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COA #0 278  
04/20/2021

Alpine, an ITW Company  
6750 Forum Drive, Suite 305  
Orlando, FL 32821  
Phone: (800)755-6001  
www.alpineitw.com



| Site Information:                                  | Page 1:             |
|----------------------------------------------------|---------------------|
| Customer: Seminole Trusses, Inc.                   | Job Number: B53428a |
| Job Description: ODUM RESIDENCE                    |                     |
| Address: 437 SE PEACOCK TERR., LAKE CITY, FL 32025 |                     |

| Job Engineering Criteria:         |                     |                                |  |
|-----------------------------------|---------------------|--------------------------------|--|
| Design Code: FBC 7th Ed. 2020 Res |                     | IntelliVIEW Version: 20.02.00A |  |
|                                   |                     | JRef #: 1X4P8570011            |  |
| Wind Standard: ASCE710            | Wind Speed (mph): 0 | Design Loading (psf): 55.00    |  |
| Building Type:                    |                     |                                |  |

This package contains general notes pages, 8 truss drawing(s) and 5 detail(s).

| Item | Drawing Number    | Truss                        | Item | Drawing Number    | Truss                   |
|------|-------------------|------------------------------|------|-------------------|-------------------------|
| 1    | 110.21.0700.10227 | F1 16'8"4 System 42 Gable    | 2    | 110.21.0700.06700 | F2 16'11"12 Floor Truss |
| 3    | 110.21.0700.03417 | F3 13'3"4 Floor Truss Girder | 4    | 110.21.0659.55667 | F4 13'3"4 Floor Truss   |
| 5    | 110.21.0659.54147 | F5 14'4"14 Floor Truss       | 6    | 110.21.0659.52767 | F6 13'5"14 Floor Truss  |
| 7    | 110.21.0659.51047 | F7 13'2"8 Floor Truss        | 8    | 110.21.0659.49257 | F8 12'0"14 Floor Truss  |
| 9    | PB160160118       |                              | 10   | PB180160118       |                         |
| 11   | REPCHRD1014       |                              | 12   | STRBRIBR1014      |                         |
| 13   | DEFLCAMB1014      |                              |      |                   |                         |

## **General Notes**

### **Truss Design Engineer Scope of Work, Design Assumptions and Design Responsibilities:**

The design responsibilities assumed in the preparation of these design drawings are those specified in ANSI/TPI 1, Chapter 2; and the National Design Standard for Metal Plate Connected Wood Truss Construction, by the Truss Plate Institute. The truss component designs conform to the applicable provisions of ANSI/TPI 1 and NDS, the National Design Specification for Wood Construction by AWC. The truss component designs are based on the specified loading and dimension information furnished by others to the Truss Design Engineer. The Truss Design Engineer has no duty to independently verify the accuracy or completeness of the information provided by others and may rely on that information without liability. The responsibility for verification of that information remains with others neither employed nor controlled by the Truss Design Engineer. The Truss Design Engineer's seal and signature on the attached drawings, or cover page listing these drawings, indicates acceptance of professional engineering responsibility solely for the truss component designs and not for the technical information furnished by others which technical information and consequences thereof remain their sole responsibility.

The suitability and use of these drawings for any particular structure is the responsibility of the Building Designer in accordance with ANSI/TPI 1 Chapter 2. The Building Designer is responsible for determining that the dimensions and loads for each truss component match those required by the plans and by the actual use of the individual component, and for ascertaining that the loads shown on the drawings meet or exceed applicable building code requirements and any additional factors required in the particular application. Truss components using metal connector plates with integral teeth shall not be placed in environments that will cause the moisture content of the wood in which plates are embedded to exceed 19% and/or cause corrosion of connector plates and other metal fasteners.

The Truss Design Engineer shall not be responsible for items beyond the specific scope of the agreed contracted work set forth herein, including but not limited to: verifying the dimensions of the truss component, calculation of any of the truss component design loads, inspection of the truss components before or after installation, the design of temporary or permanent bracing and their attachment required in the roof and/or floor systems, the design of diaphragms or shear walls, the design of load transfer connections to and from diaphragms and shear walls, the design of load transfer to the foundation, the design of connections for truss components to their bearing supports, the design of the bearing supports, installation of the truss components, observation of the truss component installation process, review of truss assembly procedures, sequencing of the truss component installation, construction means and methods, site and/or worker safety in the installation of the truss components and/or its connections.

This document may be a high quality facsimile of the original engineering document which is a digitally signed electronic file with third party authentication. A wet or embossed seal copy of this engineering document is available upon request.

### **Temporary Lateral Restraint and Bracing:**

Temporary lateral restraint and diagonal bracing shall be installed according to the provisions of BCSI chapters B1, B2, B7 and/or B10 (Building Component Safety Information, by TPI and SBCA), or as specified by the Building Designer or other Registered Design Professional. The required locations for lateral restraint and/or bracing depicted on these drawings are only for the permanent lateral support of the truss members to reduce buckling lengths, and do not apply to and may not be relied upon for the temporary stability of the truss components during their installation.

### **Permanent Lateral Restraint and Bracing:**

The required locations for lateral restraint or bracing depicted on these drawings are for the permanent lateral support of the truss members to reduce buckling lengths. Permanent lateral support shall be installed according to the provisions of BCSI chapters B3, B7 and/or B10, or as specified by the Building Designer or other Registered Design Professional. These drawings do not depict or specify installation/erection bracing, wind bracing, portal bracing or similar building stability bracing which are parts of the overall building design to be specified, designed and detailed by the Building Designer.

### **Connector Plate Information:**

Alpine connector plates are made of ASTM A653 or ASTM A1063 galvanized steel with the following designations, gauges and grades: W=Wave, 20ga, grade 40; H=High Strength, 20ga, grade 60; S=Super Strength, 18ga, grade 60. Information on model code compliance is contained in the ICC Evaluation Service report ESR-1118, available on-line at [www.icc-es.org](http://www.icc-es.org).

### **Fire Retardant Treated Lumber:**

Fire retardant treated lumber must be properly re-dried and maintained below 19% or less moisture level through all stages of construction and usage. Fire retardant treated lumber may be more brittle than untreated lumber. Special handling care must be taken to prevent breakage during all handling activities.

## **General Notes** (continued)

### **Key to Terms:**

Information provided on drawings reflects a summary of the pertinent information required for the truss design. Detailed information on load cases, reactions, member lengths, forces and members requiring permanent lateral support may be found in calculation sheets available upon written request.

BCDL = Bottom Chord standard design Dead Load in pounds per square foot.

BCLL = Bottom Chord standard design Live Load in pounds per square foot.

CL = Certified lumber.

Des Ld = total of TCLL, TCDL, BCLL and BCDL Design Load in pounds per square foot.

FRT = Fire Retardant Treated lumber.

FRT-DB = D-Blaze Fire Retardant Treated lumber.

FRT-DC = Dricon Fire Retardant Treated lumber.

FRT-FP = FirePRO Fire Retardant Treated lumber.

FRT-FL = FlamePRO Fire Retardant Treated lumber.

FRT-FT = FlameTech Fire Retardant Treated lumber.

FRT-PG = PYRO-GUARD Fire Retardant Treated lumber.

g = green lumber.

HORZ(LL) = maximum Horizontal panel point deflection due to Live Load, in inches.

HORZ(TL) = maximum Horizontal panel point long term deflection in inches, due to Total Load, including creep adjustment.

HPL = additional Horizontal Load added to a truss Piece in pounds per linear foot or pounds.

Ic = Incised lumber.

FJ = Finger Jointed lumber.

L/# = user specified divisor for limiting span/deflection ratio for evaluation of actual L/defl value.

L/defl = ratio of Length between bearings, in inches, divided by the vertical Deflection due to creep, in inches, at the referenced panel point. Reported as 999 if greater than or equal to 999.

Loc = Location, starting location of left end of bearing or panel point (joint) location of deflection.

Max BC CSI = Maximum bending and axial Combined Stress Index for Bottom Chords for of all load cases.

Max TC CSI = Maximum bending and axial Combined Stress Index for Top Chords for of all load cases.

Max Web CSI = Maximum bending and axial Combined Stress Index for Webs for of all load cases.

NCBCLL = Non-Concurrent Bottom Chord design Live Load in pounds per square foot.

PL = additional Load applied at a user specified angle on a truss Piece in pounds per linear foot or pounds.

PLB = additional vertical load added to a Bottom chord Piece of a truss in pounds per linear foot or pounds

PLT = additional vertical load added to a Top chord Piece of a truss in pounds per linear foot or pounds.

PP = Panel Point.

R = maximum downward design Reaction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

-R = maximum upward design Reaction, in pounds, from all specified gravity load cases, at the identified location (Loc).

Rh = maximum horizontal design Reaction in either direction, in pounds, from all specified gravity load cases, at the indicated location (Loc).

RL = maximum horizontal design Reaction in either direction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

Rw = maximum downward design Reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the identified location (Loc).

TCDL = Top Chord standard design Dead Load in pounds per square foot.

TCLL = Top Chord standard design Live Load in pounds per square foot.

U = maximum Upward design reaction, in pounds, from all specified non-gravity (wind or seismic) load cases, at the indicated location (Loc).

VERT(CL) = maximum Vertical panel point deflection in inches due to Live Load and Creep Component of Dead Load in inches.

VERT(CTL) = maximum Vertical panel point deflection ratios due to Live Load and Creep Component of Dead Load, and maximum long term Vertical panel point deflection in inches due to Total load, including creep adjustment.

VERT(LL) = maximum Vertical panel point deflection in inches due to Live Load.

VERT(TL) = maximum Vertical panel point long term deflection in inches due to Total load, including creep adjustment.

W = Width of non-hanger bearing, in inches.

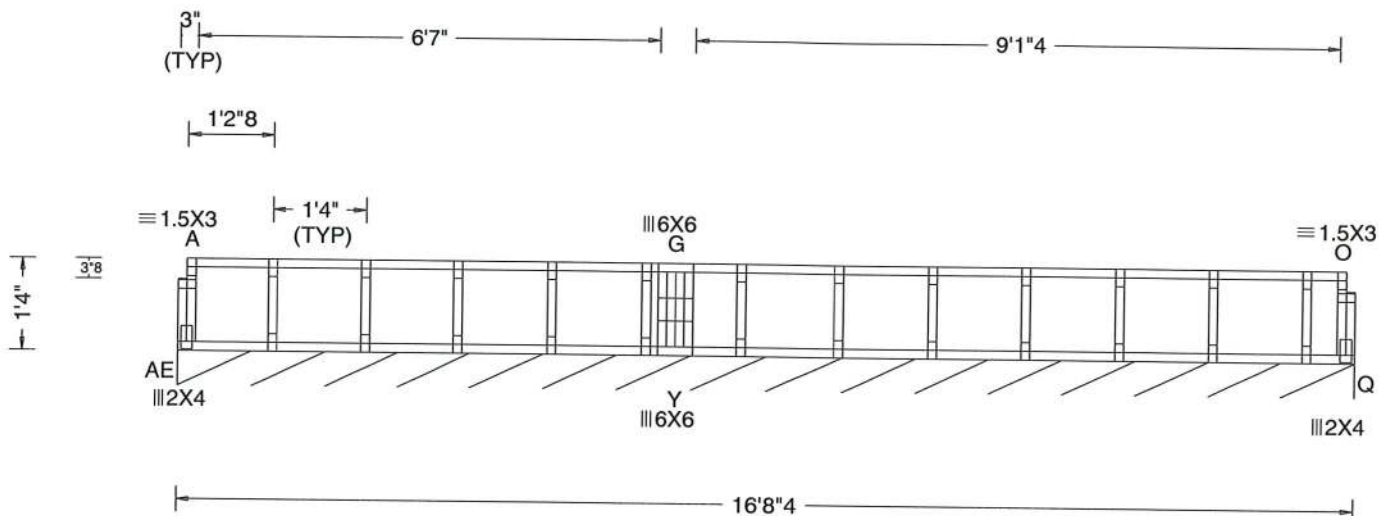
Refer to ASCE-7 for Wind and Seismic abbreviations.

Uppercase Acronyms not explained above are as defined in TPI 1.

**References:**

1. AWC: American Wood Council; 222 Catoclin Circle SE, Suite 201; Leesburg, VA 20175; [www.awc.org](http://www.awc.org).
2. ICC: International Code Council; [www.iccsafe.org](http://www.iccsafe.org).
3. Alpine, a division of ITW Building Components Group Inc.: 514 Earth City Expressway, Suite 242, Earth City, MO 63045; [www.alpineitw.com](http://www.alpineitw.com).
4. TPI: Truss Plate Institute, 2670 Crain Highway, Suite 203, Waldorf, MD 20601; [www.tpinst.org](http://www.tpinst.org).
5. SBCA: Wood Truss Council of America, 6300 Enterprise Lane, Madison, WI 53719; [www.sbcindustry.com](http://www.sbcindustry.com).

|                          |                |                  |                                                                                 |                                                                                      |
|--------------------------|----------------|------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| SEQN: 44635<br>FROM: RJL | SY42<br>Qty: 2 | Ply: 1<br>Qty: 2 | Job Number: B53428a<br>ODUM RESIDENCE<br>Truss Label: F1 16'8"4 System 42 Gable | Cust: R 857 JRef: 1X4P8570011 T12<br>DrwNo: 110.21.0700.10227<br>SSB / DF 04/20/2021 |
|--------------------------|----------------|------------------|---------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|



| Loading Criteria (psf)                                                                                                                             | Wind Criteria                                                                                                                                                                                                                                           | Snow Criteria (Pg, Pf in PSF)                                                                                                                                                                               | Def/CSI Criteria                                                                                                                                                                                                                                                    | ▲ Maximum Reactions (lbs), or * = PLF                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCLL: 40.00<br>TCDL: 10.00<br>BCLL: 0.00<br>BCDL: 5.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 0.00<br>Load Duration: 1.00<br>Spacing: 19.2 " | Wind Std: NA<br>Speed: NA mph<br>Enclosure: NA<br>Category: NA<br>EXP: NA Kzt: NA<br>Mean Height: NA ft<br>TCDL: NA psf<br>BCDL: NA psf<br>MWFRS Parallel Dist: NA<br>C&C Dist a: NA ft<br>Loc. from endwall: NA<br>I: NA GCpi: NA<br>Wind Duration: NA | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 7th Ed. 2020 Res.<br>TPI Std: 2014<br>Rep Fac: No<br>FT/RT: 20(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.000 E 999 360<br>VERT(CL): 0.000 E 999 240<br>HORZ(LL): 0.000 B - -<br>HORZ(TL): 0.001 B - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.058<br>Max BC CSI: 0.013<br>Max Web CSI: 0.025<br><br>VIEW Ver: 20.02.00A.1020.20 | Gravity Non-Gravity<br>Loc R+ / R- / Rh / Rw / U / RL<br>Q* 87 /- /- /- /- /-<br>Q Brg Width = 200 Min Req = -<br>Bearing AE is a rigid surface.<br>Members not listed have forces less than 375# |

#### Lumber

Top chord: 4x2 SP #1;  
Bot chord: 4x2 SP #1;  
Webs: 4x2 SP #3;

#### Bracing

Sheathing is required for any longitudinal(drag) forces. All connections to be designed by the building designer.

Fasten rated sheathing to one face of this frame.

#### Plating Notes

All plates are 1.5X3 except as noted.

#### Additional Notes

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

Truss must be installed as shown with top chord up.



COA #0 248

04/20/2021

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

**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

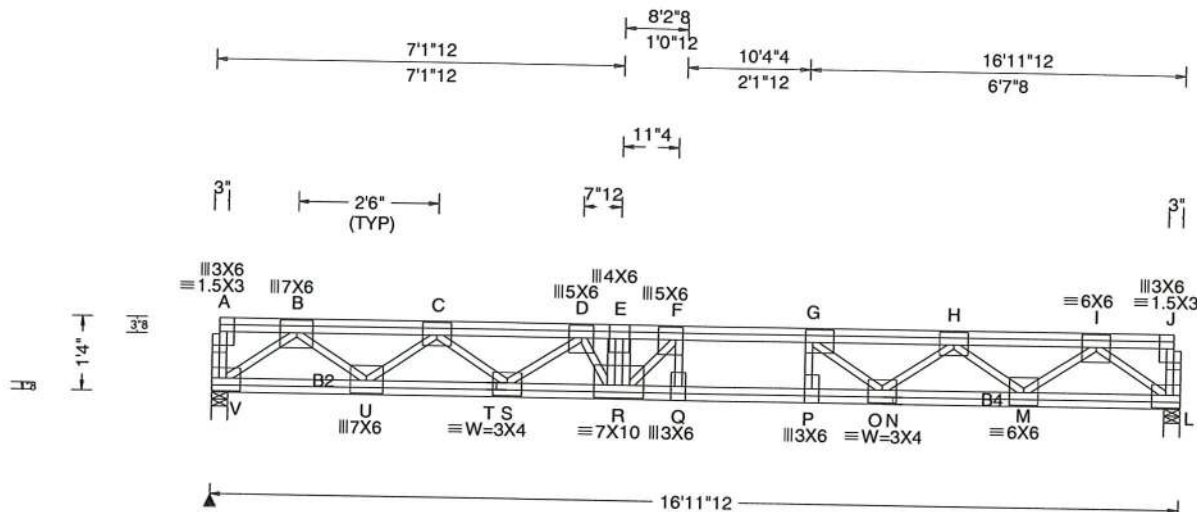
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to and follow the latest edition of BCSI (Building Component Safety Information, by TPI and SBCA) for safety practices prior to performing these functions. Installers shall provide temporary bracing per BCSI. 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 of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. 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 drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see these web sites: Alpine: alpineitw.com; TPI: tpinst.org; SBCA: sbcindustry.com; ICC: iccsafe.org; AWC: awc.org

**ALPINE**  
AN ITW COMPANY  
6750 Forum Drive  
Suite 305  
Orlando FL, 32821

|                          |                |        |                                                                               |                                                                                     |
|--------------------------|----------------|--------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SEQN: 44657<br>FROM: RJL | SY42<br>Qty: 8 | Ply: 1 | Job Number: B53428a<br>ODUM RESIDENCE<br>Truss Label: F2 16'11"12 Floor Truss | Cust: R 857 JRef: 1X4P8570011 T7<br>DrwNo: 110.21.0700.06700<br>SSB / DF 04/20/2021 |
|--------------------------|----------------|--------|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|



| Loading Criteria (psf)                                                                                                                             | Wind Criteria                                                                                                                                                                                                                                           | Snow Criteria (Pg, Pf in PSF)                                                                                                                                                                               | Def/CSI Criteria                                                                                                                                                                                                                                                   | Maximum Reactions (lbs)                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCLL: 40.00<br>TCDL: 10.00<br>BCLL: 0.00<br>BCDL: 5.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 0.00<br>Load Duration: 1.00<br>Spacing: 19.2 " | Wind Std: NA<br>Speed: NA mph<br>Enclosure: NA<br>Category: NA<br>EXP: NA Kzt: NA<br>Mean Height: NA ft<br>TCDL: NA psf<br>BCDL: NA psf<br>MWFRS Parallel Dist: NA<br>C&C Dist a: NA ft<br>Loc. from endwall: NA<br>I: NA GCpi: NA<br>Wind Duration: NA | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 7th Ed. 2020 Res.<br>TPI Std: 2014<br>Rep Fac: No<br>FT/RT: 12(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/def L/#<br>VERT(LL): 0.253 F 786 360<br>VERT(CL): 0.386 F 515 240<br>HORZ(LL): 0.038 B - -<br>HORZ(TL): 0.058 B - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.822<br>Max BC CSI: 0.737<br>Max Web CSI: 0.759<br><br>VIEW Ver: 20.02.00A.1020.20 | Gravity Non-Gravity<br>Loc R+ / R- / Rh / Rw / U / RL<br>V 1263 -/- -/- -/- -/-<br>L 1110 -/- -/- -/- -/- -/-<br>V Brg Width = 3.4 Min Req = 1.5<br>L Brg Width = 3.4 Min Req = 1.5<br>Bearings V & L are a rigid surface.<br>Members not listed have forces less than 375#<br><b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>B - C 0 - 2672 F - G 0 - 5286<br>C - D 0 - 4786 G - H 0 - 4110<br>D - E 0 - 6043 H - I 0 - 2306<br>E - F 0 - 6043 |

#### Lumber

Top chord: 4x2 SP #1;  
Bot chord: 4x2 SP SS Dense; B2, B4 4x2 SP #1;  
Webs: 4x2 SP #3;

#### Special Loads

----- (Lumber Dur. Fac. = 1.00 / Plate Dur. Fac. = 1.00)  
TC: From 80 plf at 0.12 to 80 plf at 16.85  
BC: From 8 plf at 0.00 to 8 plf at 16.98  
TC: 900 lb Conc. Load at 7.08

#### Plating Notes

All plates are 5X6 except as noted.

#### Additional Notes

See detail STRBR1014 for bracing and bridging recommendations.

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

Truss must be installed as shown with top chord up.

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data, including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.



COA #0 278

04/20/2021

#### \*\*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 SBCA) 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 of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

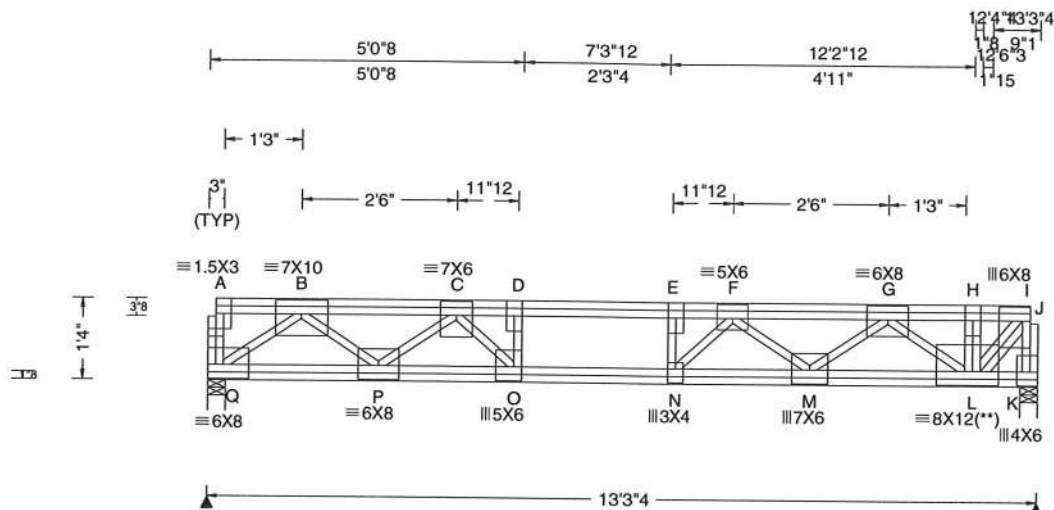
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For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcindustry.com](http://sbcindustry.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



6750 Forum Drive  
Suite 305  
Orlando FL, 32821

|                          |                |                  |                                                                                    |                                                                                     |
|--------------------------|----------------|------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SEQN: 44655<br>FROM: RJL | SY42<br>Qty: 1 | Ply: 1<br>Qty: 1 | Job Number: B53428a<br>ODUM RESIDENCE<br>Truss Label: F3 13'3"4 Floor Truss Girder | Cust: R 857 JRef: 1X4P8570011 T4<br>DrwNo: 110.21.0700.03417<br>SSB / DF 04/20/2021 |
|--------------------------|----------------|------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|



| Loading Criteria (psf)                                                                                                                            | Wind Criteria                                                                                                                                                                                                                                           | Snow Criteria (Pg, Pf in PSF)                                                                                                                                                                               | Def/CSI Criteria                                                                                                                                                                                                                                                    | ▲ Maximum Reactions (lbs)                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCLL: 40.00<br>TCDL: 10.00<br>BCLL: 0.00<br>BCDL: 5.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 0.00<br>Load Duration: 1.00<br>Spacing: 19.2" | Wind Std: NA<br>Speed: NA mph<br>Enclosure: NA<br>Category: NA<br>EXP: NA Kzt: NA<br>Mean Height: NA ft<br>TCDL: NA psf<br>BCDL: NA psf<br>MWFRS Parallel Dist: NA<br>C&C Dist a: NA ft<br>Loc. from endwall: NA<br>l: NA GCpi: NA<br>Wind Duration: NA | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 7th Ed. 2020 Res.<br>TPI Std: 2014<br>Rep Fac: No<br>FT/RT: 12(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.072 E 999 360<br>VERT(CL): 0.284 E 544 240<br>HORZ(LL): 0.011 L - -<br>HORZ(TL): 0.042 L - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.769<br>Max BC CSI: 0.908<br>Max Web CSI: 0.942<br><br>VIEW Ver: 20.02.00A.1020.20 | Gravity Non-Gravity<br>Loc R+ / R- / Rh / Rw / U / RL<br>Q 2163 -/- /- /- /- /-<br>K 2944 -/- /- /- /- /-<br>Q Brg Width = 3.4 Min Req = 1.5<br>K Brg Width = 3.4 Min Req = 1.5<br>Bearings Q & K are a rigid surface.<br>Members not listed have forces less than 375#<br><b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>B - C 0 - 3932 F - G 0 - 5288<br>C - D 0 - 6299 G - H 0 - 2191<br>D - E 0 - 6347 H - I 0 - 2191<br>E - F 0 - 6335 |

#### Lumber

Top chord: 4x2 SP SS Dense;  
Bot chord: 4x2 SP #1;  
Webs: 4x2 SP #3;

#### Special Loads

----- (Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)  
TC: From 315 plf at 0.12 to 315 plf at 13.15  
BC: From 8 plf at 0.00 to 8 plf at 13.27  
TC: 900 lb Conc. Load at 12.23

#### Plating Notes

All plates are 3X6 except as noted.

(\*\*) 1 plate(s) require special positioning. Refer to scaled plate plot details for special positioning requirements.

#### Deflection

Max JT VERT DEFL: LL: 0.07" DL: 0.22". See detail DEFLCMB1014 for camber recommendations.

#### Additional Notes

See detail STRBRIBR1014 for bracing and bridging recommendations.

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

Truss must be installed as shown with top chord up.

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data, including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.

#### Maximum Bot Chord Forces Per Ply (lbs)

| Chords | Tens.Comp. | Chords | Tens. Comp. |
|--------|------------|--------|-------------|
| Q - P  | 2437 0     | N - M  | 6252 0      |
| P - O  | 5474 0     | M - L  | 4222 0      |
| O - N  | 6347 0     |        |             |

#### Maximum Web Forces Per Ply (lbs)

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| Q - B | 0 - 3161   | M - G | 1410 0      |
| B - P | 1978 0     | G - L | 0 - 2586    |
| P - C | 0 - 2042   | H - L | 0 - 1208    |
| C - O | 1424 0     | L - I | 3540 0      |
| O - D | 0 - 913    | I - J | 0 - 2891    |
| N - F | 432 - 33   | J - K | 0 - 2907    |
| F - M | 0 - 1276   |       |             |



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04/20/2021

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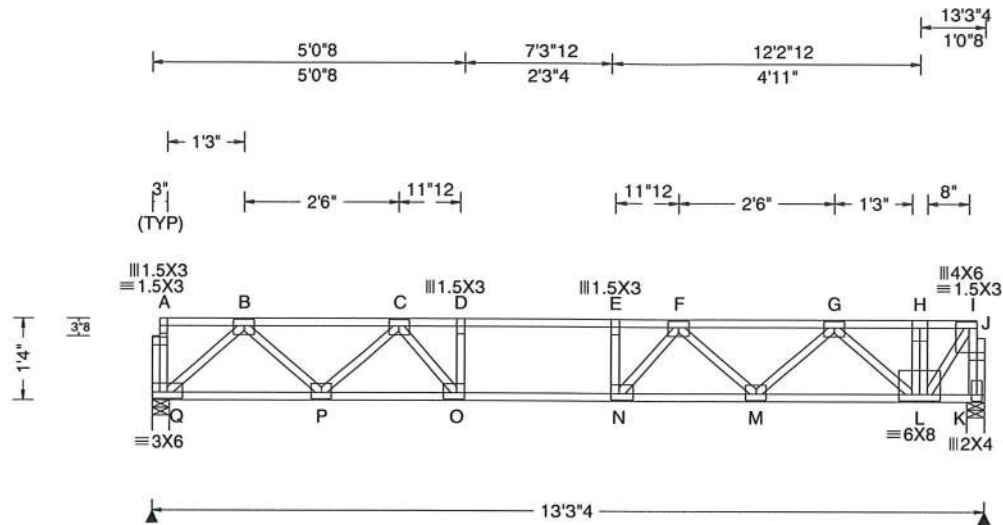
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821

|                          |      |                  |                                                                             |                                                                                    |
|--------------------------|------|------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| SEQN: 44652<br>FROM: RJL | SY42 | Ply: 1<br>Qty: 8 | Job Number: B53428a<br>ODUM RESIDENCE<br>Truss Label: F4 13'3"4 Floor Truss | Cust: R857 JRef: 1X4P8570011 T6<br>DrwNo: 110.21.0659.55667<br>SSB / DF 04/20/2021 |
|--------------------------|------|------------------|-----------------------------------------------------------------------------|------------------------------------------------------------------------------------|



| Loading Criteria (psf)                                                                                                                            | Wind Criteria                                                                                                                                                                                                                                           | Snow Criteria (Pg, Pf in PSF)                                                                                                                                                                               | Defl/CSI Criteria                                                                                                                                                                                                                                                   | Maximum Reactions (lbs)                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCLL: 40.00<br>TCDL: 10.00<br>BCLL: 0.00<br>BCDL: 5.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 0.00<br>Load Duration: 1.00<br>Spacing: 19.2" | Wind Std: NA<br>Speed: NA mph<br>Enclosure: NA<br>Category: NA<br>EXP: NA Kzt: NA<br>Mean Height: NA ft<br>TCDL: NA psf<br>BCDL: NA psf<br>MWFRS Parallel Dist: NA<br>C&C Dist a: NA ft<br>Loc. from endwall: NA<br>I: NA GCpi: NA<br>Wind Duration: NA | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 7th Ed. 2020 Res.<br>TPI Std: 2014<br>Rep Fac: No<br>FT/RT: 12(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.110 E 999 360<br>VERT(CL): 0.190 E 815 240<br>HORZ(LL): 0.016 L - -<br>HORZ(TL): 0.024 I - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.648<br>Max BC CSI: 0.692<br>Max Web CSI: 0.781<br><br>VIEW Ver: 20.02.00A.1020.20 | Gravity<br>Loc R+ / R- / Rh<br>Non-Gravity<br>/ Rw / U / RL<br>Q 633 -/- /- /- /- /-<br>K 1414 -/- /- /- /- /-<br>Q Brg Width = 3.4 Min Req = 1.5<br>K Brg Width = 3.4 Min Req = 1.5<br>Bearings Q & K are a rigid surface.<br>Members not listed have forces less than 375#<br><b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>B - C 0 -1054 F - G 0 -1644<br>C - D 0 -1753 G - H 0 -946<br>D - E 0 -1767 H - I 0 -946<br>E - F 0 -1767 |

#### Lumber

Top chord: 4x2 SP #1;  
Bot chord: 4x2 SP #1;  
Webs: 4x2 SP #3;

#### Special Loads

----- (Lumber Dur.Fac.=1.00 / Plate Dur.Fac.=1.00)  
TC: From 80 plf at 0.12 to 80 plf at 13.15  
BC: From 8 plf at 0.00 to 8 plf at 13.27  
TC: 900 lb Conc. Load at 12.23

#### Plating Notes

All plates are 3X4 except as noted.

#### Additional Notes

See detail STRBRIBR1014 for bracing and bridging recommendations.

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

Truss must be installed as shown with top chord up.

It is the responsibility of the Building Designer and Truss Fabricator to review this drawing prior to cutting lumber to verify that all data, including dimensions and loads, conform to the architectural plans/specifications and fabricators truss layout.



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#### Maximum Bot Chord Forces Per Ply (lbs)

| Chords | Tens.Comp. | Chords | Tens. Comp. |
|--------|------------|--------|-------------|
| Q - P  | 639 0      | N - M  | 1813 0      |
| P - O  | 1480 0     | M - L  | 1412 0      |
| O - N  | 1767 0     |        |             |

#### Maximum Web Forces Per Ply (lbs)

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| Q - B | 0 -868     | H - L | 0 -946      |
| B - P | 577 0      | L - I | 1640 0      |
| P - C | 0 -593     | I - J | 0 -1386     |
| C - O | 595 0      | J - K | 0 -1390     |
| G - L | 0 -621     |       |             |

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

**\*\*IMPORTANT\*\*** FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS

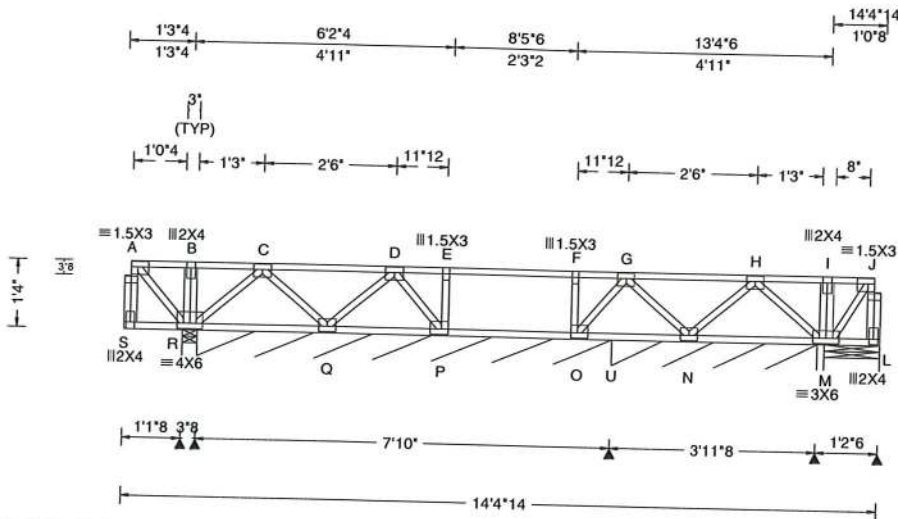
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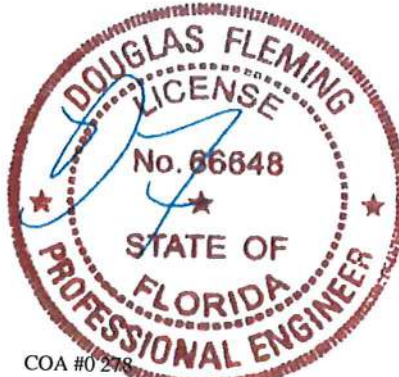


| Loading Criteria (psf)                                                                                                                            | Wind Criteria                                                                                                                                                                                                                                           | Snow Criteria (Pg, Pf in PSF)                                                                                                                                                                           | Defl/CSI Criteria                                                                                                                                                                                                                                                | Maximum Reactions (lbs), or *PLF                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCLL: 40.00<br>TCDL: 10.00<br>BCLL: 0.00<br>BCDL: 5.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 0.00<br>Load Duration: 1.00<br>Spacing: 19.2" | Wind Std: NA<br>Speed: NA mph<br>Enclosure: NA<br>Category: NA<br>EXP: NA Kzt: NA<br>Mean Height: NA ft<br>TCDL: NA psf<br>BCDL: NA psf<br>MWFRS Parallel Dist: NA<br>C&C Dist a: NA ft<br>Loc. from endwall: NA<br>I: NA GCpi: NA<br>Wind Duration: NA | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br>Building Code:<br>FBC 7th Ed. 2020 Res.<br>TPI Std: 2014<br>Rep Fac: No<br>FT/RT: 12(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.008 S 999 360<br>VERT(CL): 0.014 S 999 240<br>HORZ(LL): -0.003 A - -<br>HORZ(TL): 0.006 A - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.267<br>Max BC CSI: 0.053<br>Max Web CSI: 0.224<br>VIEW Ver: 20.02.00A.1020.20 | Gravity<br>Loc R+ / R- / Rh<br>Non-Gravity<br>/ Rw / U / RL<br>R 1097 /- /- /- /- /-<br>R* 68 /-4 /- /- /- /-<br>U* 45 /- /- /- /- /-<br>L 211 /- /- /- /- /-<br>R Brg Width = 3.5 Min Req = 1.5<br>R Brg Width = 94.0 Min Req = -<br>U Brg Width = 47.5 Min Req = -<br>L Brg Width = 12.9 Min Req = 1.5<br>Bearings R, R, U, & M are a rigid surface.<br>Members not listed have forces less than 375#<br>Maximum Top Chord Forces Per Ply (lbs)<br>Chords Tens.Comp. Chords Tens. Comp. |

**Lumber**  
Top chord: 4x2 SP #1;  
Bot chord: 4x2 SP #1;  
Webs: 4x2 SP #3;

**Plating Notes**  
All plates are 3X4 except as noted.

**Additional Notes**  
See detail STRBRIBR1014 for bracing and bridging recommendations.  
Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.  
This truss spaced @ 19.2" oc supports additional concentrated load at left end from 8.09' stud wall (13.75 PSF) supporting 13-6-0 roof spans with 1-4-0 overhang. Roof load: 20.00 psf LL and 17.00 psf DL.  
Truss must be installed as shown with top chord up.



COA #0 218  
04/20/2021

**Maximum Bot Chord Forces Per Ply (lbs)**  
Chords Tens.Comp.

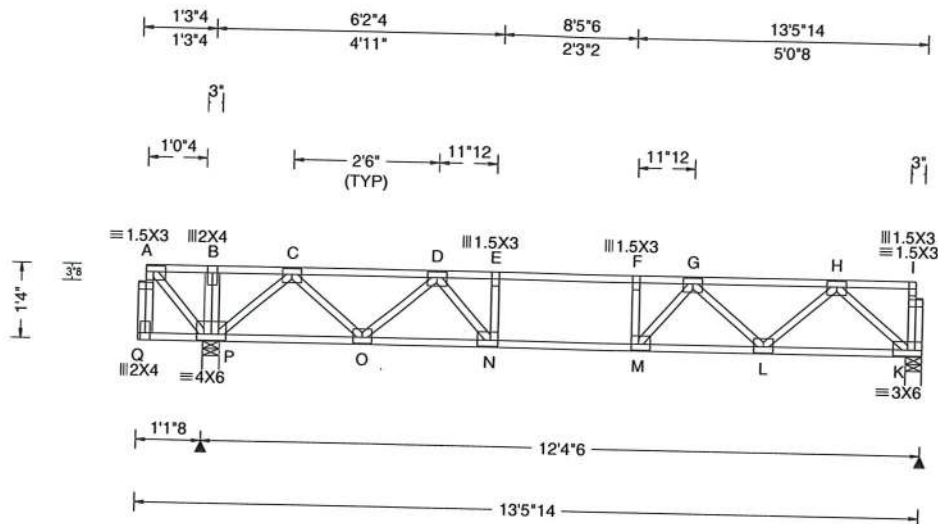
R - Q 8 -411

**Maximum Web Forces Per Ply (lbs)**  
Webs Tens.Comp. Webs Tens. Comp.  
A - R 0 -959 R - C 0 -426

**\*\*WARNING\*\*** READ AND FOLLOW ALL NOTES ON THIS DRAWING!  
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AN ITW COMPANY  
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Suite 305  
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|                          |      |                  |                                                                              |                                                                                    |
|--------------------------|------|------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------|
| SEQN: 44643<br>FROM: RJL | SY42 | Ply: 1<br>Qty: 2 | Job Number: B53428a<br>ODUM RESIDENCE<br>Truss Label: F6 13'5"14 Floor Truss | Cust: R 857 JRef: 1X4P8570011 T8<br>Dwno: 110.21.0659.52767<br>SSB / DF 04/20/2021 |
|--------------------------|------|------------------|------------------------------------------------------------------------------|------------------------------------------------------------------------------------|



| Loading Criteria (psf)                                                                                                                            | Wind Criteria                                                                                                                                                                                                                                           | Snow Criteria (Pg. Pf in PSF)                                                                                                                                                                               | Def/CSI Criteria                                                                                                                                                                                                                                                    | Maximum Reactions (lbs)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|---------|--|-------------|--|----|----|----|---|---|------|---|---|---|---|-----|---|---|---|---|-----------------|--|---------------|--|---|-----------------|--|---------------|--|----------------------------------------|--|--|--|--|--------|-------|-------|--------|-------------|-------|-----|---|-------|----------|-------|-----|---|-------|----------|-------|-----|------|-------|---------|-------|---|-------|--|--|
| TCLL: 40.00<br>TCDL: 10.00<br>BCLL: 0.00<br>BCDL: 5.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 0.00<br>Load Duration: 1.00<br>Spacing: 19.2" | Wind Std: NA<br>Speed: NA mph<br>Enclosure: NA<br>Category: NA<br>EXP: NA Kzt: NA<br>Mean Height: NA ft<br>TCDL: NA psf<br>BCDL: NA psf<br>MWFRS Parallel Dist: NA<br>C&C Dist a: NA ft<br>Loc. from endwall: NA<br>I: NA GCpi: NA<br>Wind Duration: NA | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 7th Ed. 2020 Res.<br>TPI Std: 2014<br>Rep Fac: No<br>FT/RT: 12(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/def L/#<br>VERT(LL): 0.057 F 999 360<br>VERT(CL): 0.109 F 999 240<br>HORZ(LL): -0.012 H - -<br>HORZ(TL): 0.022 H - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.771<br>Max BC CSI: 0.455<br>Max Web CSI: 0.249<br><br>VIEW Ver: 20.02.00A.1020.20 | <table border="1"> <thead> <tr> <th rowspan="2">Loc</th> <th colspan="2">Gravity</th> <th colspan="2">Non-Gravity</th> </tr> <tr> <th>R+</th> <th>R-</th> <th>Rw</th> <th>U</th> </tr> </thead> <tbody> <tr> <td>P</td> <td>1359</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>K</td> <td>506</td> <td>-</td> <td>-</td> <td>-</td> </tr> <tr> <td>P</td> <td colspan="2">Brg Width = 3.5</td> <td colspan="2">Min Req = 1.5</td> </tr> <tr> <td>K</td> <td colspan="2">Brg Width = 3.4</td> <td colspan="2">Min Req = 1.5</td> </tr> </tbody> </table> <p>Bearings P &amp; K are a rigid surface.<br/>Members not listed have forces less than 375#</p> <table border="1"> <thead> <tr> <th colspan="5">Maximum Top Chord Forces Per Ply (lbs)</th> </tr> <tr> <th>Chords</th> <th>Tens.</th> <th>Comp.</th> <th>Chords</th> <th>Tens. Comp.</th> </tr> </thead> <tbody> <tr> <td>A - B</td> <td>659</td> <td>0</td> <td>E - F</td> <td>0 - 1089</td> </tr> <tr> <td>B - C</td> <td>659</td> <td>0</td> <td>F - G</td> <td>0 - 1084</td> </tr> <tr> <td>C - D</td> <td>300</td> <td>-559</td> <td>G - H</td> <td>0 - 777</td> </tr> <tr> <td>D - E</td> <td>0</td> <td>-1079</td> <td></td> <td></td> </tr> </tbody> </table> | Loc | Gravity |  | Non-Gravity |  | R+ | R- | Rw | U | P | 1359 | - | - | - | K | 506 | - | - | - | P | Brg Width = 3.5 |  | Min Req = 1.5 |  | K | Brg Width = 3.4 |  | Min Req = 1.5 |  | Maximum Top Chord Forces Per Ply (lbs) |  |  |  |  | Chords | Tens. | Comp. | Chords | Tens. Comp. | A - B | 659 | 0 | E - F | 0 - 1089 | B - C | 659 | 0 | F - G | 0 - 1084 | C - D | 300 | -559 | G - H | 0 - 777 | D - E | 0 | -1079 |  |  |
| Loc                                                                                                                                               | Gravity                                                                                                                                                                                                                                                 |                                                                                                                                                                                                             | Non-Gravity                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
|                                                                                                                                                   | R+                                                                                                                                                                                                                                                      | R-                                                                                                                                                                                                          | Rw                                                                                                                                                                                                                                                                  | U                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| P                                                                                                                                                 | 1359                                                                                                                                                                                                                                                    | -                                                                                                                                                                                                           | -                                                                                                                                                                                                                                                                   | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| K                                                                                                                                                 | 506                                                                                                                                                                                                                                                     | -                                                                                                                                                                                                           | -                                                                                                                                                                                                                                                                   | -                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| P                                                                                                                                                 | Brg Width = 3.5                                                                                                                                                                                                                                         |                                                                                                                                                                                                             | Min Req = 1.5                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| K                                                                                                                                                 | Brg Width = 3.4                                                                                                                                                                                                                                         |                                                                                                                                                                                                             | Min Req = 1.5                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| Maximum Top Chord Forces Per Ply (lbs)                                                                                                            |                                                                                                                                                                                                                                                         |                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| Chords                                                                                                                                            | Tens.                                                                                                                                                                                                                                                   | Comp.                                                                                                                                                                                                       | Chords                                                                                                                                                                                                                                                              | Tens. Comp.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| A - B                                                                                                                                             | 659                                                                                                                                                                                                                                                     | 0                                                                                                                                                                                                           | E - F                                                                                                                                                                                                                                                               | 0 - 1089                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| B - C                                                                                                                                             | 659                                                                                                                                                                                                                                                     | 0                                                                                                                                                                                                           | F - G                                                                                                                                                                                                                                                               | 0 - 1084                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| C - D                                                                                                                                             | 300                                                                                                                                                                                                                                                     | -559                                                                                                                                                                                                        | G - H                                                                                                                                                                                                                                                               | 0 - 777                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |
| D - E                                                                                                                                             | 0                                                                                                                                                                                                                                                       | -1079                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |     |         |  |             |  |    |    |    |   |   |      |   |   |   |   |     |   |   |   |   |                 |  |               |  |   |                 |  |               |  |                                        |  |  |  |  |        |       |       |        |             |       |     |   |       |          |       |     |   |       |          |       |     |      |       |         |       |   |       |  |  |

#### Lumber

Top chord: 4x2 SP #1;  
Bot chord: 4x2 SP #1;  
Webs: 4x2 SP #3;

#### Plating Notes

All plates are 3X4 except as noted.

#### Additional Notes

See detail STBRIBR1014 for bracing and bridging recommendations.

Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

This truss spaced @ 19.2" oc supports additional concentrated load at left end from 8.09' stud wall (13.75 PSF) supporting 13-6-0 roof spans with 1-4-0 overhang. Roof load: 20.00 psf LL and 17.00 psf DL.

Truss must be installed as shown with top chord up.



COA #0 218

04/20/2021

#### \*\*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 SBCA) 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 of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.

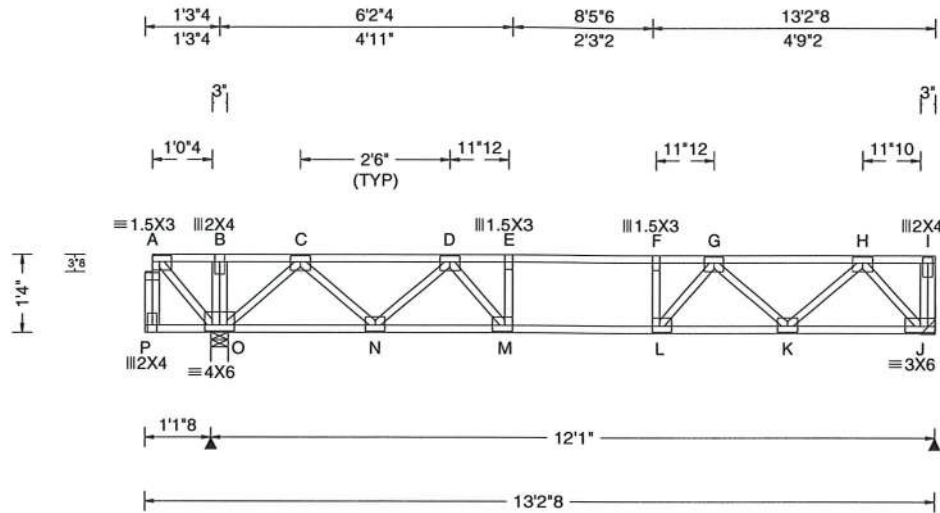
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCA: [sbcindustry.com](http://sbcindustry.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)



6750 Forum Drive  
Suite 305  
Orlando FL, 32821

|                          |                |        |                                                                             |                                                                                     |
|--------------------------|----------------|--------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SEQN: 44641<br>FROM: RJL | SY42<br>Qty: 7 | Ply: 1 | Job Number: B53428a<br>ODUM RESIDENCE<br>Truss Label: F7 13'2"8 Floor Truss | Cust: R 857 JRef: 1X4P8570011 T1<br>DrwNo: 110.21.0659.51047<br>SSB / DF 04/20/2021 |
|--------------------------|----------------|--------|-----------------------------------------------------------------------------|-------------------------------------------------------------------------------------|



| Loading Criteria (psf)                                                                                                                            | Wind Criteria                                                                                                                                                                                                                                           | Snow Criteria (Pg, Pf in PSF)                                                                                                                                                                               | Defl/CSI Criteria                                                                                                                                                                                                                                                    | ▲ Maximum Reactions (lbs)                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCLL: 40.00<br>TCDL: 10.00<br>BCLL: 0.00<br>BCDL: 5.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 0.00<br>Load Duration: 1.00<br>Spacing: 19.2" | Wind Std: NA<br>Speed: NA mph<br>Enclosure: NA<br>Category: NA<br>EXP: NA Kzt: NA<br>Mean Height: NA ft<br>TCDL: NA psf<br>BCDL: NA psf<br>MWFRS Parallel Dist: NA<br>C&C Dist a: NA ft<br>Loc. from endwall: NA<br>I: NA GCpi: NA<br>Wind Duration: NA | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br><br>Building Code:<br>FBC 7th Ed. 2020 Res.<br>TPI Std: 2014<br>Rep Fac: No<br>FT/RT: 12(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.049 F 999 360<br>VERT(CL): 0.094 F 999 240<br>HORZ(LL): -0.011 H - -<br>HORZ(TL): 0.021 H - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.717<br>Max BC CSI: 0.414<br>Max Web CSI: 0.241<br><br>VIEW Ver: 20.02.00A.1020.20 | Gravity<br>Loc R+ / R- / Rh<br>Non-Gravity<br>/ Rw / U / RL<br>O 1345 /- /- /- /- /-<br>J 495 /- /- /- /- /-<br>O Brg Width = 3.5 Min Req = 1.5<br>J Brg Width = - Min Req = -<br>Bearing O is a rigid surface.<br>Members not listed have forces less than 375#<br><b>Maximum Top Chord Forces Per Ply (lbs)</b><br>Chords Tens.Comp. Chords Tens. Comp.<br>A - B 659 0 E - F 0 -1018<br>B - C 659 0 F - G 0 -1013<br>C - D 305 -530 G - H 0 -666<br>D - E 5 -1010 |

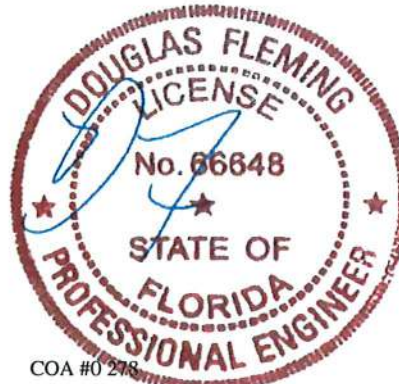
**Lumber**  
Top chord: 4x2 SP #1;  
Bot chord: 4x2 SP #1;  
Webs: 4x2 SP #3;

**Plating Notes**  
All plates are 3X4 except as noted.

**Hangers / Ties**  
(J) Hanger Support Required, by others

**Additional Notes**  
See detail STRBRIBR1014 for bracing and bridging recommendations.  
Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.

This truss spaced @ 19.2" oc supports additional concentrated load at left end from 8.09' stud wall (13.75 PSF) supporting 13-6-0 roof spans with 1-4-0 overhang. Roof load: 20.00 psf LL and 17.00 psf DL.  
Truss must be installed as shown with top chord up.



COA #02718  
04/20/2021

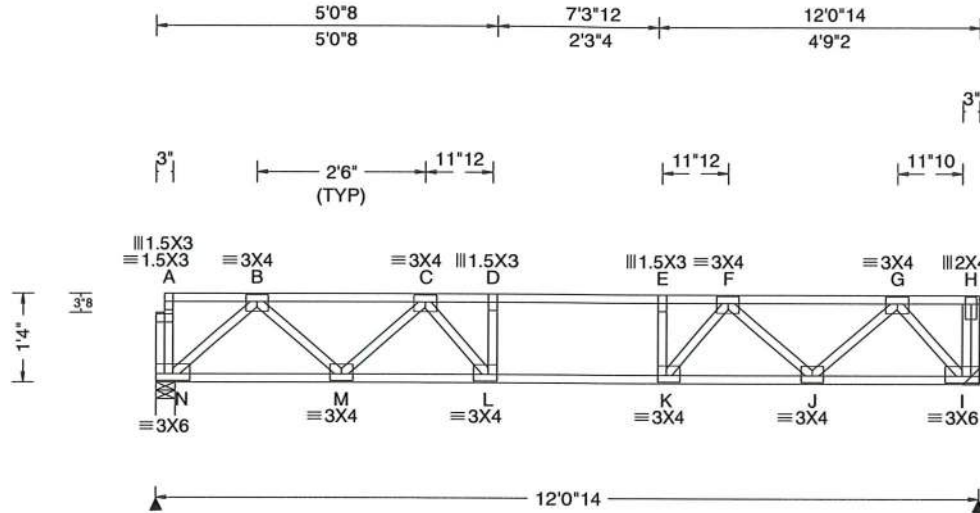
| Chords         | Tens.Comp. | Chords       | Tens. Comp. |
|----------------|------------|--------------|-------------|
| O - N 210 -459 |            | M - L 1018 0 |             |
| N - M 860 -144 |            | L - K 936 0  |             |

| Webs         | Tens.Comp. | Webs          | Tens. Comp. |
|--------------|------------|---------------|-------------|
| A - O 0 -958 |            | D - M 490 0   |             |
| O - C 0 -785 |            | G - K 12 -376 |             |
| C - N 506 0  |            | K - H 414 0   |             |
| N - D 0 -512 |            | H - J 0 -592  |             |

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AN ITW COMPANY  
6750 Forum Drive  
Suite 305  
Orlando FL, 32821

**\*\*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 SBCEA) 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 of webs shall have bracing installed per BCSI sections B3, B7, or B10, as applicable. Apply plates to each face of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions. Refer to job's General Notes page for additional information.  
Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation and bracing of trusses. 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 drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.  
For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpinst.org](http://tpinst.org); SBCEA: [sbceaindustry.com](http://sbceaindustry.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)

|                          |                |        |                                                                              |                                                                                     |
|--------------------------|----------------|--------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| SEQN: 44646<br>FROM: RJL | SY42<br>Qty: 3 | Ply: 1 | Job Number: B53428a<br>ODUM RESIDENCE<br>Truss Label: F8 12'0"14 Floor Truss | Cust: R 857 JRef: 1X4P8570011 T2<br>DrwNo: 110.21.0659.49257<br>SSB / DF 04/20/2021 |
|--------------------------|----------------|--------|------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|



| Loading Criteria (psf)                                                                                                                            | Wind Criteria                                                                                                                                                                                                                                           | Snow Criteria (Pg, Pf in PSF)                                                                                                                                                                           | Def/CSI Criteria                                                                                                                                                                                                                                                | Maximum Reactions (lbs)                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| TCLL: 40.00<br>TCCL: 10.00<br>BCLL: 0.00<br>BCDL: 5.00<br>Des Ld: 55.00<br>NCBCLL: 10.00<br>Soffit: 0.00<br>Load Duration: 1.00<br>Spacing: 19.2" | Wind Std: NA<br>Speed: NA mph<br>Enclosure: NA<br>Category: NA<br>EXP: NA Kzt: NA<br>Mean Height: NA ft<br>TCCL: NA psf<br>BCDL: NA psf<br>MWFRS Parallel Dist: NA<br>C&C Dist a: NA ft<br>Loc. from endwall: NA<br>I: NA GCpi: NA<br>Wind Duration: NA | Pg: NA Ct: NA CAT: NA<br>Pf: NA Ce: NA<br>Lu: NA Cs: NA<br>Snow Duration: NA<br>Building Code:<br>FBC 7th Ed. 2020 Res.<br>TPI Std: 2014<br>Rep Fac: No<br>FT/RT: 12(0)/10(0)<br>Plate Type(s):<br>WAVE | PP Deflection in loc L/defl L/#<br>VERT(LL): 0.053 D 999 360<br>VERT(CL): 0.086 D 999 240<br>HORZ(LL): 0.013 B - -<br>HORZ(TL): 0.022 B - -<br>Creep Factor: 2.0<br>Max TC CSI: 0.481<br>Max BC CSI: 0.359<br>Max Web CSI: 0.221<br>VIEW Ver: 20.02.00A.1020.20 | Gravity<br>Loc R+ / R- / Rh<br>N 518 /- /- /- /- /-<br>I 534 /- /- /- /- /-<br>N Brg Width = 3.4 Min Req = 1.5<br>I Brg Width = - Min Req = -<br>Bearing N is a rigid surface.<br>Members not listed have forces less than 375#<br>Maximum Top Chord Forces Per Ply (lbs)<br>Chords Tens.Comp. Chords Tens. Comp.<br>B - C 0 -823 E - F 0 -1190<br>C - D 0 -1192 F - G 0 -732<br>D - E 0 -1198 |

#### Lumber

Top chord: 4x2 SP #1;  
Bot chord: 4x2 SP #1;  
Webs: 4x2 SP #3;

#### Hangers / Ties

(J) Hanger Support Required, by others

#### Additional Notes

See detail STRBRI1014 for bracing and bridging recommendations.  
Deflection estimate assumes composite action with single layer of the appropriate span rated glue-nailed wood sheathing.  
Truss must be installed as shown with top chord up.

#### Maximum Bot Chord Forces Per Ply (lbs)

| Chords | Tens.Comp. | Chords | Tens. Comp. |
|--------|------------|--------|-------------|
| N - M  | 516 0      | K - J  | 1051 0      |
| M - L  | 1103 0     | J - I  | 398 0       |
| L - K  | 1198 0     |        |             |

#### Maximum Web Forces Per Ply (lbs)

| Webs  | Tens.Comp. | Webs  | Tens. Comp. |
|-------|------------|-------|-------------|
| N - B | 0 -702     | F - J | 0 -444      |
| B - M | 426 0      | J - G | 464 0       |
| M - C | 0 -389     | G - I | 0 -641      |



COA #0278  
04/20/2021

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

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For more information see these web sites: Alpine: [alpineitw.com](http://alpineitw.com); TPI: [tpiinst.org](http://tpiinst.org); SBCA: [sbcindustry.com](http://sbcindustry.com); ICC: [iccsafe.org](http://iccsafe.org); AWC: [awc.org](http://awc.org)

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Suite 305  
Orlando FL, 32821

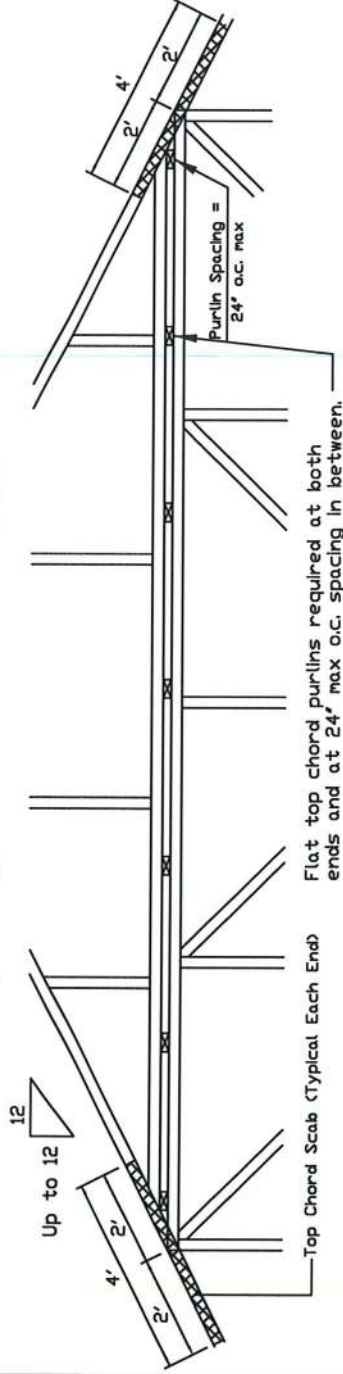
# Piggyback Detail - ASCE 7-16: 160 mph, 30' Mean Height, Enclosed, Exposure C, Kzt=1.00

160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg, located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0, Dr 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg, located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

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. Maximum truss spacing is 24' o.c. detail is not applicable if cap supports additional loads such as cupola, steeple, chimney or drag strut loads.

Refer to Engineer's sealed truss design drawing for piggyback and base truss specifications.

## Detail A : Purlin Spacing = 24" o.c. or less



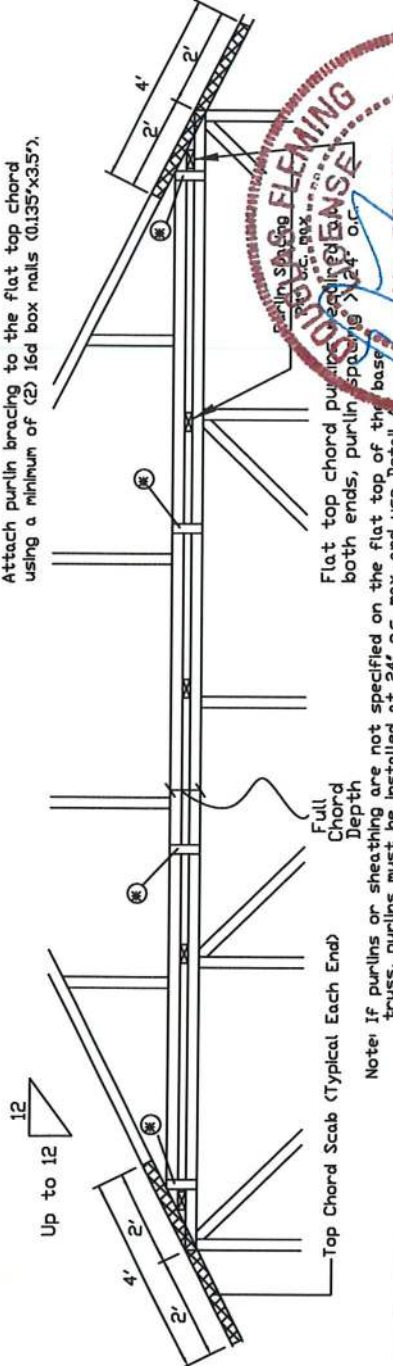
Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with 2 rows of 10d box nails (0.128"x3") at 4" o.c.

Attach purlin bracing to the flat top chord using (2) 16d box nails (0.135"x3.5").

The top chord #3 grade 2x4 scab may be replaced with either of the following: (1) 3X8 Trulox plate attached with (8) 0.120"x1.375" nails, (4) into cap TC & (4) into base truss TC or (2) 28PB wave piggyback plate attached to the piggyback truss TC and attached to the base truss TC with (4) 0.120"x1.375" nails. Note: Nailing thru holes of wave plate is acceptable.

## Detail B : Purlin Spacing > 24" o.c.

Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") 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"x3") at 4" o.c. Attach purlin bracing to the flat top chord using a minimum of (2) 16d box nails (0.135"x3.5").



Note: If purlins or sheathing are not specified on the flat top of the base truss, purlins must be installed at 24' o.c. max. and use Detail A.

✱ In addition, provide connection with one of the following methods:

**Trulox**  
Use 3X8 Trulox plates for 2x4 chord member, and 3X10 Trulox plates for 2x6 and larger chord members. Attach to each face @ 8" o.c. with (4) 0.120"x1.375" nails into cap bottom chord and (4) in base truss top chord. Trulox plates may be staggered 4' o.c. front to back faces.

**APA Rated Gusset**  
8"x8"x7/16" (min) APA rated sheathing gussets (each face). Attach @ 8" o.c. with (8) 6d common (0.113"x2") nails per gusset; (4) in cap bottom chord and (4) in base truss top chord. Gussets may be staggered 4' o.c. front to back faces.

**2x4 Vertical Scabs**  
2x4 SPF #2, full chord depth scabs (each face). Attach @ 8" o.c. with (6) 10d box nails (0.128"x3") per scab, (3) in cap bottom chord and (3) in base truss top chord. Scabs may be staggered 4' o.c. front to back faces.

**28PB Wave Piggyback Plate**  
One 28PB wave piggyback plate to each face @ 8" o.c. Attach teeth to piggyback at line of connection. Attach to supporting truss with (4) 0.120"x1.375" nails per face per ply. Piggyback plates may be staggered 4' o.c. front to back faces.

**ALPINE**  
AN ITW COMPANY

11 13723 Riverport Drive  
11 Suite 200  
11 Maryland Heights, MO 63043

**IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING**

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of ITW Building Components Safety Information, by TPI and SBCA for safety instructions. Truss installers shall provide temporary bracing and bracing details. Truss installers shall provide bracing details for permanent lateral bracing of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 160H-2 for standard plate positions.

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**UNIVERSITY OF FLORIDA**  
No. 66648  
04/28/2012

**FLORIDA ENGINEER**  
No. 66648  
04/28/2012

REF PIGGYBACK

DATE 01/02/2018

DRWG PBI60160118

SPACING 24.0'

Piggyback Detail - ASCE 7-16: 180 mph, 30' Mean Hgt, Partially Enclosed, Exp. C, Kzt=1.00

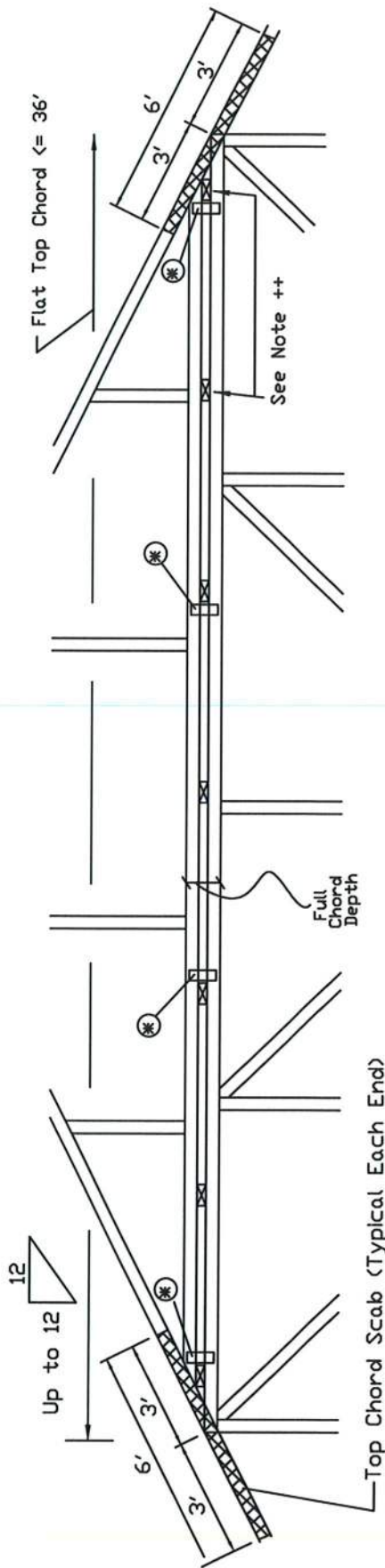
180 mph Wind, 30.00 ft Mean Hgt, ASCE 7-16, Part. Enclosed Bldg. located anywhere in roof, Exp C, Wind DL= 5.0 psf (nh), Kzt=1.0.  
Dr 160 mph wind, 30.00 ft Mean Hgt, ASCE 7-16, Part. Enclosed Bldg. located anywhere in roof, Exp D, wind DL= 5.0 psf (nh), Kzt=1.0.

Note: Top chords of trusses supporting pigg/back 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 piggback and base truss specifications.

Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") 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"x3") at 4' o.c.

++ 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 (0.135"x3.5").



■ In addition, provide connection with one of the following methods:

|                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>Trulox</b></p> <p>Use 3X8 Trulox plates for 2x4 chord member, and 3X10 Trulox plates for 2x6 and larger chord members. Attach to each face @ 8' o.c. with (4) 0.120"x1.375" nails into cap bottom chord and (4) in base truss top chord. Trulox plates may be staggered 4' o.c. front to back faces.</p> | <p><b>28PB Wave Playback Plate</b></p> <p>One 28PB wave playback plate to each face @ 8' o.c. Attach length to playback at time of fabrication. Attach to supporting truss with (4) 0.120"x1.375" nails per face per ply. Playback plates may be staggered 4' o.c. front to back faces.</p> |
| <p><b>APA Rated Gusset</b></p> <p>8"x8"x7/16" (min) APA rated sheathing gussets (each face). Attach @ 8' o.c. with (8) ed common (0.113"x2") nails per gusset (4) in cap bottom chord and (4) in base truss top chord. Gussets may be staggered 4' o.c. front to back faces.</p>                               | <p><b>2x4 Vertical Scabs</b></p> <p>2x4 SPF #2, full chord depth scabs (each face). Attach @ 8' o.c. with (6) 10d box nails (0.128"x3") per scab. Attach cap bottom chord and (3) in base truss top chord. Scabs may be staggered 4' o.c. front to back faces.</p>                          |



AN ITW COMPANY

115141 Earth City Expressway  
 115141 Earth City, MO 63045

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**IMPORTANT: READ AND FILL IN ALL NOTES ON THIS DRAWING**

Trussers require extreme care in fabricating, shipping, installing and erecting. Follow the latest edition of BCSI Guiding Component Safety Practices (BCSI GCPSP) prior to performing these functions. Installers shall provide temporary bracing per BCSI. Unless properly attached and braced, top chord shall have Locations shown for permanent lateral restraint. The locations shall be as shown above and on the Job. Details, unless noted otherwise. Refer to drawings 160A-Z for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installation, erection or bracing of trusses.

The undersigned hereby certifies that the undersigned is the responsible professional engineering responsibility solely for the design shown. The authority of the design for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see this job's general notes page and these web sites

NO. 00049

STATE OF FLORIDA

PROFESSIONAL ENGINEER

00049-00078

SPACING 24.0"

REF PIGGYBACK

DATE 01/02/2018

DRWG PB180160118

# Cracked or Broken Member Repair Detail

This drawing specifies repairs for a truss with broken chord or web member.

This design is valid only for single ply trusses with 2x4 or 2x6 broken members. No more than one break per chord panel and no more than two breaks per truss are allowed. Contact the truss manufacturer for any repairs that do not comply with this detail.

(B) = Damaged area, 12' max length of damaged section  
(L) = Minimum nailing distance on each side of damaged area (B)  
(S) = Two 2x4 or two 2x6 side members, same size, grade, and species as damaged member. Apply one scab per face. Minimum side member length(s) = (2xL) + (B)

Scab member length (S) must be within the broken panel.

Nail into 2x4 members using two (2) rows at 4' o.c., rows staggered.

Nail into 2x6 members using three (3) rows at 4' o.c., rows staggered.

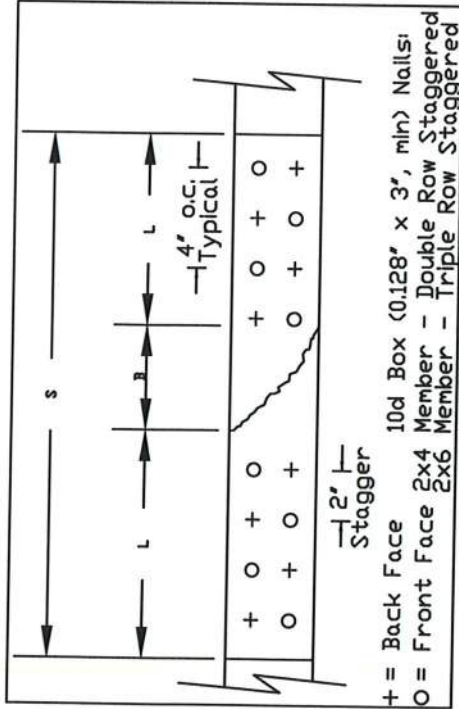
Nail using 10d box or gun nails (0.128"x3", min) into each side member.

The maximum permitted lumber grade for use with this detail is limited to Visual Grade #1 and MSR grade 1650F.

This repair detail may be used for broken connector plate at mid-panel splices.

This repair detail may not be used for damaged chord or web sections occurring within the connector plate area.

Broken chord may not support any tie-in loads.



Nail Spacing Detail

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11514 Earth City Expressway  
11 Suite 242  
11 Earth City, MO 63045

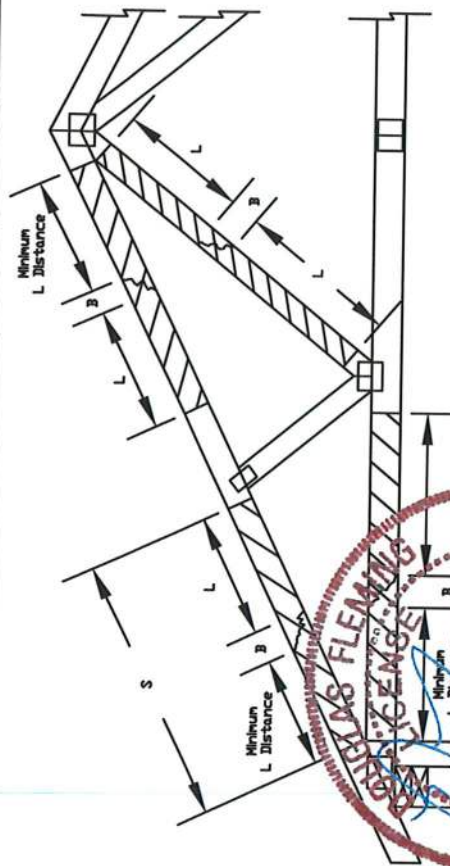
**IMPORTANT! READ AND FOLLOW ALL NOTES ON THIS DRAWING**  
FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLER.  
Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of ICCI Guiding Component Safety Information, by TPI and ICCI for safety instructions. Perform these functions. Installers shall provide temporary bracing per ICCI. Unless noted otherwise, all members shall have properly attached structural sheathing and bracing. Trusses shall have bracing installed per ICCI sections 32, 37 or 38, as applicable. Apply plates to end of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 10d-2 for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation or error in this drawing or any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installing, or bracing. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The suitability of the design for any structure is the responsibility of the Building Designer per ANSI/TPI 1, Sec.2.

For more information see this job's general notes page and these web sites:  
ALPINE: [www.alpineinc.com](http://www.alpineinc.com) TPI: [www.tpiindustry.org](http://www.tpiindustry.org) ICCI: [www.icciusa.org](http://www.icciusa.org)

Load Duration = 0%  
Member forces may be increased for Duration of Load

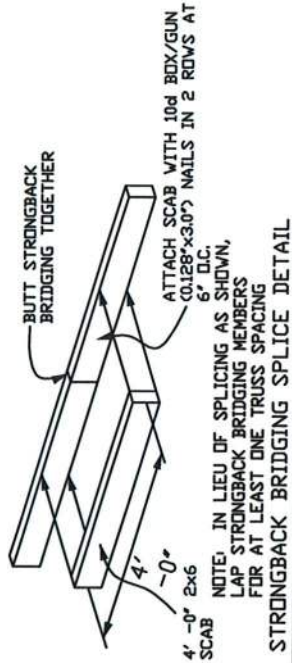
| Maximum Member Axial Force |      |     |       |       |       |       |
|----------------------------|------|-----|-------|-------|-------|-------|
| Member                     | Size | L   | SPF-C | HF    | DF-L  | SYP   |
| Web Only                   | 2x4  | 12' | 620#  | 635#  | 730#  | 800#  |
| Web Only                   | 2x4  | 18' | 975#  | 1055# | 1295# | 1415# |
| Web or Chord               | 2x4  | 24' | 975#  | 1055# | 1495# | 1745# |
| Web or Chord               | 2x6  |     | 1465# | 1585# | 2245# | 2620# |
| Web or Chord               | 2x4  | 30' | 1910# | 1960# | 2315# | 2555# |
| Web or Chord               | 2x6  |     | 2230# | 2365# | 3125# | 3575# |
| Web or Chord               | 2x4  | 36' | 2470# | 2530# | 2930# | 3210# |
| Web or Chord               | 2x6  |     | 3535# | 3635# | 4295# | 4745# |
| Web or Chord               | 2x4  | 42' | 2975# | 3045# | 3505# | 3835# |
| Web or Chord               | 2x6  |     | 4395# | 4500# | 5225# | 5725# |
| Web or Chord               | 2x4  | 48' | 3460# | 3540# | 4070# | 4445# |
| Web or Chord               | 2x6  |     | 5165# | 5280# | 6095# | 6660# |



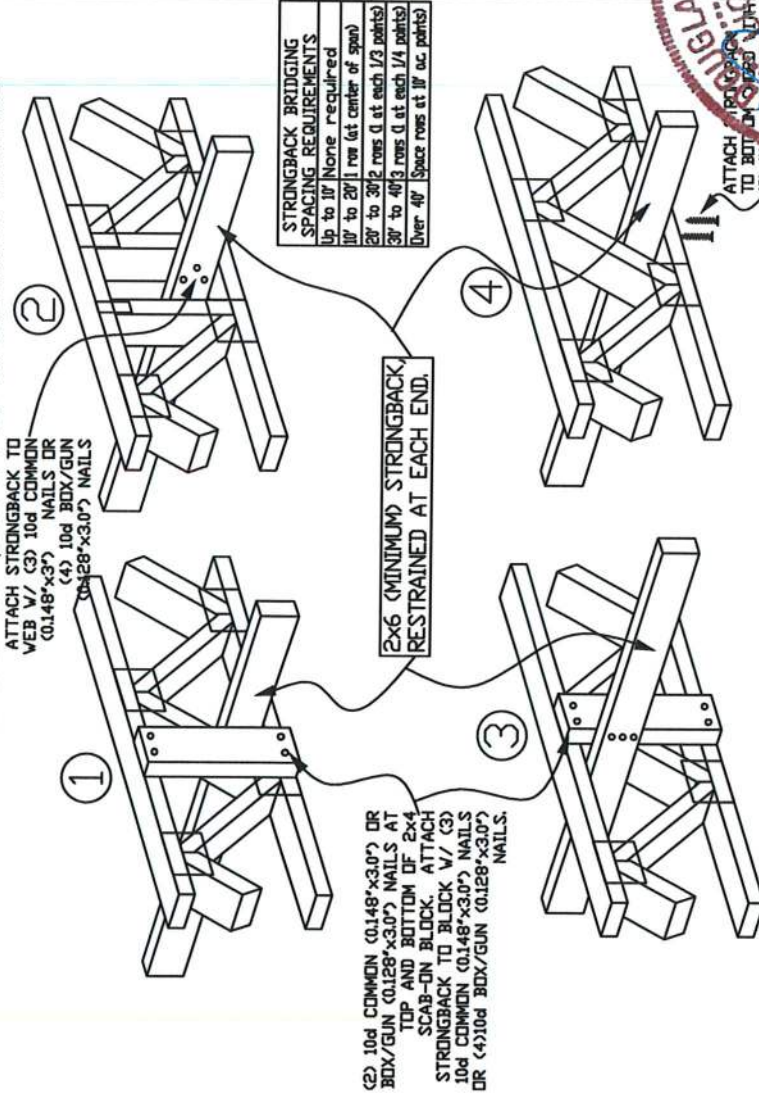
|         |               |
|---------|---------------|
| REF     | MEMBER REPAIR |
| DATE    | 10/01/14      |
| DRWG    | REPCHRD1014   |
| SPACING | 24.0" MAX     |



# STRONGBACK BRIDGING RECOMMENDATIONS



NOTE: Details 1 and 2 are the preferred attachment methods



- All scab-on blocks shall be a minimum 2x4 "stress graded lumber."
- All strongback bridging and bracing shall be a minimum 2x6 "stress graded lumber."
- The purpose of strongback bridging is to develop load sharing between individual trusses, resulting in an overall increase in the stiffness of the floor system. 2x6 strongback bridging, positioned as shown in details, is recommended at 10' - 0" o.c. (max.)

The terms "bridging" and "bracing" are sometimes mistakenly used interchangeably. "Bracing" is an important structural requirement of any floor or roof system. Refer to the Truss Design Drawing (TDD) for the bracing requirements for each individual truss component. "Bridging," particularly "strongback bridging" is a recommendation for a truss system to help control vibration. In addition to aiding in the distribution of point loads between adjacent truss, strongback bridging serves to reduce "bounce" or residual vibration resulting from moving point loads, such as footsteps.

The performance of all floor systems are enhanced by the installation of strongback bridging and therefore is strongly recommended by Alpine.

For additional information regarding strongback bridging, refer to BCSI (Building Component Safety Information).

## STRONGBACK BRIDGING ATTACHMENT ALTERNATIVES

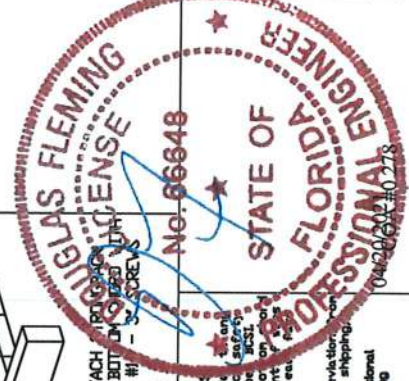
IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING. FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLER. Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of BCSI Guiding Component Safety Information, by TPI and SCSA for proper practices. Trusses shall be braced in accordance with the BCSI Guiding Component Safety Information. Unless noted otherwise, top chord shall have temporary bracing per BCSI. Trusses shall have a properly attached rigid ceiling. Locations shown for permanent bracing and for truss bracing shall be installed per BCSI sections 83, 97 or 310, as applicable. Apply plates to end of truss and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 1004-2 for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from this drawing. The user of this drawing shall be responsible for the installation and bracing of trusses. A seal on this drawing or cover page listing this drawing, indicates acceptance of professional engineering responsibility solely for the design shown. The authority and use of this drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

For more information see this job's general notes page and these web sites:  
ALPINE: [www.alpineinc.com](http://www.alpineinc.com) TPI: [www.tpi.org](http://www.tpi.org) SCSA: [www.scsa.org](http://www.scsa.org) BCSI: [www.bcsi.org](http://www.bcsi.org)

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AN ITW COMPANY  
11514 Earth City Expressway  
Suite 242  
Earth City, MO 63045

|           |      |      |            |
|-----------|------|------|------------|
| TC LL     | PSF  | REF  | STRONGBACK |
| TC DL     | PSF  | DATE | 10/01/14   |
| BC DL     | PSF  | DRWG | STRBTR1014 |
| BC LL     | PSF  |      |            |
| TOT. LD.  | PSF  |      |            |
| DUR. FAC. | 1.00 |      |            |
| SPACING   |      |      |            |



## Commentary:

Camber may be built into trusses to compensate for the vertical deflection that results from the application of loads. Providing camber has the following advantages:

- Helps to ensure level ceilings and floors after dead loads are applied.
- Facilitates drainage to avoid ponding on flat or low slope roofs.
- Compensates for different deflection characteristics between adjacent trusses.
- Improves appearance of garage door headers and other long spans that can appear to 'sag.'
- Avoids 'dips' in roof ridgelines at the transition from the gable to adjacent clear span trusses.

In accordance with ANSI/TPI 1 the Building Designer, through the Construction Documents, shall provide the location, direction, and magnitude of all loads attributable to ponding that may occur due to the design of the roof drainage system. The Building Designer shall also specify any dead load, live load, and in-service creep deflection criteria for flat or low-slope roofs subject to ponding loads.

The amount of camber is dependent on the truss type, span, loading, application, etceteras.

More restrictive limits for allowable deflection and slenderness ratio (L/D) may be required to help control vibration.

The following tables are provided as guidelines for limiting deflection and estimating camber. Conditions or codes may exist that require exceeding these recommendations, or past experience may warrant using more stringent limitations.

## Deflection and Camber

L = Span of Truss (inches)  
D = Depth of Truss at Deflection Point (inches)

### Recommended Truss Deflection Limits

| Truss Type                           | L/D | Live Load          | Deflection Limits  | Total Load |
|--------------------------------------|-----|--------------------|--------------------|------------|
| Pitched Roof Trusses                 | 24  | L/240 (vertical)   | L/180 (vertical)   |            |
| Floor of Room-In-Attic Trusses       | 24  | L/360 (vertical)   | L/240 (vertical)   |            |
| Flat or Shallow Pitched Roof Trusses | 24  | L/360 (vertical)   | L/240 (vertical)   |            |
| Residential Floor Trusses            | 24  | L/360 (vertical)   | L/240 (vertical)   |            |
| Commercial Floor Trusses             | 20  | L/480 (vertical)   | L/240 (vertical)   |            |
| Scissors Trusses                     | 24  | 0.75' (horizontal) | 1.25' (horizontal) |            |

### Recommended Camber

|                                |                                                                          |
|--------------------------------|--------------------------------------------------------------------------|
| Pitched Trusses                | 1.00 x Deflection from Actual Dead Load                                  |
| Sloping Parallel Chord Trusses | 1.5 x Vertical Deflection from Actual Dead Load                          |
| Floor Trusses                  | (0.25 x Deflection from Live Load) + Actual Dead Load                    |
| Flat Roof Trusses              | (0.25 x Deflection from Live Load) + (1.5 x Design Dead Load Deflection) |

Note: The actual dead load may be considerably less than the design-dead load.

IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING

Trusses require extreme care in fabricating, handling, shipping, installing and bracing. Refer to the latest edition of BCSI Building Component Safety Information, by TPI and SCSA for safety instructions. Trusses are designed to be installed in a vertical position. Trusses shall have a properly attached rigid ceiling, wall, floor joist and roof joist. Trusses shall have bracing installed per BCSI sections 32, 37 or 310, as applicable. Apply plates to ends of trusses and position as shown above and on the Joint Details, unless noted otherwise. Refer to drawings 1604-2 for standard plate positions.

Alpine, a division of ITW Building Components Group Inc. shall not be responsible for any deviation from the instructions, any failure to build the truss in conformance with ANSI/TPI 1, or for handling, shipping, installing, or any other use of the truss. 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 drawing for any structure is the responsibility of the Building Designer per ANSI/TPI 1 Sec.2.

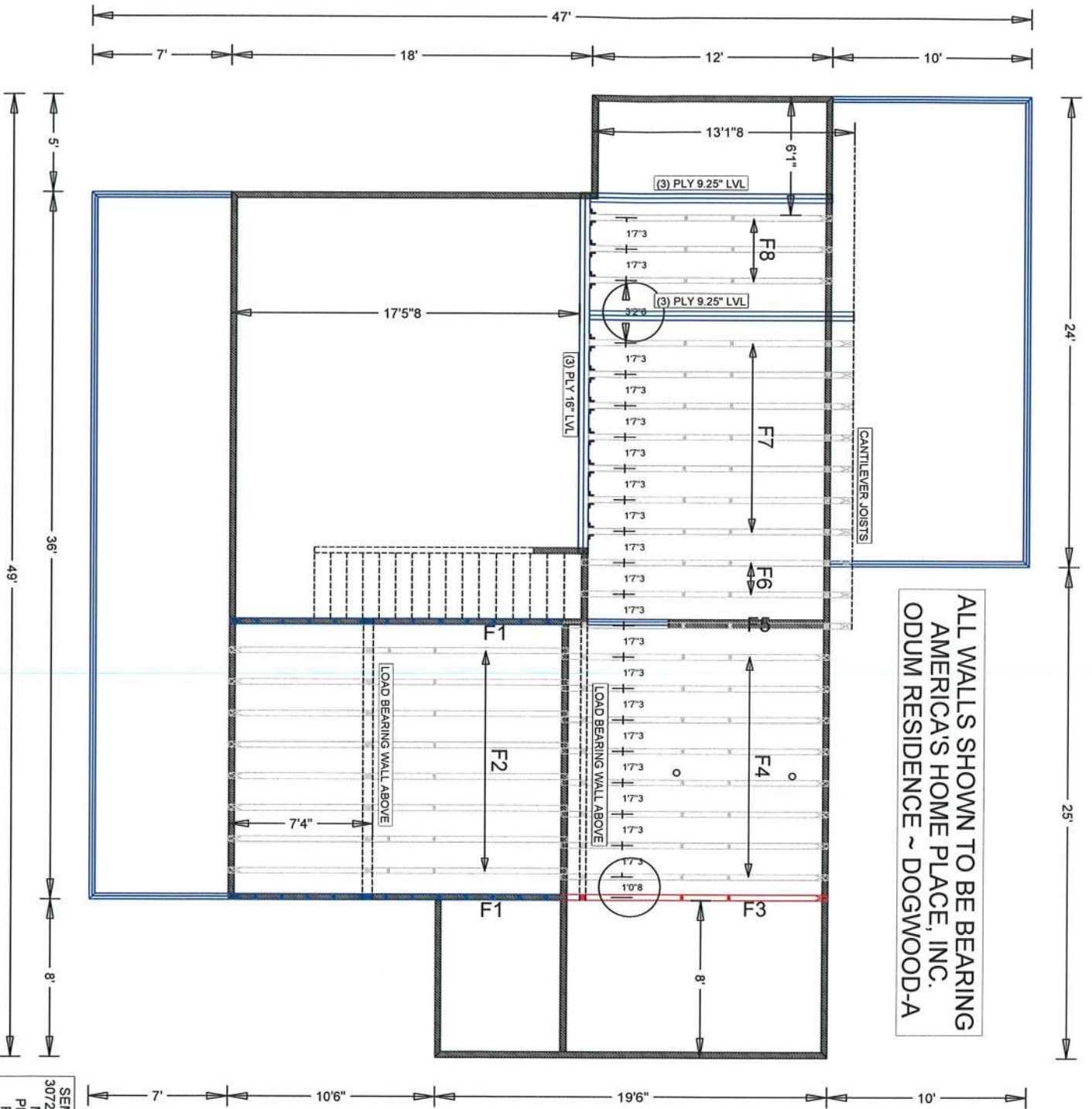
For more information see this job's general notes page and these web sites:  
ALPINE: [www.alpinehuts.com](http://www.alpinehuts.com) TPI: [www.tpiinc.org](http://www.tpiinc.org) SCSA: [www.scsaindustry.org](http://www.scsaindustry.org) IBC: [www.iccsa.org](http://www.iccsa.org)

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115141 Earth City Expressway  
11 Suite 242  
11 Earth City, MO 63045



|      |              |
|------|--------------|
| REF  | DEFLEC/CAMB  |
| DATE | 10/01/14     |
| DRWG | DEFLCAMB1014 |



SEMINOLE TRUSSES INC.  
30726 Bluestar Memorial Hwy.  
MIDWAY FL 32343  
Phone (850) 575-0102  
Fax (850) 575-4413  
Design By Robert J. Little

Job Name: ODUM RESIDENCE  
Customer: America's Home Place  
Designer: ROBERT J. LITTLE  
PlanName: DOGWOOD-A  
Created : 04-20-2021  
SemRef# : B53428a

JOB NO:  
B53428a

PAGE NO:  
1 OF 1