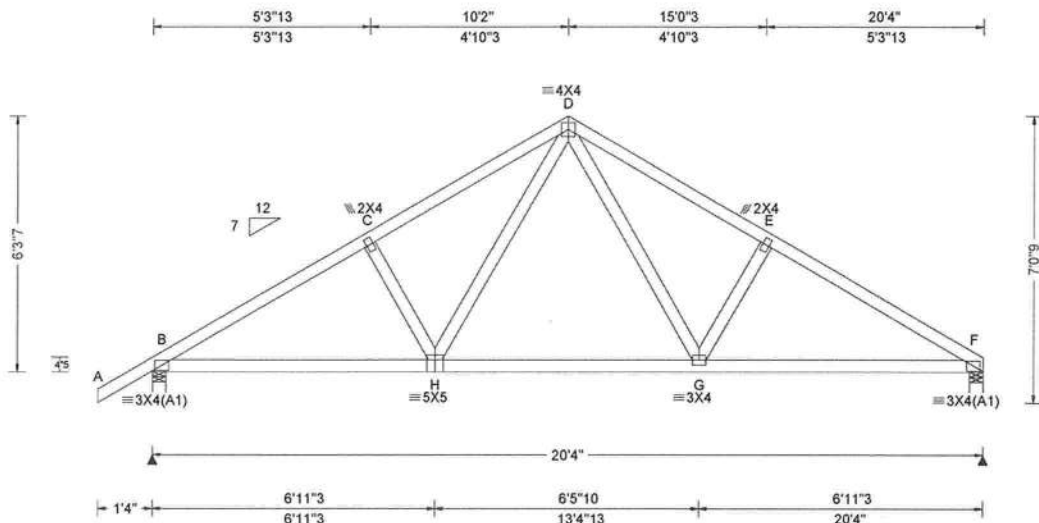


SEQN: 636331 FROM: CDM	SPEC Qty: 3	Ply: 1 Arata Truss Label: B03	Job Number: 21-5954 Cust: R 215 JRef: 1X9O2150001 T1 DrwNo: 288.21.0914.11353 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.00 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.039 H 999 240 VERT(CL): 0.076 H 999 180 HORZ(LL): 0.016 F - - HORZ(TL): 0.032 F - - Creep Factor: 2.0 Max TC CSI: 0.257 Max BC CSI: 0.469 Max Web CSI: 0.188  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh Non-Gravity / Rw / U / RL B 982 /- /- /563 /16 /177 F 884 /- /- /486 /9 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 F Brg Width = 4.0 Min Req = 1.5 Bearings B & F are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 255 - 1365 D - E 294 - 1232 C - D 289 - 1218 E - F 261 - 1378

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Loading

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

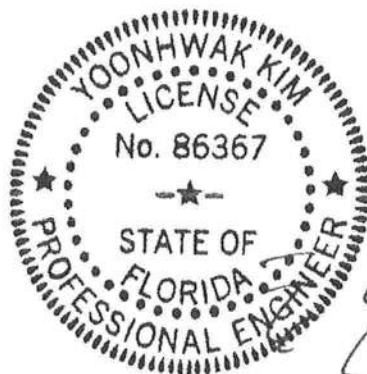
#### Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 6-3-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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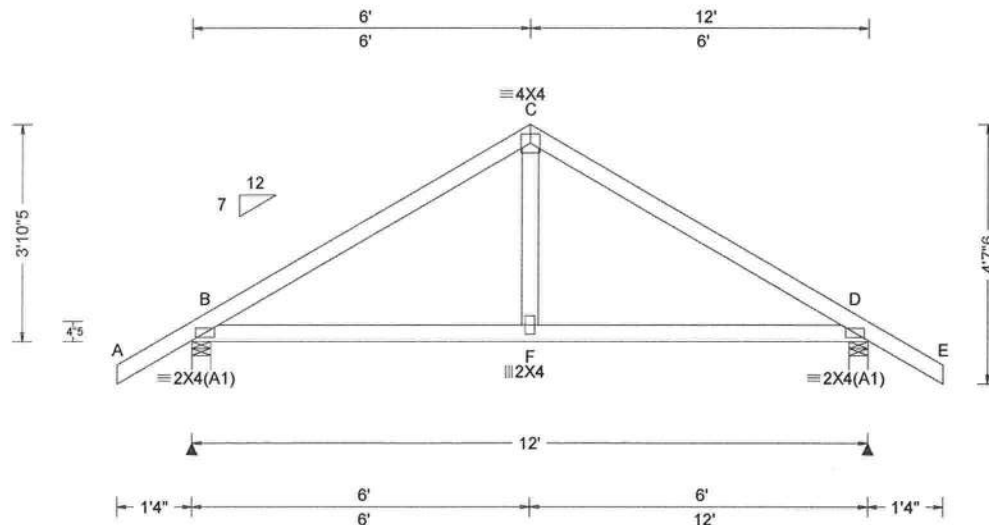
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AN ITW COMPANY  
6750 Forum Drive  
Suite 305  
Orlando FL, 32821



SEQN: 634074 / FROM: CDM	COMN Ply: 1 Qty: 2	Job Number: 21-5954 Arata Truss Label: C02	Cust R 215 JRef: 1X9O2150001 T43 / DrwNo: 288.21.0838.05338 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.007 F 999 240 VERT(CL): 0.014 F 999 180 HORZ(LL): 0.004 B - - HORZ(TL): 0.008 B - - Creep Factor: 2.0 Max TC CSI: 0.346 Max BC CSI: 0.352 Max Web CSI: 0.102  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh Non-Gravity / Rw / U / RL B 567 /- /- /345 /97 /119 D 567 /- /- /345 /97 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 D Brg Width = 4.0 Min Req = 1.5 Bearings B & D are a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. B - C 333 -619 C - D 333 -619

#### Lumber

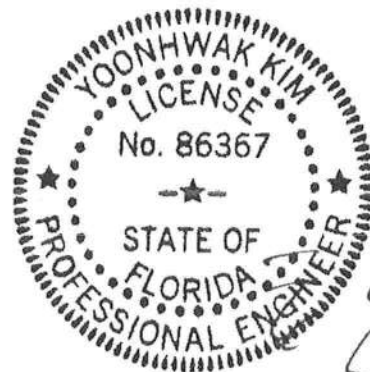
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Wind

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 3'-10-5/8\"/>



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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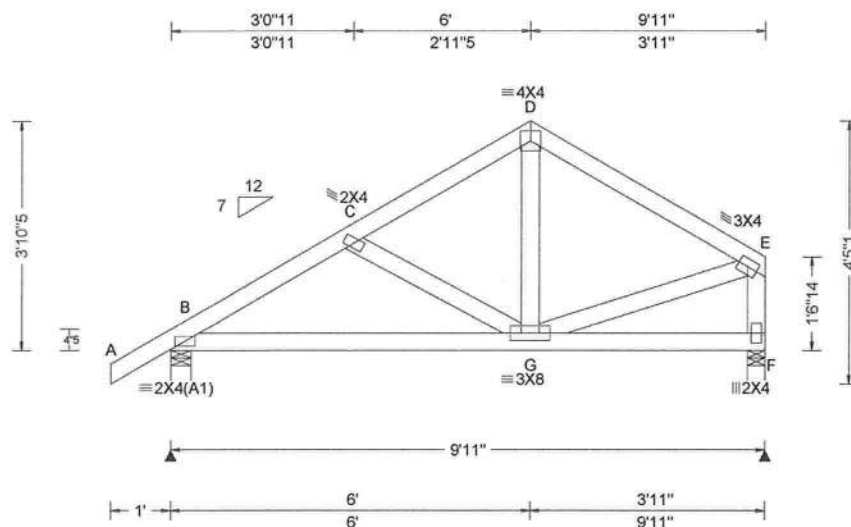
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AN ITW COMPANY  
6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 633528 / FROM: CDM	SPEC	Ply: 1 Qty: 1	Job Number: 21-5954 Arata Truss Label: C03	Cust: R 215 JRef: 1X9O2150001 T36 / DrwNo: 288.21.0838.04806 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.006 C 999 240 VERT(CL): 0.012 C 999 180 HORZ(LL): 0.002 C - - HORZ(TL): 0.004 C - - Creep Factor: 2.0 Max TC CSI: 0.197 Max BC CSI: 0.271 Max Web CSI: 0.113  VIEW Ver: 21.01.01A.0521.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 491 /- /- /307 /82 /101 F 402 /- /- /215 /67 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 F Brg Width = 3.5 Min Req = 1.5 Bearings B & F are a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp. Chords Tens. Comp. B - C 238 - 546 D - E 168 - 398 C - D 182 - 384

#### Lumber

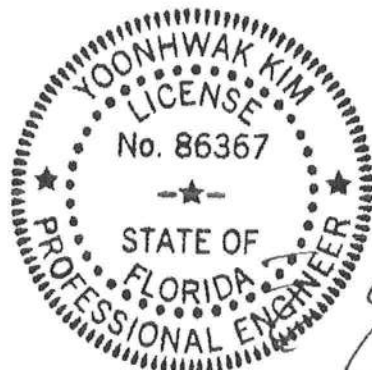
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Wind

Wind loads based on MWFRS with additional C&C member design.  
Right end vertical not exposed to wind pressure.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 10'-5".



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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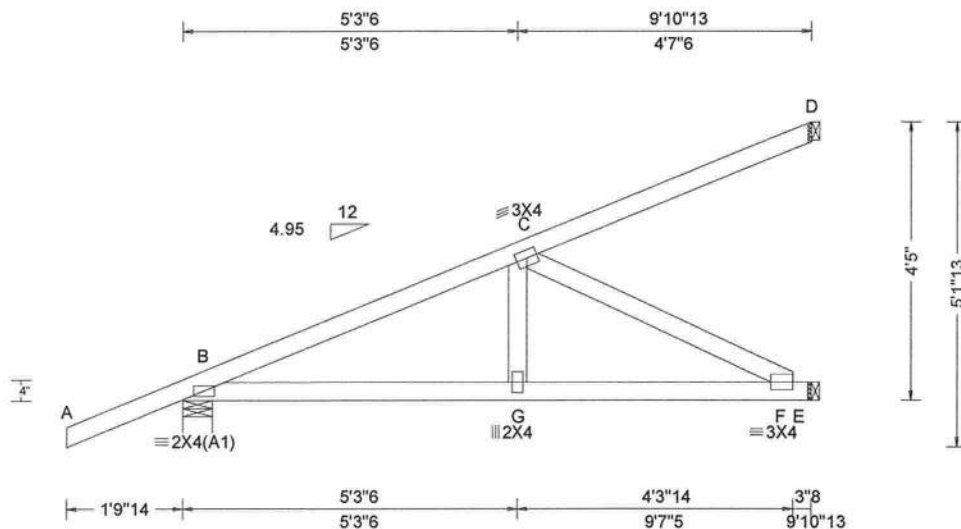
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 634072 / FROM: CDM	HIP_	Ply: 1 Qty: 3	Job Number: 21-5954 Arata Truss Label: HJ01	Cust: R 215 JRef: 1X9O2150001 T33 / DrwNo: 288.21.0838.05509 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: NA GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: No FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.018 G 999 240 VERT(CL): 0.038 G 999 180 HORZ(LL): 0.005 F - - HORZ(TL): 0.010 F - - Creep Factor: 2.0 Max TC CSI: 0.595 Max BC CSI: 0.527 Max Web CSI: 0.348  VIEW Ver: 21.01.01A.0521.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 364 /- /- /- /64 /- E 396 /- /- /- /15 /- D 248 /- /- /- /92 /-  Wind reactions based on MWFRS B Brg Width = 5.7 Min Req = 1.5 E Brg Width = 1.5 Min Req = - D Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375# <b>Maximum Top Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. B - C 121 -717  <b>Maximum Bot Chord Forces Per Ply (lbs)</b> Chords Tens.Comp. Chords Tens. Comp. B - G 645 -106 G - F 639 -109  <b>Maximum Web Forces Per Ply (lbs)</b> Webs Tens.Comp. C - F 123 -723

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Loading

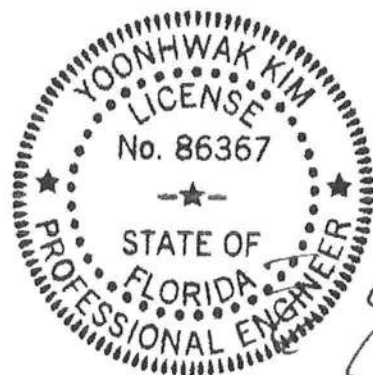
Hipjack supports 7-0-0 setback jacks with no webs.

#### Wind

Wind loads and reactions based on MWFRS.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 4-5-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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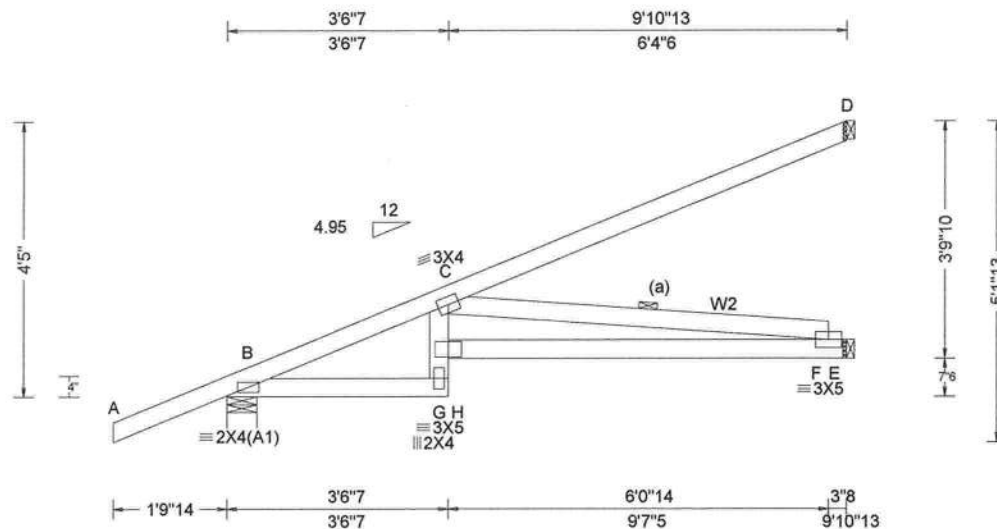
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821



SEQN: 634070 / FROM: CDM	HIP_	Ply: 1 Qty: 1	Job Number: 21-5954 Arata Truss Label: HJ02	Cust R 215 JRef: 1X902150001 T2 / DrwNo: 288.21.0838.05306 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 0.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: NA GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: No FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.081 C 999 240 VERT(CL): 0.168 C 696 180 HORZ(LL): 0.034 F - - HORZ(TL): 0.070 F - - Creep Factor: 2.0 Max TC CSI: 0.482 Max BC CSI: 0.867 Max Web CSI: 0.418  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh Non-Gravity / Rw / U / RL B 361 - / - / - /64 - E 300 - / 0 /19 - /0 D 344 - / - / - /126 - Wind reactions based on MWFRS B Brg Width = 5.7 Min Req = 1.5 E Brg Width = 1.5 Min Req = - D Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp.

#### Lumber

Top chord: 2x4 SP M-31;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP M-31; W2 2x4 SP #3;

#### Bracing

(a) Continuous lateral restraint equally spaced on member.

#### Loading

Hipjack supports 7-0-0 setback jacks with no webs.

#### Wind

Wind loads and reactions based on MWFRS.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 4-5-0.



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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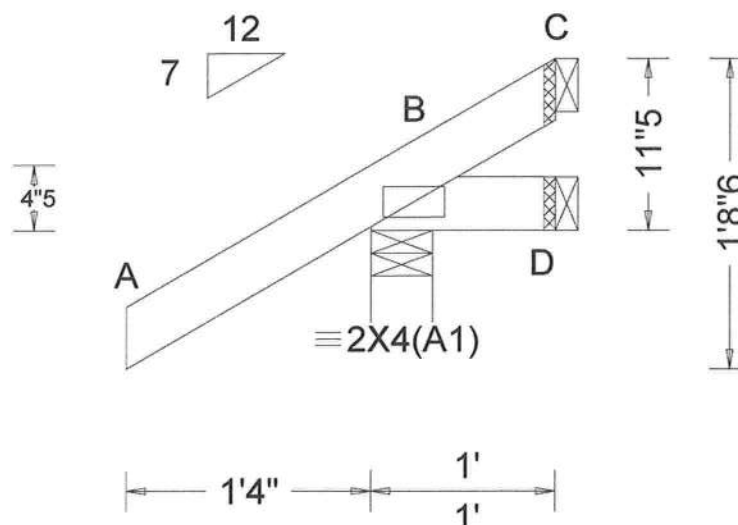
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 634018 / FROM: CDM	JACK Qty: 8	Ply: 1	Job Number: 21-5954 Arata Truss Label: J01	Cust: R 215 JRef: 1X9O2150001 T46 / DrwNo: 288.21.0838.05337 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): -0.000 B - - HORZ(TL): 0.000 B - - Creep Factor: 2.0 Max TC CSI: 0.106 Max BC CSI: 0.014 Max Web CSI: 0.000  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 168 /- /- /129 /30 /36 D 11 /-2 /- /11 /5 /- C - /-15 /- /18 /22 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;

#### Wind

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 0-11-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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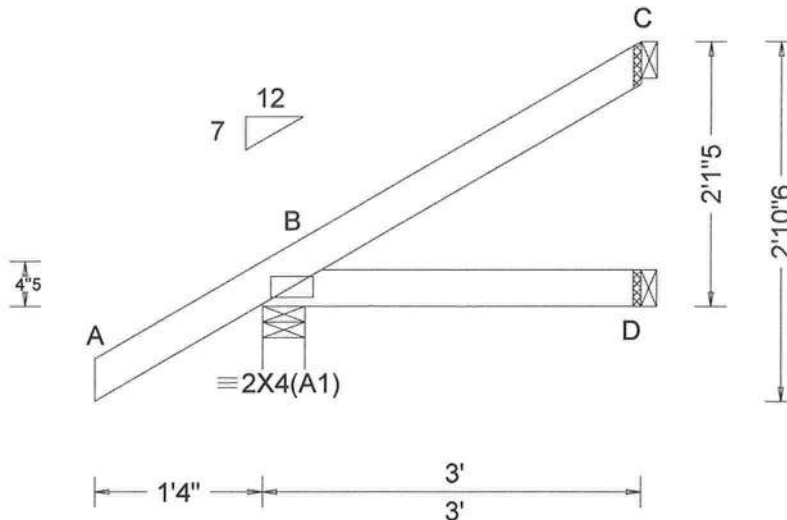
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 634020 / FROM: CDM	JACK Qty: 6	Ply: 1 Arata Truss Label: J02	Job Number: 21-5954 Cust: R 215 JRef: 1X9O2150001 T5 / DrwNo: 288.21.0838.05009 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg.Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCDL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT:20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.001 B - - HORZ(TL): 0.001 B - - Creep Factor: 2.0 Max TC CSI: 0.114 Max BC CSI: 0.073 Max Web CSI: 0.000  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh Non-Gravity / Rw / U / RL  B 214 /- /- /149 /22 /77 D 52 /- /- /30 /- /- C 73 /- /- /47 /42 /-  Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;

#### Wind

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 2-1-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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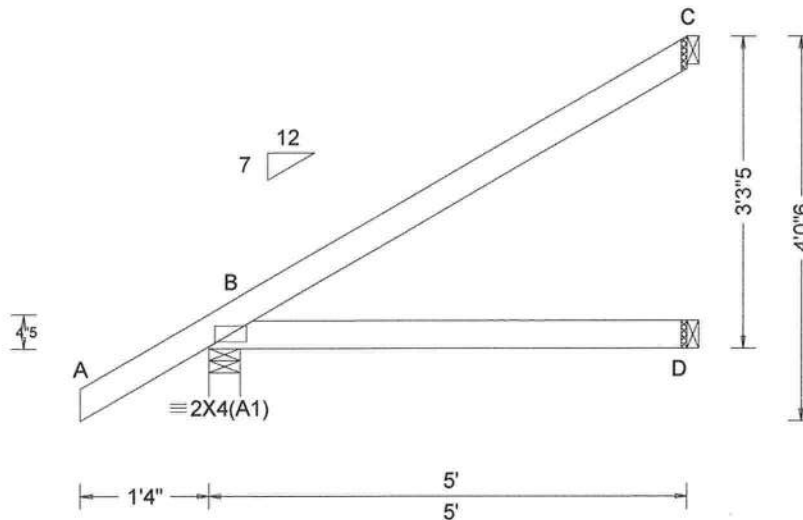
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821



SEQN: 634022 / FROM: CDM	JACK Qty: 6	Ply: 1 Qty: 6	Job Number: 21-5954 Arata Truss Label: J03	Cust: R 215 JRef: 1X9O2150001 T6 / DrwNo: 288.21.0838.05025 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.005 B - - HORZ(TL): 0.010 B - - Creep Factor: 2.0 Max TC CSI: 0.394 Max BC CSI: 0.247 Max Web CSI: 0.000  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh Non-Gravity / Rw / U / RL B 291 /- /- /196 /22 /118 D 92 /- /- /52 /- /- C 135 /- /- /88 /73 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;

#### Wind

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 3-3-5.



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10/15/2021

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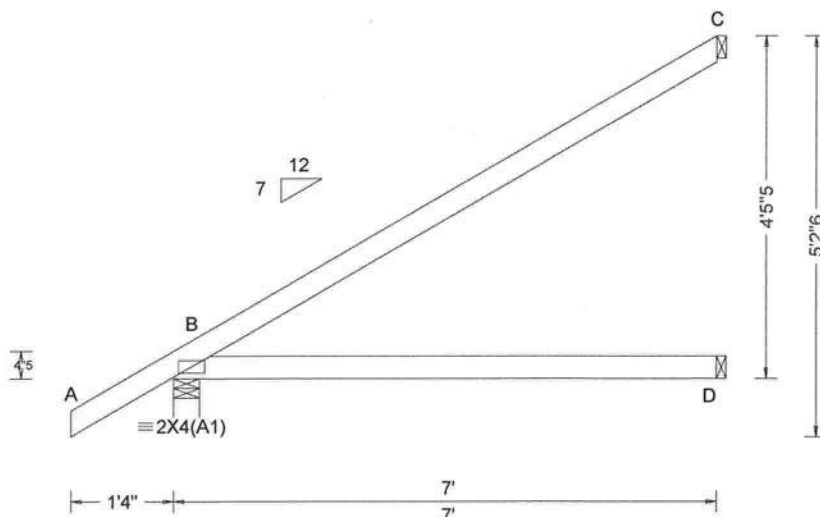
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 634026 / FROM: CDM	EJAC Qty: 23	Ply: 1	Job Number: 21-5954 Arata Truss Label: J04	Cust: R 215 JRef: 1X9O2150001 T42 / DrwNo: 288.21.0838.05463 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h/2 to h C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): NA VERT(CL): NA HORZ(LL): 0.015 B - - HORZ(TL): 0.030 B - - Creep Factor: 2.0 Max TC CSI: 0.758 Max BC CSI: 0.530 Max Web CSI: 0.000  VIEW Ver: 21.01.01A.0521.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 371 /- /- /245 /23 /160 D 131 /- /- /76 /- /- C 193 /- /- /128 /104 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 D Brg Width = 1.5 Min Req = - C Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#

#### Lumber

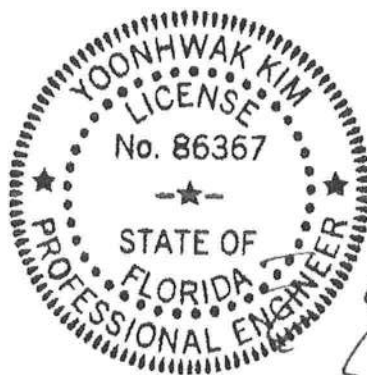
Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;

#### Wind

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 4-5-5.



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10/15/2021

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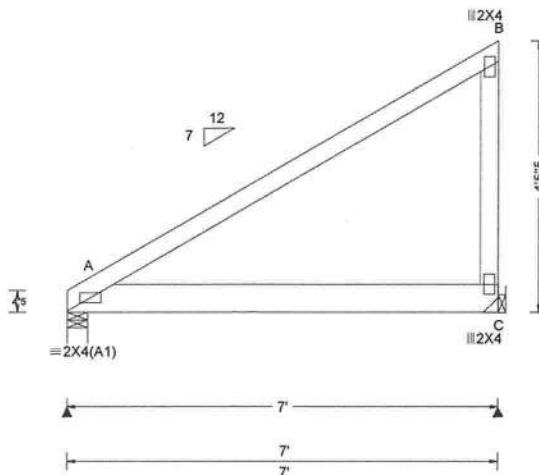
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821

2 Complete Trusses Required



Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00	Wind Std: ASCE 7-16	Pg: NA Ct: NA CAT: NA	PP Deflection in loc L/defl L/#	Gravity Non-Gravity
TCDL: 10.00	Speed: 130 mph	Pf: NA Ce: NA	VERT(LL): NA	Loc R+ / R- / Rh / Rw / U / RL
BCLL: 0.00	Enclosure: Closed	Lu: NA Cs: NA	VERT(CL): NA	A 751 /- /- /- /97 /119
BCDL: 10.00	Risk Category: II	Snow Duration: NA	HORZ(LL): 0.014 A - -	C 1201 /- /- /- /39 /-
Des Ld: 40.00	EXP: C Kzt: NA	Building Code:	HORZ(TL): 0.028 A - -	Wind reactions based on MWFRS
NCBCLL: 0.00	Mean Height: 15.00 ft	FBC 7th Ed. 2020 Res.	Creep Factor: 2.0	A Brg Width = 4.0 Min Req = 1.5
Soffit: 2.00	TCDL: 5.0 psf	TPI Std: 2014	Max TC CSI: 0.458	C Brg Width = - Min Req = -
Load Duration: 1.25	MWFRS Parallel Dist: 0 to h/2	Rep Fac: No	Max BC CSI: 0.544	Bearing A is a rigid surface.
Spacing: 24.0 "	C&C Dist a: 3.00 ft	FT/RT: 20(0)/10(0)	Max Web CSI: 0.105	Members not listed have forces less than 375#
	Loc. from endwall: Any	Plate Type(s):	VIEW Ver: 21.01.01A.0521.20	
	GCpi: 0.18	WAVE		
	Wind Duration: 1.60			

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x6 SP 2400F-2.0E;  
Webs: 2x4 SP #3;

#### Nailnote

Nail Schedule: 0.128"x3", min. nails  
Top Chord: 1 Row @ 12.00" o.c.  
Bot Chord: 1 Row @ 7.50" o.c.  
Webs: 1 Row @ 4" o.c.  
Use equal spacing between rows and stagger nails in each row to avoid splitting.

#### Special Loads

——(Lumber Dur.Fac.=1.25 / Plate Dur.Fac.=1.25)  
TC: From 63 plf at 0.00 to 63 plf at 7.00  
BC: From 20 plf at 0.00 to 20 plf at 7.00  
BC: 1370 lb Conc. Load at 4.73

#### Wind

Wind loads and reactions based on MWFRS.  
Right end vertical exposed to wind pressure.  
Deflection meets L/360.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 4'-5".



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10/15/2021

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6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 396064 /	EJAC	Ply: 2	Job Number: 21-5954	Cust: R 215 JRef: 1X9O2150001 T17 /
FROM: CDM		Qty: 1	Arata	DrwNo: 288.21.0838.04978
Page 2 of 2			Truss Label: J05	/ YK 10/15/2021

#### Hangers / Ties

Simpson Construction Hardware is specified based on the most current information provided by Simpson Strong-Tie. Please refer to the most recent Simpson Strong-Tie catalog for additional information.

Recommended hanger connections are based on manufacturer tested capacities and calculations. Conditions may exist that require different connections than indicated. Refer to manufacturer publication for additional information.

Hanger specified assumes connection to supporting chord is located a minimum of five times the depth of the supporting chord from any unsupported end, unless unsupported chord end has 85% plating coverage.

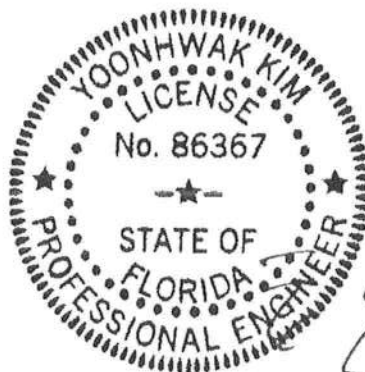
Bearing at location  $x=6'9"$  uses the following support conditions: 6'9"

Bearing C (6'9", 9'1"2) LUS26-2

Supporting Member: (1)2x6 SP 2400f-2.0E

(4) 0.162"x3.5" nails into supporting member,

(4) 0.162"x3.5" nails into supported member.



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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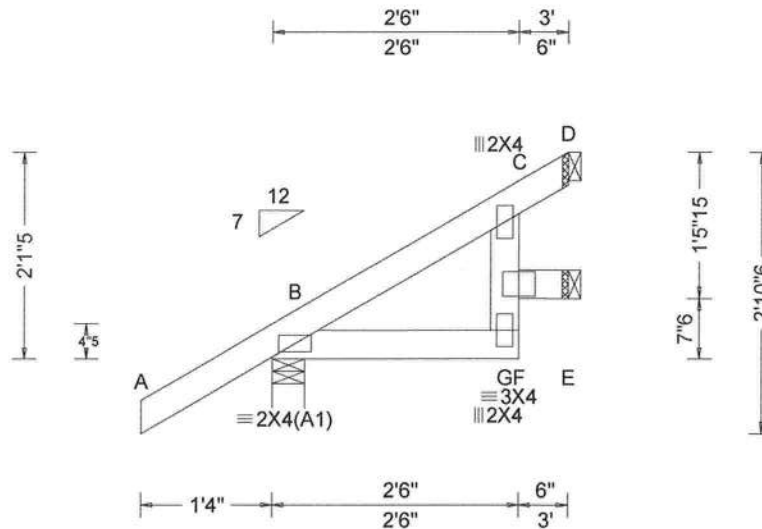
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AN ITW COMPANY  
6750 Forum Drive  
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Orlando FL, 32821

SEQN: 634068 / FROM: CDM	JACK Qty: 2	Ply: 1 Qty: 2	Job Number: 21-5954 Arata Truss Label: J06	Cust: R 215 JRef: 1X902150001 T34 / DrwNo: 288.21.0838.05120 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg,Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCCL: 10.00 BCCL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCCL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: Any GCPI: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.003 F 999 240 VERT(CL): 0.006 F 999 180 HORZ(LL): 0.002 C - - HORZ(TL): 0.004 C - - Creep Factor: 2.0 Max TC CSI: 0.111 Max BC CSI: 0.050 Max Web CSI: 0.031  VIEW Ver: 21.01.01A.0521.20	Gravity Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 214 /- /- /149 /22 /77 E 21 /- /- /15 /4 /- D 84 /- /- /60 /31 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 E Brg Width = 1.5 Min Req = - D Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Wind

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 2-1-5.



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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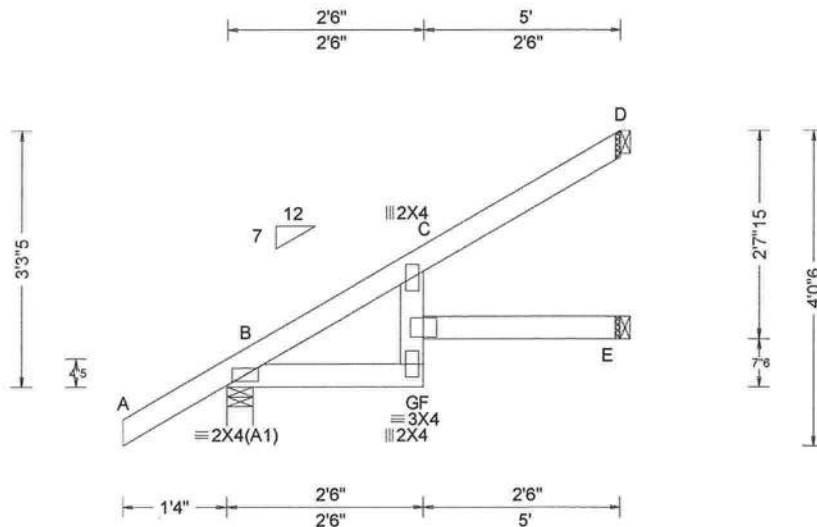
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 634066 / FROM: CDM	JACK Qty: 2	Ply: 1 Qty: 2	Job Number: 21-5954 Arata Truss Label: J07	Cust: R 215 JRef: 1X902150001 T50 / DrwNo: 288.21.0838.04994 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	▲ Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.055 F 999 240 VERT(CL): 0.110 F 527 180 HORZ(LL): 0.034 C - - HORZ(TL): 0.069 C - - Creep Factor: 2.0 Max TC CSI: 0.357 Max BC CSI: 0.111 Max Web CSI: 0.097  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh Non-Gravity / Rw / U / RL B 291 /- /- /196 /22 /118 E 61 /- /- /36 /- /- D 151 /- /- /104 /68 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 E Brg Width = 1.5 Min Req = - D Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375#

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Wind

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 3-3.5.



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10/15/2021

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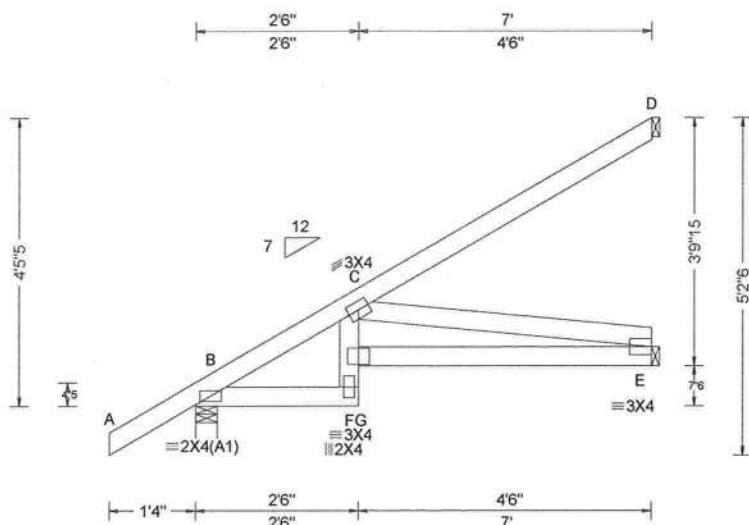
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**ALPINE**  
ANITW COMPANY  
6750 Forum Drive  
Suite 305  
Orlando FL, 32821



SEQN: 634064 / FROM: CDM	EJAC Qty: 5	Ply: 1 Job Number: 21-5954 Arata Truss Label: J08	Cust: R 215 JRef: 1X9O2150001 T31 / DrwNo: 288.21.0838.05415 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs)
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: 0 to h/2 C&C Dist a: 3.00 ft Loc. from endwall: not in 4.50 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.023 F 999 240 VERT(CL): 0.047 F 999 180 HORZ(LL): 0.014 E - - HORZ(TL): 0.029 E - - Creep Factor: 2.0 Max TC CSI: 0.323 Max BC CSI: 0.330 Max Web CSI: 0.729  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity Loc R+ / R- / Rh / Rw / U / RL B 371 /- /- /245 /23 /160 E 162 /- /- /119 /17 /- D 130 /- /- /85 /71 /- Wind reactions based on MWFRS B Brg Width = 4.0 Min Req = 1.5 E Brg Width = 1.5 Min Req = - D Brg Width = 1.5 Min Req = - Bearing B is a rigid surface. Members not listed have forces less than 375# Maximum Top Chord Forces Per Ply (lbs) Chords Tens.Comp.

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Wind

Wind loads based on MWFRS with additional C&C member design.  
Wind loading based on both gable and hip roof types.

#### Additional Notes

The overall height of this truss excluding overhang is 4-5-5.



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10/15/2021

B - C 89 -402

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

F - E 549 -503

Maximum Web Forces Per Ply (lbs)  
Webs Tens.Comp.

C - E 508 -554

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

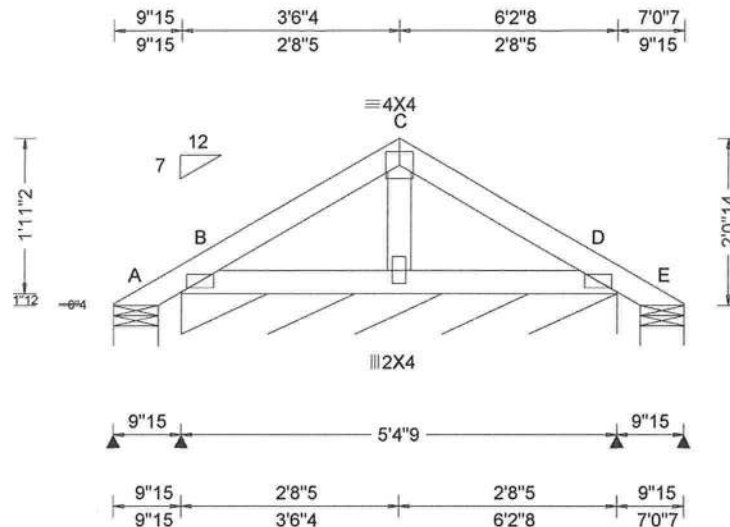
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**ALPINE**  
AN ITW COMPANY  
6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 633684 / FROM: CDM	GABL Qty: 1	Ply: 1 Job Number: 21-5954 Arata Truss Label: PB01	Cust: R 215 JRef: 1X902150001 T3 / DrwNo: 288.21.0838.04681 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs), or *PLF
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.24 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.00 ft Loc. from endwall: not in 13.00 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.001 B 999 240 VERT(CL): 0.001 B 999 180 HORZ(LL): 0.000 B - - HORZ(TL): 0.001 B - - Creep Factor: 2.0 Max TC CSI: 0.069 Max BC CSI: 0.035 Max Web CSI: 0.016  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity A - /-9 /- /34 /33 /52 B* 85 /- /- /59 /10 /- E - /-9 /- /7 /7 /-  Wind reactions based on MWFRS A Brg Width = 6.5 Min Req = 1.5 B Brg Width = 64.6 Min Req = - E Brg Width = 6.5 Min Req = 1.5 Bearings A, B, & E are a rigid surface. Members not listed have forces less than 375#

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Plating Notes

All plates are 2X4(A1) except as noted.

#### Loading

Gable end supports 8" max rake overhang. Top chord must not be cut or notched.

#### Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

#### Additional Notes

See DWGS A14030ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 2-0-14.



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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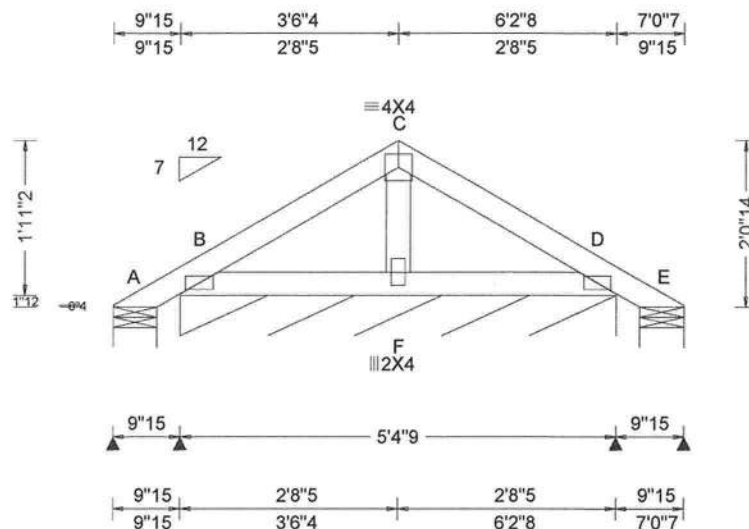
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**ALPINE**  
AN ITW COMPANY  
6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 633698 / FROM: CDM	COMN Qty: 1	Ply: 1 Arata Truss Label: PB02	Job Number: 21-5954 Arata Truss Label: PB02	Cust: R 215 JRef: 1X902150001 T16 / DrwNo: 288.21.0838.04634 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs), or *=PLF
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0 "	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 20.58 ft TCDL: 5.0 psf BCDL: 2.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.00 ft Loc. from endwall: not in 9.00 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.001 B 999 240 VERT(CL): 0.001 B 999 180 HORZ(LL): 0.000 B - - HORZ(TL): 0.001 B - - Creep Factor: 2.0 Max TC CSI: 0.070 Max BC CSI: 0.035 Max Web CSI: 0.016 VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity Loc R+ / R- / Rh / Rw / U / RL A - /-11 /- /33 /39 /53 B* 84 /- /- /56 /16 /- E - /-11 /- /6 /13 /- Wind reactions based on MWFRS A Brg Width = 6.5 Min Req = 1.5 B Brg Width = 64.6 Min Req = - E Brg Width = 6.5 Min Req = 1.5 Bearings A, B, & E are a rigid surface. Members not listed have forces less than 375#

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Plating Notes

All plates are 2X4(A1) except as noted.

#### Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

#### Additional Notes

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 2-0-14.



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10/15/2021

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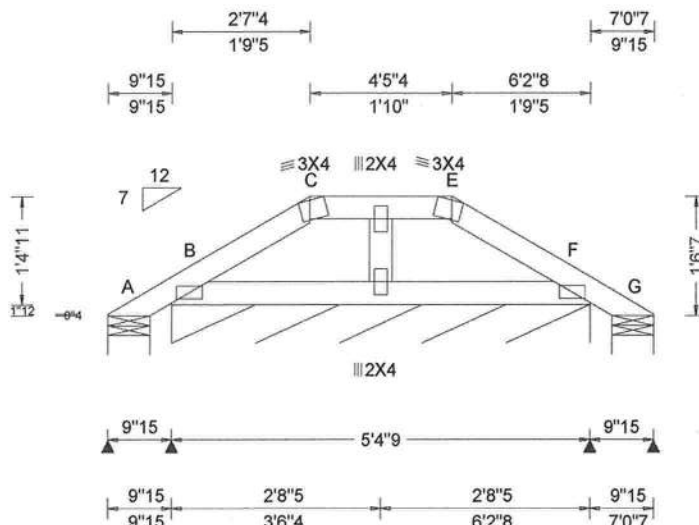
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6750 Forum Drive  
Suite 305  
Orlando FL, 32821

SEQN: 633700 / FROM: CDM	GABL Qty: 1	Ply: 1 Qty: 1	Job Number: 21-5954 Arata Truss Label: PB03	Cust R 215 JRef: 1X9O2150001 T24 / DrwNo: 288.21.0838.04807 / YK 10/15/2021
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Loading Criteria (psf)	Wind Criteria	Snow Criteria (Pg, Pf in PSF)	Defl/CSI Criteria	Maximum Reactions (lbs), or *PLF
TCLL: 20.00 TCDL: 10.00 BCLL: 0.00 BCDL: 10.00 Des Ld: 40.00 NCBCLL: 10.00 Soffit: 2.00 Load Duration: 1.25 Spacing: 24.0"	Wind Std: ASCE 7-16 Speed: 130 mph Enclosure: Closed Risk Category: II EXP: C Kzt: NA Mean Height: 15.00 ft TCDL: 5.0 psf BCDL: 5.0 psf MWFRS Parallel Dist: h to 2h C&C Dist a: 3.00 ft Loc. from endwall: not in 13.00 ft GCpi: 0.18 Wind Duration: 1.60	Pg: NA Ct: NA CAT: NA Pf: NA Ce: NA Lu: NA Cs: NA Snow Duration: NA  Building Code: FBC 7th Ed. 2020 Res. TPI Std: 2014 Rep Fac: Yes FT/RT: 20(0)/10(0) Plate Type(s): WAVE	PP Deflection in loc L/defl L/# VERT(LL): 0.001 C 999 240 VERT(CL): 0.002 C 999 180 HORZ(LL): 0.000 E - - HORZ(TL): 0.001 E - - Creep Factor: 2.0 Max TC CSI: 0.033 Max BC CSI: 0.031 Max Web CSI: 0.017  VIEW Ver: 21.01.01A.0521.20	Gravity Loc R+ / R- / Rh / Rw / U / RL Non-Gravity A 13 /- /- /31 /22 /38 B* 77 /- /- /53 /8 /- G 13 /- /- /11 /3 /- Wind reactions based on MWFRS A Brg Width = 6.5 Min Req = 1.5 B Brg Width = 64.6 Min Req = - G Brg Width = 6.5 Min Req = 1.5 Bearings A, B, & G are a rigid surface. Members not listed have forces less than 375#

#### Lumber

Top chord: 2x4 SP #2;  
Bot chord: 2x4 SP #2;  
Webs: 2x4 SP #3;

#### Plating Notes

All plates are 2X4(A1) except as noted.

#### Loading

Gable end supports 8" max rake overhang. Top chord must not be cut or notched.

#### Wind

Wind loads based on MWFRS with additional C&C member design.

Wind loading based on both gable and hip roof types.

#### Additional Notes

See DWGS A14015ENC160118 & GBLLETIN0118 for gable wind bracing and other requirements.

Refer to DWG PB160160118 for piggyback details.

The overall height of this truss excluding overhang is 1-6-7.



FL REG# 278, Yoonhwak Kim, FL PE #86367  
10/15/2021

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

# **Gable Stud Reinforcement Detail** **ASCE 7-16: 140 mph Wind Speed, 15' Mean Height, Enclosed, Exposure C, Kzt = 1.00**

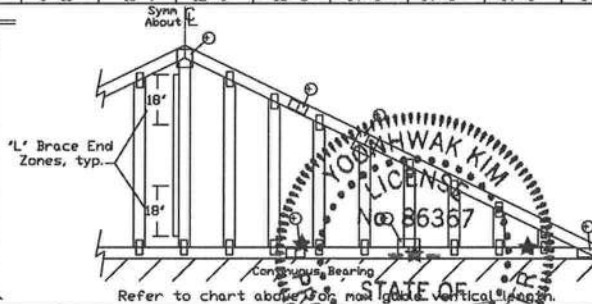
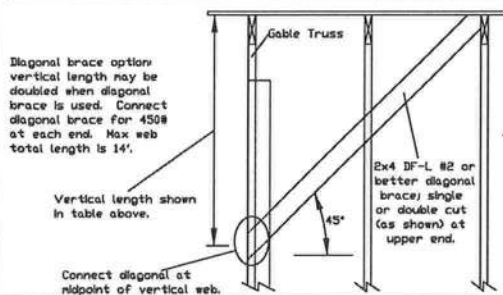
Dri: 120 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00  
 Dri: 120 mph Wind Speed, 15' Mean Height, Enclosed, Exposure D, Kzt = 1.00  
 Dri: 100 mph Wind Speed, 15' Mean Height, Partially Enclosed, Exposure D, Kzt = 1.00

Max Gable Vertical Length	Gable Vertical Spacing	2x4 Vertical Species	Brace Grade	No Braces	(1) 1x4 'L' Brace		(1) 2x4 'L' Brace		(2) 2x4 'L' Brace		(1) 2x6 'L' Brace		(2) 2x6 'L' Brace	
					Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B
					Group A		Group B		Group A		Group B		Group A	
24" o.c.	SPF	#1 / #2	#1	4' 3"	7' 3"	7' 7"	8' 7"	8' 11"	10' 3"	10' 8"	13' 6"	14' 0"	14' 0"	14' 0"
			#3	4' 1"	6' 7"	7' 1"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
			Stud	4' 1"	6' 7"	7' 0"	8' 6"	8' 10"	10' 1"	10' 6"	13' 4"	13' 10"	14' 0"	14' 0"
		Standard	#1	4' 1"	5' 8"	6' 0"	7' 7"	8' 1"	10' 1"	10' 6"	11' 10"	12' 8"	14' 0"	14' 0"
			#2	4' 6"	7' 4"	7' 8"	8' 8"	9' 0"	10' 4"	10' 9"	13' 8"	14' 0"	14' 0"	14' 0"
			#3	4' 2"	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	13' 4"	14' 0"	14' 0"
	DFL	Stud	#1	4' 2"	6' 0"	6' 4"	7' 11"	8' 6"	10' 2"	10' 7"	12' 5"	13' 4"	14' 0"	14' 0"
			#2	4' 0"	5' 3"	5' 7"	7' 0"	7' 6"	9' 6"	10' 2"	11' 0"	11' 10"	14' 0"	14' 0"
			#3	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	#1	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	4' 8"	8' 1"	8' 6"	9' 8"	10' 1"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	4' 8"	6' 11"	7' 5"	9' 3"	9' 11"	11' 7"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
16" o.c.	SPF	#1 / #2	#1	5' 1"	8' 5"	8' 9"	9' 11"	10' 4"	11' 10"	12' 4"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	4' 11"	8' 4"	8' 8"	9' 10"	10' 3"	11' 8"	12' 2"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	4' 9"	7' 4"	7' 9"	9' 9"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	#1	4' 9"	7' 4"	7' 9"	9' 9"	10' 2"	11' 8"	12' 1"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	4' 8"	6' 5"	6' 10"	8' 7"	9' 2"	11' 7"	12' 1"	13' 6"	14' 0"	14' 0"	14' 0"
			#3	4' 8"	5' 2"	5' 6"	10' 10"	11' 3"	11' 8"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"
	DFL	Stud	#1	5' 1"	9' 0"	9' 4"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	5' 1"	8' 0"	8' 6"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	5' 1"	8' 0"	8' 6"	10' 8"	11' 1"	12' 9"	13' 3"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	#1	5' 8"	9' 3"	9' 8"	10' 11"	11' 4"	13' 0"	13' 6"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	5' 5"	9' 2"	9' 6"	10' 10"	11' 3"	12' 11"	13' 5"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
12" o.c.	SPF	#1 / #2	#1	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	#1	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
	DFL	Stud	#1	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
		Standard	#1	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
			#2	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"
			#3	5' 3"	8' 5"	9' 0"	10' 9"	11' 2"	12' 10"	13' 4"	14' 0"	14' 0"	14' 0"	14' 0"

Bracing Group Species and Grades:			
Group A:			
Spruce-Pine-Fir	Group A1	Group A2	Group A3
#1 / #2	Standard	#2	Stud
#3	Stud	#3	Standard
Douglas Fir-Larch	Group B1	Southern Pine	Group B2
#3	Stud	#3	Stud
Standard	Standard	Standard	Standard
Group B:			
Group B1	Group B2	Group B3	Group B4
#1 / #2	Stud	#3	Stud
#3	Standard	#3	Standard
Douglas Fir-Larch	Group B1	Southern Pine	Group B2
#1	Stud	#1	Stud
#2	Standard	#2	Standard

1x4 Braces shall be SRB (Stress-Rated Board).  
 For 1x4 So. Pine use only Industrial 35 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.

**Gable Truss Detail Notes:**  
 Wind Load deflection criterion is L/240.  
 Provide uplift connections for SS plf over continuous bearing (5 psf TC Dead Load).  
 Gable end supports load from 4' 0" outliners with 2' 0" overhang, or 12" plywood overhang.



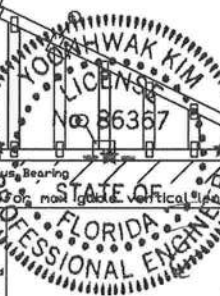
Attach 'L' braces with 10d (0.188"x3.0" min) nails.  
 \* For (1) 'L' brace: space nails at 2' o.c.  
 In 18" end zones and 4' o.c. between zones.  
 \* For (2) 'L' brace: space nails at 3' o.c.  
 In 18" end zones and 6' o.c. between zones.  
 'L' bracing must be a minimum of 80% of web member length.

Gable Vertical Plate Sizes	
Vertical Length	No Splice
Less than 4' 0"	1X4 or 2X3
Greater than 4' 0"	3X4

+ Refer to common truss design for peak, splice, and heel plates.  
 Refer to the Building Designer for conditions not addressed by this detail.



**IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING.**  
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 Alpha, 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 or 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 this job's general notes page and these web sites: 10/15/2021  
 ALPINE www.alpinetruss.com TPI www.tpi.org SICA www.sicaindustry.org ICC www.iccsafe.org



MAX. TOT. LD. 60 PSF  
 MAX. SPACING 24.0'

REF ASCE7-16-GAB14015  
 DATE 01/26/2018  
 DRWG A14015ENC160118



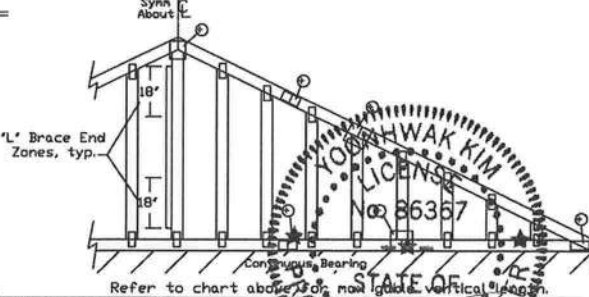
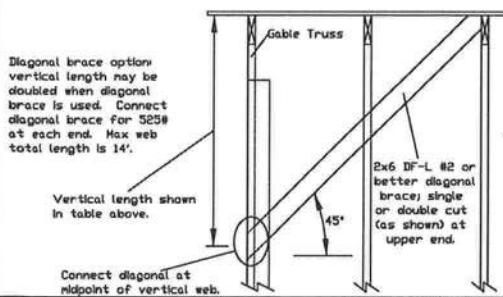
# **Gable Stud Reinforcement Detail** **ASCE 7-16: 140 mph Wind Speed, 30' Mean Height, Enclosed, Exposure C, Kzt = 1.00**

Or: 120 mph Wind Speed, 30' Mean Height, Partially Enclosed, Exposure C, Kzt = 1.00  
 Or: 120 mph Wind Speed, 30' Mean Height, Enclosed, Exposure D, Kzt = 1.00  
 Or: 100 mph Wind Speed, 30' Mean Height, Partially Enclosed, Exposure D, Kzt = 1.00

Max Gable Vertical Length	2x4 Gable Vertical Spacing	Brace Species	Grade	No Braces	(1) 1x4 'L' Brace		(1) 2x4 'L' Brace		(2) 2x4 'L' Brace		(1) 2x6 'L' Brace		(2) 2x6 'L' Brace	
					Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B	Group A	Group B
24" o.c.	SPF	#1 / #2	HF	Standard	4' 1"	6' 11"	7' 2"	8' 2"	8' 5"	9' 9"	10' 2"	12' 10"	13' 4"	14' 0"
					3' 10"	6' 2"	6' 7"	8' 1"	8' 5"	9' 8"	10' 0"	12' 8"	13' 2"	14' 0"
					3' 10"	6' 2"	6' 6"	8' 1"	8' 5"	9' 8"	10' 0"	12' 8"	13' 2"	14' 0"
		#1	DFL	Standard	4' 2"	7' 0"	7' 3"	8' 3"	8' 7"	9' 10"	10' 3"	13' 0"	13' 6"	14' 0"
					4' 1"	6' 11"	7' 2"	8' 2"	8' 5"	9' 9"	10' 2"	12' 10"	13' 4"	14' 0"
					4' 0"	5' 7"	5' 11"	7' 5"	7' 11"	9' 8"	10' 1"	11' 7"	12' 5"	14' 0"
16" o.c.	SPF	#1 / #2	HF	Standard	4' 1"	6' 11"	7' 2"	8' 2"	8' 5"	9' 9"	10' 2"	12' 10"	13' 4"	14' 0"
					4' 5"	7' 6"	8' 3"	9' 3"	9' 7"	11' 0"	11' 6"	14' 0"	14' 0"	14' 0"
					4' 5"	7' 6"	8' 0"	9' 3"	9' 7"	11' 0"	11' 6"	14' 0"	14' 0"	14' 0"
		#1	DFL	Standard	4' 10"	8' 0"	8' 4"	9' 6"	9' 10"	11' 3"	11' 9"	14' 0"	14' 0"	14' 0"
					4' 8"	7' 11"	8' 3"	9' 4"	9' 8"	11' 2"	11' 7"	14' 0"	14' 0"	14' 0"
					4' 7"	6' 10"	7' 3"	8' 1"	8' 5"	10' 1"	10' 6"	14' 0"	14' 0"	14' 0"
12" o.c.	SPF	#1 / #2	HF	Standard	4' 5"	6' 10"	6' 5"	8' 0"	8' 7"	10' 10"	11' 6"	12' 7"	13' 15"	14' 0"
					5' 2"	8' 9"	9' 1"	10' 4"	10' 9"	11' 2"	12' 9"	14' 0"	14' 0"	14' 0"
					4' 10"	8' 7"	8' 11"	10' 2"	10' 7"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"
		#1	DFL	Standard	4' 10"	8' 7"	8' 11"	10' 2"	10' 7"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"
					4' 10"	7' 5"	7' 11"	9' 11"	10' 7"	12' 2"	12' 8"	14' 0"	14' 0"	14' 0"
					5' 4"	8' 10"	9' 2"	10' 5"	10' 10"	12' 5"	12' 11"	14' 0"	14' 0"	14' 0"

Bracing Group Species and Grades:			
<b>Group A:</b>			
Spruce-Pine-Fir	Group A:	He-Fir	
#1 / #2 Standard		#2 Stud	
#3 Stud		#3 Standard	
Douglas Fir-Larch		Southern Pine	
#3 Stud		#3 Stud	
Standard		Standard	
<b>Group B:</b>			
He-Fir			
#1 & Btr			
#1			
Douglas Fir-Larch		Southern Pine	
#1		#1	
#2		#2	

1x4 Braces shall be SRB (Stress-Rated Board).  
 For 1x4 Sp. Pine use only Industrial S5 or Industrial 45 Stress-Rated Boards. Group B values may be used with these grades.  
**Gable Truss Detail Notes:**  
 Wind Load deflection criterion is L/240.  
 Provide uplift connections for 100 plf over continuous bearing (3 psf TC Dead Load).  
 Gable end supports load from 4' 0" outlookers with 2' 0" overhang, or 12' plywood overhang.



Attach 'L' braces with 10d (0.128"x3.0" min) nails.  
 \* For (1) 'L' brace: space nails at 2' o.c. in 18" end zones and 4' o.c. between zones.  
 \*\* For (2) 'L' brace: space nails at 3' o.c. in 18" end zones and 6' o.c. between zones.  
 'L' bracing must be a minimum of 80% of web member length.

Gable Vertical Plate Sizes	
Vertical Length	No Splice
Less than 4' 0"	2X4
Greater than 4' 0", but less than 11' 6"	3X4
Greater than 11' 6"	4X4

\* Refer to common truss design for peak, splice, and heel plates.  
 Refer to the Building Designer for conditions not addressed by this detail.

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 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 & bracing of trusses.  
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 For more information see this job's general notes page and these web sites:  
 ALPINE: [www.alpineitw.com](http://www.alpineitw.com) TPI: [www.tpi-inc.org](http://www.tpi-inc.org) SICA: [www.sicaindustrial.org](http://www.sicaindustrial.org) ICC: [www.iccsa.org](http://www.iccsa.org)

Yoonhwak Kim  
 No. 86367  
 PROFESSIONAL ENGINEER  
 STATE OF FLORIDA

REF ASCE7-16-GAB14030  
 DATE 01/26/2018  
 DRWG A14030ENC160118

MAX. TOT. LD. 60 PSF  
 MAX. SPACING 24.0"



# CLR Reinforcing Member Substitution

This detail is to be used when a Continuous Lateral Restraint (CLR) is specified on a truss design but an alternative web reinforcement method is desired.

## Notes:

This detail is only applicable for changing the specified CLR shown on single ply sealed designs to T-reinforcement or L-reinforcement or scab reinforcement.

Alternative reinforcement specified in chart below may be conservative. For minimum alternative reinforcement, re-run design with appropriate reinforcement type.

Use scabs instead of L- or T- reinforcement on webs with intersecting truss joints, such as K-web joints, that may interfere with proper application along the narrow face of the web.

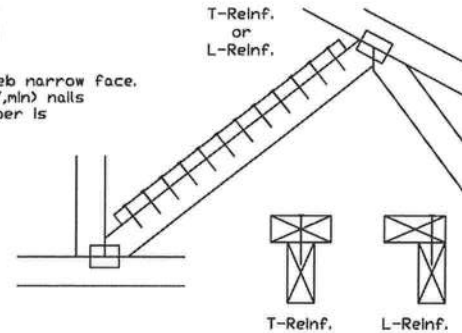
Web Member Size	Specified CLR Restraint	Alternative Reinforcement T- or L- Reinf.	Scab Reinf.
2x3 or 2x4	1 row	2x4	1-2x4
2x3 or 2x4	2 rows	2x6	2-2x4
2x6	1 row	2x4	1-2x6
2x6	2 rows	2x6	2-2x4
2x8	1 row	2x6	1-2x8
2x8	2 rows	2x6	2-2x6

T-reinforcement, L-reinforcement, or scab reinforcement to be same species and grade or better than web member unless specified otherwise on Engineer's sealed design.

☉ Center scab on wide face of web. Apply (1) scab to each face of web.

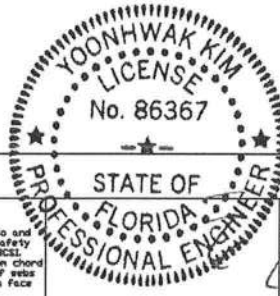
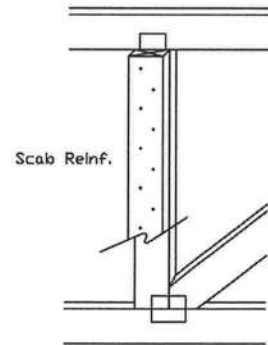
## T-Reinforcement or L-Reinforcement:

Apply to either side of web narrow face. Attach with 10d (0.128"x3.0",min) nails at 6' o.c. Reinforcing member is a minimum 80% of web member length.



## Scab Reinforcement:

Apply scab(s) to wide face of web. No more than (1) scab per face. Attach with 10d (0.128"x3.0",min) nails at 6' o.c. Reinforcing member is a minimum 80% of web member length.



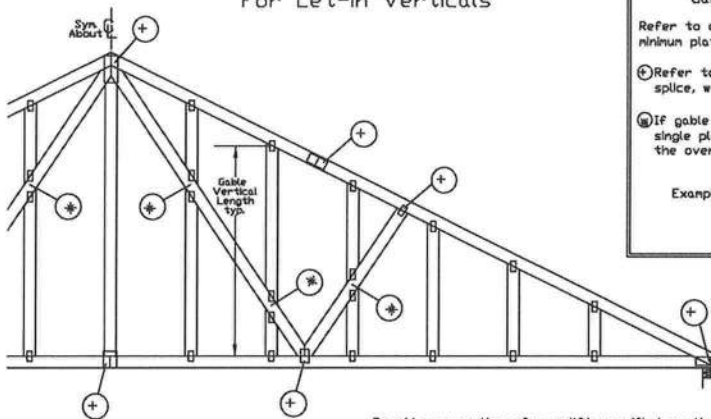
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FURNISH THIS DRAWING TO ALL CONTRACTORS INCLUDING THE INSTALLERS.  
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For more information see this job's general notes page and these web sites:  
ALPINE [www.alpine.com](http://www.alpine.com) TPI [www.tpi.org](http://www.tpi.org) SICA [www.sicaindustry.org](http://www.sicaindustry.org) ICCI [www.icci.org](http://www.icci.org)

TC LL	PSF	REF CLR Subst.
TC DL	PSF	DATE 01/02/19
BC DL	PSF	DRWG BRCLBSUB0119
BC LL	PSF	
TOT. LD.	PSF	
DUR. FAC.		
SPACING		

12-10-2018, Yoonhwak Kim, FL PE #86367

## Gable Detail For Let-in Verticals



### Gable Truss Plate Sizes

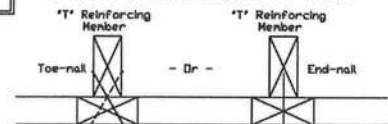
Refer to appropriate Alpine gable detail for minimum plate sizes for vertical studs.

① Refer to Engineered truss design for peak, splice, web, and heel plates.

② If gable vertical plates overlap, use a single plate that covers the total area of the overlapped plates to span the web.



### 'T' Reinforcement Attachment Detail



To convert from 'L' to 'T' reinforcing members, multiply 'T' increase by length (based on appropriate Alpine gable detail).

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

'T' reinforcing member material must match size, specie, and grade of the 'L' reinforcing member.

Web Length Increase w/ 'T' Brace

'T' Reinf. Mem. Size	'T' Increase
2x4	30 %
2x6	20 %

Example:

ASCE 7-10 Wind Speed = 120 mph  
Mean Roof Height = 30 ft, Kzt = 1.00  
Gable Vertical = 24' o.c. SP #3  
'T' Reinforcing Member Size = 2x4  
'T' Brace Increase (From Above) = 30% = 1.30  
(1) 2x4 'L' Brace Length = 8' 7"  
Maximum 'T' Reinforced Gable Vertical Length  
1.30 x 8' 7" = 11' 2"

Provide connections for uplift specified on the engineered truss design.

Attach each 'T' reinforcing member with

End Driven Nails:

10d Common (0.148"x 3", min) Nails at 4' o.c. plus  
(4) nails in the top and bottom chords.

Toenailed Nails:

10d Common (0.148"x 3", min) Toenails at 4' o.c. plus  
(4) toenails in the top and bottom chords.

This detail to be used with the appropriate Alpine gable detail for ASCE wind load.

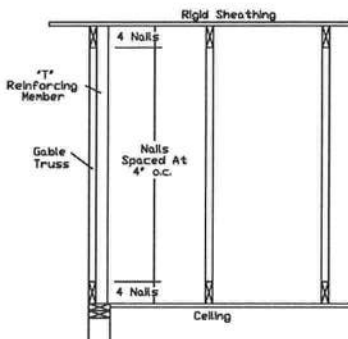
### ASCE 7-05 Gable Detail Drawings

A13015051014, A12015051014, A11015051014, A10015051014, A14015051014,  
A13030051014, A12030051014, A11030051014, A10030051014, A14030051014

### ASCE 7-10 & ASCE 7-16 Gable Detail Drawings

A11515ENC100118, A12015ENC100118, A14015ENC100118, A10015ENC100118,  
A18015ENC100118, A20015ENC100118, A20015END100118, A20015END100118,  
A11530ENC100118, A12030ENC100118, A14030ENC100118, A10030ENC100118,  
A18030ENC100118, A20030ENC100118, A20030END100118, A20030END100118,  
S11515ENC100118, S12015ENC100118, S14015ENC100118, S16015ENC100118,  
S18015ENC100118, S20015ENC100118, S20015END100118, S20015END100118,  
S11530ENC100118, S12030ENC100118, S14030ENC100118, S16030ENC100118,  
S18030ENC100118, S20030ENC100118, S20030END100118, S20030END100118

See appropriate Alpine gable detail for maximum unreinforced gable vertical length.



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For more information see this job's general notes page and these web sites: 1/5/2021  
ALPINE www.alpinetw.com TPI www.tpinet.org SICA www.sicaindustry.org ICC www.iccsa.org



Yoonhwak Kim, FL PE #86367

REF LET-IN VERT  
DATE 01/02/2018  
DRWG GBLLETIN0118

MAX. TOT. LD. 60 PSF  
DUR. FAC. ANY  
MAX. SPACING 24.0'

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

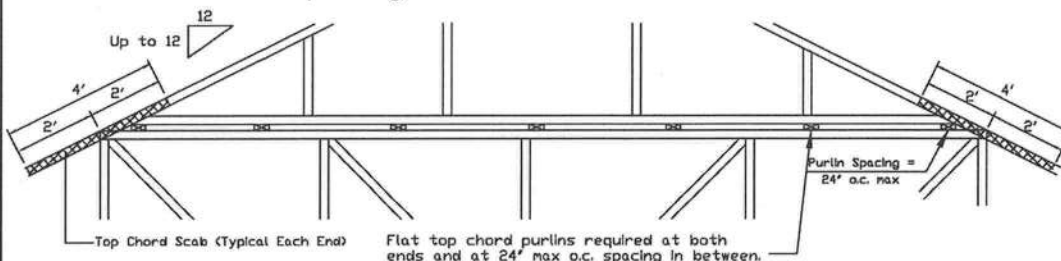
160 mph Wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp C, Wind DL= 5.0 psf (min), Kzt=1.0.  
Or 140 mph wind, 30.00 ft Mean Hgt, ASCE 7-16, Enclosed Bldg. located anywhere in roof, Exp D, wind DL= 5.0 psf (min), Kzt=1.0.

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

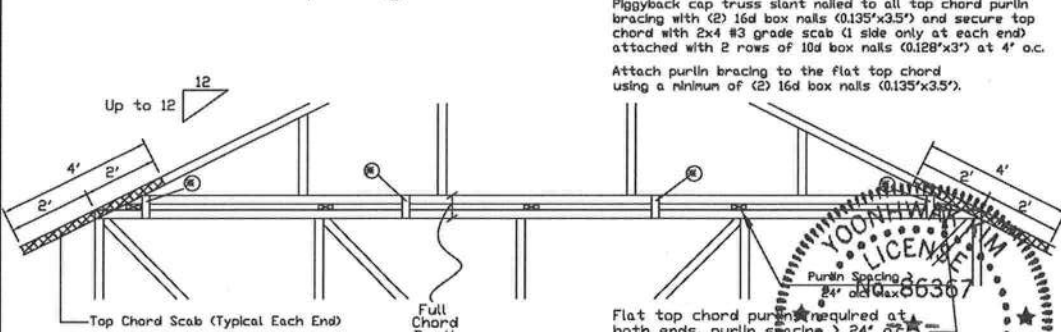


Piggyback cap truss slant nailed to all top chord purlin bracing with (2) 16d box nails (0.135"x3.5") and secure top chord with 2x4 #3 grade scab (1 side only at each end) attached with 2 rows of 10d box nails (0.128"x3") at 4' o.c.

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 (1) 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 (6) 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 time of fabrication. 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.



13723 Riverport Drive  
Suite 200  
Maryland Heights, MO 63043

**IMPORTANT: READ AND FOLLOW ALL NOTES ON THIS DRAWING**  
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 ICCI Building Component Safety Information by TPI and SICA for safety practices prior to performing these functions. Installers shall provide temporary bracing per ICCI. 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 ICCI 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-2 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 & 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 this job's general notes page and these web sites:  
ALPINE: www.alpineitw.com TPI: www.tpi.org SICA: www.sicaindustrial.org ICCI: www.icci.org



REF PIGGYBACK  
DATE 01/02/2018  
DRWG PB160160118

SPACING 24.0'

PE-KIM-278, Yoonhwak Kim, FL PE #86367