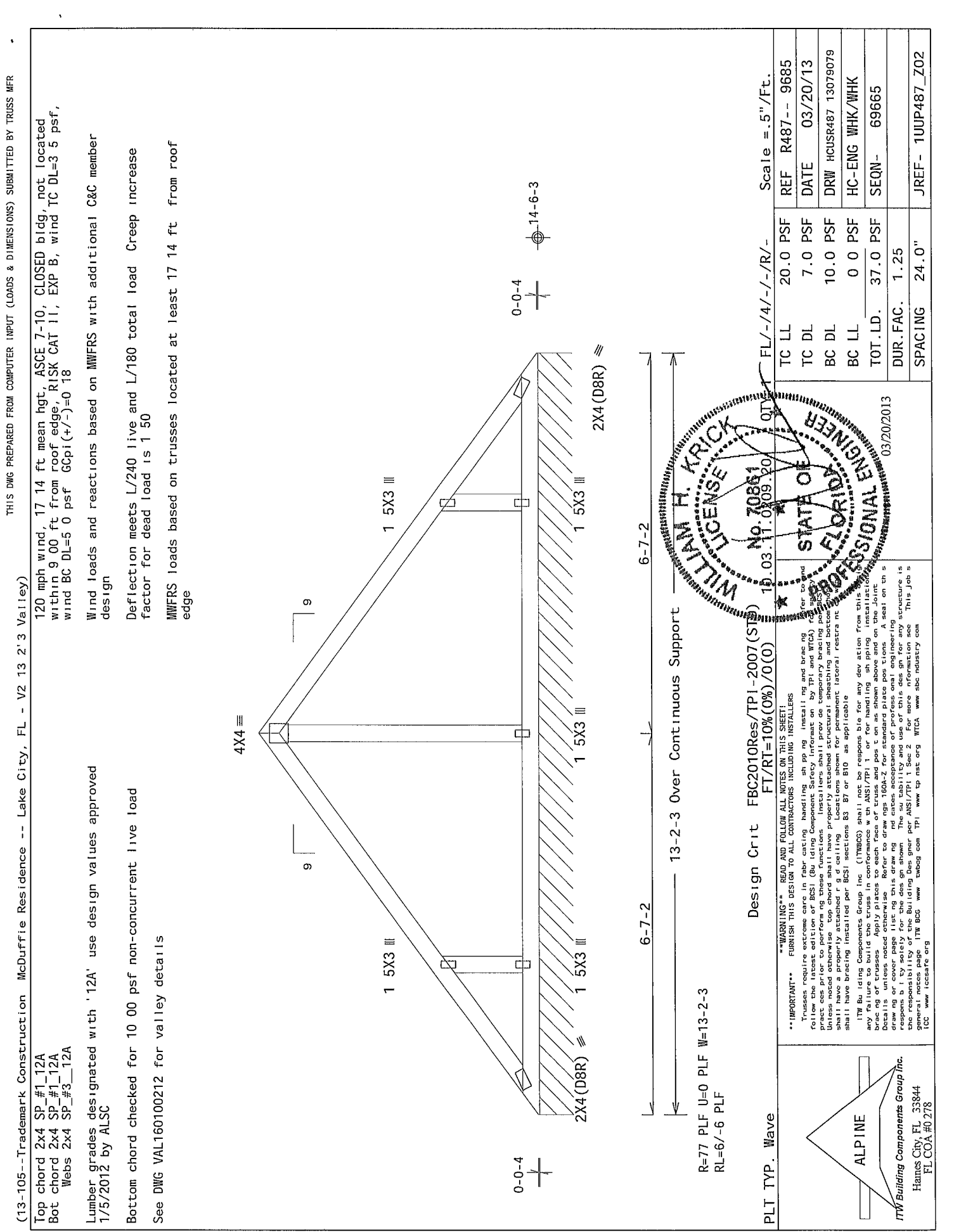
|                   |
|-------------------|
| HC-ENG WHK/WHK    |
| SEQN- 69664       |
| JREF- 1UUP487_Z02 |

03/20/2013

ITW Building Components Group Inc.

Haines City, FL 33844  
FL COA #0278





THIS DWG PREPARED FROM COMPUTER INPUT (LOADS & DIMENSIONS) SUBMITTED BY TRUSS MFR

(13-105--Trademark Construction McDuffie Residence -- Lake City, FL - V2 13 2'3 Valley)

Top chord 2x4 SP #1\_12A  
Bot chord 2x4 SP #1\_12A  
Webs 2x4 SP #3\_12A

120 mph wind, 17 14 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpi(+/-)=0 18

Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

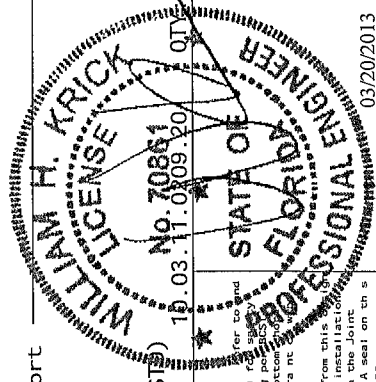
Wind loads and reactions based on MWFRS with additional C&C member design

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50

Bottom chord checked for 10 00 psf non-concurrent live load

MWFRS loads based on trusses located at least 17 14 ft from roof edge

See DWG VAL160100212 for valley details



R=77 PLF U=0 PLF W=13-2-3  
RL=6/-6 PLF

|               |                                                           |              |                   |
|---------------|-----------------------------------------------------------|--------------|-------------------|
| PLT TYP. Wave | Design Crit FBC2010Res/TP1-2007(S1)<br>FT/RT=10%(0%)/0(0) | FL/-/4/-/R/- | Scale =.5"/Ft.    |
| TC LL         | 20.0 PSF                                                  | REF          | R487-- 9685       |
| TC DL         | 7.0 PSF                                                   | DATE         | 03/20/13          |
| BC DL         | 10.0 PSF                                                  | DRW          | HCUSR487 13079079 |
| BC LL         | 0 0 PSF                                                   | HC-ENG       | WHK/WHK           |
| TOT.LD.       | 37.0 PSF                                                  | SEQN-        | 69665             |
| DUR.FAC.      | 1.25                                                      |              |                   |
| SPACING       | 24.0"                                                     | JREF-        | 1UUP487_Z02       |

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS

**\*\*IMPORTANT\*\*** Trusses require extreme care in fabricating, handling, shipping, installing and bracing. For low bay trusses, erection should be completed prior to final bracing. For high bay trusses, erection should be completed prior to final bracing. Trusses shall be erected in accordance with the manufacturer's instructions. Trusses shall be erected in accordance with the manufacturer's instructions. Trusses shall be erected in accordance with the manufacturer's instructions.

ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design. The user of this design shall be responsible for any deviation from this design. The user of this design shall be responsible for any deviation from this design.

ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278

120 mph wind, 17 73 ft mean hgt, ASCE 7-10, CLOSED bldg, not located within 9 00 ft from roof edge, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpl (+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

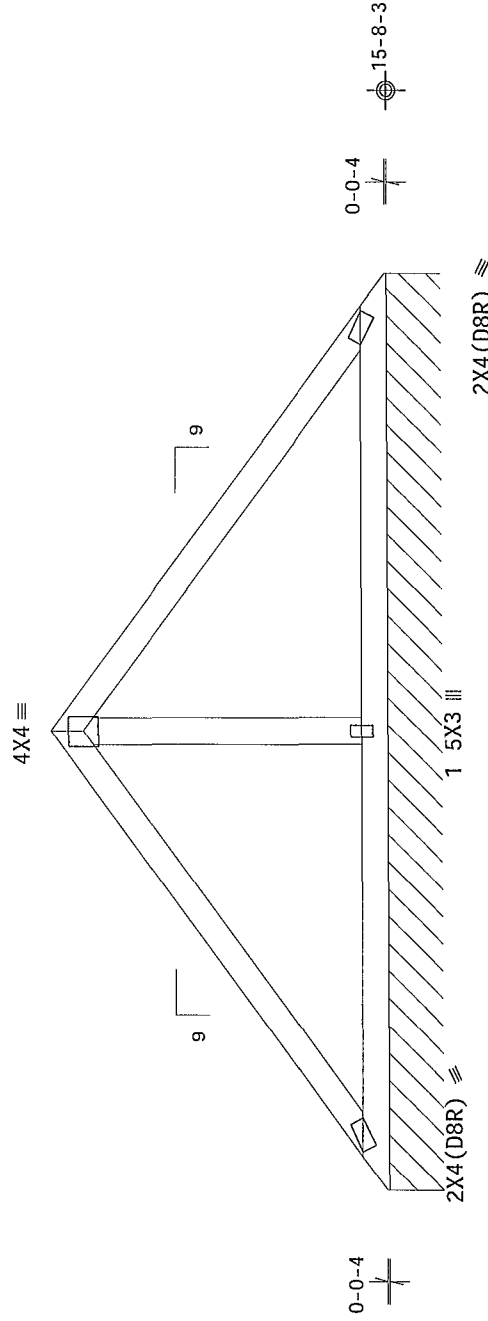
Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

MWFRS loads based on trusses located at least 17 73 ft from roof edge

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Bottom chord checked for 10 00 psf non-concurrent live load

See DWG VAL160100212 for valley details



5-0-7 5-0-7

10-0-14 Over Continuous Support

R=77 P I F U=0 P I F W=10-0-14

 $R1 = 6/-6 \text{ PLF}$ 

PI T TYP Wave

Design Crit.: EBC2010Res/TP1-2007(ST)

$$FT/RT=10\%(0\%)/0(0)$$

**\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS SHEET!**

**\*\*IMPORTANT\*\* FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS**

Trussess require extreme care in fabricating handling shipping rescaling and bracing follow the latest edition of BGSI (Building Component Safety Information by TPI and WITCA) to ensure proper installation and performance. Installers shall provide temporary bracing per BGSI section 8.10.1.1. Trussess have no top chord lateral bracing provisions shown for permanent lateral restraint or bracing. Trussess may be installed per BGSI sections 8.3, 8.7 or 8.10, as applicable.

**ITW Building Components Group Inc.** (ITWBGC) shall not be responsible for any deviation from this drawing or specification. The user of this drawing is advised to consult the applicable building code and other relevant documents in accordance with ANSI/TPI-1 for all handling, shipping, installation, bracing or trusses. Apply plates to each pair of truss and post in as shown above and on the Joint Data is unless noted otherwise. Refer to drawings T60A-Z for standard plate positions. A seal on this drawing or cover page listing this drawing indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this design for any structure is the responsibility of the user. ITW Building Design Group, Inc., Sec 2  
General message page: ITW BCG www.design.com TPI and/or logo: WCA www.subindustry.com  
Drawing number: T60A-Z

03/20/2013

mw Building Components Group Inc.

Hanes City, FL 33844  
FL COA #0 278

|                  |                  |
|------------------|------------------|
| FL/-/4/-/4/-/R/- | Scale = 5" / Ft. |
| TC LL            | 20.0 PSF         |
| TC DL            | 7.0 PSF          |
| BC DL            | 10 0 PSF         |
| BC LL            | 0.0 PSF          |
| TOT LD.          | 37.0 PSF         |
| DUR FAC.         | 1 25             |
| SPACING          | 24 0"            |
| REF              | R487-- 9686      |
| DATE             | 03/20/13         |
| DRW              | HCU8487 13079080 |
| HC-ENG           | WHK/WHK          |
| SEQN-            | 69666            |
| JREF-            | 1UUP487_Z02      |

|  | Top chord | 2x4 | SP_#1_12A |
|--|-----------|-----|-----------|
|  | Bot chord | 2x4 | SP_#1_12A |
|  | Webbs     | 2x4 | SP_#3_12A |

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Bottom chord checked for 10 00 psf non-concurrent live load

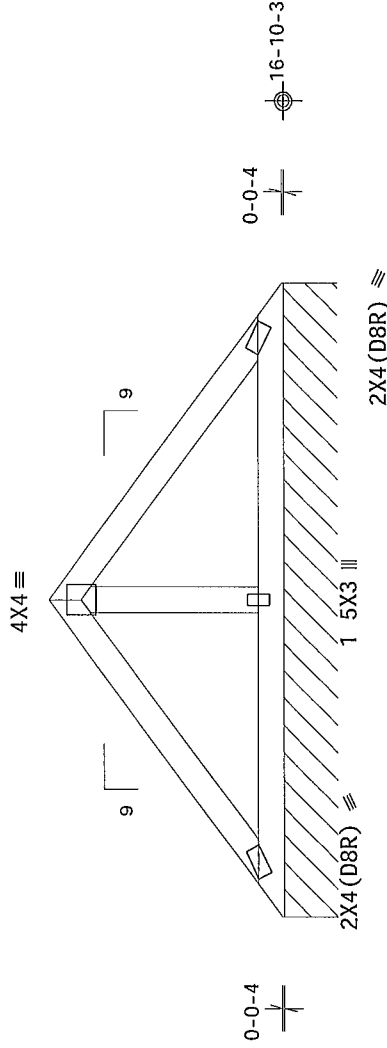
See DWG VAL160100212 for valley details

120 mph wind, 18 31 ft mean hgt, ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCp1(+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

MWFRS loads based on trusses located at least 18 31 ft from roof edge



R=77 PLF U=0 PLF W=6-11-8  
RI=6/-6 PLF

PIT TYP. Wave

Design Crit: FBC2010Res/TPI-2007(STB)  
FT/RT=10%(0%)/0(0)

Scale = .5"/Ft

|         |       |     |        |          |             |      |
|---------|-------|-----|--------|----------|-------------|------|
| TC LL   | 20    | 0   | PSF    | REF      | R487--      | 9687 |
| TC DL   | 7     | 0   | PSF    | DATE     | 03/20/13    |      |
| BC DL   | 10.0  | PSF | DRW    | HCUSR487 | 13079081    |      |
| BC LL   | 0.0   | PSF | HC-ENG | WHK/WHK  |             |      |
| TOT LD. | 37    | 0   | PSF    | SEQN-    | 69667       |      |
| DUR FAC | 1     | 25  |        |          |             |      |
| SPACING | 24.0" |     |        | JREF-    | 1UUP487_Z02 |      |

03/20/2013

**ITW Building Components Group Inc.**  
Haines City, FL 33844  
FL COA #0 278

120 mph wind, 18 89 ft mean hgt., ASCE 7-10, CLOSED bldg, Located anywhere in roof, RISK CAT II, EXP B, wind TC DL=3 5 psf, wind BC DL=5 0 psf GCpi (+/-)=0 18

Wind loads and reactions based on MWFRS with additional C&C member design

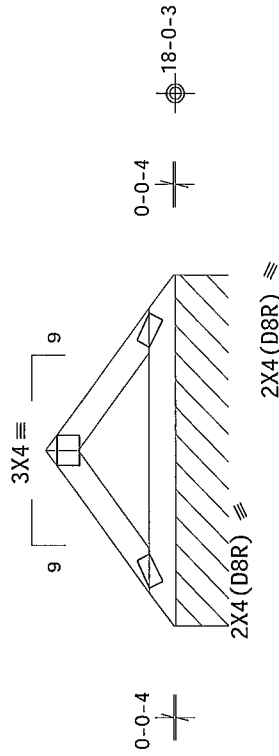
Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1.50

Lumber grades designated with "12A" use design values approved 1/5/2012 by ALSC

Bottom chord checked for 10 00 psf non-concurrent live load

See DWG VAL160100212 for valley details

MWFRS loads based on trusses located at least 18 89 ft from roof edge



R=77 PLF U=0 PLF W=3-10-3

PLT TYP.: Wave

Design Crit: FBC2010Res/TPI-2007(STP)  
FT/RT=10%(0%)/0(0)

Scale = .5"/Ft.

|         |      |       |        |             |          |
|---------|------|-------|--------|-------------|----------|
| TC LL   | 20.0 | PSF   | REF    | R487 --     | 9688     |
| TC DL   | 7    | 0 PSF | DATE   | 03/20/13    |          |
| BC DL   | 10   | 0 PSF | DRW    | HCUSR487    | 13079082 |
| BC LL   | 0    | 0 PSF | HC-ENG | WHK/WHK     |          |
| TOT.LD. | 37   | 0 PSF | SEQN-  | 69668       |          |
| DUR FAC | 1    | 25    |        |             |          |
| SPACING | 24   | 0"    | JREF-  | 1UUP487_Z02 |          |

03/20/2013

ITW Building Components Group Inc.

Haines City, FL 33844

FL COA #0 278

(13-105--Trademark Construction McDuffie Residence -- Lake City, FL - VDG 19 4 14 Valley)

Top chord 2x4 SP\_#1\_12A  
Bot chord 2x4 SP\_#1\_12A  
Webs 2x4 SP\_#3\_12A

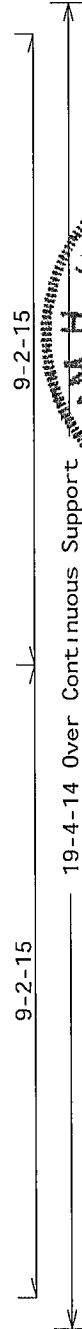
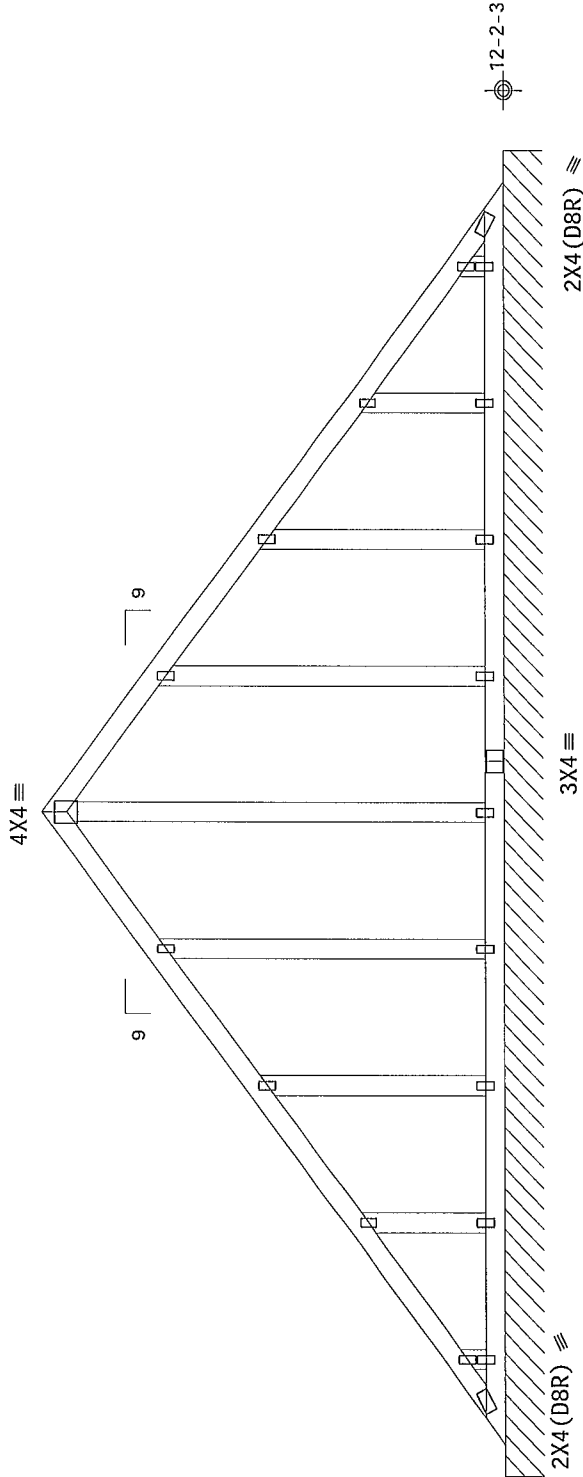
Lumber grades designated with '12A' use design values approved 1/5/2012 by ALSC

See DWGS A12030ENC100212, GBILLET100212, & GABRST100212 for more requirements

Wind loads and reactions based on MWFRS with additional C&C member design

Bottom chord checked for 10 00 psf non-concurrent live load

Deflection meets L/240 live and L/180 total load Creep increase factor for dead load is 1 50



R=74 PLF U=2 PLF W=19-4-14  
RL=6/-6 PLF

Note: All Plates Are 1 5X3 Except As Shown

Design Crit FBC2010Res/TP1-2007(ST)

FT/RT=10%(0%)/0(0)

PLT TYP. Wave

Scale = 375"/Ft

|          |          |        |             |          |
|----------|----------|--------|-------------|----------|
| TC LL    | 20 0 PSF | REF    | R487--      | 9689     |
| TC DL    | 7 0 PSF  | DATE   | 03/20/13    |          |
| BC DL    | 10.0 PSF | DRW    | HCUSR487    | 13079083 |
| BC LL    | 0.0 PSF  | HC-ENG | WHK/WHK     |          |
| TOT LD   | 37.0 PSF | SEQN-  | 69669       |          |
| DUR FAC. | 1.25     |        |             |          |
| SPACING  | 24 0"    | JREF-  | 1UUP487_Z02 |          |

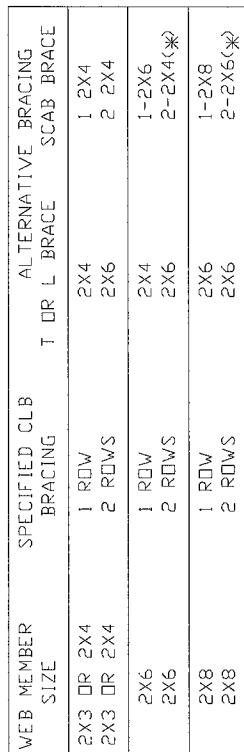
**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS SHEET!  
FURNISH THIS DESIGN TO ALL CONTRACTORS INCLUDING INSTALLERS  
**\*\*IMPORTANT\*\*** Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Follow the latest edition of BCSI (Building Component Safety Information) by TPI and WTC. Do not practice prior to performing these functions. Installers shall provide temporary bracing for all trusses. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have bracing attached per BCSI section 8.1.1. Locate and show for permanent lateral restraint of trusses shall have bracing installed per BCSI section 8.1.1 or B10 as applicable.  
ITW Building Components Group Inc. (ITWBCG) shall not be responsible for any deviation from this design or any failure to build the trusses in accordance with ANSI/TPI 1 or for handling, shipping, installation, bracing, or any other action taken by the contractor. Refer to drawings 160A-2 for standard plate positions. A seal on this drawing or cover page listing this design indicates acceptance of professional engineering. The responsibility of the building designer per ANSI/TPI 1 Sec 2. For more information see This Job's general notes page. ITW BCG www.itwbcg.com TPI www.tpinet.org WTC www.wtcindustry.com

03/20/2013

ALPINE  
ITW Building Components Group Inc.  
Haines City, FL 33844  
FL COA #0278

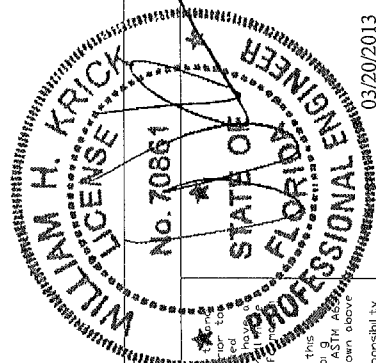
THIS DETAIL IS TO BE USED WHEN CONTINUOUS LATERAL BRACING (CLB) IS SPECIFIED ON A TRUSS DESIGN BUT AN ALTERNATIVE WEB BRACING METHOD IS DEPICTED

THIS DETAIL IS ONLY APPLICABLE FOR CHANGING THE SPECIFIED  
CLUB SHOWN ON SINGLE PLY SEALED DESIGNS TO T-BRACING OR SCAB  
BRACING



ALL L BRACE AND SCAB BRACE TO BE SAME SPECIES AND GRADE OR BETTER THAN WEB MEMBER UNLESS SPECIFIED OTHERWISE ON ENGINEER'S SEALED DESIGN

\*) CENTER CAB ON WIDE FACE OF WEB APPLY (1) SCAB TO EACH  
FACE OF WEB



|         |     |      |               |
|---------|-----|------|---------------|
| TC LL   | PSF | REF  | CLB SUBST     |
| TC DL   | PSF | DATE | 1/1/09        |
| BC DL   | PSF | DRWG | BRCCLBSUB0109 |
| BC LL   | PSF |      |               |
| TOT LD  | PSF |      |               |
| DUR FAC |     |      |               |
| SPACING |     |      |               |

Mar 20 '13

Earth City MO 63045

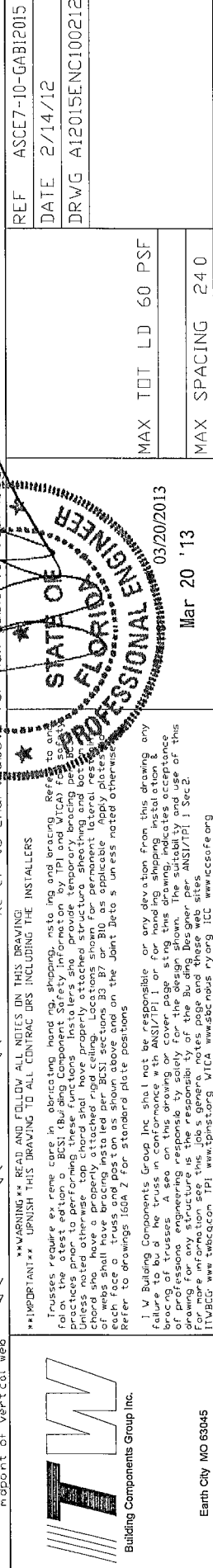
| Dr | 100 mph | Wind Speed | 15                                                                                        | Mean Height | Partially Enclosed | Exposure C | kzt        | 100     |
|----|---------|------------|-------------------------------------------------------------------------------------------|-------------|--------------------|------------|------------|---------|
| D  | 100 mph | Wind Speed | 15 <td>Mean Height</td> <td>E</td> <td>Enclosed</td> <td>Exposure D</td> <td>kzt 100</td> | Mean Height | E                  | Enclosed   | Exposure D | kzt 100 |

|                    |          |                  |          |
|--------------------|----------|------------------|----------|
| Bracing Group Pine |          | Group A          |          |
| Spruce Pine-Fir    |          | Hem-Fir          |          |
| #1 / #2            | Standard | #2               | Stud     |
| #3                 | Stud     | #3               | Standard |
| Douglas Fir Larch  |          | Southern Pine*** |          |
| #3                 | Stud     | #3               | Stud     |
| Standard           | Standard |                  | Standard |

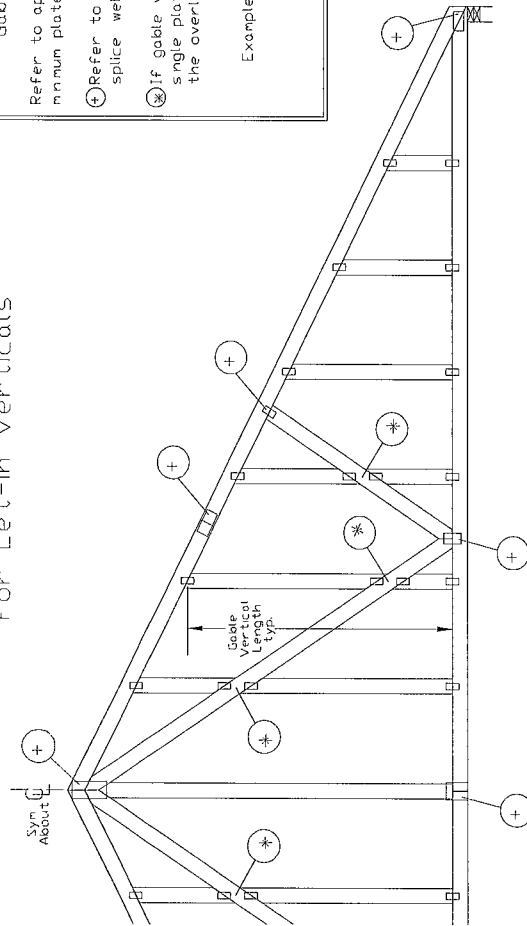
|                    |          |                  |          |
|--------------------|----------|------------------|----------|
| Bracing Group Pine |          | Group B          |          |
| Hem Fir            |          | Southern Pine*** |          |
| #1 & Btr           | #1       | #1               | Stud     |
|                    |          | #2               | Standard |
| Douglas Fir Larch  |          | Southern Pine*** |          |
| #1                 | Stud     | #1               | Stud     |
| #2                 | Standard |                  | Standard |

Wind Load deflection criterion  $s_L/240$   
Provide uplift connections for 35 plf over  
continuous bearing (5 psf TC Dead Load)  
Gable end supports load from 4' 0" outliers  
with 2' 0" overhang or 12" plywood overhang.  
So Pine Lumber design values based on  
the ALSC January 2012 rule



|                                                         |                   |
|---------------------------------------------------------|-------------------|
| REF                                                     | ASCE7-10-GABI2015 |
| DATE                                                    | 2/14/12           |
| DRWG                                                    | A12015ENC100212   |
| <div> <div> -D 60 PSF </div> <div> NG 240 </div> </div> |                   |

Syn About  
 — 



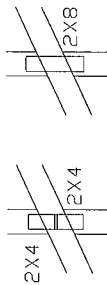
### Gable Truss Plate Sizes

Refer to appropriate ITW gable detail for minimum plate sizes for vertical studs

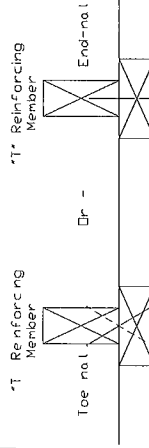
- ⊕ Refer to Engineered truss design for peak splice web and heel plates

⊗ If gable vertical plates overlap use a single plate that covers the total area of the overlapped plates to span the web

### Example 3



## Reinforcement Attachment Detail



To convert from L' to T' reinforcing members multiply T' increase by length (based on appropriate ITW cable detail)

Maximum allowable T reinforced gable vertical length is 14' from top to bottom chord

Web Length Increase w/ T Brace

| I Reinf<br>Mbr Size | I<br>Increase |
|---------------------|---------------|
| 2x4                 | 30 %          |
| 2x6                 | 20 %          |

Example 3

| ASCE 7-10 Wnd Speed | 120 mph               |
|---------------------|-----------------------|
| Mean Roof Height    | 30 ft                 |
|                     | K <sub>z</sub> = 1.00 |

|                |       |      |
|----------------|-------|------|
| Gable Vertical | 24 oc | P #3 |
|----------------|-------|------|

\* T Reinforcing Member Size 2x4

T Brace Increase (From Above) = 30% - 130

(1) 2x4 \*L Brace Length = 8' 7"  
Maximum \*T Reinforced Gable Vertical Length  
130' x 8' 7" = 11' 2"

See appropriate ITW gable detail for maximum vertical length

\*\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
\*\*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Consult the latest edition of BCSI Building Component 30 for information on all practices prior to performing these functions. Installations must follow the design drawings and shall have proper anchorage, fastening and detailing. Locations shown for permanent webbing shall have proper attached rigid gusset. Locations shown for permanent webs shall have proper installed per BCSI sections B7 or B10 as applicable from each face of truss and position as shown above and on the Joint Detail unless noted. Refer to drawings 160A-Z for standard plate positions.

ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any other drawings, specifications, or instructions. The undersigned hereby certifies that the design shown on this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The sublet by and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/IFP1 Sec2. No other information shall be used in this job's general notes page and these drawings shall not alter the design. ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any other drawings, specifications, or instructions.

**Building Components Group Inc.**

Earth City MO 63045

REF LET-IN VERT

DATE 2/16/12

DRAWG GBLLETIN0212

MAX TOT LD 60 PSF

| DUR | FAC | ANY |
|-----|-----|-----|
| 1   | 1   | 1   |
| 2   | 2   | 2   |
| 3   | 3   | 3   |
| 4   | 4   | 4   |
| 5   | 5   | 5   |
| 6   | 6   | 6   |
| 7   | 7   | 7   |
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| 95  | 95  | 95  |
| 96  | 96  | 96  |
| 97  | 97  | 97  |
| 98  | 98  | 98  |
| 99  | 99  | 99  |
| 100 | 100 | 100 |

MAX SPACING 240



# ASCE 7-10 120 mph, 30' Mean Height, Closed, Exposure C Common Residential Gable End Wind Bracing Requirements - Stiffeners

120 mph 30ft Mean Hgt ASCE 7-10 Enclosed Exp C or  
100 mph 30ft Mean Hgt ASCE 7-10 Enclosed Exp D or  
100 mph 30ft Mean Hgt ASCE 7-10 Part Enclosed Exp C,  
kzt = 1.00, Wind TC DL=50 psf, Wind BC DL=50 psf

H Less than 46 - no stud bracing required  
H Greater than 46 to 76 n length  
provide a 2x6 stiffback at mid-height and brace  
to roof diaphragm every 60 (see detail below or  
refer to DRWG A12030ENC10)

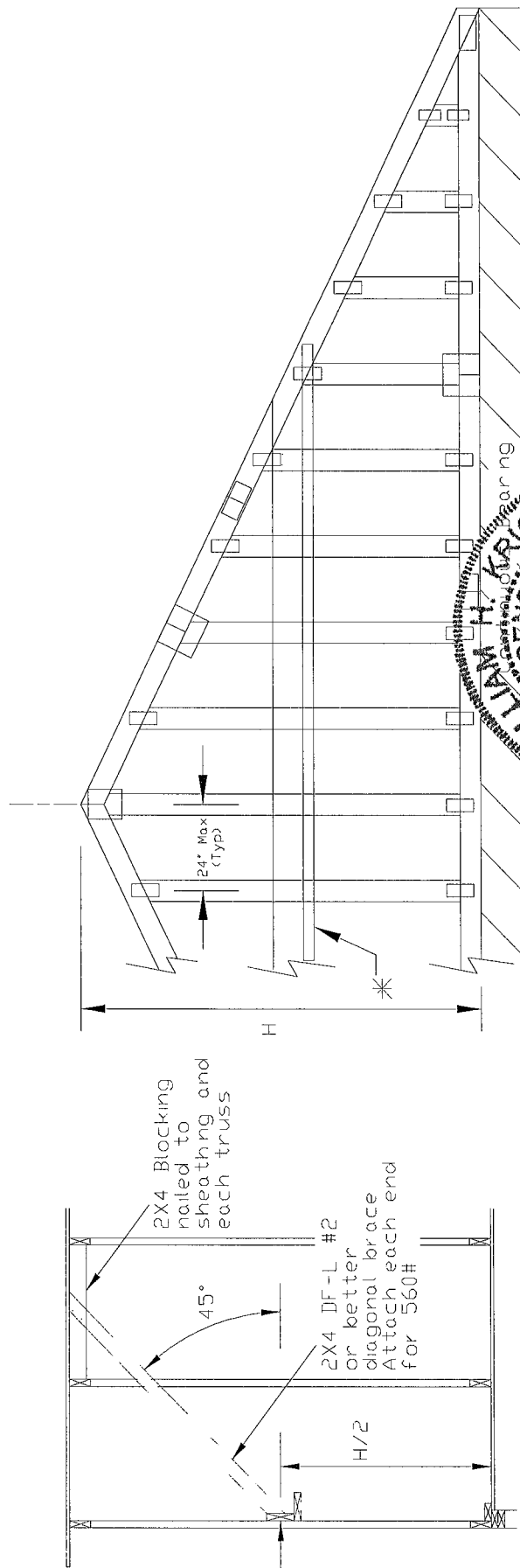
Lateral chord bracing requirements  
Top Continuous roof sheathing  
Bot Continuous ceiling diaphragm

H Greater than 76 to 120 max  
provide a 2x6 stiffback at mid-height and brace  
to roof diaphragm every 40 (see detail below or  
refer to DRWG A12030ENC10)

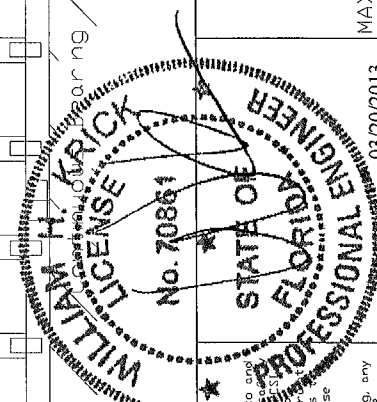
Engineer's sealed design referencing this detail  
for lumber plates and other information not shown  
on this detail

\* Optional 2x L reinforcement attached  
to stiffback with 10d box or gun  
(0128 x 3 min) nails @ 6 o.c

Nails 10d box or gun (0128 x 3 min) nails



2x6 #2 Stiffback  
attached to each  
Stud w/ (4) 10d box or gun (0128 x 3 min) nails



\*\*\*WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
\*\*\*IMPORTANT\*\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information by TPI and VICA) for best practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have a properly installed per BCSI section B3, B7 or B10 as applicable. Apply plates to each face of truss and position as shown above and on the Joint Detail unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

TW Building Components Group, Inc. shall not be responsible for any deviation from this drawing, any failure to follow or non-compliance with ANSI/TPI-1 or for handling, shipping, installation & bracing of trusses. A seal on this drawing or cover page indicating acceptance & a professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI-1 Sec. 2.1. TWBCG: twbcs@twbcg.com TPI: www.tpi.com VICA: www.vica.org ICC: www.iccsafe.org



Building Components Group Inc.

Earth City MO 63045

REF GE WHALER

DATE 2/14/12

DRWG GABRST100212

MAX TOT LD 60 PSF

MAX SPACING

03/20/2013

Mar 20 '13

140 MPH WIND 3000 FT MEAN HGT ASCE 7 02 OR ASCE  
7 05 PARTIALLY ENCLOSED BLDG LOCATED ANYWHERE  
EXP C WIND DL 50 PSF (MIN) Kzt - 100

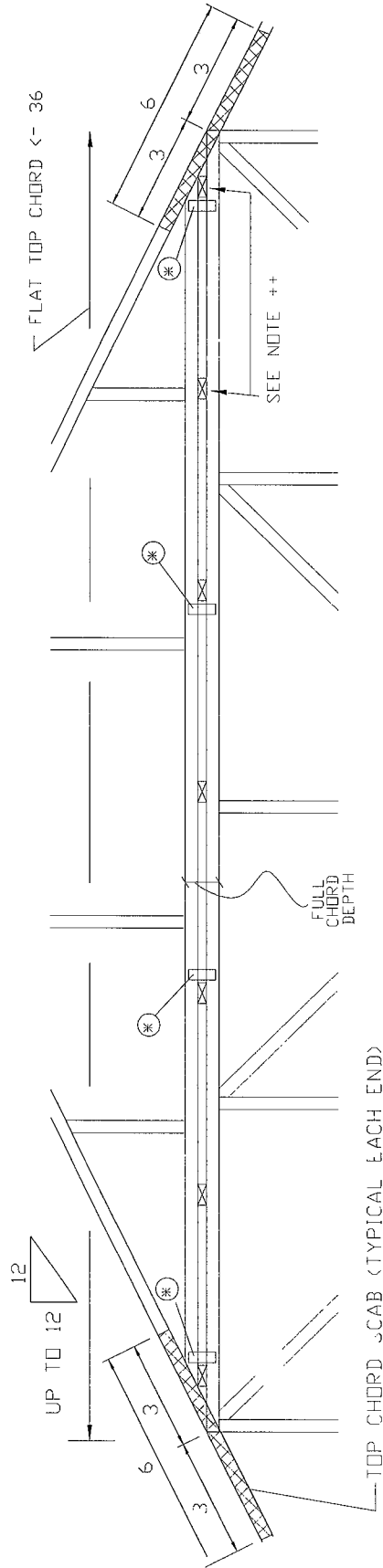
MAXIMUM TRUSS SPACING IS 24' OC  
DETAIL IS NOT APPLICABLE IF CAP SUPPORTS ADDITIONAL LOADS SUCH AS  
CUPOLA STEEPLE CHIMNEY OR DRAG STRUT LOADS

NOTE TOP CHORDS OF TRUSSES SUPPORTING PIGGYBACK CAP TRUSSES MUST BE ADEQUATELY BRACED BY SHEATHING OR PURLINS. THE BUILDING ENGINEER OF RECORD SHALL PROVIDE DIAGONAL BRACING OR ANY OTHER SUITABLE ANCHORAGE TO PERMANENTLY RESTRAIN PURLINS AND LATERAL BRACING FOR OUT OF PLANE LOADS OVER GABLE ENDS

\*\*\* REFER TO ENGINEER'S SEALED TRUSS DESIGN DRAWING FOR PIGGYBACK AND BASE TRUSS SPECIFICATIONS

PIGGYBACK CAP TRUSS SLANT NAILED TO ALL TOP CHORD PURLIN BRACING WITH (2) 16d BOX NAILS (0.135 x 35") AND SECURE TOP CHORD WITH 2X4 #3 GRADE SCAB (1 SIDE ONLY AT EACH END) ATTACHED WITH 2 ROWS OF 10d BOX NAILS (0.128 x 3" AT 4" O

+++ FLAT TOP CHORD PURLINS REQUIRED AT BOTH ENDS AND AT A MAXIMUM OF 24 INTERVALS UNLESS OTHERWISE NOTED ON BASE TRUSS DESIGN DRAWING ATTACH PURLIN BRACING TO THE FLAT TOP CHORD USING A MINIMUM OF (2) 16d BOX NAILS (X135 x35')



\* IN ADDITION PROVIDE CONNECTION WITH ONE OF THE FOLLOWING METHODS

**TRULIOX**

USE 3x8 TRULOX PLATES FOR 2x4 CHORD MEMBER AND 3x10 TRULOX PLATES FOR 2x6 AND LARGER CHORD MEMBERS. ATTACH TO EACH FACE @ 4" OC WITH (4) 0.120"x1.375" NAILS INTO CAP BOTTOM CHORD AND (4) TRULOX PLATES MAY BE STAGGERED @ 6" OC INTO BACK FACES.

APA RATED GUSSET

3" x 8" x 7/16" (MIN) APA RATED SHEATHING GUSSETS  
ATTACH @ 4' OC WITH (8) 6d COMMON  
NAILS PER GUSSET (4) IN CAP BOTTOM  
CHORD AND (4) IN BASE TRUSS TOP CHORD GUSSETS  
MAY BE STAGGERED 2' OC FRONT TO BACK FACES

2x4 VERTICAL SCABS

2x4 SPF#2 FULL CHORD DEPTH SCABS (EACH FACE)  
ATTACH @ 4' O.C. WITH 10d BOX NAILS (0.128"x3")  
PER SCAB. IN CAP BUT NOT IN CHORD AND (3) IN  
BASE TOSS. THE CHORD SCABS MAY BE STAGGERED

RECORDS DIVISION

[illegible][illegible]

**TWN**  
Building Components Group Inc.

Building Components Group Inc.

Earth City MO 63045

REF PIGGYBACK

DATE 3/15/10

DBV/C DB1400310

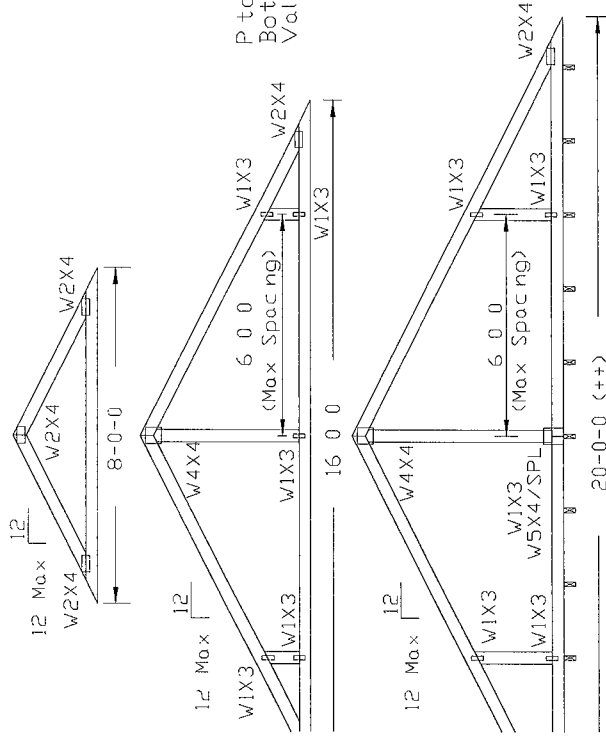
SPACING 240

# Valley Detail - ASCE 7-10 160 mph, 30' Mean Height, Enclosed, Exp C Kzt=1.00

Top Chord 2x4 SP #2N SPF #1/2 DF L #2 or better  
 Bot Chord 2x4 SP #2N or SPF #1/2 or better  
 Webs 2x4 SP #3 SPF #1/2 DF-L #2 or better

\*\* Attach each valley to every supporting truss with  
 (2) 16d box (0.135 x 35) nails toe-nailed for  
 ASCE 7-10 160 mph 30' Mean Height Enclosed  
 Building Exp C Wind TC DL=5 psf Kzt = 1.00  
 Or  
 ASCE 7-10 140 mph 30' Mean Height Enclosed  
 Building Exp D Wind TC DL=5 psf Kzt = 1.00

Cut from 2 6 or  
 larger as req'd



Supporting trusses at 24' oc max spacing

Unless specified on engineer's sealed design apply 1x4 T brace 80% length of web same species and SRB grade or better attached with 8d box (0.113 x 25) nails at 6' oc or continuous lateral bracing equally spaced for vertical valley webs greater than 7'-9"

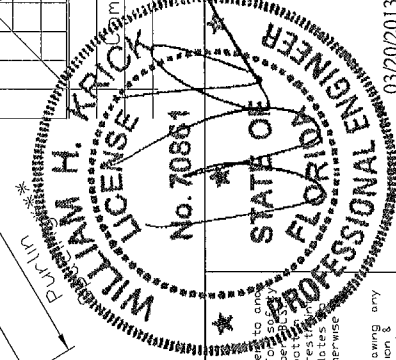
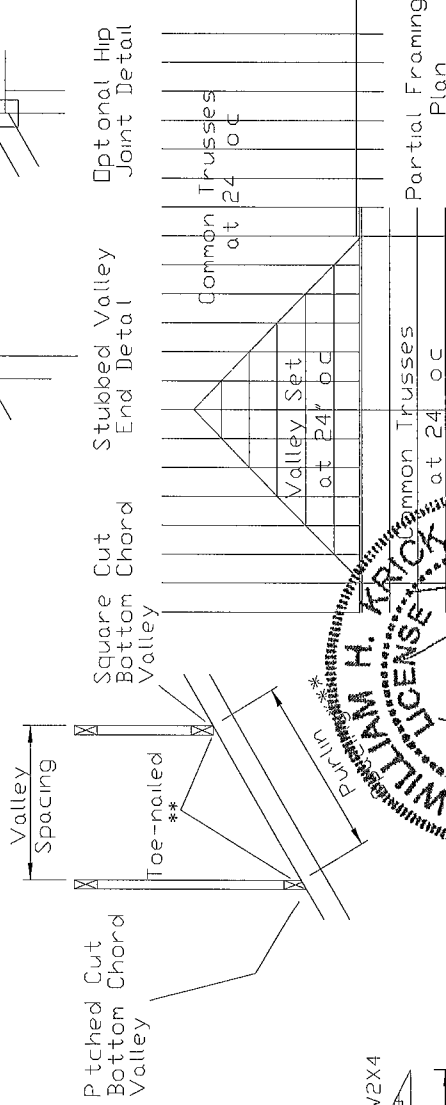
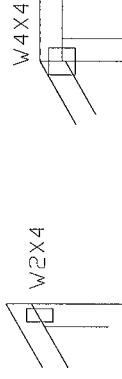
For verticals over 10'-0" tall apply (2) 1x4 T braces, 80% length of web same species and SRB grade or better attached with 8d box (0.113 x 25) nails @ 6' oc

Top chord of truss beneath valley set must be braced with properly attached rated sheathing applied prior to valley truss installation

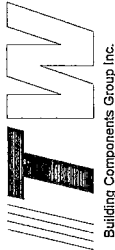
Or  
 Purlins at 24' oc or as otherwise specified on Engineer's sealed design  
 Or  
 By valley trusses used in lieu of purlin spacing as specified on Engineer's sealed design

\*\*\* Note that the purlin spacing for bracing the top chord of the truss beneath the valley is measured along the slope of the top chord  
 \*\* Larger spans may be built as long as the vertical height does not exceed 14'-0"

Bottom chord may be square or pitched cut as shown



\*\*\*WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
 \*\*IMPORTANT\*\* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS  
 Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI Building Component Safety Information by TPI and WCAI for best practices prior to performing these functions. Installers shall provide temporary bracing per BCSI and WCAI. Unless noted otherwise, top chord shall have properly attached structural sheathing and bottom chord shall have bracing at 24' oc or as specified on the drawing. Apply plates to each face of truss and position as shown above and on the Joint Detail unless noted otherwise. Refer to drawings 160A Z or standard plate positions.  
 TWC Building Components Group, Inc. shall not be responsible for any deviation from this drawing or failure to build the truss in accordance with ANSI/TPI 1 or for handling, shipping, installation & bracing of trusses. A seal on this drawing or cover page indicating this drawing indicates acceptance to provide professional engineering responsibility solely for this design. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec 2. Information on this drawing is the property of TWC Building Components Group, Inc. and shall not be reproduced without written permission. TWC Building Components Group, Inc. www.twcgroup.com WCAI www.wcaigroup.com ITC www.itcgroup.com



Earth City MO 63045

| REF     | VALLEY DETAIL |
|---------|---------------|
| DATE    | 2/14/12       |
| DRWG    | VAL160100212  |
| TC LL   | 30            |
| TC DL   | 20            |
| BC DL   | 10            |
| BC LL   | 0             |
| TOT LD  | 60            |
| 40PSF   | 15            |
| 7PSF    | 10            |
| 10PSF   | 0             |
| 0PSF    | 55            |
| 57PSF   | 60            |
| DURFAC  | 125/133       |
| 115     | 115           |
| SPACING | 24'0"         |

| MEMBER | TYPE  | SECTION | SP | SP # | SP #       |
|--------|-------|---------|----|------|------------|
| TOP    | CHORD | 2x4     | SP | #2   |            |
| BOT    | CHORD | 2x4     | SP | #2N  | 2x4 SPF #2 |
|        | WEBS  | 2x4     | SP | #3   |            |

(X) 2x6 SP/DFL #2 OF BETTER SLEEPER ATTACH THROUGH SHEATHING TO TRUSSES BENEATH WITH (3) 16d (0162 x3 1/2 ) COMMON OR (4) GUN NAILS (0128 x3 )

&lt;Y&gt; ATTACH BOTTOM CHORD OF VALLEY GABLE TO SLEEPER WITH

16d COMMON (0162 x3 1/2 ) NAILS @ 6" □ □ DR GUN NAILS @ 4 □ □

VALLEY GABLE TRUSS FOR ENCLOSED BUILDING REFER TO A14030050109  
(ASCE 7 05) OR A14030020109 (ASCE 7-02) FOR PART ENCLOSED  
BUILDING REFER TO A140GC0109 FOR GABLE END DETAIL

++ LARGER SPANS MAY BE BUILT AS LONG AS THE VERTICAL HEIGHT DOES NOT EXCEED 14'-0"

NOTE BOTTOM CHORD MAY BE SQUARE CUT OR PITCHED CUT

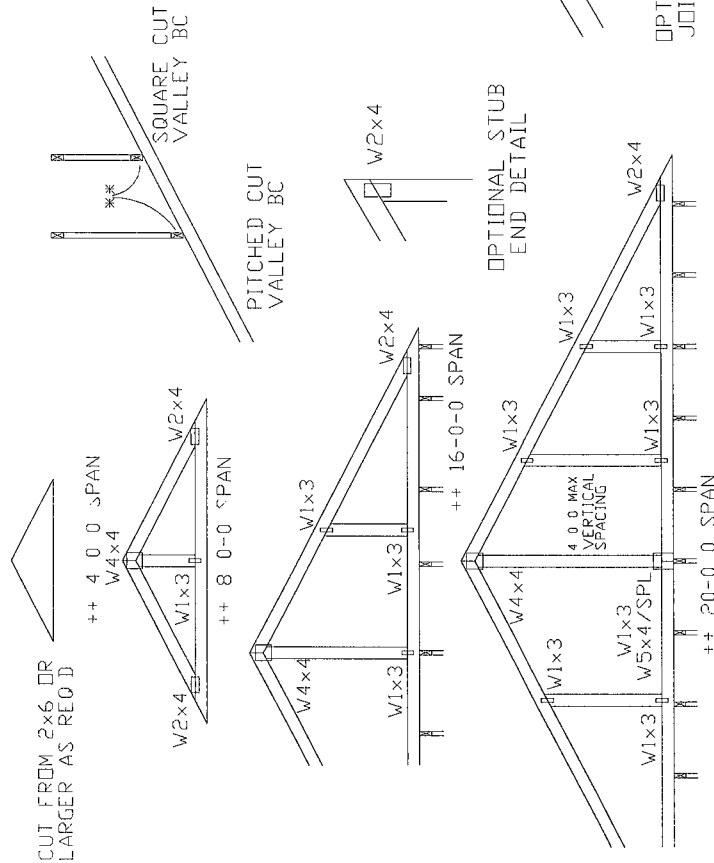
IN LIEU OF 1x4 T BRACING 1x4 #3 HEM-FIR (OR BETTER) CONTINUOUS  
LATERAL BRACING MAY BE USED ATTACH WITH (2) 8d BOX (0113 x2 1/2 )  
OR (2) 0128 x3 GUN NAILS BRACING MATERIAL TO BE ATTACHED AT BOTH  
ENDS TO A SUITABLE SUPPORT

FOR VERTICALS OVER 7' 9" TALL APPLY (1) 1x4 T BRACE TO  
NARROW FACE SAME GRADE AS WEB MEMBER ATTACH WITH 8d BOX  
(1) 11/16" x 2 1/2" OR 0128 x 3 GUN NAILS @ 6" OC STAGGERED

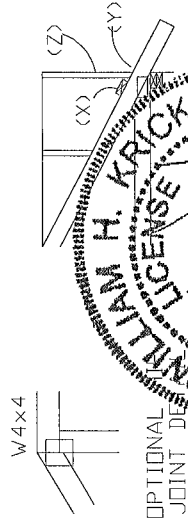
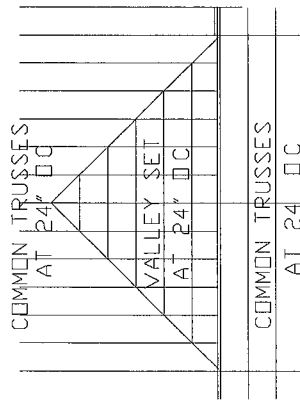
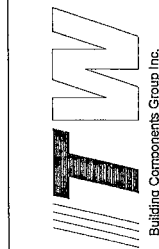
TRUSS TOP CHORDS UNDER VALLEY SET MUST HAVE SHEATHING ATTACHED TO THEM WITH NAILS SPACED PER CODE REQUIREMENTS OR PROPERLY ATTACHED VALLEY TRUSSES MAY BE USED IN LIEU OF SHEATHING OR PURLINS SEE NOTE (\*\*)

140 MPH WIND 30 FT MEAN HGT ASCE 7-05 PART ENC BLDG LOCATED  
ANYWHERE IN ROOF CAT II EXP C WIND TCDF-50 PSF WIND  
BCDL-50 PSF Kzt = 100

140 MPH WIND 30 FT MEAN HGT ASCE 7 02 PART ENC BLDG LOCATED  
ANYWHERE IN ROOF CAT II EXP C WIND TCDF=50 PSF WIND  
BCDF=50 PSF Kzt 100



SUPPORTING TRUSSES AT 24' OC MAXIMUM SPACING

[illegible]

Earth City MO 63045

|         |     |           |      |               |
|---------|-----|-----------|------|---------------|
| TC LL   | 20  | DR 30PSF  | REF  | VALLEY DETAIL |
| TC DL   | 20  | DR 15PSF  | DATE | 1/1/09        |
| BC DL   | 10  | DR 10 PSF | DRWG | VAL1400109    |
| BC LL   | 0   | 0 0 PSF   |      |               |
| TOT LD  | 50  | DR 55PSF  |      |               |
| DURFAC  | 125 |           |      |               |
| SPACING | 24  |           |      |               |

03/20/2013

Mar 20 '13

$$C_{KZt} = 100$$

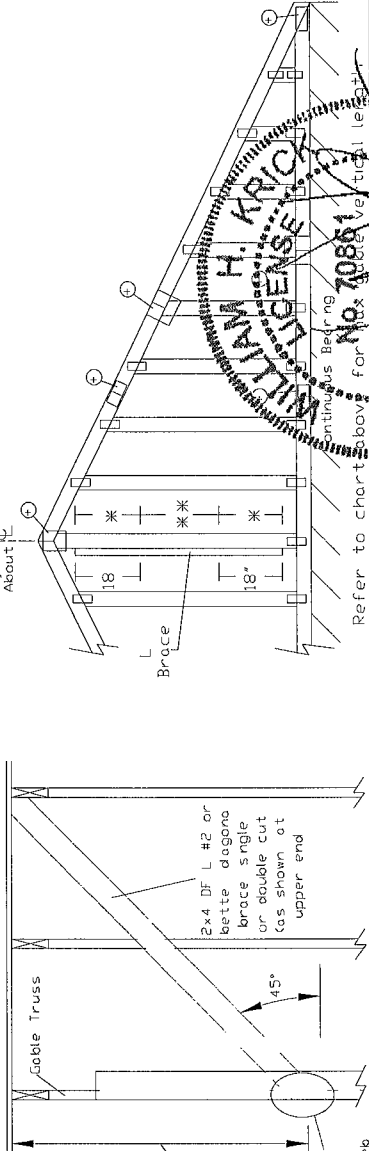
exposure C Kzt - 100  
Kzt - 100

| Max Cable Vertical Length | 2x4 Cable Vertical Spacing | Brace    |         | No Braces | (1) 1x4 L <sup>+</sup> Brace * |     |         |    |         |    |         |     |         |     |         |     | (2) 2x4 L <sup>+</sup> Brace ** |    |         |    | (1) 2x6 L <sup>+</sup> Brace * |    |         |   | (2) 2x6 L <sup>+</sup> Brace ** |  |  |  |
|---------------------------|----------------------------|----------|---------|-----------|--------------------------------|-----|---------|----|---------|----|---------|-----|---------|-----|---------|-----|---------------------------------|----|---------|----|--------------------------------|----|---------|---|---------------------------------|--|--|--|
|                           |                            | Grade    | #1 / #2 |           | Group A                        |     | Group B |    | Group A |    | Group B |     | Group A |     | Group B |     | Group A                         |    | Group B |    | Group A                        |    | Group B |   |                                 |  |  |  |
|                           |                            |          |         |           |                                |     |         |    |         |    |         |     |         |     |         |     |                                 |    |         |    |                                |    |         |   |                                 |  |  |  |
| 16" o.c.                  | SPF                        | #1 / #2  | 4       | 7         | 7                              | 10  | 8       | 1" | 9       | 3  | 9       | 7"  | 11      | 0"  | 11      | 5"  | 14                              | 0" | 14      | 0" | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | #3       | 4       | 4         | 7                              | 2   | 7       | 8  | 9       | 1  | 9       | 5"  | 10      | 10" | 11      | 4"  | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | Stud     | 4       | 4         | 7                              | 8   | 8       | 0  | 9       | 1" | 9       | 5"  | 10      | 10" | 11      | 4"  | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           | HF                         | Standard | 4       | 4         | 7                              | 6   | 8       | 0  | 9       | 1" | 9       | 5"  | 10      | 10" | 11      | 4"  | 14                              | 0  | 14      | 0" | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | #1       | 4       | 8         | 7                              | 10  | 8       | 2  | 9       | 3  | 9       | 8   | 11      | 0   | 11      | 6"  | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | #2       | 4       | 7         | 7                              | 10  | 8       | 1  | 9       | 3" | 9       | 7"  | 9       | 7"  | 11      | 0"  | 11                              | 5  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
| 24" o.c.                  | SPF                        | #3       | 4       | 4         | 6                              | 5"  | 6       | 10 | 8       | 7  | 9       | 2   | 10      | 10  | 11      | 4   | 13                              | 5  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | Stud     | 4       | 4         | 6                              | 5   | 6       | 10 | 8       | 7  | 9       | 2   | 10      | 10  | 11      | 4   | 13                              | 5  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | Standard | 4       | 3         | 5                              | 7   | 5       | 11 | 7       | 5  | 7       | 11  | 10      | 0   | 10      | 9   | 11                              | 8  | 12      | 5  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           | HF                         | #1 / #2  | 5       | 3         | 8                              | 11  | 9       | 3  | 10      | 7  | 11      | 0   | 12      | 7   | 13      | 1   | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | #3       | 5       | 0         | 8                              | 10  | 9       | 2  | 10      | 5  | 10      | 10  | 12      | 5   | 12      | 11  | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | Stud     | 5       | 0         | 8                              | 10  | 9       | 2  | 10      | 5  | 10      | 10  | 12      | 5   | 12      | 11  | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
| 16" o.c.                  | SPF                        | Standard | 5       | 4         | 9                              | 0   | 9       | 4  | 10      | 7" | 11      | 0"  | 12      | 8   | 13      | 2"  | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | #1       | 5       | 3         | 8                              | 11  | 9       | 3  | 10      | 7  | 11      | 0   | 12      | 7"  | 13      | 1   | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | #2       | 5       | 3         | 8                              | 11  | 9       | 3  | 10      | 7  | 11      | 0   | 12      | 7"  | 13      | 1   | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           | DFL                        | #3       | 5       | 0         | 7                              | 10  | 8       | 4  | 10      | 5  | 10      | 10  | 12      | 5   | 12      | 11" | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | Stud     | 5       | 0"        | 7                              | 10  | 8       | 4  | 10      | 5  | 10      | 10  | 12      | 5   | 12      | 11" | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | Standard | 5       | 0         | 6                              | 10" | 7       | 3  | 9       | 1" | 9       | 8"  | 12      | 4   | 12      | 11  | 14                              | 0  | 14      | 0" | 14                             | 0  | 14      | 0 |                                 |  |  |  |
| 12" o.c.                  | SPF                        | #1 / #2  | 5       | 9         | 9                              | 10  | 2       | 11 | 7"      | 12 | 1"      | 13  | 7"      | 14  | 0"      | 14  | 0                               | 14 | 0       | 14 | 0                              | 14 | 0       |   |                                 |  |  |  |
|                           |                            | #3       | 5       | 6"        | 9                              | 8   | 10      | 1  | 11      | 6" | 11      | 11" | 13      | 8"  | 14      | 0"  | 14                              | 0  | 14      | 0  | 14                             | 0  |         |   |                                 |  |  |  |
|                           |                            | Stud     | 5       | 6         | 9                              | 8"  | 10      | 1  | 11      | 6" | 11      | 11" | 13      | 8"  | 14      | 0"  | 14                              | 0  | 14      | 0  | 14                             | 0  |         |   |                                 |  |  |  |
|                           | HF                         | Standard | 5       | 6         | 9                              | 8"  | 10      | 1" | 11      | 6" | 11      | 11" | 13      | 8"  | 14      | 0   | 14                              | 0  | 14      | 0  | 14                             | 0  | 14      | 0 |                                 |  |  |  |
|                           |                            | #1       | 5       | 11        | 9                              | 11  | 10      | 3  | 11      | 8  | 12      | 2   | 13      | 11  | 14      | 0   | 14                              | 0  | 14      | 0  | 14                             | 0  |         |   |                                 |  |  |  |
|                           |                            | #2       | 5       | 9         | 9                              | 10  | 2       | 11 | 7       | 12 | 1       | 13  | 10      | 14  | 0       | 14  | 0                               | 14 | 0       | 14 | 0                              | 14 | 0       |   |                                 |  |  |  |
| SP                        | #3                         | 5        | 6       | 9         | 1                              | 9   | 8       | 11 | 6"      | 11 | 11"     | 13  | 8"      | 14  | 0       | 14  | 0                               | 14 | 0       | 14 | 0                              | 14 | 0       |   |                                 |  |  |  |
|                           | Stud                       | 5        | 6       | 9         | 1"                             | 9   | 8       | 11 | 6"      | 11 | 11"     | 13  | 8"      | 14  | 0       | 14  | 0                               | 14 | 0       | 14 | 0                              | 14 | 0       |   |                                 |  |  |  |
|                           | Standard                   | 5        | 6       | 7         | 10                             | 8   | 4       | 10 | 6"      | 11 | 3"      | 13  | 8"      | 14  | 0"      | 14  | 0                               | 14 | 0       | 14 | 0                              | 14 | 0       |   |                                 |  |  |  |

Diagon brace option  
vertical length may be  
double d when diagon  
braces used Connect  
diagonal brace for 385#  
at each end Max web  
total length is 14

Vertical  
table above

Connect diagonals at midpoint of vertical web



⚡ ⚡ R  
\*\*WARNING\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!

\*\*\*WARNING\*\*\* READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
 \* FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.

[illegible][illegible]

STATE OF  
FLORIDA  
PROFESSIONAL ENGINEER

Mar 20 '13

03/20/2013

|    | MAX | TOT | LD | 60 PSF |
|----|-----|-----|----|--------|
| 1  | 18  | 17  | 19 | 18     |
| 2  | 18  | 17  | 19 | 18     |
| 3  | 18  | 17  | 19 | 18     |
| 4  | 18  | 17  | 19 | 18     |
| 5  | 18  | 17  | 19 | 18     |
| 6  | 18  | 17  | 19 | 18     |
| 7  | 18  | 17  | 19 | 18     |
| 8  | 18  | 17  | 19 | 18     |
| 9  | 18  | 17  | 19 | 18     |
| 10 | 18  | 17  | 19 | 18     |
| 11 | 18  | 17  | 19 | 18     |
| 12 | 18  | 17  | 19 | 18     |
| 13 | 18  | 17  | 19 | 18     |
| 14 | 18  | 17  | 19 | 18     |
| 15 | 18  | 17  | 19 | 18     |
| 16 | 18  | 17  | 19 | 18     |
| 17 | 18  | 17  | 19 | 18     |
| 18 | 18  | 17  | 19 | 18     |
| 19 | 18  | 17  | 19 | 18     |
| 20 | 18  | 17  | 19 | 18     |
| 21 | 18  | 17  | 19 | 18     |
| 22 | 18  | 17  | 19 | 18     |
| 23 | 18  | 17  | 19 | 18     |
| 24 | 18  | 17  | 19 | 18     |
| 25 | 18  | 17  | 19 | 18     |
| 26 | 18  | 17  | 19 | 18     |
| 27 | 18  | 17  | 19 | 18     |
| 28 | 18  | 17  | 19 | 18     |
| 29 | 18  | 17  | 19 | 18     |
| 30 | 18  | 17  | 19 | 18     |
| 31 | 18  | 17  | 19 | 18     |
| 32 | 18  | 17  | 19 | 18     |
| 33 | 18  | 17  | 19 | 18     |
| 34 | 18  | 17  | 19 | 18     |
| 35 | 18  | 17  | 19 | 18     |
| 36 | 18  | 17  | 19 | 18     |
| 37 | 18  | 17  | 19 | 18     |
| 38 | 18  | 17  | 19 | 18     |
| 39 | 18  | 17  | 19 | 18     |
| 40 | 18  | 17  | 19 | 18     |
| 41 | 18  | 17  | 19 | 18     |
| 42 | 18  | 17  | 19 | 18     |
| 43 | 18  | 17  | 19 | 18     |
| 44 | 18  | 17  | 19 | 18     |
| 45 | 18  | 17  | 19 | 18     |
| 46 | 18  | 17  | 19 | 18     |
| 47 | 18  | 17  | 19 | 18     |
| 48 | 18  | 17  | 19 | 18     |
| 49 | 18  | 17  | 19 | 18     |
| 50 | 18  | 17  | 19 | 18     |
| 51 | 18  | 17  | 19 | 18     |
| 52 | 18  | 17  | 19 | 18     |
| 53 | 18  | 17  | 19 | 18     |
| 54 | 18  | 17  | 19 | 18     |
| 55 | 18  | 17  | 19 | 18     |
| 56 | 18  | 17  | 19 | 18     |
| 57 | 18  | 17  | 19 | 18     |
| 58 | 18  | 17  | 19 | 18     |
| 59 | 18  | 17  | 19 | 18     |
| 60 | 18  | 17  | 19 | 18     |
| 61 | 18  | 17  | 19 | 18     |
| 62 | 18  | 17  | 19 | 18     |
| 63 | 18  | 17  | 19 | 18     |
| 64 | 18  | 17  | 19 | 18     |
| 65 | 18  | 17  | 19 | 18     |
| 66 | 18  | 17  | 19 | 18     |
| 67 | 18  | 17  | 19 | 18     |
| 68 | 18  | 17  | 19 | 18     |
| 69 | 18  | 17  | 19 | 18     |
| 70 | 18  | 17  | 19 | 18     |
| 71 | 18  | 17  | 19 | 18     |
| 72 | 18  | 17  | 19 | 18     |
| 73 | 18  | 17  | 19 | 18     |
| 74 | 18  | 17  | 19 | 18     |
| 75 | 18  | 17  | 19 | 18     |
| 76 | 18  | 17  | 19 | 18     |
| 77 | 18  | 17  | 19 | 18     |
| 78 | 18  | 17  | 19 | 18     |
| 79 | 18  | 17  | 19 | 18     |
| 80 | 18  | 17  | 19 | 18     |
| 81 | 18  | 17  | 19 | 18     |
| 82 | 18  | 17  | 19 | 18     |
| 83 | 18  | 17  | 19 | 18     |
| 84 | 18  | 17  | 19 | 18     |
| 85 | 18  | 17  | 19 | 18     |
| 86 | 18  | 17  | 19 | 18     |
| 87 | 18  | 17  | 19 | 18     |
| 88 | 18  | 17  | 19 | 18     |
| 89 | 18  | 17  | 19 | 18     |
| 90 | 18  | 17  | 19 | 18     |
| 91 | 18  | 17  | 19 | 18     |
| 92 | 18  | 17  | 19 | 18     |
| 93 | 18  | 17  | 19 | 18     |
| 94 | 18  | 17  | 19 | 18     |
| 95 | 18  | 17  | 19 | 18     |
| 96 | 18  | 17  | 19 | 18     |
| 97 | 18  | 17  | 19 | 18     |
| 98 | 18  | 17  | 19 | 18     |
| 99 | 18  | 17  | 19 | 1      |

MAX SPACING 240

REF ASCE7-10-GAB12030

DATE 2/14/12

DRWG A12030ENC100212

| Gable Vertical Plate Sizes              |            |
|-----------------------------------------|------------|
| Vertical Length                         | No Splice  |
| Less than 4' 0"                         | 1X4 or 2X3 |
| Greater than 4' 0" but less than 11' 6" | 2X4        |
| Greater than 11' 6"                     | 2X4        |

+ Refer to common truss design for peak splice and heel plates

Refer to the Building Designer for conditions not addressed by this detail

Gable Truss Detail Notes

Provide up to 4 connections for 70 pif over continuous bearing (5 psf IC Dead Load) with 2" 0" overhang or 12" plywood overhang

Attach L braces with 10d (0.128"x30 in) nails.

\* For (1) L brace space nails at 2' o.c. in 18' end zones and 4' o.c. between zones  
 \* \* \* for (2) L braces space nails at 3' o.c. in 18' end zones and 6' o.c. between zones  
 L bracing must be a minimum of 80% of web member length

