72990 (68) County copy 1

SIMPSON Strong-Tie®

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

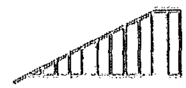
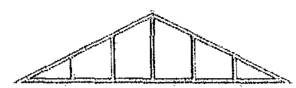
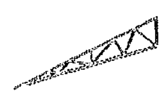
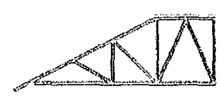
Job #:	235539
Job Name:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
Customer:	Century Truss Systems
Received:	6/7/2024 6:22 AM
Requested:	6/10/2024 10.00 AM

Contact/Shipping Information

Sent By:	Chris Wallington
Sender Email:	centurytrussengineering@gmail com
Eng Email:	centurytrussengineering@gmail com
Ship Type:	Email
Customer Note:	
Engineering Note:	

Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023 9 2 1
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
1	GE1	22-0-0	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947337	
Customer Note								
Engineering Note								
2	GE2	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947338	
Customer Note								
Engineering Note								
3	GE3	6-0-0	6.00 0.00	2-0-0 2-0-0	Truss Studio 2023.9.2.1		2947339	
Customer Note								
Engineering Note								
4	PB01	27-8-10	6.00 0.00	0-0-0 0-0-0	Truss Studio 2023.9.2.1		2947340	
Customer Note								
Engineering Note								
5	T01	32-1-4	6.00 3.50	2-0-0 0-0-0	Truss Studio 2023.9.2.1	X	2947341	
Customer Note								
Engineering Note	Changed bearing geometry from flat to sloped							
6	T02	26-11-4	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947342	
Customer Note								
Engineering Note								

SIMPSON Strong-Tie®

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

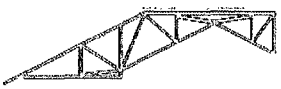
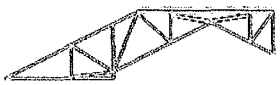
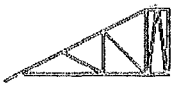
Job #:	235539
Job Name:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
Customer:	Century Truss Systems
Received:	6/7/2024 6 22 AM
Requested:	6/10/2024 10:00 AM

Contact/Shipping Information

Sent By:	Chris Wallington
Sender Email:	centurytrussengineering@gmail com
Eng Email:	centurytrussengineering@gmail.com
Ship Type:	Email
Customer Note:	
Engineering Note:	

Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023.9 2 1
Original Studio Version:			2023 9 2.1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
7	T02-A	37-1-8	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947343	
Customer Note								
Engineering Note								
8	T02-B	37-1-8	6.00 6.00	0-0-0 0-0-0	Truss Studio 2023.9.2.1		2947344	
Customer Note								
Engineering Note								
9	T03	24-7-6	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947345	
Customer Note								
Engineering Note								
10	T03-A	38-11-12	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947346	
Customer Note								
Engineering Note								
11	T04	21-9-0	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947347	
Customer Note								
Engineering Note								
12	T04-A	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947348	
Customer Note								
Engineering Note								

SIMPSON Strong-Tie

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

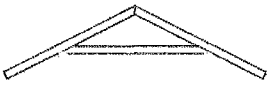
Job #:	235539
Job Name:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
Customer:	Century Truss Systems
Received:	6/7/2024 6 22 AM
Requested:	6/10/2024 10 00 AM

Contact/Shipping Information

Sent By:	Chris Wallington
Sender Email:	centurytrussengineering@gmail com
Eng Email:	centurytrussengineering@gmail com
Ship Type:	Email
Customer Note:	
Engineering Note:	

Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023 9 2 1
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
13	T04-B	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947349	
Customer Note								
Engineering Note								
14	T05	6-0-0	6.00 0.00	2-0-0 2-0-0	Truss Studio 2023.9.2.1		2947350	
Customer Note								
Engineering Note								

SIMPSON Strong-Tie®

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

Job #:	235539
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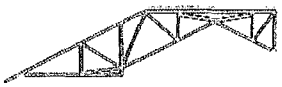
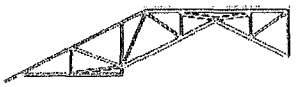
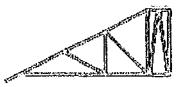
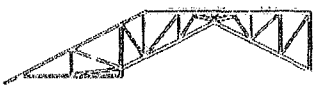
Eng Email:	centurytrussengineering@gmail com
Ship Type:	Email
Customer Note:	
Engineering Note:	

Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023 9 2 1
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
7	T02-A	37-1-8	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947343	
Customer Note								
Engineering Note								
8	T02-B	37-1-8	6.00 6.00	0-0-0 0-0-0	Truss Studio 2023.9.2.1		2947344	
Customer Note								
Engineering Note								
9	T03	24-7-6	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947345	
Customer Note								
Engineering Note								
10	T03-A	38-11-12	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947346	
Customer Note								
Engineering Note								
11	T04	21-9-0	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947347	
Customer Note								
Engineering Note								
12	T04-A	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947348	
Customer Note								
Engineering Note								

SIMPSON Strong-Tie

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

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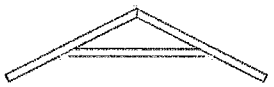
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
13	T04-B	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947349	
Customer Note								
Engineering Note								
14	T05	6-0-0	6.00 0.00	2-0-0 2-0-0	Truss Studio 2023.9.2.1		2947350	
Customer Note								
Engineering Note								

Century Truss Systems
1360 Saratoga St

Deland, Florida 32724

Ph

Reaction Summary

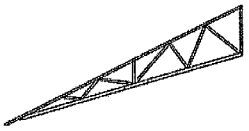
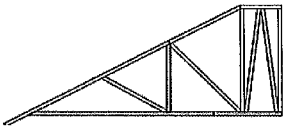
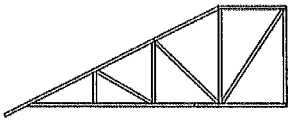
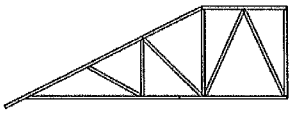
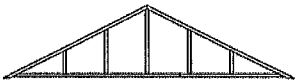
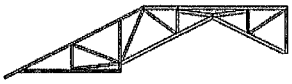
Date 6/7/2024

Project: P-23-228 - 421 SE Alfred Markham Rd
HOUSE

CUSTOMER INFORMATION		JOB INFORMATION
Valued Customer	Phone	Sydash Construction L L.C
Placeholder	Fax	421 SE Alfred Markham Rd
	Email	
Placeholder,	Sls Chris Wallington	Lake City, Florida 32025
Valued Customer -		

Plan 1 Elevation A - Quantity: 1

Maximum number of reported reactions is 5

Truss Weight	Qty per Elev	Span Spacing	Pitch Top Bottom	Plies	Truss Image	Location Dn Reaction Uplift Status Bearing Type	Location Dn Reaction Uplift Status Bearing Type	Location Dn Reaction Uplift Status Bearing Type	Location Dn Reaction Uplift Status Bearing Type	Location Dn Reaction Uplift Status Bearing Type
T01 207 87	28	32-1-4 2-0-0	6 00 3 50	1		**0-4-0** 1434 (554) OK Wall	**31-11-8** 1274 (497) Failed Hanger			
T04 153 20	12	21-9-0 2-0-0	6 00 0 00	1		**0-4-0** 1020 (335) OK Wall	**21-8-4** 862 (297) OK Hanger			
T03 155 61	1	24-7-6 2-0-0	6 00 0 00	1		**0-4-0** 1133 (374) OK Wall	**24-5-14** 979 (332) OK Hanger			
T02 168 91	11	26-11-4 2-0-0	6 00 0 00	1		**0-4-0** 1226 (405) OK Wall	**26-9-12** 1081 (360) OK Hanger			
PB01 108 43	25	27-8-10 2-0-0	6 00 0 00	1		**See TDD for reactions**				
T03-A 303 65	1	38-11-12 2-0-0	6 00 0 00	1		**0-4-0** 1705 (576) OK Wall	**38-7-6** 1550 (513) OK Wall			
T04-A 369 93	7	42-4-0 2-0-0	6 00 0 00	1		**0-4-0** 1839 (612) OK Wall	**42-0-0** 1684 (552) OK Wall			
T04-B 272 25	5	42-4-0 2-0-0	6 00 0 00	1		**0-4-0** 302 (343) OK Wall	**14-8-0** 2736 (970) OK Wall	**42-0-0** 740 (415) OK Wall		

Engineered drawing values supersede any of these values if a discrepancy is found

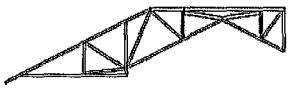
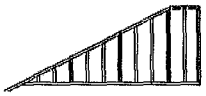
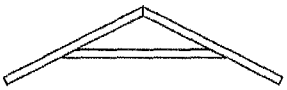
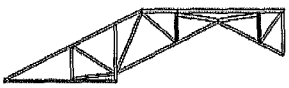
Century Truss Systems
1360 Saratoga St

Deland, Florida 32724

Ph

Reaction Summary

Date 6/7/2024

T02-A 268 20	6	37-1-8 2-0-0	6 00 0 00	1		**0-4-0** 1631 (558) OK Wall	**36-10-12** 1478 (491) OK Wall	
GE1 162 47	1	22-0-0 2-0-0	6 00 0 00	1		**See TDD for reactions**		
GE2 373 55	1	42-4-0 2-0-0	6 00 0 00	1		**7-2-0** 2758 (868) OK Wall	**42-0-0** 763 (293) OK Wall	
GE3 27 82	1	6-0-0 2-0-0	6 00 0 00	1		**See TDD for reactions**		
T05 25 83	2	6-0-0 2-0-0	6 00 0 00	1		**0-1-12** 454 (147) OK Wall	**5-10-4** 454 (147) OK Wall	
T02-B 265 06	5	37-1-8 2-0-0	6 00 0 00	1		**0-4-0** 1490 (481) OK Wall	**36-10-12** 1480 (494) OK Wall	

Total: 106

Engineered drawing values supersede any of these values if a discrepancy is found

Century Truss Systems
1360 Saratoga St

Deland, Florida 32724

Ph

Reaction Summary

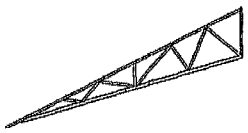
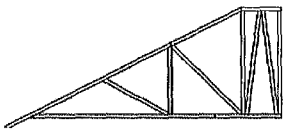
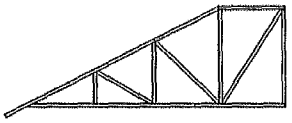
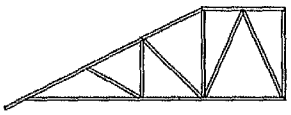
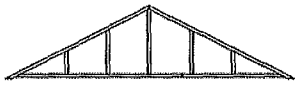
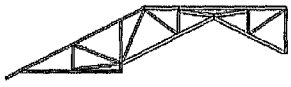
Date 6/7/2024

Project: P-23-228 - 421 SE Alfred Markham Rd
HOUSE

CUSTOMER INFORMATION		JOB INFORMATION
Valued Customer	Phone	Sydash Construction L L C
Placeholder	Fax	421 SE Alfred Markham Rd
	Email	
Placeholder,	Sls Chris Wallington	Lake City, Florida 32025
Valued Customer -		

Plan 1 Elevation A - Quantity: 1

Maximum number of reported reactions is 5

Truss Weight	Qty per Elev	Span Spacing	Pitch Top Bottom	Plies	Truss Image	Location Dn Reaction Uplift Status Bearing Type	Location Dn Reaction Uplift Status Bearing Type	Location Dn Reaction Uplift Status Bearing Type	Location Dn Reaction Uplift Status Bearing Type	Location Dn Reaction Uplift Status Bearing Type
T01 207 87	28	32-1-4 2-0-0	6 00 3 50	1		**0-4-0** 1434 (554) OK Wall	**31-11-8** 1274 (497) Failed Hanger			
T04 153 20	12	21-9-0 2-0-0	6 00 0 00	1		**0-4-0** 1020 (335) OK Wall	**21-8-4** 862 (297) OK Hanger			
T03 155 61	1	24-7-6 2-0-0	6 00 0 00	1		**0-4-0** 1133 (374) OK Wall	**24-5-14** 979 (332) OK Hanger			
T02 168 91	11	26-11-4 2-0-0	6 00 0 00	1		**0-4-0** 1226 (405) OK Wall	**26-9-12** 1081 (360) OK Hanger			
PB01 108 43	25	27-8-10 2-0-0	6 00 0 00	1		See TDD for reactions				
T03-A 303 65	1	38-11-12 2-0-0	6 00 0 00	1		**0-4-0** 1705 (576) OK Wall	**38-7-6** 1550 (513) OK Wall			
T04-A 369 93	7	42-4-0 2-0-0	6 00 0 00	1		**0-4-0** 1839 (612) OK Wall	**42-0-0** 1684 (552) OK Wall			
T04-B 272 25	5	42-4-0 2-0-0	6 00 0 00	1		**0-4-0** 302 (343) OK Wall	**14-8-0** 2736 (970) OK Wall	**42-0-0** 740 (415) OK Wall		

Engineered drawing values supersede any of these values if a discrepancy is found

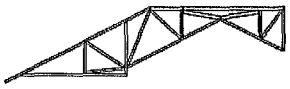
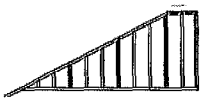
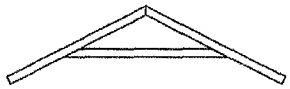
Century Truss Systems
1360 Saratoga St

Deland, Florida 32724

Ph:

Reaction Summary

Date 6/7/2024

T02-A 268 20	6	37-1-8 2-0-0	6 00 0 00	1		**0-4-0** 1631 (558) OK Wall	**36-10-12** 1478 (491) OK Wall	
GE1 162 47	1	22-0-0 2-0-0	6 00 0 00	1		**See TDD for reactions**		
GE2 373 55	1	42-4-0 2-0-0	6 00 0 00	1		**7-2-0** 2758 (868) OK Wall	**42-0-0** 763 (293) OK Wall	
GE3 27 82	1	6-0-0 2-0-0	6 00 0 00	1		**See TDD for reactions**		
T05 25 83	2	6-0-0 2-0-0	6 00 0 00	1		**0-1-12** 454 (147) OK Wall	**5-10-4** 454 (147) OK Wall	
T02-B 265 06	5	37-1-8 2-0-0	6 00 0 00	1		**0-4-0** 1490 (481) OK Wall	**36-10-12** 1480 (494) OK Wall	

Total: 106

Engineered drawing values supersede any of these values if a discrepancy is found

SIMPSON Strong-Tie

COMPONENT DESIGN DRAWINGS & DETAILS

Simpson Strong-Tie Company, Inc.

5956 W Las Positas Blvd
Pleasanton, CA 94588
(800) 999-5099
www strongtie com

Prepared for:	Century Truss Systems
Job:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
Date:	6/7/2024 6 22 AM
Ref. Number:	235539

Kevin M Boothe State of Florida, Professional Engineer License No 69577

This item has been digitally signed and sealed by Kevin M Boothe on the date indicated here 2024 06.07 14 09 53-05'00'

Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies

Notes

1 The component design drawings referenced below have been prepared based on design criteria and requirements set forth in the Construction Documents, as communicated by the Component Manufacturer
2 The engineer's signature on these drawings indicates professional engineering responsibility solely for the individual components to be able to resist the design loads indicated, utilizing all the design parameter and materials indicated or referenced on each individual design
3 It is the Building Designer's responsibility to review the component design drawings to insure compatibility with the Building design, Refer to all notes on the individual component design drawings

14 Component Design Drawing(s)

1-GE1 SID 2947337	**5-T01: SID 2947341**	9-T03 SID 2947345	13-T04-B SID 2947349
2-GE2 SID 2947338	6-T02 SID 2947342	10-T03-A SID 2947346	14-T05 SID 2947350
3-GE3 SID 2947339	7-T02-A SID 2947343	11-T04 SID 2947347	
4-PB01 SID 2947340	8-T02-B SID 2947344	12-T04-A SID 2947348	

SIMPSON Strong-Tie

Component Solutions™ Important Information & General Notes

General Notes

1. Each Truss Design Drawing (TDD) provided with this sheet has been prepared in conformance with ANSI/TPI 1 Refer to ANSI/TPI 1 Chapter 2 for the responsibilities of all parties involved, which include but are not limited to the responsibilities listed on this sheet, and for the definitions of all capitalized terms referenced in this document
2. TDDs should not be assumed to be to scale
3. The Contractor and Building Designer shall review and approve the Truss Submittal Package
4. The suitability and use of the component depicted on the TDD for any particular building design is the responsibility of the Building Designer
5. The Building Designer is responsible for the anchorage of the truss at all bearing locations as required to resist uplift, gravity and lateral loads, and for all Truss-to-Structural Element connections except Truss-to-Truss connections
6. The Building Designer shall ensure that the supporting structure can accommodate the vertical and/or horizontal truss deflections
7. Unless specifically stated otherwise, each Design assumes trusses will be adequately protected from the environment and will not be used in corrosive environments unless protected using an approved method This includes not being used in locations where the sustained temperature is greater than 150°F
8. Trusses are designed to carry loads within their plane Any out-of-plane loads must be resisted by the Permanent Building Stability Bracing
9. Design dead loads must account for all materials, including self-weight The TDD notes will indicate the min pitch above which the dead loads are automatically increased for pitch effects
10. Trusses installed with roof slopes less than 0 25/12 may experience (but are not designed for) ponding The Building Designer must ensure that adequate drainage is provided to prevent ponding
11. Camber is a non-structural consideration and is the responsibility of truss fabricator

Handling, Installing, Restraint & Bracing

1. The Contractor is responsible for the proper handling, erection, restraint and bracing of the Trusses In lieu of job-specific details, refer to BCSI
2. ANSI/TPI 1 stipulates that for trusses spanning 60' or greater, the Owner shall contract with any Registered Design Professional for the design and inspection of the temporary and permanent truss restraint and bracing Simpson Strong-Tie is not responsible for providing these services
3. Trusses require permanent lateral restraint to be applied to chords and certain web members (when indicated) at the locations or intervals indicated on the TDD Web restraints are to be located at mid points, or third points of the member and chord purlins are not to exceed the spacing specified by the TDD Chords shown without bracing indicated are assumed to be continuously braced by sheathing or drywall Permanent lateral restraint shall be accomplished in accordance with standard industry lateral restraint/bracing details in BCSI-B3 or BCSI-B7, supplemental bracing details referenced on the TDD, or as specified in a project-specific truss permanent bracing plan provided by the Building Designer
4. Additional building stability permanent bracing shall be installed as specified in the Construction Documents
5. Special end wall bracing design considerations may be required if a flat gable end frame is used with adjacent trusses that have sloped bottom chords (see BCSI-B3)
6. Do not cut, drill, trim, or otherwise alter truss members or plates without prior written approval of an engineer, unless specifically noted on the TDD
7. Piggyback assemblies shall be braced as per BCSI-B3 unless otherwise specified in the Construction Documents
8. For floor trusses, when specified, Strongbacking shall be installed per BCSI-B7 unless otherwise specified in the Construction Documents
9. For IBC 2021 and newer, truss chords without a diaphragm require a project specific bracing design prepared by a registered design professional

Symbols and Nomenclature

5x7 Plate size, the first digit is the plate width (perp to the slots) and the second digit is the plate length (parallel to the slots)

5x7-18 -18, -18S5, or -18S6 following the plate size indicates different 18 gauge plate types

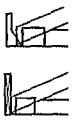
These symbols following the plate size indicate the direction of the plate length (and tooth slots) for square and nearly square plates

10-3-14 Dimensions are shown in feet-inches-sixteenths (for this example, the dimension is 10'-3 14/16")

Joints are numbered left to right, first along the top chord and then along the bottom chord Mid-panel splice joint numbers are not shown on the drawing Members are identified using their end joint numbers (e g , TC 2-3)

When this symbol is shown, permanent lateral restraint is required Lateral restraint may be applied to either edge of the member See Note 3 under Handling, Installing, Restraint & Bracing for more information

Bearing supports (wall, beam, etc.), locations at which the truss is required to have full bearing Minimum required bearing width for the given reactions are reported on the TDD Required bearing widths are based on the truss material and indicated PSI of the support material The Building Designer is responsible for verifying that the capacity of the support material exceeds the indicated PSI, and for all other bearing design considerations



Truss-to-Truss or Truss-to-Structural Element connection, which require a hanger or other structural connection (e g , toe-nail) that has adequate capacity to resist the maximum reactions specified in the Reaction Summary Structural connection type is not limited by type shown on TDD Toe-nails may be used where hanger type shown where allowed by detail or other connection design information Design of the Structural Element and the connection of the Truss to a Structural Element is by others

Note These symbols are for graphical interpretation only, they are not intended to give any indication of the geometry requirements of the actual item that is represented

Materials and Fabrication

1. Design assumes truss is manufactured in accordance with the TDD and the quality criteria in ANSI/TPI 1 Chapter 3, unless more restrictive criteria are part of the contract specifications
2. Unless specifically stated, lumber shall not exceed 19% moisture content at time of fabrication or in service
3. Design is not applicable for use with fire retardant, preservative treated or green lumber unless specifically stated on the TDD
4. Plate type, size, orientation and location indicated are based on the specified design parameters Larger plate sizes may be substituted in accordance with ANSI/TPI, Section 3 6 3 Plates shall be embedded within ANSI/TPI 1 tolerances on both faces of the truss at each joint, unless noted otherwise
5. Truss plates shall be centered on the joint unless otherwise specified

Referenced Standards

ANSI/TPI 1: National Design Standard for Metal Plate Connected Wood Truss Construction, a Truss Plate Institute publication (www tpinst org)

BCSI: Guide to Good Practice for Handling, Installing, Restraining & Bracing Metal Plate Connected Wood Trusses, a joint publication of the Truss Plate Institute (www tpinst org) and the Structural Building Components Association (www sbcindustry com)

DSB-89 Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses, a Truss Plate Institute publication (www tpinst org)

NDS: National Design Specification for Wood Construction published by American Forest & Paper Association and American Wood Council

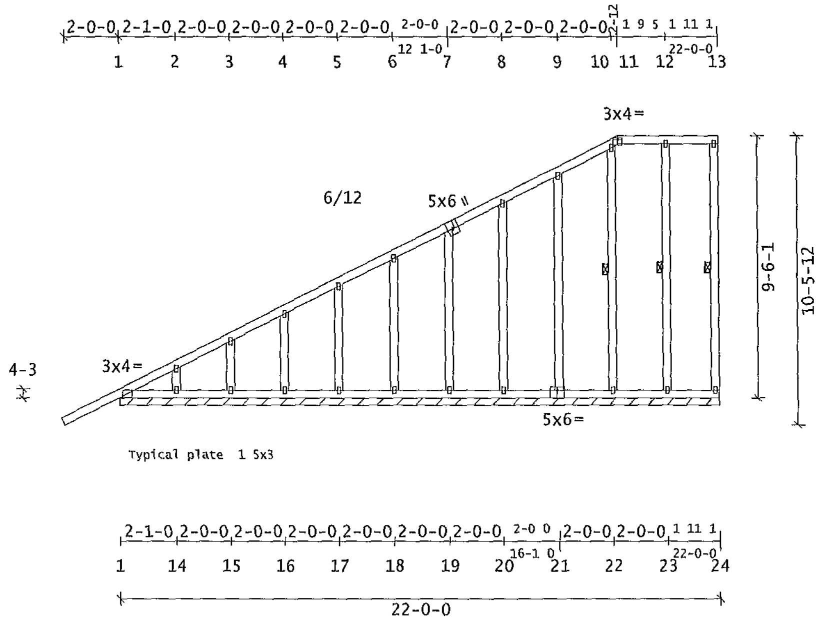
ESR-2762 Simpson Strong-Tie® AS Truss Plates are covered under ESR-2762 published by the International Code Council Evaluation Service (www icc-es org)

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 1	Truss: GE1

Customer Valued Customer

Truss Mfr Contact. Chris Wallington

SID 0002947337
TID 235539
Date 06 / 07 / 24
Page 1 of 1



Truss Weight = 162 5 lb

Code/Design FBC-2023/TPI-2014			
PSF Live Dead	Dur Factors		
TC 20 0 10 0	Live	Wind	Snow
BC 0 0 10 0 Lum	1 25	1 60	N/A
Total 40 0 Plt	1 25	1 60	N/A

Spacing 2 00-00 o c Plies 1
Repetitive Member Increase Yes
Green Lumber No Wet Service No
Fab Tolerance 20% Creep (Kcr) = 2 0
OH Soffit Load 2 0 psf

-----------Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

---- -----Wind Load Specs----- ----
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks------

10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP	(ALSC6-2013)	#1
BC	2x4	SP	(ALSC6-2013)	#1
Webs	2x4	SP	(ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL 1 - 1 0 53
Max CSI in BC PANEL 1 - 14 0 30
Max CSI in Web 24 - 13 0 95

	Mem	Ten	Comp	CSI
TC	1 7	117	0	0 53
	7-11	228	286	0 07
	11-13	242	205	0 06
BC	1-21	863	240	0 30
	21-24	242	205	0 03
Web	2-14	140	196	0 02
	3-15	239	229	0 03
	4-16	169	222	0 03
	5 17	144	222	0 05
	6-18	158	227	0 09
	7-19	147	221	0 12
	8 20	172	212	0 16
	9-21	232	226	0 22
	10-22	229	205	0 07
	12-23	163	223	0 08
	13-24	78	107	0 95

Reaction Summary

--------------Reaction Summary(Lbs)-- ---- -------

Jnt	-X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	557	111	22-00-00			
14	2-01 00	218	183	22-00-00			

Reactions not shown down < 400 and up < 150

---- Reaction Summary (plf) -----

Jnt Jnt	React	Up-	--Width-	
1- 24	50	15	22-00-00	(reduced)

Max Horiz = -258 / +548 at Joint 18

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [20-01-14] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

If this truss is exposed to wind load perpendicular to the plane of the truss, gable studs must be braced according to the Construction Documents, BCSI-B3, or a gable stud bracing detail matching the design wind speed shown Lateral bracing of the truss itself to resist out-of-plane wind load must be in accordance with the Construction Documents
The maximum rake overhang length is 12 0"
Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

TrussSpan	Limit	Actual(in)	Location
Vert LL	L/240	L/999(0 00)	1-14
Vert DL	L/120	L/999(0 00)	1-14
Vert CR	L/180	L/999(0 00)	1-14
Horz LL	0 75in	(0 01)	@Jt 1
Horz CR	1 25in	(0 01)	@Jt 1
Ohng CR	2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

---- -------Bracing Data--------- --
Chords, Sheathing required or bracing indicated
------- -----Purlins-------- --

	---oc---	--From-	---To--	#Bays
TC	5-11-00	-2-01-09	19-03 04	5
TC	2-00-00	19-03-04	21-00-07	1
TC	11-00	21-00-07	22-00-00	2
BC	7-04-00	0	22-00-00	3

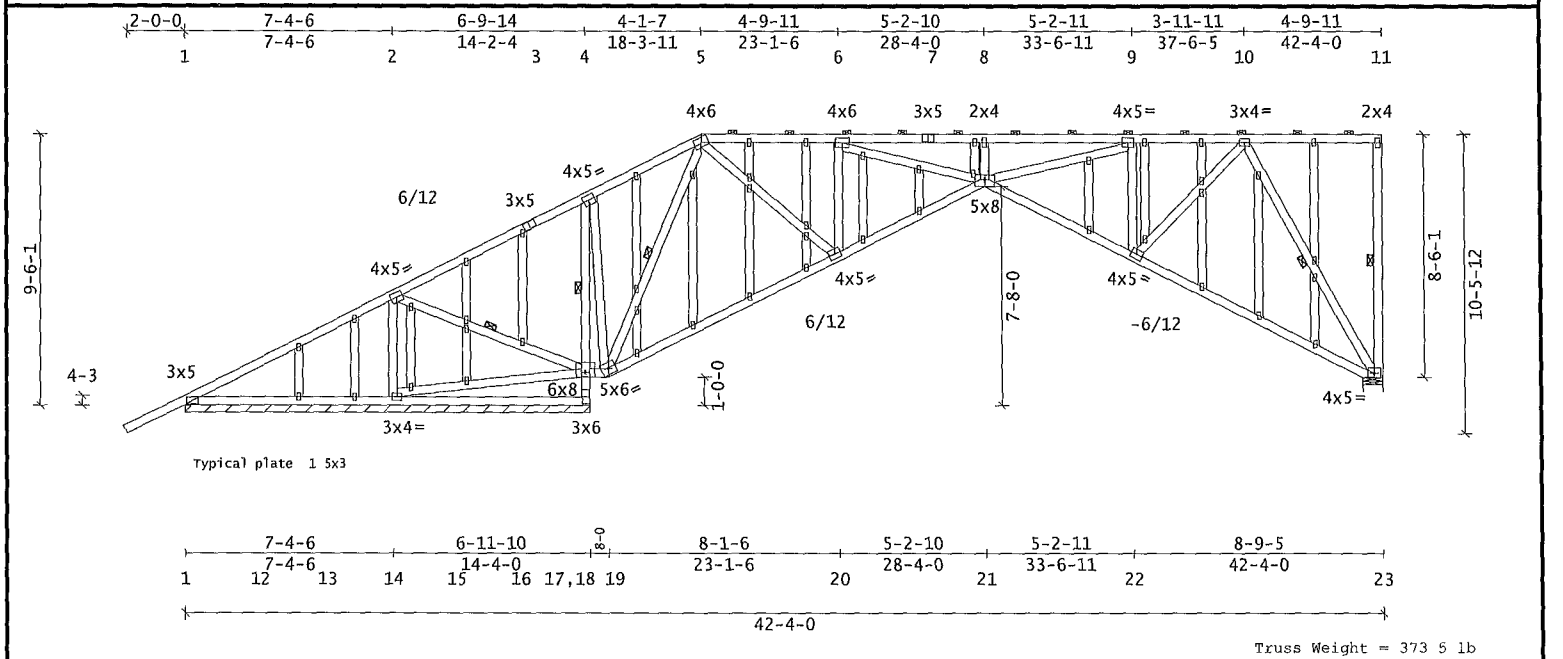
----- - Web Bracing -- CLR -- ----- -
Single 22-10 23-12 24-13
Continuous Restraint Bracing Req'd
See BCSI B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt7(-00-04,00-07), Jnt11(0,-00-12), Jnt21(0,-01-00)

KEVIN M. BOOTHE
LICENSE
No. 69577
STATE OF FLORIDA
PROFESSIONAL ENGINEER
COA #30003
6/7/2024

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 1	Truss: GE2
Customer Valued Customer		SID 0002947338
		TID 235539
		Date 06 / 07 / 24
Truss Mfr Contact: Chris Wallington		Page 1 of 1



Truss Weight = 373 5 lb

Code/Design FBC-2023/TPI-2014					
PSF	Live	Dead	Dur Factors		
TC	20 0	10 0	Live	Wind	Snow
BC	0 0	10 0 Lum 1 25	1 60		N/A
Total	40 0	Plt 1 25	1 60		N/A
Spacing 2-00-00 o c Plies 1					
Repetitive Member Increase Yes					
Green Lumber No Wet Service No					
Fab Tolerance 20% Creep (Kcr) = 2 0					
OH Soffit Load 2 0 psf					

--------- -Snow Load Specs----- ----
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

--- -----Wind Load Specs----------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	2 - 3	0 87
Max CSI in BC PANEL	18 - 19	0 96
Max CSI in Web	23 - 11	0 70

Mem		Ten	Comp	CSI
TC	OH- 1	117	0	0 53
	1- 2	616	693	0 55
	2- 3	1860	1402	0 87
	3- 4	1912	1380	0 79
	4 5	1580	1039	0 56
	5- 6	367	185	0 29
	6- 7	1127	1939	0 40
	7- 8	1127	1939	0 32
	8- 9	1127	1939	0 39
	9-10	572	911	0 25
	10-11	0	173	0 34
	11-OH	0	0	0 00
BC	1-12	194	463	0 34
	12-13	194	463	0 11
	13-14	194	463	0 08
	14-15	10	24	0 03
	15-16	10	24	0 03
	16-17	10	24	0 03
	18-19	906	1633	0 96
	19-20	506	864	0 61
	20-21	163	198	0 46
	21-22	1031	655	0 64
	22-23	528	409	0 68
Web	2-14	655	290	0 10
	2-18	944	1308	0 29
	4-18	1418	2376	0 44
	4-19	1865	905	0 37
	5-19	1033	1651	0 53
	5-20	981	534	0 21
	6-20	624	830	0 22
	6-21	1996	1264	0 40
	8-21	271	325	0 03
	9-21	1067	792	0 25
	9-22	428	562	0 15
	10-22	692	315	0 10
	10-23	514	894	0 33
	11-23	97	211	0 70
	14-18	190	443	0 32
	17-18	1921	2926	0 24

Reaction Summary

-------------Reaction Summary(Lbs)- --------- ----						
Jnt	--X-Loc-	React	-Up-	- Width-	-Reqd	Mat PSI
23	42-02-04	763	292	03-08	01-08	SPF 425
14	7-04-06	316	547	14-04-00		
17	14-02-04	2944	1199	14-04-00		

Reactions not shown down < 400 and up < 150

- - Reaction Summary (plf) -----			
Jnt-Jnt	React	-Up-	--Width-
1- 17	10	0	14-04-00 (reduced)

Max Horiz = -237 / +531 at Joint 1

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [30-03-14] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

If this truss is exposed to wind load perpendicular to the plane of the truss, gable studs must be braced according to the Construction Documents, BCSI-B3, or a gable stud bracing detail matching the design wind speed shown Lateral bracing of the truss itself to resist out-of-plane wind load must be in accordance with the Construction Documents

The maximum rake overhang length is 12 0

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees

Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints

Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE

Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(-0 22)	22-23
Vert DL		L/120	L/999(-0 25)	22 23
Vert CR		L/180	L/721(0 46)	22-23
Horz LL		0 75in	(0 15)	@Jt23
Horz CR		1 25in	(0 30)	@Jt23
Ohng CR	2L/180	2L/805	(0 06)	1- 1

Bracing Data Summary

----------Bracing Data----------				
Chords, Sheathing required or bracing indicated				
------- -----Purlins----------				
	---oc---	- From--	---To---	#Bays
TC	5-11-00	-2-01-09	19-03-04	5
TC	2-00 00	19-03-04	41-04-07	11
TC	11-00	41-04-07	42-04-00	2
BC	4 11-00	0	42-00-08	10

----- - Web Bracing - CLR --------- -			
Single	2-18	18- 4	19- 5 10-23 23-11

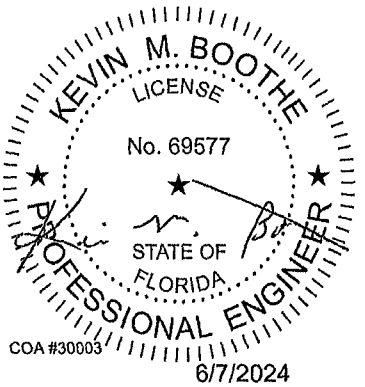
Continuous Restraint Bracing Req'd

See BCSI-B3 3 0

Plate offsets (X, Y):

(None unless indicated below)

Jnt18(0,01-04), Jnt19(00-01,00 01), Jnt21(0,-00-09), Jnt23(0,00-05)



SIMPSON Strong-Tie

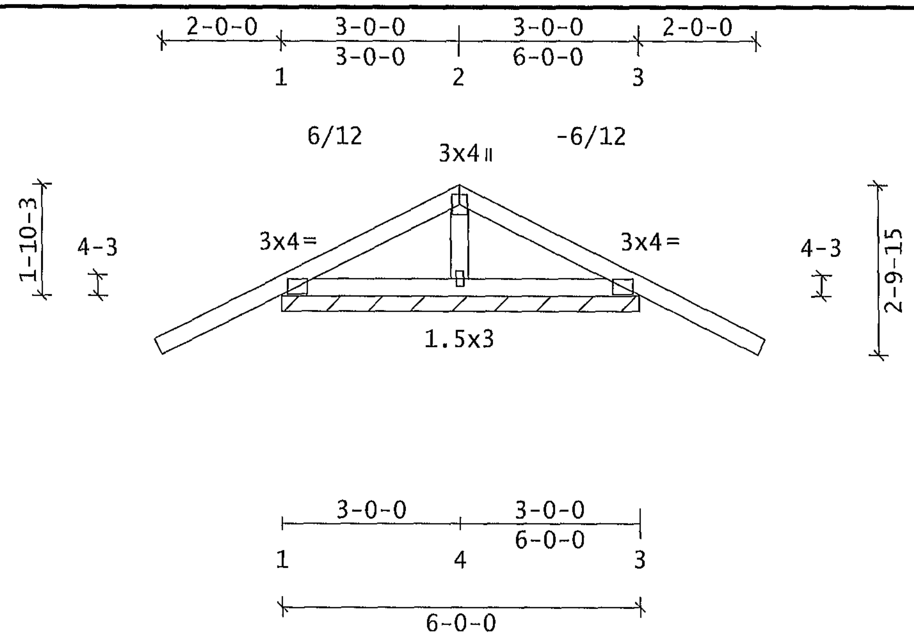
Component Solutions
Truss Studio V
2023 9 2 1

P-23-228 - 421 SE Alfred Markham Rd HOUSE | **Qty: 1** | **Truss: GE3**

Customer· Valued Customer

Truss Mfr Contact. Chris Wallington

SID 0002947339
TID 235539
Date 06 / 07 / 24
Page 1 of 1



Truss Weight = 27 8 lb

```
Code/Design  FBC-2023/TPI-2014
PSF  Live  Dead        Dur Factors
TC    20 0  10 0     Live  Wind  Snow
BC     0 0  10 0  Lum 1 25  1 60   N/A
Total      40 0  Plt 1 25  1 60   N/A
Spacing   2-00-00 o c     Plies  1
Repetitive Member Increase  Yes
Green Lumber   No  Wet Service   No
Fab Tolerance    20% Creep (Kcr) = 2 0
OH Soffit Load   2 0 psf
```

```
----------Snow Load Specs----- ----
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat  II  Terrain Cat  C
Roof Exposure  Sheltered
Thermal Condition  All Others(1 0)
Unobstructed Slippery Roof  No
Low-Slope Minimums(Pfmin)   No
Unbalanced Snow Loads       No
Rain Surcharge  No Ice Dam Chk  No
```

```
----------Wind Load Specs----------
ASCE7-22  Wind Speed(V) = 140 mph
Risk Cat  II  Exposure Cat  C
Bldg Dims  L =  97 2 ft  B =  78 3 ft
M R H(h) =  25 0 ft  Kzt = 1 0
Bldg Enclosure  Enclosed
Wind DL(psf)  TC =  5 0 BC =  5 0
End Vertical Exposed  L = Yes R = Yes
Wind Uplift Reporting  ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone  7-10-00
```

```
----- -Additional Design Checks------
10 psf Non-Concurrent BCLL          Yes
20 psf BC Limited Storage           Yes
200 lb BC Accessible Ceiling        Yes
300 lb TC Maintenance Load          Yes
2000 lb TC Safe Load                No
Unbalanced TCLL                     Yes
```

Material Summary

```
TC       2x4   SP (ALSC6-2013)  #1
BC       2x4   SP (ALSC6-2013)  #1
Webs     2x4   SP (ALSC6-2013)  #1
```

Member Forces Summary

```
Max CSI in TC PANEL    1 -  1    0 53
Max CSI in BC PANEL    1 -  4    0 28
Max CSI in Web         4 -  2    0 03
```

	Mem	Ten	Comp	CSI
TC	1- 2	117	0	0 53
	2- 3	117	0	0 50
BC	1- 3	383	182	0 28
Web	2- 4	312	207	0 03

Reaction Summary

```
Reactions not shown  down < 400 and up < 150
---- Reaction Summary (plf) -----
Jnt Jnt        React -Up-  -Width
 1-  3           125    49  6-00 00
Max Horiz =      -48 /     +48 at Joint   4
```

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [3-00-00] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

If this truss is exposed to wind load perpendicular to the plane of the truss, gable studs must be braced according to the Construction Documents, BCSI-B3, or a gable stud bracing detail matching the design wind speed shown Lateral bracing of the truss itself to resist out-of-plane wind load must be in accordance with the Construction Documents

The maximum rake overhang length is 12 0"

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees

Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints

Lumber and plating have been applied symmetrically

Deflection Summary

```
TrussSpan Limit  Actual(in)    Location
Vert LL    L/240    L/999( 0 00)  4- 3
Vert DL    L/120    L/999( 0 00)  4- 3
Vert CR    L/180    L/999( 0 00)  4- 3
Horz LL    0 75in        ( 0 01) @Jt 3
Horz CR    1 25in        ( 0 01) @Jt 3
Ohng CR  2L/180  2L/692( 0 07)  1- 1
Ohng CR  2L/180  2L/692( 0 07)  3- 3
```

Bracing Data Summary

```
- ----------Bracing Data ----- -----
Chords  Sheathing required or bracing
indicated
-- ----------Purlins------------
       ---oc---  --From--   ---To--- #Bays
TC      5-08-00  -2-01-09    8-01-09   3
BC      6-00-00         0    6-00-00   1
Web Bracing  - None
```

Plate offsets (X, Y):

(None unless indicated below)

KEVIN M. BOOTHE
LICENSE
No. 69577
STATE OF FLORIDA
PROFESSIONAL ENGINEER
COA #30003
6/7/2024

SIMPSON Strong-Tie

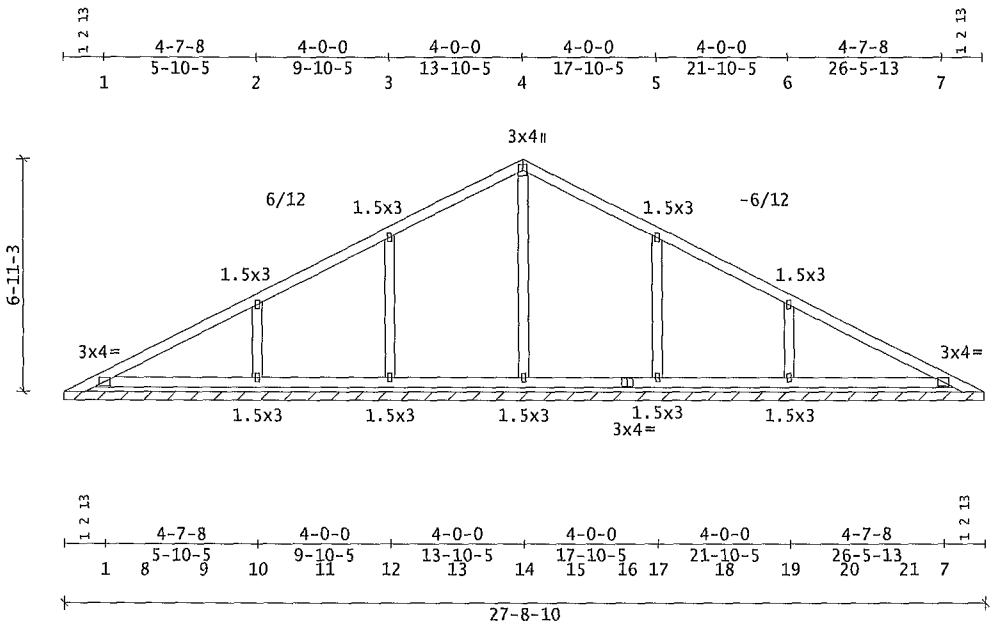
Component Solutions
Truss Studio V
2023 9 2 1

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 25	Truss: PB01

Customer: Valued Customer

Truss Mfr Contact: Chris Wallington

SID 0002947340
TID 235539
Date 06 / 07 / 24



Truss Weight = 108 4 lb

Code/Design FBC-2023/TPI-2014	--------- -Snow Load Specs---- -----	----------Wind Load Specs---------	-------Additional Design Checks------
PSF Live Dead Dur Factors	ASCE7-22 Ground Snow(Pg) = N/A	ASCE7-22 Wind Speed(V) = 140 mph	10 psf Non-Concurrent BCLL Yes
TC 20 0 10 0 Live Wind Snow	Risk Cat II Terrain Cat C	Risk Cat II Exposure Cat C	20 psf BC Limited Storage Yes
BC 0 0 1 0 Lum 1 25 1 60 N/A	Roof Exposure Sheltered	Bldg Dims L = 97 2 ft B = 78 3 ft	200 lb BC Accessible Ceiling Yes
Total 31 0 Plt 1 25 1 60 N/A	Thermal Condition All Others(1 0)	M R H(h) = 25 0 ft Kzt 1 0	300 lb TC Maintenance Load Yes
Spacing 2-00-00 o c Plies 1	Unobstructed Slippery Roof No	Bldg Enclosure Enclosed	2000 lb TC Safe Load No
Repetitive Member Increase Yes	Low-Slope Minimums(Pfmin) No	Wind DL(psf) TC = 5 0 BC = 1 0	Unbalanced TCLL Yes
Green Lumber No Wet Service No	Unbalanced Snow Loads No	End Vertical Exposed L = Yes R = Yes	
Fab Tolerance 20% Creep (Kcr) = 2 0	Rain Surcharge No Ice Dam Chk No	Wind Uplift Reporting ASCE7 MWFRS	
OH Soffit Load 2 0 psf		Hurricane Prone Region	
		C&C End Zone 7-10 00	

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL 2 - 3 0 25
Max CSI in BC PANEL 1 - 8 0 17
Max CSI in Web 14 - 4 0 16

Mem		Ten	Comp	CSI
TC	1- 2	86	152	0 24
	2- 3	104	70	0 25
	3- 4	255	95	0 24
	4- 5	255	95	0 24
	5- 6	104	70	0 25
	6- 7	86	152	0 24
BC	1- 8	242	74	0 17
	7-21	242	74	0 17
	8- 9	242	74	0 09
	9-10	242	74	0 03
	10-11	242	74	0 02
	11-12	242	74	0 02
	12-13	242	74	0 03
	13-14	242	74	0 03
	14-15	242	74	0 02
	15-16	242	74	0 02
	16-17	242	74	0 02
	17-18	242	74	0 02
	18-19	242	74	0 02
	19-20	242	74	0 03
	20-21	242	74	0 09
Web	2-10	485	315	0 05
	3-12	304	306	0 09
	4-14	0	255	0 16
	5-17	304	306	0 09
	6-19	485	315	0 05

Reaction Summary

-------- ------Reaction Summary(Lbs)-------- --------

Jnt	--X-Loc-	React	-Up-	- Width-	-Reqd	-Mat	PSI
10	5-10-05	321	211	27-08-10			
12	9-10-05	311	188	27-08-10			
17	17-10-05	310	189	27-08-10			
19	21-10-05	321	211	27-08-10			

Reactions not shown down < 400 and up < 150

- -- Reaction Summary (plf) -----

Jnt-Jnt	React	-Up-	--Width-	
1- 7	16	5	27 08-10	(reduced)

Max Horiz = -223 / +223 at Joint 14

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [13-10-05] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints

Deflection Summary

Truss	Span Limit	Actual(in)	Location
Vert LL	L/240	L/999(-0 00)	1- 8
Vert DL	L/120	L/999(-0 00)	21 7
Vert CR	L/180	L/999(-0 01)	21- 7
Horz LL	0 75in	(0 01)	@Jt 1
Horz CR	1 25in	(0 01)	@Jt 1

Bracing Data Summary

--- ----- --Bracing Data--- -- -- --

Chords Sheathing required or bracing indicated

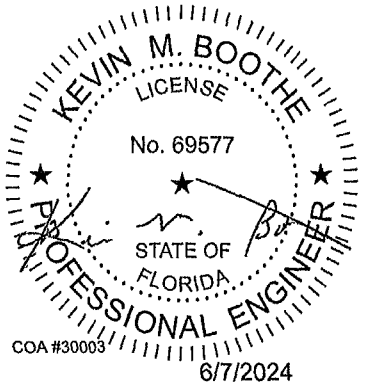
----------Purlins ----------

	---oc---	--From--	- -To---	#Bays
TC	5-01-00	0	27-08 10	7
BC	8-07-00	11-09	26-09-01	4

Web Bracing -- None

Plate offsets (X, Y):

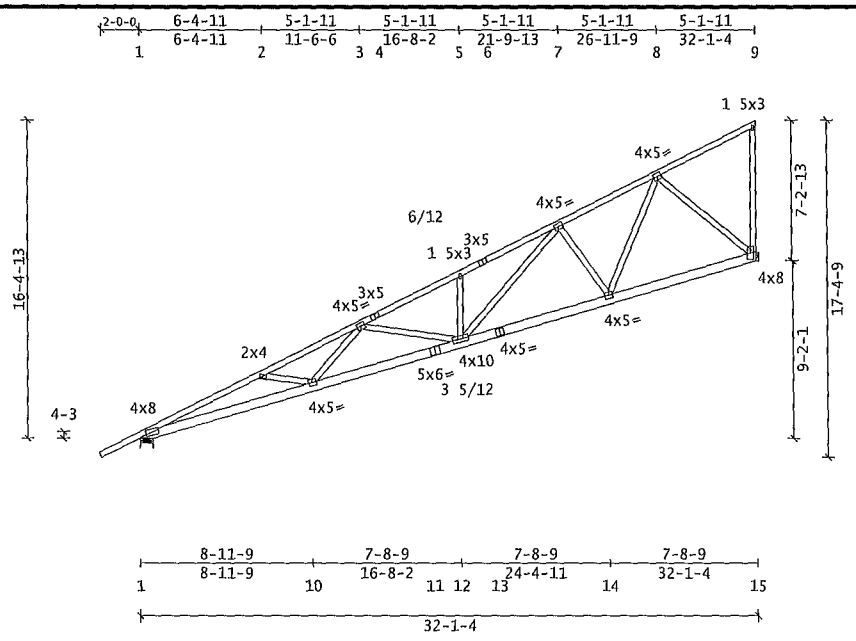
(None unless indicated below)



SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty. 28	Truss: T01
Customer: Valued Customer		SID 0002947341
		TID 235539
		Date: 06 / 07 / 24
Truss Mfr Contact. Chris Wallington		Page 1 of 1



Truss Weight = 207 9 lb

Code/Design FBC-2023/TPI-2014			
PSF	Live	Dead	Dur Factors
TC	20 0	10 0	Live 1 25 Wind 1 60 Snow N/A
BC	0 0	10 0	Lum 1 25
Total		40 0	Plt 1 25
Spacing 2-00-00 o c			Plies 1
Repetitive Member Increase Yes			
Green Lumber No		Wet Service No	
Fab Tolerance 20% Creep (Kcr) = 2 0			
OH Soffit Load 2 0 psf			

------ ----Snow Load Specs----------
ASCE7 22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs----------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10 00

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x6	SP (ALSC6-2013)	SS
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	1 - 2	0 97
Max CSI in BC PANEL	1 - 10	0 96
Max CSI in Web	8 - 15	0 82

Mem		Ten	Comp	CSI
TC	OH- 1	114	0	0 51
	1- 2	3172	4628	0 97
	2- 3	2734	4227	0 82
	3- 4	2044	3208	0 53
	4- 5	2063	3187	0 48
	5- 6	2233	3198	0 44
	6- 7	2251	3167	0 47
	7- 8	1117	1618	0 50
	8- 9	119	269	0 41
	9-OH	0	7	0 00
BC	1 10	4229	3785	0 96
	10-11	3714	3273	0 74
	11-12	3721	3255	0 62
	12-13	1952	1842	0 17
	13-14	1984	1836	0 21
	14-15	1009	1067	0 18
	15-OH	0	3	0 00
Web	2-10	584	395	0 07
	3-10	438	147	0 06
	3-12	708	752	0 33
	5-12	367	320	0 06
	7-12	1443	1141	0 61
	7-14	801	867	0 29
	8-14	1232	844	0 33
	8-15	1219	1245	0 82
	9-15	280	218	0 47

Reaction Summary

-- -------- --Reaction Summary(Lbs)-------- - --- -							
Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	Mat	PSI
1	04-00	1434	554	08-00	02-04	SPF	425
15	31-11 08	1274	497	01-09	HGR	SPF	565
Max Horiz =		-206 /	+717 at Joint	1			
Max Horiz =		-206 /	+717 at Joint	15			

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [32-01-04] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(-0 31)	10-12
Vert DL		L/120	L/999(-0 31)	10-12
Vert CR		L/180	L/614(-0 62)	10-12
Horz LL		0 75in	(0 04)	@Jt15
Horz CR		1 25in	(0 08)	@Jt15
Ohng CR	2L/180	2L/813	(0 06)	1- 1

Bracing Data Summary

----------Bracing Data----------
Chords, Sheathing required or bracing indicated

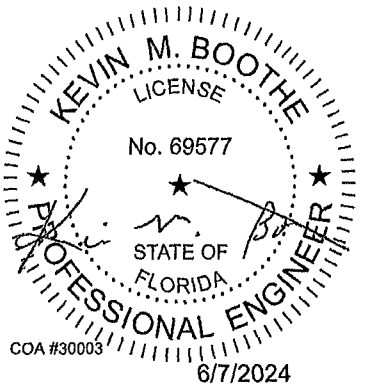
----------Purlins------- - -

	---oc---	--From--	---To --	#Bays
TC	2-05-00	-2 01-09	32-01-04	16
BC	6-00-00	0	32-01-04	6

Web Bracing -- None

Plate offsets (X, Y):

(None unless indicated below)



6/7/2024

SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

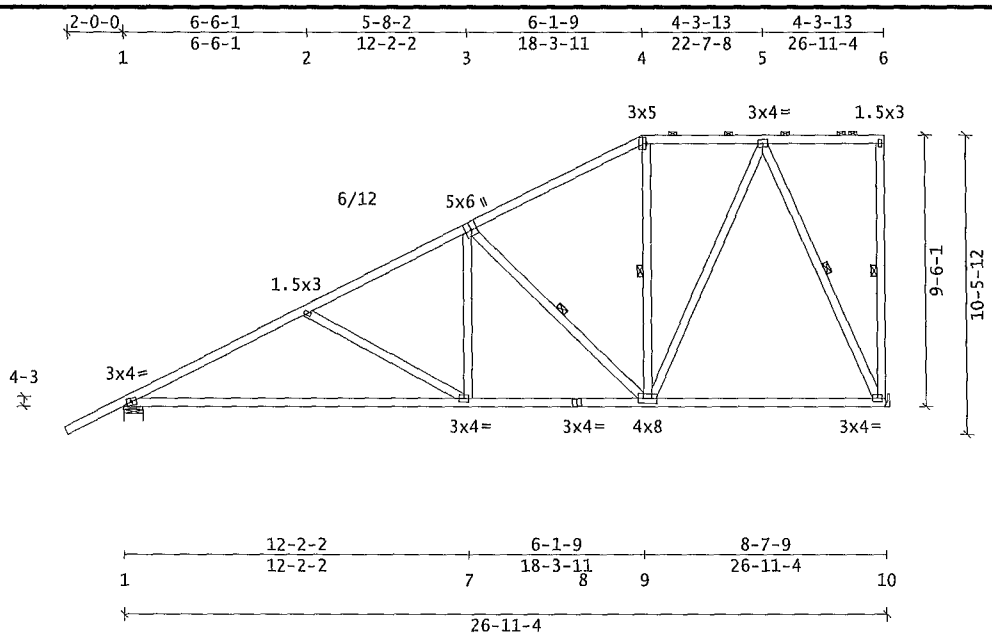
P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 11	Truss: T02

Customer Valued Customer

SID 0002947342
TID 235539
Date 06 / 07 / 24

Truss Mfr Contact: Chris Wallington

Page 1 of 1



Truss Weight = 168 9 lb

```
Code/Design  FBC-2023/TPI-2014
PSF  Live  Dead        Dur Factors
TC   20 0  10 0      Live  Wind  Snow
BC    0 0  10 0  Lum 1 25  1 60   N/A
Total      40 0  Plt 1 25  1 60   N/A
Spacing   2-00-00 o c    Plies  1
Repetitive Member Increase  Yes
Green Lumber   No  Wet Service   No
Fab Tolerance   20% Creep (Kcr) = 2 0
OH Soffit Load   2 0 psf
```

```
----------Snow Load Specs--- --- --
ASCE7 22 Ground Snow(Pg) = N/A
Risk Cat  II  Terrain Cat  C
Roof Exposure  Sheltered
Thermal Condition  All Others(1 0)
Unobstructed Slippery Roof  No
Low-Slope Minimums(Pfmin)   No
Unbalanced Snow Loads       No
Rain Surcharge  No Ice Dam Chk  No
```

```
---- -- --Wind Load Specs----------
ASCE7-22  Wind Speed(V) = 140 mph
Risk Cat  II  Exposure Cat  C
Bldg Dims  L =  97 2 ft  B =  78 3 ft
M R H(h) =  25 0 ft  Kzt = 1 0
Bldg Enclosure  Enclosed
Wind DL(psf)  TC =  5 0 BC =  5 0
End Vertical Exposed  L = Yes R = Yes
Wind Uplift Reporting  ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone  7-10-00
```

```
- -----Additional Design Checks------
10 psf Non-Concurrent BCLL          Yes
20 psf BC Limited Storage           Yes
200 lb BC Accessible Ceiling        Yes
300 lb TC Maintenance Load          Yes
2000 lb TC Safe Load                No
Unbalanced TCLL                     Yes
```

Material Summary

TC	2x4	SP	(ALSC6-2013)	#1
BC	2x4	SP	(ALSC6-2013)	#1
Webs	2x4	SP	(ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL 1 - 2 0 99
Max CSI in BC PANEL 1 - 7 1 00
Max CSI in Web 10 - 6 0 90

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 52
	1- 2	1209	1785	0 99
	2- 3	944	1404	0 71
	3- 4	724	843	0 55
	4- 5	731	673	0 33
	5- 6	230	199	0 30
	6-OH	0	0	0 00
BC	1- 7	1532	1394	1 00
	7- 8	1183	1013	0 80
	8- 9	1183	1013	0 76
	9-10	402	418	0 81
	10-OH	0	0	0 00
Web	2- 7	512	393	0 26
	3- 7	474	137	0 07
	3- 9	576	718	0 22
	4- 9	132	72	0 02
	5- 9	684	480	0 28
	5-10	834	975	0 40
	6-10	124	199	0 90

Reaction Summary

----------Reaction Summary(Lbs)----------

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	1225	405	08-00	01-15	SPF	425
10	26-09 08	1081	360	03-00	HGR	SPF	565

Max Horiz = -258 / +548 at Joint 1
Max Horiz = -258 / +548 at Joint 10

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [22-07-08] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/771(-0 41)	1- 7
Vert DL		L/120	L/793(-0 40)	1- 7
Vert CR		L/180	L/391(-0 81)	1- 7
Horz LL		0 75in	(0 02)	@Jt10
Horz CR		1 25in	(0 04)	@Jt10
Ohng CR	2L/180	2L/805	(0 06)	1- 1

Bracing Data Summary

----------Bracing Data-- -- ------
Chords, Sheathing required or bracing indicated

----------Purlins---- -------

	--oc---	--From--	---To---	#Bays
TC	4-07-00	-2-01-09	19-03-04	6
TC	2-00-00	19-03-04	25-11-11	4
TC	11-00	25-11-11	26-11-04	2
BC	7-11-00	0	26-11-04	4

------- Web Bracing -- CLR ------- ---
Single 3 9 9- 4 5-10 10- 6
Continuous Restraint Bracing Req'd
See BCSI-B3 3 0

Plate offsets (X, Y)·

(None unless indicated below)
Jnt1(0,00 01), Jnt3(-00 04,00-07),
Jnt4(-01-12,0)

KEVIN M. BOOTHE
LICENSE
No. 69577
STATE OF FLORIDA
PROFESSIONAL ENGINEER
COA #30003
6/7/2024

SIMPSON Strong-Tie

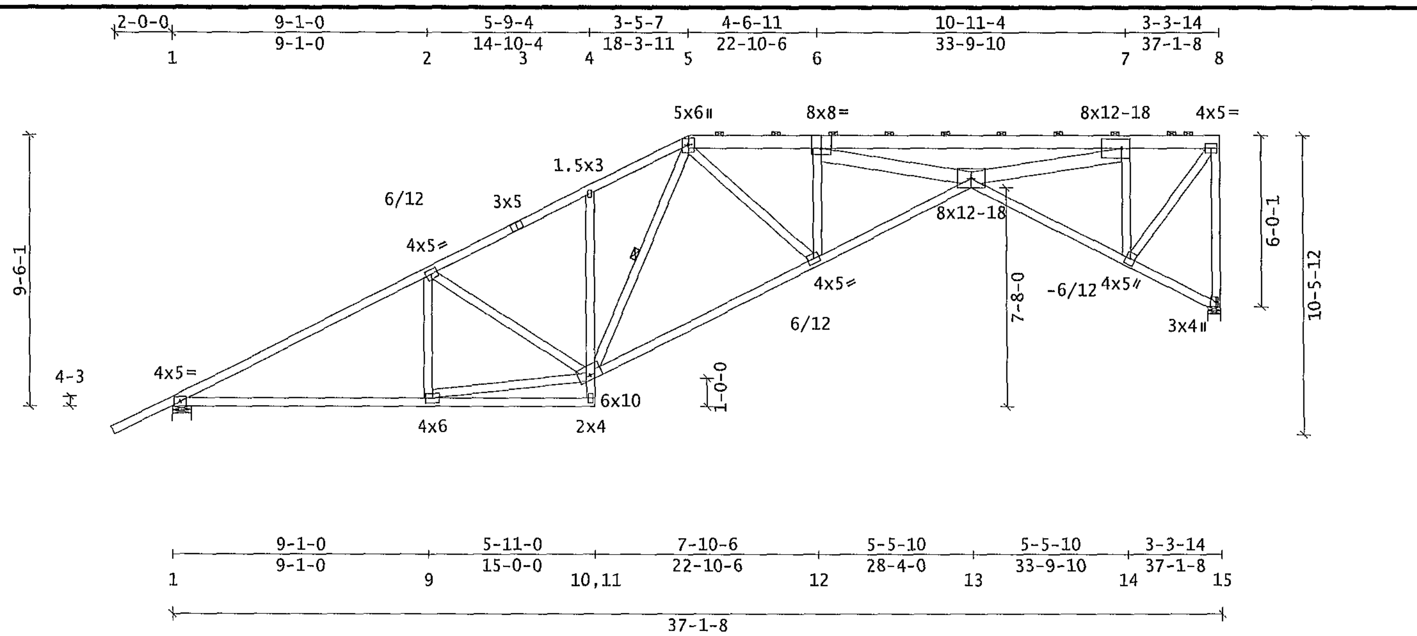
Component Solutions
Truss Studio V
2023 9 2 1

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 6	Truss: T02-A

Customer: Valued Customer

Truss Mfr Contact Chris Wallington

SID 0002947343
TID 235539
Date 06 / 07 / 24



Truss Weight = 268 2 lb

Code/Design FBC-2023/TPI-2014	--------- --Snow Load Specs----------	----------Wind Load Specs- --------	-------Additional Design Checks------
PSF Live Dead Dur Factors	ASCE7-22 Ground Snow(Pg) = N/A	ASCE7-22 Wind Speed(V) = 140 mph	10 psf Non-Concurrent BCLL Yes
TC 20 0 10 0 Live Wind Snow	Risk Cat II Terrain Cat C	Risk Cat II Exposure Cat C	20 psf BC Limited Storage Yes
BC 0 0 10 0 Lum 1 25 1 60 N/A	Roof Exposure Sheltered	Bldg Dims L = 97 2 ft B = 78 3 ft	200 lb BC Accessible Ceiling Yes
Total 40 0 Plt 1 25 1 60 N/A	Thermal Condition All Others(1 0)	M R H(h) = 25 0 ft Kzt = 1 0	300 lb TC Maintenance Load Yes
Spacing 2-00-00 o c Plies 1	Unobstructed Slippery Roof No	Bldg Enclosure Enclosed	2000 lb TC Safe Load No
Repetitive Member Increase Yes	Low Slope Minimums(Pfmin) No	Wind DL(psf) TC = 5 0 BC = 5 0	Unbalanced TCLL Yes
Green Lumber No Wet Service No	Unbalanced Snow Loads No	End Vertical Exposed L = Yes R = Yes	
Fab Tolerance 20% Creep (Kcr) = 2 0	Rain Surcharge No Ice Dam Chk No	Wind Uplift Reporting ASCE7 MWFRS	
OH Soffit Load 2 0 psf		Hurricane Prone Region	
		C&C End Zone 7-10-00	

Material Summary

```
TC        2x4    SP (ALSC6-2013)   #1
          2x6    SP (ALSC6-2013)   SS   5-6
6-8
BC        2x4    SP (ALSC6-2013)   #1
Webs      2x4    SP (ALSC6-2013)   #1
          2x6    SP (ALSC6 2013)   SS   6-13
13-7
```

Member Forces Summary

```
Max CSI in TC PANEL    1 -  2    1 00
Max CSI in BC PANEL   12 - 13    0 99
Max CSI in Web        15 -  8    0 72
```

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 51
	1- 2	1764	2602	1 00
	2- 3	1698	2307	0 83
	3- 4	1710	2222	0 44
	4- 5	1851	2277	0 35
	5- 6	2388	3126	0 26
	6- 7	4230	6528	0 66
	7- 8	834	1132	0 21
	8-OH	0	0	0 00
BC	1- 9	2224	1667	0 67
	9-10	44	33	0 42
	11-12	2325	1608	0 77
	12-13	3567	2444	0 99
	13-14	1273	845	0 44
	14-15	819	263	0 22
	15-OH	5	0	0 00
Web	2- 9	342	199	0 06
	2-11	388	316	0 22
	4-11	315	318	0 23
	5-11	146	371	0 09
	5-12	1438	939	0 28
	6-12	1085	1354	0 35
	6-13	3464	2070	0 33
	7-13	5563	3500	0 52
	7-14	1308	1906	0 49
	8-14	1871	1170	0 28
	8-15	902	1471	0 72
	9-11	2208	1655	0 40
	10-11	111	0	0 08

Reaction Summary

------ -------Reaction Summary(Lbs)----------- -----

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	1631	557	08-00	02-09	SPF	425
15	36-11-12	1478	490	05-08	01-14	SPF	531

Max Horiz = -158 / +457 at Joint 1
Max Horiz = -158 / +457 at Joint 15

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [27-08-10] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

TrussSpan	Limit	Actual(in)	Location
Vert LL	L/240	L/999(-0 33)	13-14
Vert DL	L/120	L/991(-0 44)	11 12
Vert CR	L/180	L/586(0 75)	11-12
Horz LL	0 75in	(0 28)	@Jt15
Horz CR	1 25in	(0 56)	@Jt15
Ohng CR	2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

- -----------Bracing Data -- --------

Chords Sheathing required or bracing indicated

--------- ---Purlins------------

	---oc---	--From--	- -To---	#Bays
TC	2-10-00	-2-01-09	19 03-04	9
TC	2-00-00	19-03-04	36-01-15	9
TC	11-00	36-01-15	37-01-08	2
BC	5-07-00	0	37 01-08	8

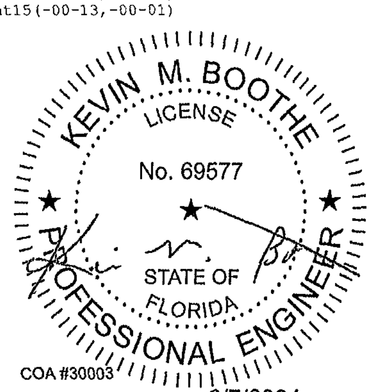
-- ---- Web Bracing -- CLR -- -- ----

Single 11- 5

Continuous Restraint Bracing Req'd
See BCSI-B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt1(0,00-02), Jnt5(0,-00-05), Jnt6(0,01-08), Jnt7(-02-08,0), Jnt11(-00-09,01-02), Jnt13(0,00-01), Jnt15(-00-13,-00-01)



COA #30003

6/7/2024

SIMPSON Strong-Tie

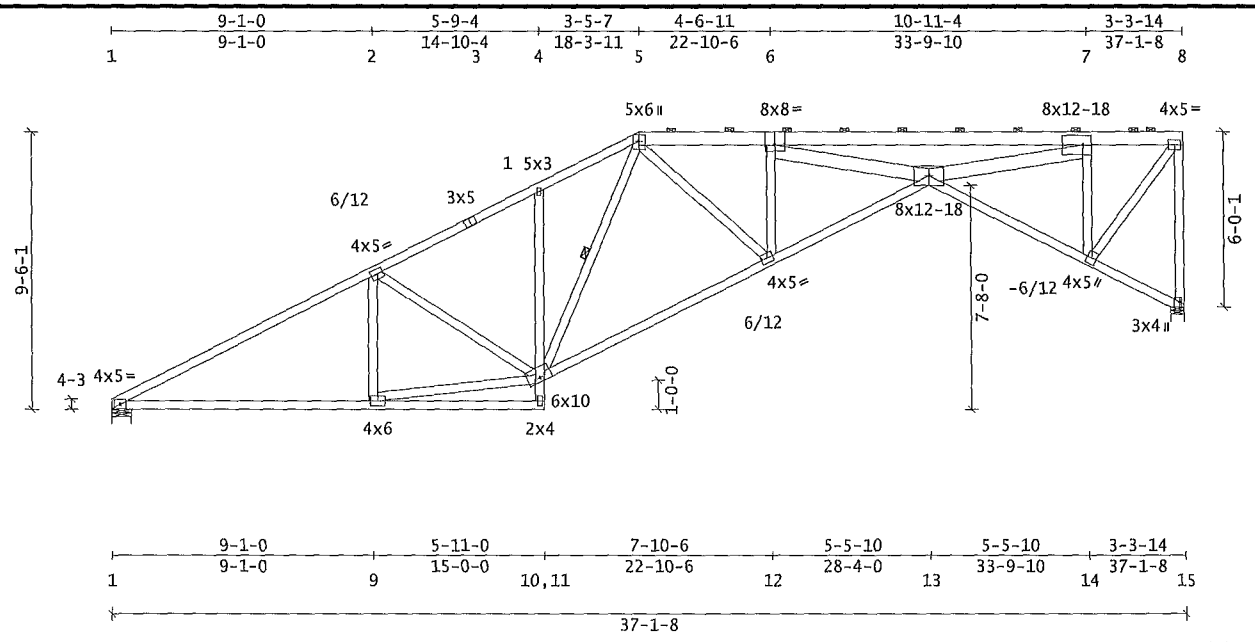
Component Solutions
Truss Studio V
2023 9 2 1

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 5	Truss: T02-B

Customer: Valued Customer

SID 0002947344
TID 235539
Date 06 / 07 / 24
Page 1 of 1

Truss Mfr Contact: Chris Wallington



Truss Weight = 265 1 lb

Code/Design FBC-2023/TPI-2014					
PSF	Live	Dead	Dur Factors		
TC	20 0	10 0	Live	Wind	Snow
BC	0 0	10 0 Lum 1 25	1 60		N/A
Total		40 0 Plt 1 25	1 60		N/A
Spacing	2-00-00 o c	Plies 1			
Repetitive Member Increase Yes					
Green Lumber No	Wet Service No				
Fab Tolerance 20% Creep (Kcr) = 2 0					
OH Soffit Load 2 0 psf					

Snow Load Specs	
ASCE7-22 Ground Snow(Pg) = N/A	
Risk Cat II	Terrain Cat C
Roof Exposure Sheltered	
Thermal Condition All Others(1 0)	
Unobstructed Slippery Roof No	
Low-Slope Minimums(Pfmin) No	
Unbalanced Snow Loads No	
Rain Surcharge No Ice Dam Chk No	

Wind Load Specs	
ASCE7-22 Wind Speed(V) = 140 mph	
Risk Cat II	Exposure Cat C
Bldg Dims L = 97 2 ft	B = 78 3 ft
M R H(h) = 25 0 ft	Kzt = 1 0
Bldg Enclosure Enclosed	
Wind DL(psf) TC = 5 0	BC = 5 0
End Vertical Exposed L = Yes	R = Yes
Wind Uplift Reporting ASCE7 MWFRS	
Hurricane Prone Region	
C&C End Zone 7-10-00	

Additional Design Checks	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	5 6 6-8
BC	2x4	SP (ALSC6-2013)	#1	
Webs	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	6-13 13-7

Member Forces Summary

Max CSI in TC PANEL	1 - 2	1 00
Max CSI in BC PANEL	12 - 13	0 99
Max CSI in Web	15 - 8	0 73

Mem		Ten	Comp	CSI
TC	1- 2	1903	2618	1 00
	2- 3	1784	2314	0 99
	3- 4	1795	2224	0 39
	4- 5	1921	2283	0 30
	5- 6	2462	3132	0 26
	6- 7	4359	6540	0 67
	7- 8	851	1133	0 18
	8-OH	0	0	0 00
BC	1- 9	2240	1838	0 70
	9-10	44	36	0 44
	11-12	2331	1674	0 77
	12-13	3574	2524	0 99
	13-14	1275	850	0 44
	14-15	748	234	0 22
	15-OH	5	0	0 00
Web	2- 9	334	187	0 06
	2-11	496	328	0 23
	4-11	307	314	0 22
	5-11	145	339	0 08
	5-12	1439	950	0 28
	6-12	1097	1355	0 35
	6 13	3469	2085	0 33
	7-13	5573	3616	0 52
	7-14	1336	1909	0 49
	8-14	1873	1196	0 28
	8-15	924	1472	0 73
	9-11	2224	1826	0 41
	10-11	109	0	0 06

Reaction Summary

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	1489	480	08-00	02-05	SPF	425
15	36-11-12	1480	493	05-08	01-14	SPF	531

Max Horiz = -181 / +429 at Joint 1
Max Horiz = -181 / +429 at Joint 15

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [27-08-10] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(-0 33)	13-14
Vert DL		L/120	L/995(-0 44)	11-12
Vert CR		L/180	L/589(-0 75)	11 12
Horz LL		0 75in	(0 28)	@Jt15
Horz CR		1 25in	(0 57)	@Jt15

Bracing Data Summary

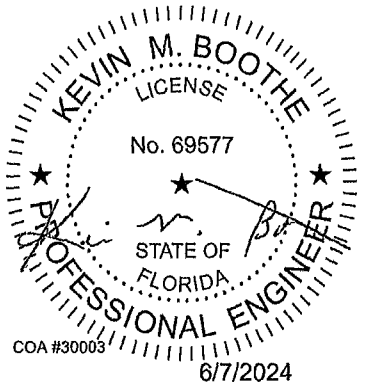
Chords; Sheathing required or bracing indicated

	--oc-	--From--	- -To---	#Bays
TC	2-09-00	0	19-03-04	8
TC	2-00-00	19-03-04	36-01-15	9
TC	11-00	36-01-15	37-01-08	2
BC	5-07-00	0	37-01-08	8

Single 11- 5
Continuous Restraint Bracing Req'd
See BCSI-B3 3 0

Plate offsets (X, Y):

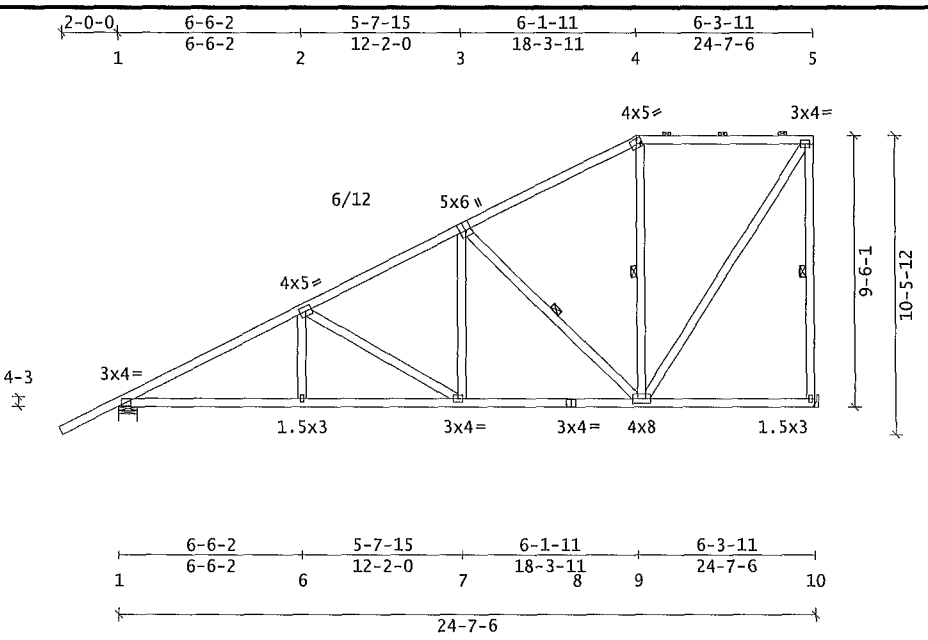
(None unless indicated below)
Jnt1(0,00-02), Jnt5(0, 00-05), Jnt6(0,01-08), Jnt7(-02 08,0), Jnt11(-00-09,01-02), Jnt13(0,00-01), Jnt15(-00-13,-00-01)



SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 1	Truss: T03
Customer Valued Customer		SID 0002947345
		TID 235539
		Date 06 / 07 / 24
Truss Mfr Contact. Chris Wallington		Page 1 of 1



Truss Weight = 155 6 lb

Code/Design FBC-2023/TPI-2014					
PSF	Live	Dead	Dur Factors		
TC	20 0	10 0	Live	Wind	Snow
BC	0 0	10 0	Lum 1 25	1 60	N/A
Total		40 0	Plt 1 25	1 60	N/A
Spacing 2 00-00 o c Plies 1					
Repetitive Member Increase Yes					
Green Lumber No Wet Service No					
Fab Tolerance 20% Creep (Kcr) = 2 0					
OH Soffit Load 2 0 psf					

----------Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs----------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10 00

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	1 - 2	0 95
Max CSI in BC PANEL	1 - 6	0 74
Max CSI in Web	10 - 5	1 00

Mem		Ten	Comp	CSI
TC	OH- 1	117	0	0 52
	1- 2	997	1648	0 95
	2- 3	808	1178	0 56
	3- 4	566	638	0 51
	4- 5	596	492	0 66
	5 OH	0	0	0 00
BC	1- 6	1400	1270	0 74
	6- 7	1400	1270	0 74
	7- 8	983	938	0 45
	8- 9	983	938	0 47
	9-10	815	237	0 42
	10-OH	0	0	0 00
Web	2- 6	255	0	0 04
	2- 7	456	476	0 30
	3- 7	412	179	0 06
	3- 9	582	690	0 21
	4- 9	286	169	0 06
	5- 9	901	741	0 56
	5-10	798	926	1 00

Reaction Summary

- ----------Reaction Summary(Lbs)--------- ----						
Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat PSI
1	03-04	1133	374	08-00	01-12	SPF 425
10	24-05-10	978	331	03-00	HGR	SPF 565
Max Horiz =		-258 /	+548	at Joint	1	
Max Horiz =		-258 /	+548	at Joint	10	

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [21-05-09] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(-0 06)	9-10
Vert DL		L/120	L/999(-0 06)	6- 7
Vert CR		L/180	L/999(-0 12)	6- 7
Horz LL		0 75in	(0 02)	@Jt10
Horz CR		1 25in	(0 03)	@Jt10
Ohng CR	2L/180	2L/805	(0 06)	1- 1

Bracing Data Summary

----------Bracing Data----------				
Chords Sheathing required or bracing indicated				
------- -----Purlins--- --------				
	---oc---	--From--	---To---	#Bays
TC	4-07-00	-2 01-09	19-03-04	6
TC	2-00-00	19-03-04	23-07-13	2
	11-00	23-07-13	24-07-06	2
BC	8-02-00	0	24-07-06	4
------- Web Bracing - CLR -- ----- --				
Single 3- 9 9- 4 10- 5				
Continuous Restraint Bracing Req'd				
See BCSI B3 3 0				

Plate offsets (X, Y):

(None unless indicated below)
Jnt3(-00-04,00-07), Jnt4(01-12,0)

KEVIN M. BOOTHE
LICENSE
No. 69577
STATE OF FLORIDA
PROFESSIONAL ENGINEER
COA #30003
6/7/2024

NOTICE A copy of this design shall be furnished to the erection contractor The design of this individual truss is based on design criteria and requirements supplied by the Truss Manufacturer and relies upon the accuracy and completeness of the information set forth by the Building Designer A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown See the cover page and the Important Information & General Notes' page for additional information All connector plates shall be manufactured by Simpson Strong-Tie Company Inc in accordance with ESR-2762 All connector plates are 20 gauge unless the specified plate size is followed by a 18 which indicates an 18 gauge plate or 'S# 18' which indicates a high tension 18 gauge plate

SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

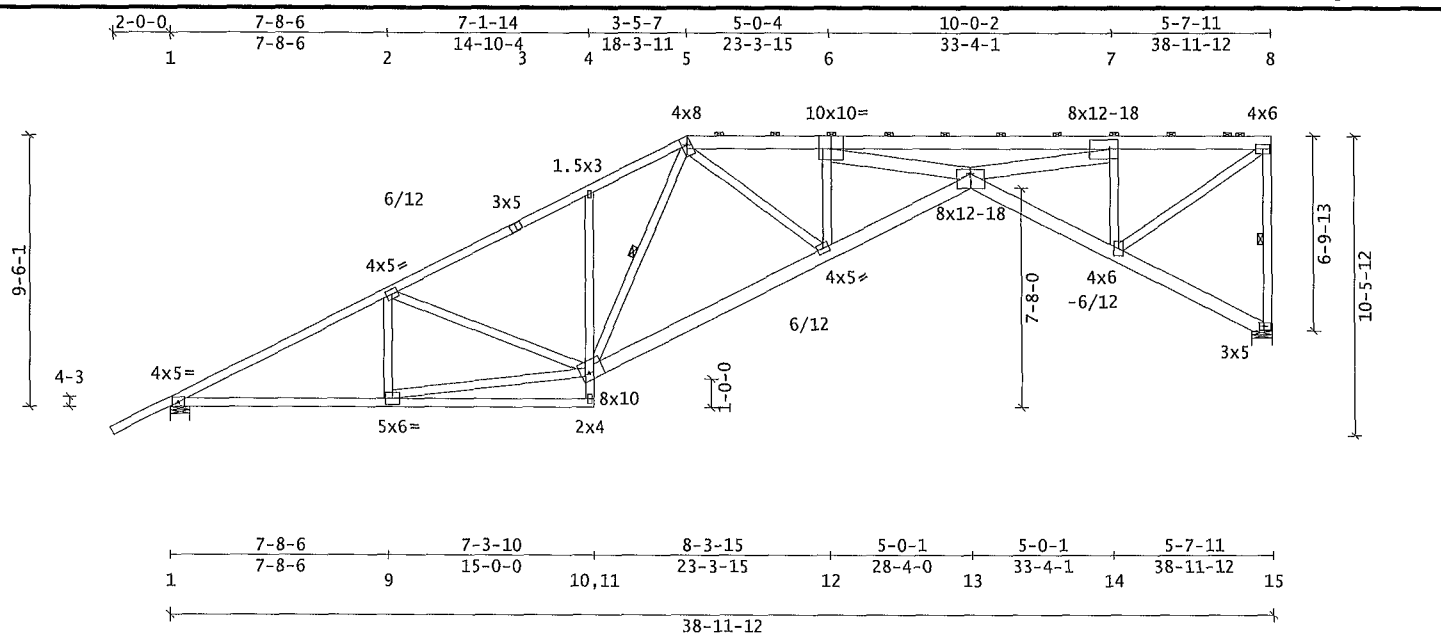
EngDrwg 2021r5RGT PS

P-23-228 - 421 SE Alfred Markham Rd HOUSE | **Qty: 1** | **Truss: T03-A**

Customer: Valued Customer

SID 0002947346
TID 235539
Date 06 / 07 / 24
Page 1 of 1

Truss Mfr Contact Chris Wallington



Truss Weight = 303 7 lb

Code/Design FBC-2023/TPI-2014			
PSF	Live	Dead	Dur Factors
TC	20 0	10 0	Live 1 25 Wind 1 60 Snow N/A
BC	0 0	10 0	Lum 1 25 1 60 N/A
Total		40 0	Plt 1 25 1 60 N/A
Spacing 2-00-00 o c			Plies 1
Repetitive Member Increase Yes			
Green Lumber No		Wet Service No	
Fab Tolerance 20% Creep (Kcr) = 2 0			
OH Soffit Load 2 0 psf			

-------- --Snow Load Specs---- -----	
ASCE7-22 Ground Snow(Pg) = N/A	
Risk Cat II	Terrain Cat C
Roof Exposure Sheltered	
Thermal Condition All Others(1 0)	
Unobstructed Slippery Roof No	
Low-Slope Minimums(Pfmin) No	
Unbalanced Snow Loads No	
Rain Surcharge No	Ice Dam Chk No

----------Wind Load Specs----------	
ASCE7-22 Wind Speed(V) = 140 mph	
Risk Cat II	Exposure Cat C
Bldg Dims L = 97 2 ft	B = 78 3 ft
M R H(h) = 25 0 ft	Kzt = 1 0
Bldg Enclosure Enclosed	
Wind DL(psf) TC = 5 0	BC = 5 0
End Vertical Exposed L = Yes	R = Yes
Wind Uplift Reporting ASCE7 MWFRS	
Hurricane Prone Region	
C&C End Zone 7-10-00	

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	5-6 6-8
BC	2x6	SP (ALSC6-2013)	SS	
	2x4	SP (ALSC6-2013)	#1	1-10
Webs	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	6-13 13-7

Member Forces Summary

Max CSI in TC PANEL 1 - 2 0 97
Max CSI in BC PANEL 12 - 13 0 97
Max CSI in Web 9 - 11 0 66

Mem		Ten	Comp	CSI
TC	OH- 1	117	0	0 51
	1- 2	2831	2831	0 97
	2- 3	1785	2549	0 74
	3- 4	1797	2427	0 62
	4- 5	2007	2536	0 62
	5- 6	2727	3726	0 27
	6- 7	5351	8557	0 83
	7- 8	1306	1945	0 17
	8-OH	0	0	0 00
BC	1- 9	2443	1792	0 94
	9-10	50	36	0 53
	11-12	2581	1786	0 38
	12-13	4249	2784	0 97
	13-14	2173	1393	0 31
	14-15	836	276	0 12
Web	2- 9	355	212	0 05
	2-11	382	337	0 30
	4-11	448	388	0 27
	5-11	166	403	0 09
	5-12	1814	1130	0 37
	6-12	1252	1681	0 36
	6-13	4925	3006	0 42
	7-13	6817	4229	0 57
	7-14	1449	2194	0 47
	8-14	2394	1429	0 56
	8-15	922	1514	0 53
	9-11	2417	1773	0 66
	10-11	131	0	0 11

Reaction Summary

----------Reaction Summary(Lbs)---------- ----

Jnt	--X-Loc-	React	-Up-	-Width-	-Reqd	-Mat	PSI
1	03-04	1705	576	08-00	02-11	SPF	425
15	38-10 00	1549	512	04-12	02-07	SPF	425

Max Horiz = -184 / +479 at Joint 1
Max Horiz = -184 / +479 at Joint 15

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [28-07-12] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span Limit	Actual(in)	Location
Vert LL	L/240	L/980(-0 47)	13-14
Vert DL	L/120	L/967(-0 48)	13-14
Vert CR	L/180	L/487(0 95)	13-14
Horz LL	0 75in	(0 38)	@Jt15
Horz CR	1 25in	(0 76)	@Jt15
Ohng CR	2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

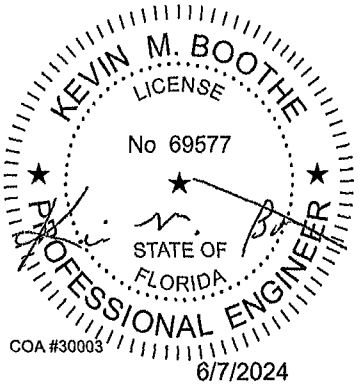
----------Bracing Data---- --- --
Chords, Sheathing required or bracing indicated
----------Purlins- -- -------

	---oc---	--From--	- -To---	#Bays
TC	2-11-00	-2-01-09	19-03-04	9
TC	2-00-00	19 03-04	38-00 03	10
TC	11-00	38-00-03	38 11-12	2
BC	6-10-00	0	38-08-04	7

------- Web Bracing -- CLR ----------
Single 11- 5 15- 8
Continuous Restraint Bracing Req'd
See BCSI-B3 3 0

Plate offsets (X, Y)

(None unless indicated below)
Jnt1(0,00-02), Jnt5(0,-00-09), Jnt6(0,00-08), Jnt7(-02-08,0), Jnt11(00-10,01-11), Jnt13(0,-02-02), Jnt15(00-08,0)



SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

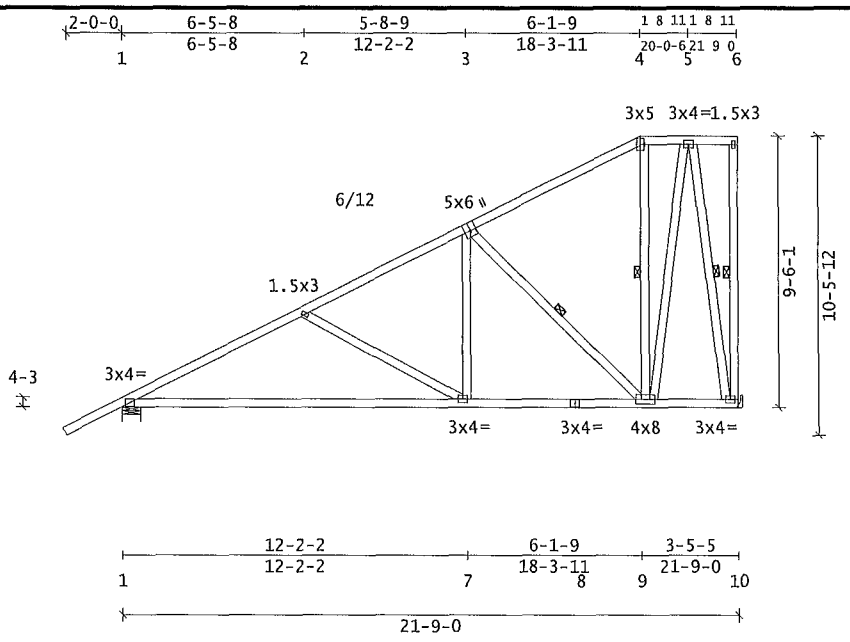
EngDrwg 2021r5RGT Eng

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 12	Truss: T04

Customer: Valued Customer

Truss Mfr Contact. Chris Wallington

SID 0002947347
TID 235539
Date 06 / 07 / 24
Page 1 of 1



Truss Weight = 153 2 lb

Code/Design FBC-2023/TPI-2014			
PSF	Live	Dead	Dur Factors
TC	20 0	10 0	Live Wind Snow
BC	0 0	10 0	Lum 1 25 1 60 N/A
Total		40 0	Plt 1 25 1 60 N/A
Spacing	2-00-00 o c		Plies 1
Repetitive Member Increase Yes			
Green Lumber No Wet Service No			
Fab Tolerance 20% Creep (Kcr) = 2 0			
OH Soffit Load 2 0 psf			

----------Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs--- ------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

---- --Additional Design Checks-----	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	1 - 2	0 97
Max CSI in BC PANEL	1 - 7	0 86
Max CSI in Web	10 6	0 95

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 53
	1- 2	877	1351	0 97
	2- 3	604	962	0 61
	3- 4	384	377	0 50
	4- 5	425	254	0 17
	5- 6	243	205	0 05
	6-OH	0	0	0 00
BC	1- 7	1147	1207	0 86
	7- 8	786	831	0 79
	8- 9	786	831	0 24
	9-10	729	308	0 16
	10-OH	0	0	0 00
Web	2 7	524	405	0 27
	3- 7	520	134	0 08
	3- 9	623	749	0 23
	4- 9	346	187	0 06
	5- 9	721	761	0 33
	5-10	784	788	0 28
	6-10	72	96	0 95

Reaction Summary

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03 04	1019	335	08-00	01-10	SPF	425
10	21-07-04	861	297	01-08	HGR	SPF	565

Max Horiz = -258 / +548 at Joint 1
Max Horiz = -258 / +548 at Joint 10

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [20-00-06] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/651(-0 39)	1- 7
Vert DL		L/120	L/674(-0 38)	1- 7
Vert CR		L/180	L/331(-0 77)	1- 7
Horz LL		0 75in	(0 02)	@Jt 1
Horz CR		1 25in	(0 03)	@Jt 1
Ohng CR	2L/180	2L/805	(0 06)	1 1

Bracing Data Summary

----------Bracing Data----------
Chords Sheathing required or bracing indicated

-------- ----Purlins--- --------			
---oc---	--From--	--To---	#Bays
TC 5-03-00	-2-01-09	19 03-04	5
TC 2-00-00	19-03-04	20-09-07	1
TC 11-00	20-09-07	21-09-00	2
BC 7 03-00	0	21-09-00	3

-- ---- Web Bracing -- CLR ----------
Single 3- 9 9- 4 5-10 10- 6
Continuous Restraint Bracing Req'd
See BCSI B3 3 0

Plate offsets (X, Y)

(None unless indicated below)
Jnt3(-00-04,00-07), Jnt4(-01-12,0)

KEVIN M. BOOTHE
LICENSE
No 69577
STATE OF FLORIDA
PROFESSIONAL ENGINEER
COA #30003
6/7/2024

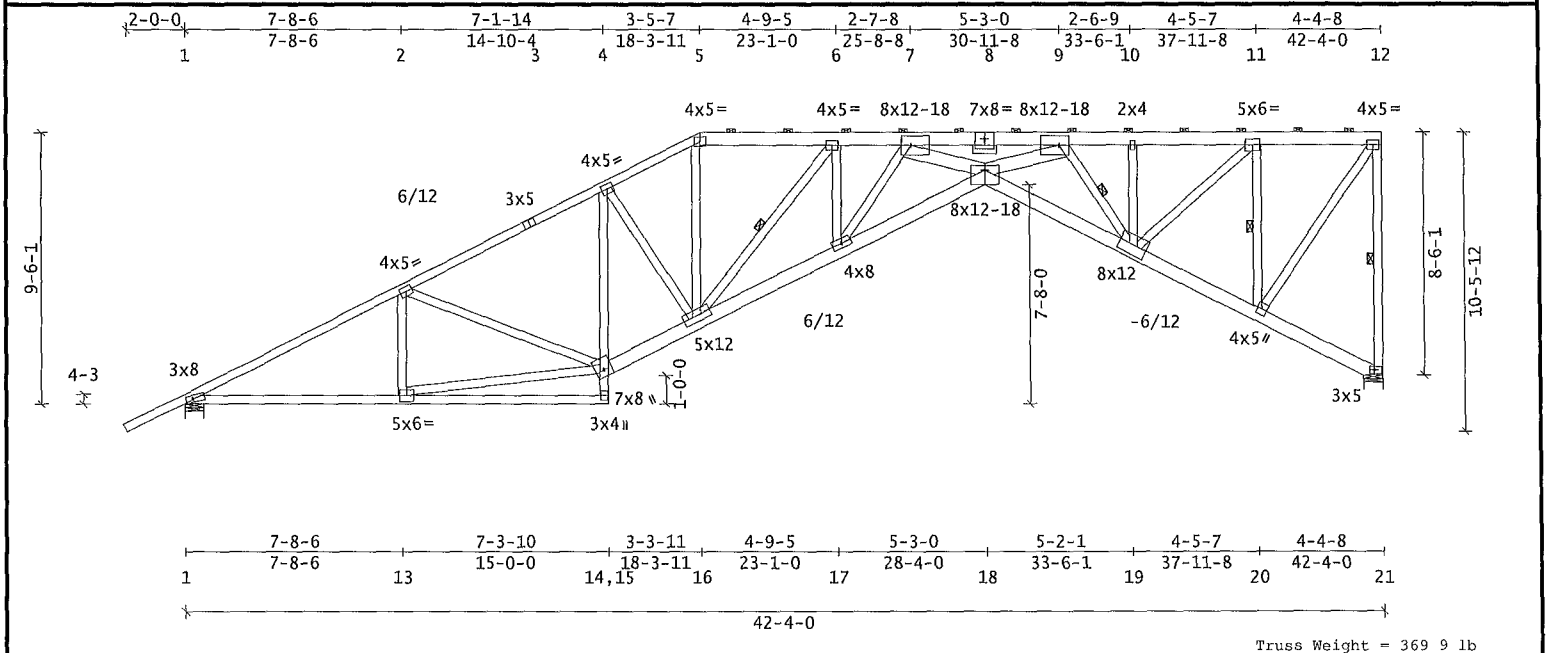
NOTICE A copy of this design shall be furnished to the erection contractor The design of this individual truss is based on design criteria and requirements supplied by the Truss Manufacturer and relies upon the accuracy and completeness of the information set forth by the Building Designer A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown See the cover page and the Important Information & General Notes' page for additional information All connector plates shall be manufactured by Simpson Strong-Tie Company, Inc in accordance with ESR-2762. All connector plates are 20 gauge unless the specified plate size is followed by a 18' which indicates an 18 gauge plate or 'S# 18' which indicates a high tension 18 gauge plate

SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

EngDrwg 2021r5RGT PS

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 7	Truss: T04-A
Customer Valued Customer		SID 0002947348
		TID 235539
		Date 06 / 07 / 24
Truss Mfr Contact Chris Wallington		Page 1 of 1



Truss Weight = 369 9 lb

Code/Design FBC-2023/TPI-2014				
PSF	Live	Dead	Dur Factors	
TC	20 0	10 0	Live Wind	Snow
BC	0 0	10 0	Lum 1 25 1 60	N/A
Total		40 0	Plt 1 25 1 60	N/A
Spacing 2-00-00 o c Plies 1				
Repetitive Member Increase Yes				
Green Lumber No Wet Service No				
Fab Tolerance 20% Creep (Kcr) = 2 0				
OH Soffit Load 2 0 psf				

--------- -Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs--- ------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks-----	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	5-8
8-12				
BC	2x6	SP (ALSC6-2013)	SS	
	2x4	SP (ALSC6-2013)	#1	1-14
Webs	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	7-18
18-9				
SB	2x4	SP (ALSC6-2013)	#1	

Member Forces Summary

Max CSI in TC PANEL	1 - 2	1 00	
Max CSI in BC PANEL	17 - 18	0 97	
Max CSI in Web	17 - 7	0 92	

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 51
	1- 2	2010	3115	1 00
	2- 3	1986	2886	0 75
	3- 4	1997	2764	0 60
	4- 5	2238	3067	0 64
	5- 6	2023	2683	0 16
	6- 7	3041	4367	0 23
	7- 8	6981	11429	0 99
	8- 9	6981	11429	0 98
	9-10	1808	2914	0 12
	10-11	1808	2914	0 11
	11-12	757	1045	0 10
	12-OH	0	0	0 00
BC	1-13	2696	1957	0 70
	13-14	56	39	0 54
	15-16	2822	1989	0 21
	16-17	4889	3166	0 51
	17-18	6691	4303	0 97
	18-19	5436	3442	0 66
	19-20	1189	802	0 10
	20-21	858	276	0 08
Web	2-13	374	253	0 06
	2-15	356	310	0 28
	4-15	574	719	0 50
	4-16	325	163	0 08
	5-16	1142	746	0 22
	6-16	1675	2771	0 70
	6-17	1847	1032	0 28
	7-17	1907	3039	0 92
	7-18	6009	3683	0 40
	9-18	7228	4518	0 48
	9-19	2361	3697	0 44
	10-19	230	355	0 08
	11-19	2524	1520	0 45
	11-20	1233	1959	0 32
	12 20	1846	1069	0 53
	12-21	974	1644	0 77
	13-15	2667	1938	0 74
	14-15	132	0	0 12

Reaction Summary

Jnt	--X-Loc	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	1838	611	08-00	02-14	SPF	425
21	42-02-04	1683	552	04-08	02-10	SPF	425

Max Horiz = -234 / +519 at Joint 1
Max Horiz = -234 / +519 at Joint 21

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [30-03 14] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

TrussSpan Limit	Actual(in)	Location
Vert LL L/240	L/806(-0 62)	18-19
Vert DL L/120	L/804(-0 63)	17-18
Vert CR L/180	L/403(-1 25)	17-18
Horz LL 0 75in	(0 52)	@Jt21
Horz CR 1 25in	(1 04)	@Jt21
Ohng CR 2L/180 2L/805	(0 06)	1- 1

Bracing Data Summary

--- --------Bracing Data--------- -

Chords Sheathing required or bracing indicated

---- ---- ---Purlins-----------

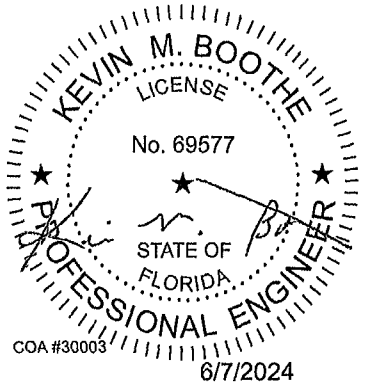
	---oc---	-From--	---To---	#Bays
TC	2-08-00	-2-01-09	19-03-04	9
TC	2-00-00	19-03-04	41-04-07	11
TC	11-00	41-04-07	42-04-00	2
BC	5-04-00	0	42-00-08	9

------- Web Bracing -- CLR ---- ------

Single 16- 6 9-19 20-11 21-12
Continuous Restraint Bracing Req'd
See BCSI B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt1(01-00,00-08), Jnt7(01-12,0), Jnt8(0,-00-12), Jnt9(-01-12,0), Jnt15(-00-09,01-02), Jnt17(00-01,00 01), Jnt18(0,-02-02), Jnt21(00-08,0)



SIMPSON Strong-Tie

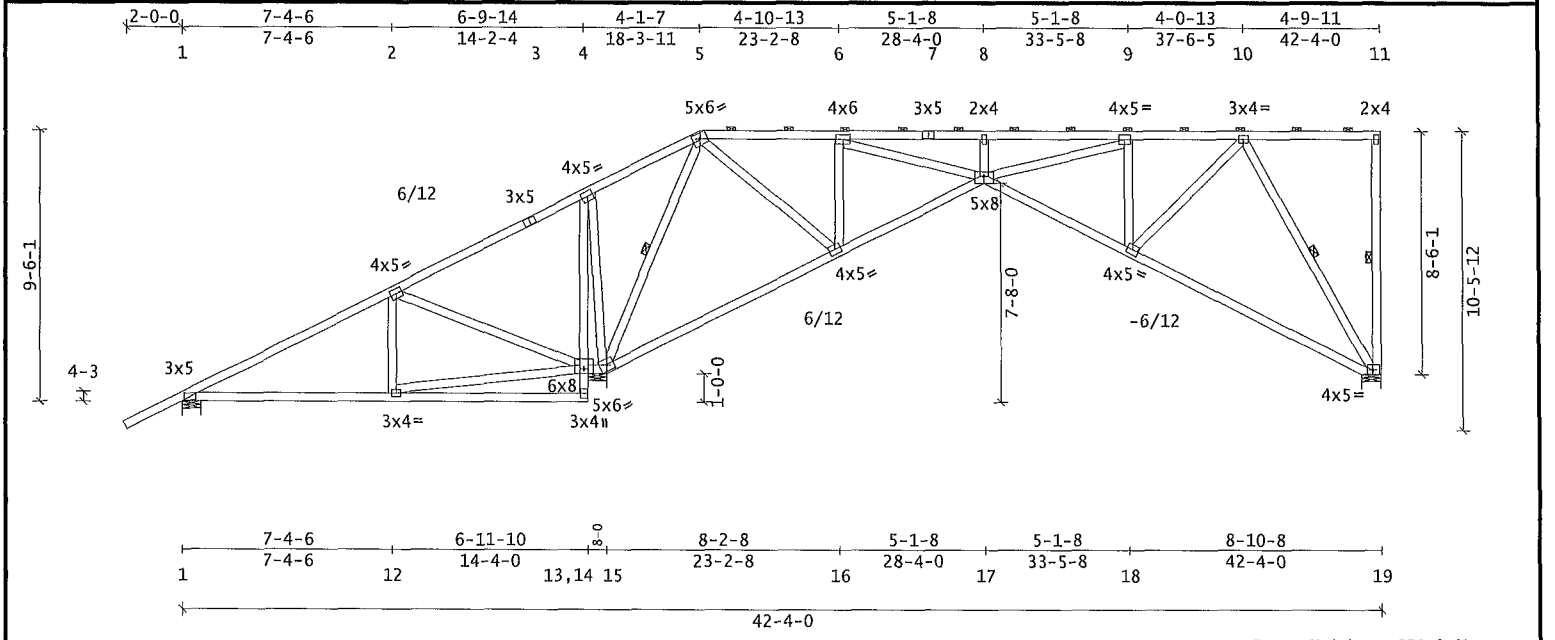
Component Solutions
Truss Studio V
2023 9 2 1

P-23-228 - 421 SE Alfred Markham Rd HOUSE | **Qty: 5** | **Truss: T04-B**

Customer: Valued Customer

SID 0002947349
TID 235539
Date 06 / 07 / 24
Page 1 of 1

Truss Mfr Contact: Chris Wallington



Truss Weight = 272 2 lb

Code/Design FBC-2023/TPI-2014			
PSF	Live	Dead	Dur Factors
TC	20 0	10 0	Live Wind Snow
BC	0 0	10 0	Lum 1 25 1 60 N/A
Total		40 0	Plt 1 25 1 60 N/A
Spacing	2 00-00 o c		Plies 1
Repetitive Member Increase Yes			
Green Lumber No Wet Service No			
Fab Tolerance 20% Creep (Kcr) = 2 0			
OH Soffit Load 2 0 psf			

----------Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs----- ----
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	2 - 3	0 78
Max CSI in BC PANEL	14 - 15	0 95
Max CSI in Web	2 - 14	0 73

Mem		Ten	Comp	CSI
TC	OH- 1	117	0	0 53
	1- 2	1101	917	0 61
	2- 3	1698	1284	0 78
	3- 4	1750	1262	0 68
	4- 5	1746	1128	0 59
	5- 6	556	230	0 32
	6- 7	1081	1720	0 37
	7- 8	1081	1720	0 31
	8- 9	1081	1720	0 35
	9-10	540	873	0 25
	10-11	193	173	0 35
	11-OH	0	0	0 00
BC	1-12	822	949	0 54
	12-13	22	26	0 46
	14-15	1512	1490	0 95
	15-16	599	999	0 66
	16-17	294	192	0 49
	17-18	988	652	0 65
	18-19	716	406	0 68
Web	2-12	410	65	0 06
	2-14	758	899	0 73
	4-14	173	152	0 05
	4-15	553	476	0 29
	5-15	1069	1727	0 55
	5-16	962	518	0 22
	6-16	601	797	0 20
	6-17	1864	1229	0 39
	8-17	271	325	0 03
	9-17	880	749	0 24
	9-18	420	514	0 13
	10-18	651	308	0 11
	10-19	508	857	0 32
	11-19	97	211	0 70
	12-14	808	932	0 68
	13-14	121	0	0 04

Reaction Summary

----------Reaction Summary(Lbs)----------

Jnt	--X-Loc-	React	Up-	- Width-	-Reqd	-Mat	PSI
1	03-04	302	343	08-00	01-08	SPF	425
15	14-10-04	2735	970	08-00	04-05	SPF	425
19	42-02-04	740	415	04-08	01-08	SPF	425

Max Horiz = -237 / +531 at Joint 1
Max Horiz = 237 / +531 at Joint 15
Max Horiz = -237 / +531 at Joint 19

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [30-03-14] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span Limit	Actual(in)	Location
Vert LL	L/240	L/999(-0 22)	18-19
Vert DL	L/120	L/999(-0 25)	18-19
Vert CR	L/180	L/699(-0 47)	18-19
Horz LL	0 75in	(0 14)	@Jt19
Horz CR	1 25in	(0 26)	@Jt19
Ohng CR	2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

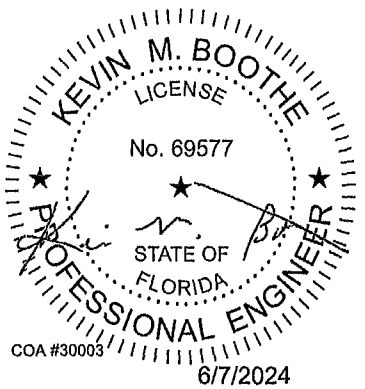
----------Bracing Data----------
Chords, Sheathing required or bracing indicated

	---oc--	--From--	---To-	#Bays
TC	5-11-00	-2-01-09	19-03-04	5
TC	2-00-00	19-03-04	41-04-07	11
TC	11-00	41-04 07	42-04-00	2
BC	5-01-00	0	42-00-08	9

-- ---- Web Bracing -- CLR ----------
Single 15- 5 10-19 19-11
Continuous Restraint Bracing Req'd
See BCSI B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt5(00-01,-00-01), Jnt14(0,01-04), Jnt15(-00-01,00-01), Jnt17(0,-00-09), Jnt19(00 04,00-05)



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Truss Studio V
2023 9 2 1

EngDrwg 2021r5RGT PS

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 2	Truss: T05

Customer Valued Customer

SID 0002947350
TID 235539
Date 06 / 07 / 24
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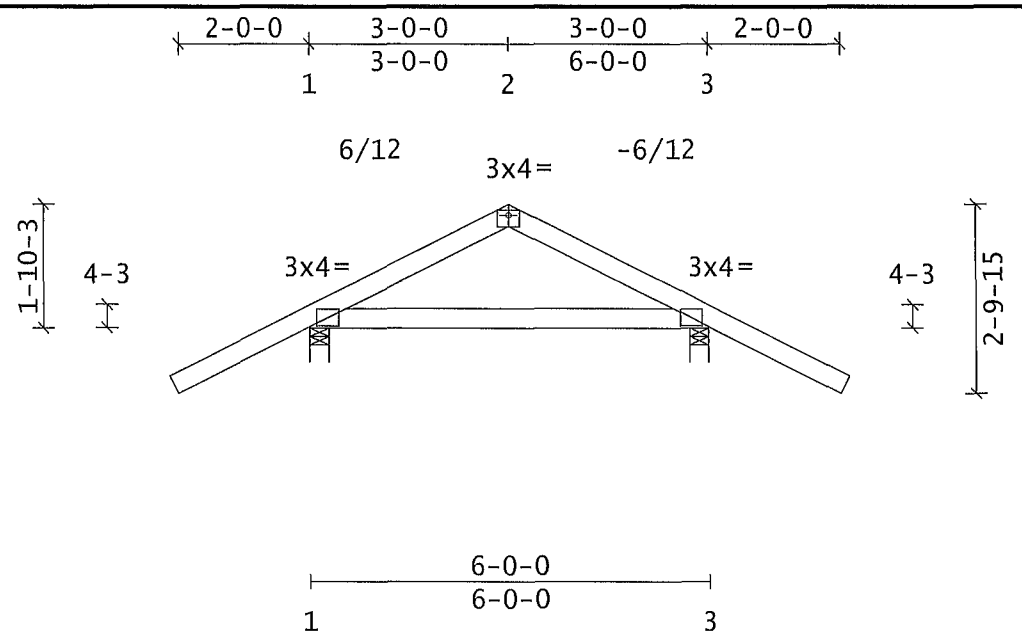
Truss Mfr Contact. Chris Wallington



Truss Weight = 25 8 lb

Code/Design FBC-2023/TPI-2014	------ ----Snow Load Specs----------	----------Wind Load Specs----------	-------Additional Design Checks------
PSF Live Dead Dur Factors	ASCE7-22 Ground Snow(Pg) = N/A	ASCE7-22 Wind Speed(V) = 140 mph	10 psf Non-Concurrent BCLL Yes
TC 20 0 10 0 Live Wind Snow	Risk Cat II Terrain Cat C	Risk Cat II Exposure Cat C	20 psf BC Live Storage Yes
BC 0 0 10 0 Lum 1 25 1 60 N/A	Roof Exposure Sheltered	Bldg Dims L = 97 2 ft B = 78 3 ft	200 lb BC Accessible Ceiling Yes
Total 40 0 Plt 1 25 1 60 N/A	Thermal Condition All Others(1 0)	M R H(h) = 25 0 ft Kzt = 1 0	300 lb TC Maintenance Load Yes
Spacing 2 00-00 o c Plies 1	Unobstructed Slippery Roof No	Bldg Enclosure Enclosed	2000 lb TC Safe Load No
Repetitive Member Increase Yes	Low-Slope Minimums(Pfmin) No	Wind DL(psf) TC = 5 0 BC = 5 0	Unbalanced TCLL Yes
Green Lumber No Wet Service No	Unbalanced Snow Loads No	End Vertical Exposed L = Yes R = Yes	
Fab Tolerance 20% Creep (Kcr) = 2 0	Rain Surcharge No Ice Dam Chk No	Wind Uplift Reporting ASCE7 MWFRS	
OH Soffit Load 2 0 psf		Hurricane Prone Region	
		C&C End Zone 7-10-00	

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL 1 - 1 0 53
Max CSI in BC PANEL 1 - 3 0 24

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 53
	1- 2	173	286	0 23
	2- 3	173	286	0 23
	3-OH	117	0	0 50
BC	1- 3	235	23	0 24

Reaction Summary

----------Reaction Summary(Lbs)-------- -------

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	01-12	454	147	03-08	01-08	SPF	531
3	5-10-04	454	147	03-08	01-08	SPF	531

Max Horiz = -48 / +48 at Joint 1

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [3-00-00] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Lumber and plating have been applied symmetrically

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(-0 02)	1- 3
Vert DL		L/120	L/999(-0 01)	1- 3
Vert CR		L/180	L/999(-0 04)	1- 3
Horz LL		0 75in	(0 01)	@Jt 1
Horz CR		1 25in	(0 01)	@Jt 1
Ohng CR		2L/180	2L/692(0 07)	1- 1
Ohng CR		2L/180	2L/692(0 07)	3- 3

Bracing Data Summary

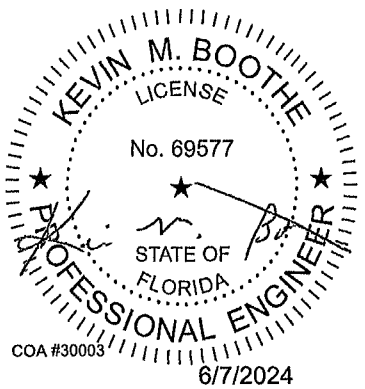
------- ----Bracing Data----------
Chords Sheathing required or bracing indicated
----------Purlins------ - - -

	---oc---	--From -	---To---	#Bays
TC	5 08-00	-2-01-09	8-01-09	3
BC	6-00-00	0	6-00-00	1

Web Bracing -- None

Plate offsets (X, Y):

(None unless indicated below)
Jnt2(0,-00-09)



6/7/2024

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SIMPSON Strong-Tie

PIGGYBACK TRUSS CONNECTION DETAIL

TD-CPS-0001

Date 09/04/2014 | Rev D | Pg 1 of 1

This detail provides minimum connection requirements between a cap truss and a base truss of a piggyback assembly for assemblies that meet the following conditions and design requirements

- the cap truss has continuous bearing or bearings at 2' o c max ,
- the cap truss contains vertical web members at 4' o c max,
- the cap trusses are spaced no greater than 24" o c ,
- the pitch does not exceed 12/12,
- the cap truss span does not exceed 100', for spans > 36', see Table 2 Footnote 5
- the cap truss supports no point loads or drag loads (see detail TD-CPS-0002 for drag load connection requirements)

Design Requirements:

Max Wind Speed 140 mph (nominal) Load Duration Factor 1 6
Max Mean Roof Height. 30' Lumber SPF or Better
Exp Category B or C (Min SG = 0 42)

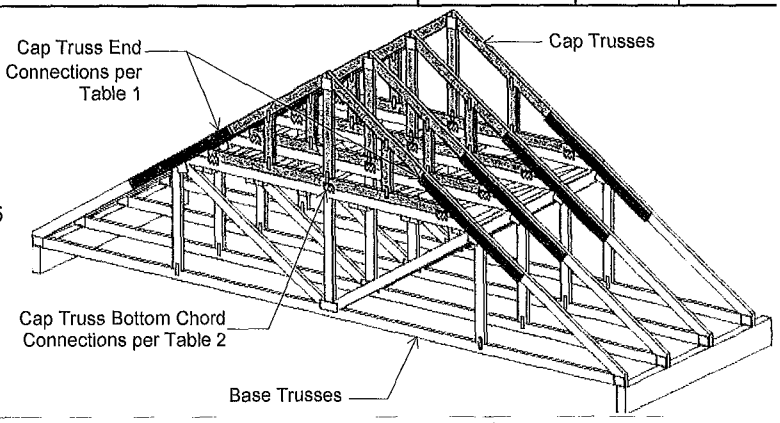


TABLE 1 - Connection Requirements At Each End of Cap Truss (One Face Only)

Cap Truss Span	Max. Wind Speed (mph)		End Connection Options	Fasteners[1]
	Nominal	Ultimate		
Up to 18'	100	125	Sheathing - See Note 2	---
	140	180	4' 2x Scab	16-10d nails
			LSTA18 or CS20 Strap	14-10dx1 5 nails
18' < Span <= 100'	120	150	4' 2x Scab	16-10d nails
	130	160	LSTA18 or CS20 Strap	14-10dx1 5 nails
	140	180	6' 2x Scab	24-10d nails
				10-SDS 1/4x3
			LSTA30 or CS18 Strap	20-10dx1 5

See footnotes below

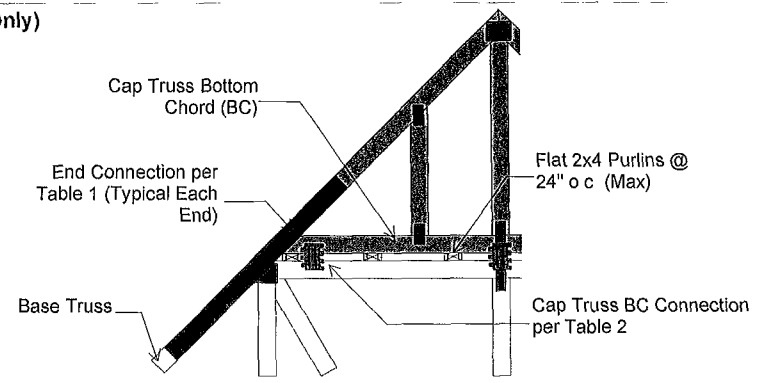


Figure 1 - Typical Piggyback Assembly with 1 1/2" Gap Between Cap and Base

TABLE 2 - Connection Requirements Along Cap Truss Bottom Chord

Condition	Max. Wind Speed (mph)		Connection Options Along BC	Fasteners
	Nominal	Ultimate		
With 1 5" Gap (See Fig 1)	140	180	Nails into purlins installed on base truss at 24" o c (max)	Purlin-to-Base 2-10d nails (ea purlin) Cap-to-purlin 2-10d toe-nails (ea purlin)
			(3) 7' x7"x7/16" Plywood/OSB Gussets (each face)	6-6d nails per Gusset (see note 1 & 5)
			(3) LTP5 Framing Angles (one face)	8-8dx1 5 nails per LTP5 (see note 1 & 5)
No Gap (See Fig 2)	130	160	(2) LTP4 Framing Angles (one face)	12-8dx1 5 nails per LTP4 (see note 1 & 5)
	140	180	Toe-Nails @ 24" o c.	2-10d toe-nails along BC @ 24" o c.
			(3) 7"x7"x7/16 ' Plywood/OSB Gussets (each face)	6-6d nails per Gusset (see note 1& 5)
			(3) LTP4 Framing Angles (one face)	12-8dx1 5 nails per LTP4 (see note 1 & 5)

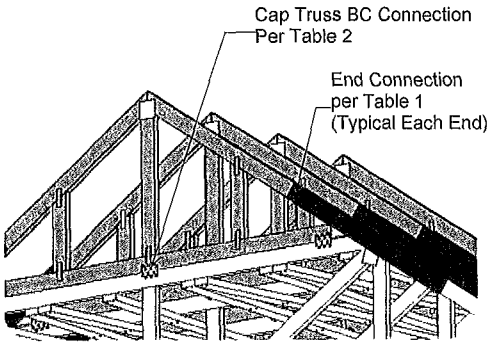
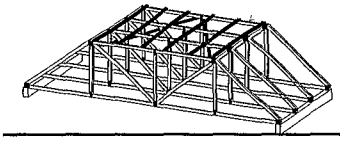


Figure 2 - Typical Piggyback Assembly with No Gap Between Cap and Base

1 Where noted install half of the specified fasteners in each member being connected
2 An additional end connection is not required for wind speeds up to 100 mph (nominal) and cap truss spans up to 18' if the sheathing is continuous and extends at least 12" beyond the intersection
3 When using (2) connectors along the cap truss BC, install one at each end of the bottom chord, when using (3) connectors, install one on each end and one in the center of the bottom chord
4 NAILS 10d=0 148 dia x3" long, 10dx1 5=0 148 dia x1½ long, 8dx1 5=0 131 dia x1½ long, 6d=0 113" dia x2 long
5 For piggyback truss spans greater than 36' and less than or equal to 100' where there is a 1 5" gap between BC of cap truss and TC of base truss, attach BC of cap truss to the TC of base truss with 7"x7"x7/16" Plywood/OSB Gussets (each face) with 6-6d nails per gusset or LTP5 Framing Angles (one face) with 8-8dx1 5" nails per LTP5 under each vertical web at 4 on center Where there is no gap between BC of cap truss and TC of base truss, attach BC of cap truss to the TC of base truss with 7"x7"x7/16" Plywood/OSB Gussets (each face) with 6-6d nails per gusset or LTP4 Framing Angles (one face) with 12-8dx1 5' nails per LTP4 under each vertical web at 4' on center Note spacing for vertical webs must not exceed 4' on center

Bracing for the Base Truss Flat Top Chord n a Piggyback Assembly

The flat top chords of the supporting base trusses must be adequately braced to prevent them from buckling out from under the cap trusses One option for acomplishing this is with flat 2x4 purlins in combination with diagonal bracing that gets repeated at max 10' intervals Other methods may be required as specified in the Construction Documents See BCSI-B3 for additional information



KEVIN M. BOOTHE LICENSE No 69577 STATE OF FLORIDA PROFESSIONAL ENGINEER
COA #30003
6/7/2024

SIMPSON Strong-Tie

PIGGYBACK TRUSS CONNECTION DETAIL WITH DRAG LOADS

TD-CPS-0002

Date 09/04/2014 | Rev | Pg 1 of 1

This detail provides minimum connection requirements between a cap truss and a base truss of a piggyback assembly to resist drag loads This detail applies to assemblies that meet the following conditions and design requirements

- the cap truss has continuous bearing or bearings at 2' o c max ,
- the cap truss contains vertical web members at 4' o c. max,
- the cap trusses are spaced no greater than 24" o c ,
- the pitch does not exceed 12/12,
- the cap truss span does not exceed 36',
- the cap truss is not a mono truss ,

Design Requirements:

Load Duration Factor 1 6

Lumber· SPF or Better (Min SG = 0 42)

See also TD-CPS-0001D for connection requirements for wind loads The piggyback connections must satisfy both the drag load and wind load requirements

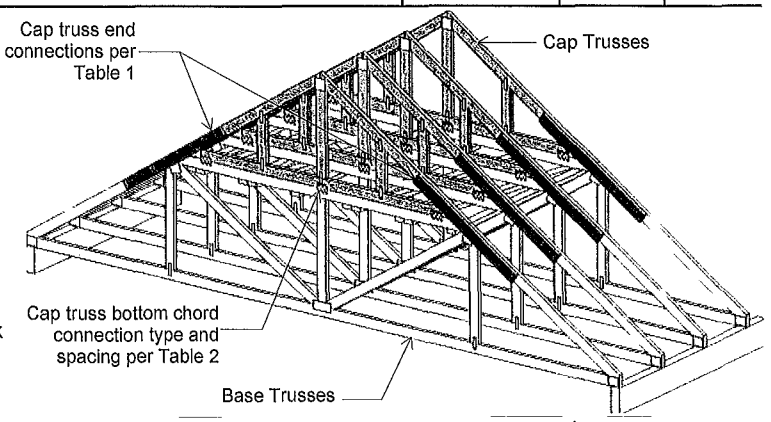


Table 1 - Maximum Cap Truss Span Based on Cap Truss End Connections

Max. Drag Load (plf)	End Connection Type									
	LSTA18 or CS20 with 14-10dx1.5		4' 2x Scab with 16-10d		6' 2x Scab with 10-SDS1/4x3		LSTA30 or CS18 with 20-10dx1.5		6' 2x Scab with 24-10d	
	One Face	Both Faces	One Face	Both Faces	One Face	Both Faces	One Face	Both Faces	One Face	Both Faces
100	18'	36'	24'	36'	24'	36'	24'	36'	36'	36'
200	9'	18'	12'	24'	12'	24'	12'	24'	18'	36'
400	--	9'	--	12'	--	12'	--	12'	9'	18'
600	--	--	--	--	--	9'	--	9'	--	12'
700	--	--	--	--	--	--	--	--	--	9'

1 Install half of the specified fasteners in each member being connected
2 NAILS 10d = 0 148 dia x 3 long 10d x1 5 = 0 148 dia x1 ½ long

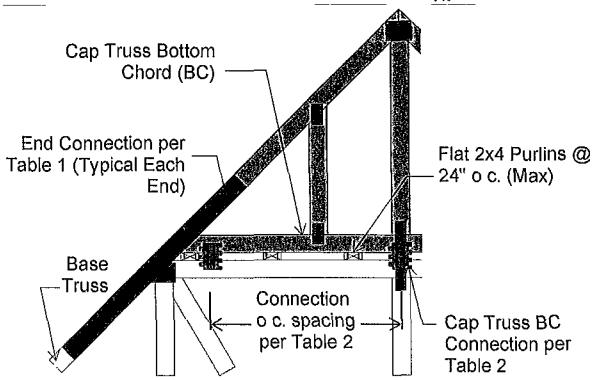


Figure 1 - Typical Piggyback Assembly with 1 1/2" Gap Between Cap and Base

Table 2 - Maximum On-Center Spacing of Connections Along Cap Truss BC

Max. Drag Load (plf)	Connection Type					
	1.5" Gap Between Cap & Base Truss (See Figure 1)			No Gap Between Cap Base Truss (See Figure 2)		
	2-10d Toe-nails into Purlins on Base Truss[1]	7"x7"x7/16" Plywood/OSB with 6-6d (ea face)[2,3]	LTP5 with 8-8dx1.5 (ea face)[2,3]	2-10d Toe-nails	7"x7"x7/16" Plywood/OSB with 6-6d (ea face)[2,3]	LTP4 with 12-8dx1.5 (ea face)[2,3]
100	2' o c	3'-6" o c	6' o c	2' o c	3'-6" o c.	9' o c
200	--	2' o c.	3' o c	--	2' o c.	5' o c
400	--	1' o c	1'-6" o c	--	1' o c	2'-6" o c.
600	--	--	1' o c	--	--	1'-6" o c.
700	--	--	1' o c	--	--	1'-6" o c

1 Purlins must be fastened to the base truss (at 24" o c max) with min 2-10d nails (each purlin)
2 Install half of the specified fasteners in each member being connected
3 Connections shall be staggered on the opposite face
4 NAILS 10d=0 148 dia x 3" long 8dx1 5=0 131" dia x 1 ½ long 6d = 0 113 dia x 2 long

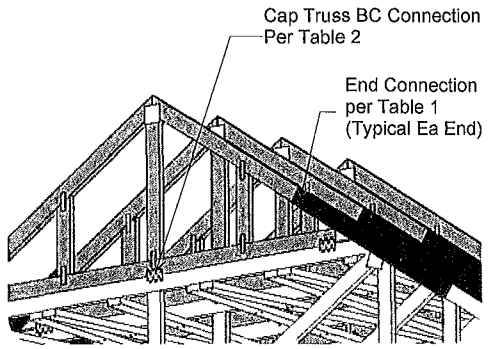
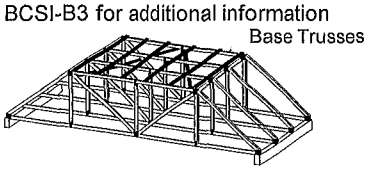
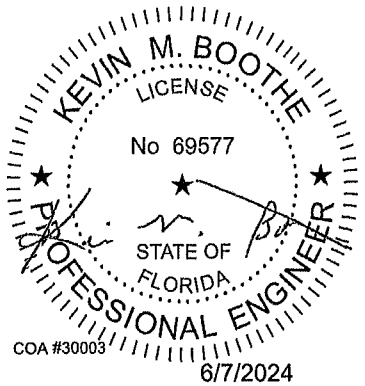


Figure 2 - Typical Piggyback Assembly with No Gap Between Cap and Base

Bracing for the Base Truss Flat Top Chord in a Piggyback Assembly

The flat top chords of the supporting base trusses must be adequately braced to prevent them from buckling out from under the cap trusses One option for accomplishing this is with flat 2x4 purlins in combination with diagonal bracing that gets repeated at max 10' intervals Other methods may be required as specified in the Construction Documents See BCSI-B3 for additional information





SIMPSON Strong-Tie

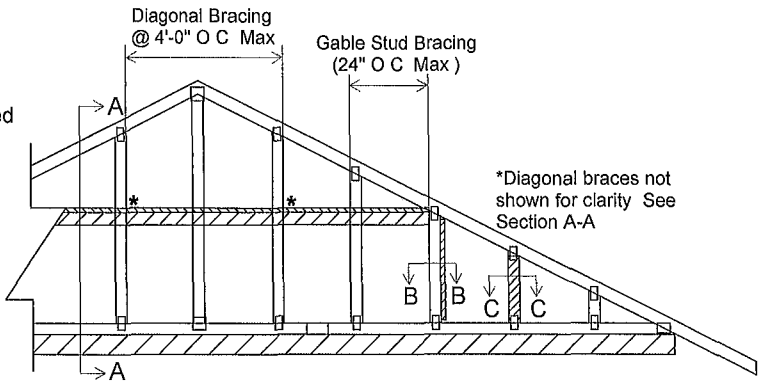
GABLE STUD BRACING DETAIL - 110 MPH (NOMINAL), 140 MPH (ULTIMATE)

TD-GBL-0004B

Date 06/11/2014 | Rev B | Pg 1 of 1

NOTES:

1 This detail provides bracing/reinforcement options for the gable studs to resist the out-of-plane wind loading Refer to the individual truss design drawing for bracing/reinforcement requirements for resisting the vertical (in-plane) loads assumed in the design of the gable end frame Additional bracing/reinforcement at the end of the building and/or at the gable end wall may be required Refer to the Building Designer/Construction Documents for all gable end frame and roof system bracing requirements For additional information, see BCSI-B3
2 This detail does not apply to structural gables
3 Connection requirements between the gable end frame and the wall to be specified by the Building Designer
4 The gable end frame must match the profile of the adjacent trusses Do not use a gable end frame with a flat bottom chord next to trusses with sloped bottom chords, such as scissor or vaulted trusses

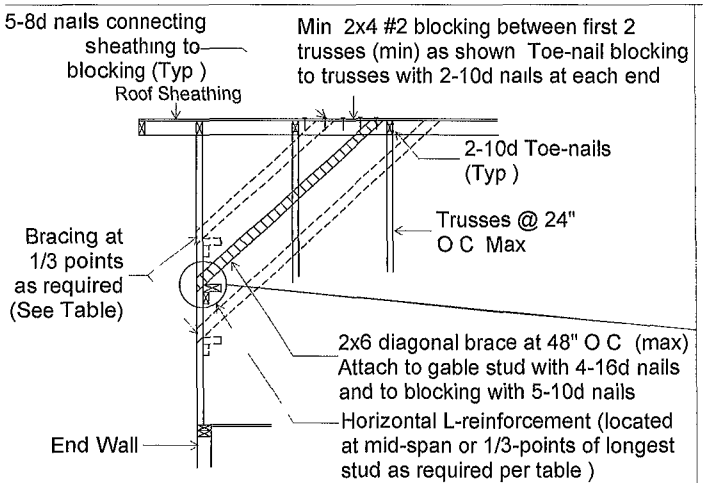


GABLE END WITH STUD BRACING/REINFORCEMENT

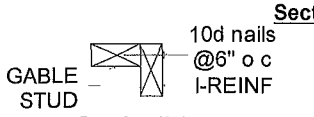
MINIMUM GABLE STUD SIZE, SPECIES & GRADE	MAX. GABLE STUD SPACING	WITHOUT BRACE	L-REINFORCEMENT [1]	SCAB REINFORCEMENT [1]	DIAGONAL BRACING @ MID-SPAN [2]	DIAGONAL BRACING @ 1/3 POINTS [2]
		MAXIMUM STUD LENGTH [3]				
2X4 SPF STUD or STANDARD	12" O C	4-6-0	7-11-4	9-0-4	9-0-4	13-6-8
	16" O C	4-1-0	7-0-4	8-2-4	8-2-4	12-3-8
	24" O C	3-5-8	5-8-12	6-11-0	6-11-0	10-4-8

DETAIL LIMITATIONS:
Max Mean Roof Height 30'
Category II
Exposure B or C
Load Duration Factor 1 6
Wind Speed 110 mph Nominal (140 mph Ultimate)

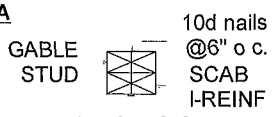
1 L- and Scab Reinforcements shall be minimum 2x4 stud grade and must be a minimum of 90% of the gable stud length Fasten the reinforcement member to the gable stud with 10d nails @ 6" o c.
2 Attach horizontal reinforcing member at mid-span (or 1/3 points as required) of the longest stud and install diagonal bracing @ 4' o c. (max) as shown in Section A-A
3 Tabulated maximum stud lengths are based on components and cladding wind pressures using the wind design parameters listed in the detail limitations Gable stud deflection criteria is L/240



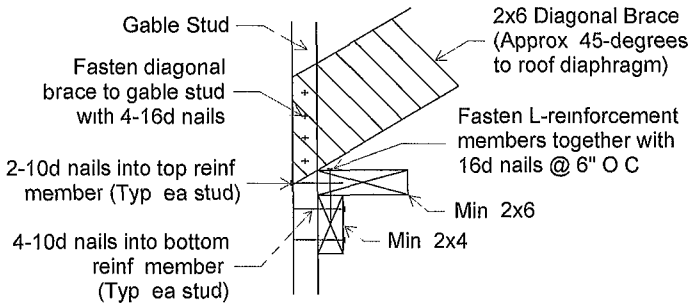
Section A-A



Section B-B



Section C-C



NOTE Diagonal braces over 6'-3" require a 2x4 T-brace attached to one narrow edge Diagonal braces over 12'-6" require 2x4s attached on both narrow edges The braces must cover 90% of the diagonal brace and shall be fastened to the narrow edge with 10d nails at 6" o c.(min 3" end distance) When attached on both narrow edges, stagger the nails on each side by 3"

Nail Dimension
16d = 3 5" x 0 162"
10d = 3" x 0 148"
8d = 2 5" x 0 131"

KEVIN M. BOOTHE
LICENSE
No 69577
STATE OF FLORIDA
PROFESSIONAL ENGINEER
COA #30003
6/7/2024

SIMPSON Strong-Tie

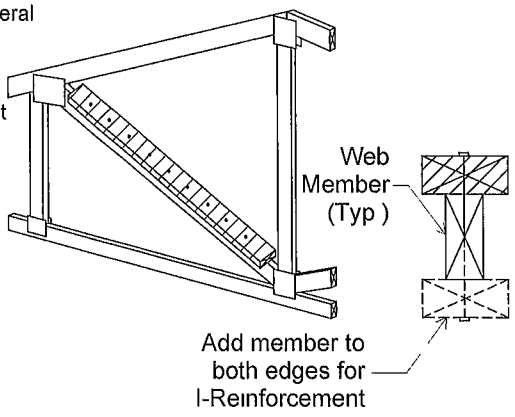
INDIVIDUAL WEB REINFORCEMENT DETAIL

D-WEBREINFORCE

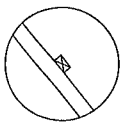
Date 01/19/2024 | Rev A | Pg 1 of 1

NOTES:

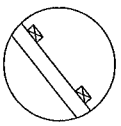
1 This detail provides web reinforcement options that may be used as an alternative to continuous lateral restraint (CLR) when installing CLRs in combination with diagonal bracing is not practical or desired
2 Refer to the truss design drawing for web lateral restraint requirements A ⊠ on the truss design drawing indicates that continuous lateral restraint is required at the locations shown (either at the midpoint or 1/3-points of the web member) Refer to the tables below for acceptable web reinforcement options that may be used in place of one or two rows of CLR
3 T-, L-, I- and scab web reinforcements must be the same or better species and grade of the web member as indicated on the truss design drawing
4 All reinforcements must extend to within 6" of each end of the web member
5 This detail does not apply to single-ply webs that exceed 14' in length



T- Reinforcement
(I-Reinforcement similar)



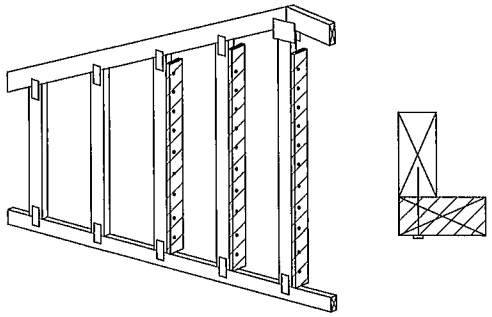
1 Row of CLR @ Web Mid-point



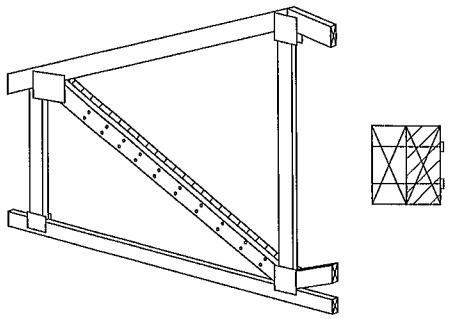
2 Rows of CLRs @ Web 1/3 points

WEB REINFORCEMENT OPTIONS FOR SINGLE-PLY TRUSSES [1]						
Specified Web Member Lateral Restraint (CLRs)	Web Member Size	Acceptable Web Reinforcement Substitutions - Type & Size				Reinforcement-to-Web Connection Requirements
		T-	L-	Scab	I-	
1 Row @ Mid-point	2x4	2x4	2x4	2x4	---	16d gun nails @ 6" on-center
	2x6	2x6	2x6	2x6	---	
	2x8	2x8	2x8	2x8	---	
2 Row @ 1/3-points	2x4	No substitutions allowed			2-2x4	
	2x6				2-2x6	
	2x8				2-2x8	

WEB REINFORCEMENT OPTIONS FOR 2-PLY TRUSSES [2]						
Specified Web Member Lateral Restraint (CLRs)	Web Member Size	Acceptable Web Reinforcement Substitutions - Type & Size				Reinforcement-to-Web Connection Requirements
		T-	L-	Scab	I-	
1 Row @ Mid-point	2x4	2x4	2x4	---	---	16d gun nails @ 6" on-center
	2x6	2x6	2x6	---	---	
	2x8	2x8	2x8	---	---	
2 Row @ 1/3-points	2x4	No substitutions allowed			2-2x4	
	2x6				2-2x6	
	2x8				2-2x8	



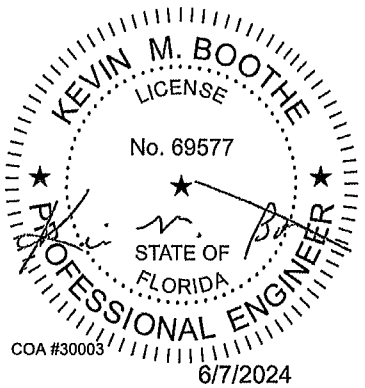
L- Reinforcement



Scab Reinforcement

1 The maximum allowable web length for single-ply trusses is 14'
2 For 2-ply trusses, the reinforcement must be nailed to both plies of the web with the nailing pattern specified in the table
3 For the scab reinforcement, 2 rows of 10d gun nails @ 6" o c may be used in place of 16d gun nails for attaching the reinforcement to the web
4 For I-reinforcement, attach each 2x_member to opposite edges of the web using the nailing pattern specified in the table

Nail Dimension
16d = 3 5" x 0 131"
10d = 3" x 0 120"



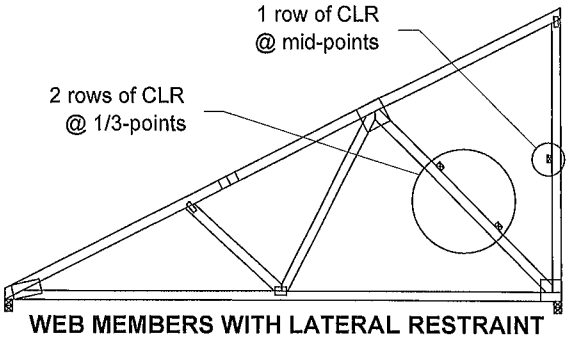
SIMPSON Strong-Tie

LATERAL RESTRAINT & DIAGONAL BRACING DETAILS FOR WEB MEMBERS

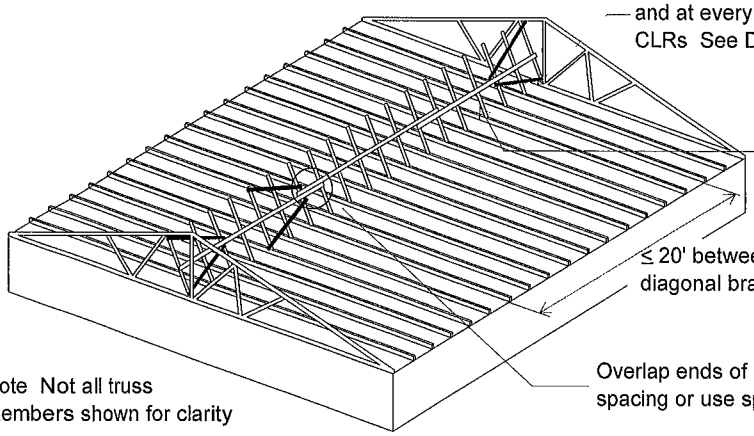
D-WEBCLRBRACE

Date 05/24/2021 | Rev A | Pg 1 of 1

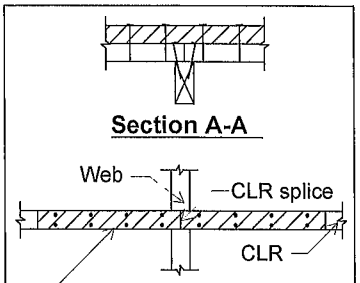
This detail provides information for laterally restraining and bracing web members to prevent lateral buckling using continuous lateral restraints (CLRs) in combination with diagonal bracing In addition to the CLRs indicated on the truss design drawing, diagonal bracing must be installed as indicated in this detail and BCSI-B3 See WEBREINFORCE for web reinforcement options that may be used as an alternative to this detail when installing CLRs and diagonal bracing is not practical or desired Properly attached full-length sheathing satisfies (may replace) any bracing requirements specified for end vertical webs Refer to the Construction Documents for additional bracing requirements For trusses with spacing greater than 2' o c. refer to BCSI-B10



WEB MEMBERS WITH LATERAL RESTRAINT

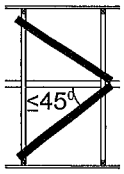


Note Not all truss members shown for clarity

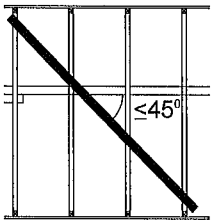


Detail 1 - CLR Splice

For webs with one row of CLRs, diagonal bracing shall be installed using Option 2A or 2B Attach diagonal braces to each truss with min 2-10d nails



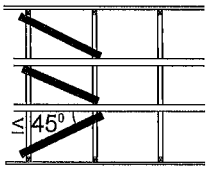
Option 2A



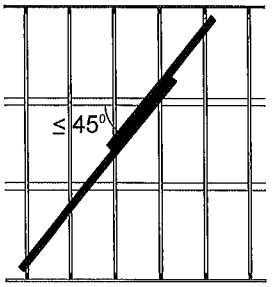
Option 2B

Detail 2 - Diagonal Bracing for 1 Row of CLRs

For webs with 2 rows of CLRs, diagonal bracing shall be installed using Option 3A or 3B Attach diagonal braces to each truss with min 2-10d nails



Option 3A



Option 3B

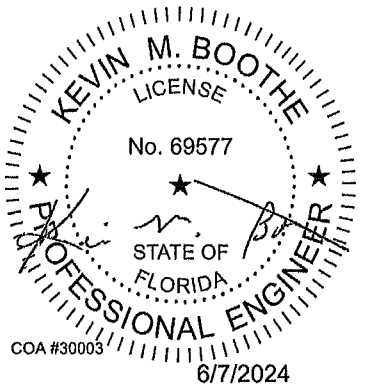
Detail 3 - Diagonal Bracing for 2 Rows of CLRs

DETAIL LIMITATIONS:

1 Restraint and Bracing Material min 2x4 stress graded lumber
2 This detail does not address permanent building stability bracing to resist lateral forces acting on the building
3 This detail shall not supersede any project-specific truss member permanent bracing design for the roof framing structural system
4 This detail is not applicable for trusses with spacing greater than 2' o c

Nail Dimensions:

10d = 3" x 0 128"



6/7/2024

#72996 County copy 2

SIMPSON Strong-Tie®

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

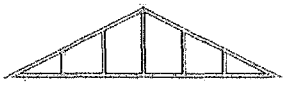
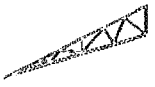
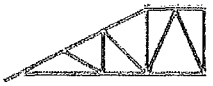
Job #:	235539
Job Name:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
Customer:	Century Truss Systems
Received:	6/7/2024 6 22 AM
Requested:	6/10/2024 10 00 AM

Contact/Shipping Information

Sent By:	Chris Wallington
Sender Email:	centurytrussengineering@gmail com
Eng Email:	centurytrussengineering@gmail com
Ship Type:	Email
Customer Note:	
Engineering Note:	

Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023 9 2 1
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
1	GE1	22-0-0	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947337	
Customer Note								
Engineering Note								
2	GE2	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947338	
Customer Note								
Engineering Note								
3	GE3	6-0-0	6.00 0.00	2-0-0 2-0-0	Truss Studio 2023.9.2.1		2947339	
Customer Note								
Engineering Note								
4	PB01	27-8-10	6.00 0.00	0-0-0 0-0-0	Truss Studio 2023.9.2.1		2947340	
Customer Note								
Engineering Note								
5	T01	32-1-4	6.00 3.50	2-0-0 0-0-0	Truss Studio 2023.9.2.1	X	2947341	
Customer Note								
Engineering Note	Changed bearing geometry from flat to sloped							
6	T02	26-11-4	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947342	
Customer Note								
Engineering Note								

SIMPSON Strong-Tie

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

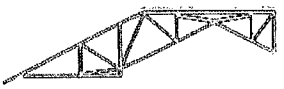
Job #:	235539
Job Name:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
Customer:	Century Truss Systems
Received:	6/7/2024 6:22 AM
Requested:	6/10/2024 10 00 AM

Contact/Shipping Information

Sent By:	Chris Wallington
Sender Email:	centurytrussengineering@gmail com
Eng Email:	centurytrussengineering@gmail com
Ship Type:	Email
Customer Note:	
Engineering Note:	

Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023 9 2 1
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
7	T02-A	37-1-8	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947343	
Customer Note								
Engineering Note								
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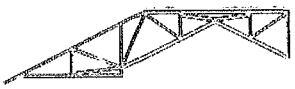
Customer Note								
Engineering Note								
9	T03	24-7-6	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947345	
Customer Note								
Engineering Note								
10	T03-A	38-11-12	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947346	
Customer Note								
Engineering Note								
11	T04	21-9-0	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947347	
Customer Note								
Engineering Note								
12	T04-A	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947348	
Customer Note								
Engineering Note								

SIMPSON Strong-Tie

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

Job #:	235539
Job Name:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
Customer:	Century Truss Systems
Received:	6/7/2024 6 22 AM
Requested:	6/10/2024 10 00 AM

Contact/Shipping Information

Sent By:	Chris Wallington
Sender Email:	centurytrussengineering@gmail com
Eng Email:	centurytrussengineering@gmail com
Ship Type:	Email
Customer Note:	
Engineering Note:	

Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023 9.2 1
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
13	T04-B	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947349	
Customer Note								
Engineering Note								
14	T05	6-0-0	6.00 0.00	2-0-0 2-0-0	Truss Studio 2023.9.2.1		2947350	
Customer Note								
Engineering Note								

SIMPSON Strong-Tie

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

Job #:	235539
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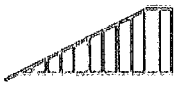
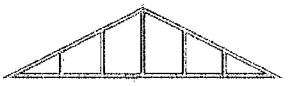
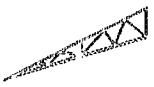
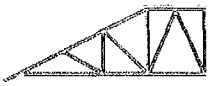
Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023 9 2 1
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
1	GE1	22-0-0	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947337	
Customer Note								
Engineering Note								
2	GE2	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947338	
Customer Note								
Engineering Note								
3	GE3	6-0-0	6.00 0.00	2-0-0 2-0-0	Truss Studio 2023.9.2.1		2947339	
Customer Note								
Engineering Note								
4	PB01	27-8-10	6.00 0.00	0-0-0 0-0-0	Truss Studio 2023.9.2.1		2947340	
Customer Note								
Engineering Note								
5	T01	32-1-4	6.00 3.50	2-0-0 0-0-0	Truss Studio 2023.9.2.1	X	2947341	
Customer Note								
Engineering Note	Changed bearing geometry from flat to sloped							
6	T02	26-11-4	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947342	
Customer Note								
Engineering Note								

SIMPSON Strong-Tie

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

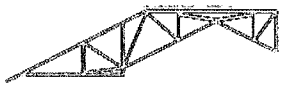
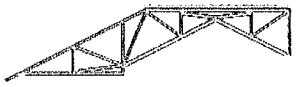
Job #:	235539
Job Name:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
Customer:	Century Truss Systems
Received:	6/7/2024 6 22 AM
Requested:	6/10/2024 10.00 AM

Contact/Shipping Information

Sent By:	Chris Wallington
Sender Email:	centurytrussengineering@gmail com
Eng Email:	centurytrussengineering@gmail com
Ship Type:	Email
Customer Note:	
Engineering Note:	

Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023 9 2 1
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
7	T02-A	37-1-8	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947343	
Customer Note								
Engineering Note								
8	T02-B	37-1-8	6.00 6.00	0-0-0 0-0-0	Truss Studio 2023.9.2.1		2947344	
Customer Note								
Engineering Note								
9	T03	24-7-6	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947345	
Customer Note								
Engineering Note								
10	T03-A	38-11-12	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947346	
Customer Note								
Engineering Note								
11	T04	21-9-0	6.00 0.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947347	
Customer Note								
Engineering Note								
12	T04-A	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947348	
Customer Note								
Engineering Note								

SIMPSON StrongTie

Job Cover Sheet

Job Type:	Project
Seal:	Florida
Priority:	SameDayRush

Job #:	235539
Job Name:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
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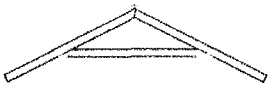
Engineering Note:	

Design Information

# of Trusses:	14	# of Wet:	0
Design App:	Truss Studio	Version:	2023 9 2 1
Original Studio Version:			2023 9 2 1
Catalog:	235539_Catalog		
Assoc. Jobs:			

#	Truss	Span	Pitch	L/R OH	App/ Version	Modified	Sequence #	
13	T04-B	42-4-0	6.00 6.00	2-0-0 0-0-0	Truss Studio 2023.9.2.1		2947349	
Customer Note								
Engineering Note								
14	T05	6-0-0	6.00 0.00	2-0-0 2-0-0	Truss Studio 2023.9.2.1		2947350	
Customer Note								
Engineering Note								

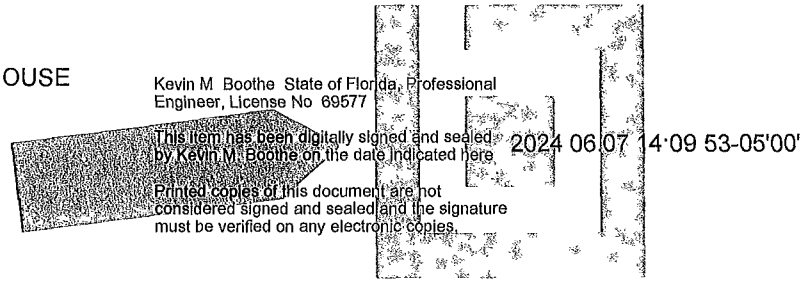
SIMPSON Strong-Tie

COMPONENT DESIGN DRAWINGS & DETAILS

Simpson Strong-Tie Company, Inc.

5956 W Las Positas Blvd
Pleasanton, CA 94588
(800) 999-5099
www strongtie com

Prepared for:	Century Truss Systems
Job:	P-23-228 - 421 SE Alfred Markham Rd HOUSE
Date:	6/7/2024 6 22 AM
Ref. Number:	235539



Notes

1 The component design drawings referenced below have been prepared based on design criteria and requirements set forth in the Construction Documents, as communicated by the Component Manufacturer
2 The engineer's signature on these drawings indicates professional engineering responsibility solely for the individual components to be able to resist the design loads indicated, utilizing all the design parameter and materials indicated or referenced on each individual design
3. It is the Building Designer's responsibility to review the component design drawings to insure compatibility with the Building design, Refer to all notes on the individual component design drawings

14 Component Design Drawing(s)

1-GE1 SID 2947337	**5-T01: SID 2947341**	9-T03 SID 2947345	13-T04-B SID 2947349
2-GE2 SID 2947338	6-T02 SID 2947342	10-T03-A. SID 2947346	14-T05 SID 2947350
3-GE3 SID 2947339	7-T02-A SID 2947343	11-T04 SID 2947347	
4-PB01 SID 2947340	8-T02-B SID 2947344	12-T04-A. SID 2947348	

SIMPSON Strong-Tie

Component Solutions™ Important Information & General Notes

General Notes

1. Each Truss Design Drawing (TDD) provided with this sheet has been prepared in conformance with ANSI/TPI 1 Refer to ANSI/TPI 1 Chapter 2 for the responsibilities of all parties involved, which include but are not limited to the responsibilities listed on this sheet, and for the definitions of all capitalized terms referenced in this document
2. TDDs should not be assumed to be to scale
3. The Contractor and Building Designer shall review and approve the Truss Submittal Package
4. The suitability and use of the component depicted on the TDD for any particular building design is the responsibility of the Building Designer
5. The Building Designer is responsible for the anchorage of the truss at all bearing locations as required to resist uplift, gravity and lateral loads, and for all Truss-to-Structural Element connections except Truss-to-Truss connections
6. The Building Designer shall ensure that the supporting structure can accommodate the vertical and/or horizontal truss deflections
7. Unless specifically stated otherwise, each Design assumes trusses will be adequately protected from the environment and will not be used in corrosive environments unless protected using an approved method This includes not being used in locations where the sustained temperature is greater than 150°F
8. Trusses are designed to carry loads within their plane Any out-of-plane loads must be resisted by the Permanent Building Stability Bracing
9. Design dead loads must account for all materials, including self-weight. The TDD notes will indicate the min pitch above which the dead loads are automatically increased for pitch effects
10. Trusses installed with roof slopes less than 0 25/12 may experience (but are not designed for) ponding The Building Designer must ensure that adequate drainage is provided to prevent ponding
11. Camber is a non-structural consideration and is the responsibility of truss fabricator

Handling, Installing, Restraint & Bracing

1. The Contractor is responsible for the proper handling, erection, restraint and bracing of the Trusses In lieu of job-specific details, refer to BCSI
2. ANSI/TPI 1 stipulates that for trusses spanning 60' or greater, the Owner shall contract with any Registered Design Professional for the design and inspection of the temporary and permanent truss restraint and bracing Simpson Strong-Tie is not responsible for providing these services
3. Trusses require permanent lateral restraint to be applied to chords and certain web members (when indicated) at the locations or intervals indicated on the TDD Web restraints are to be located at mid points, or third points of the member and chord purlins are not to exceed the spacing specified by the TDD Chords shown without bracing indicated are assumed to be continuously braced by sheathing or drywall Permanent lateral restraint shall be accomplished in accordance with standard industry lateral restraint/bracing details in BCSI-B3 or BCSI-B7, supplemental bracing details referenced on the TDD, or as specified in a project-specific truss permanent bracing plan provided by the Building Designer
4. Additional building stability permanent bracing shall be installed as specified in the Construction Documents
5. Special end wall bracing design considerations may be required if a flat gable end frame is used with adjacent trusses that have sloped bottom chords (see BCSI-B3)
6. Do not cut, drill, trim, or otherwise alter truss members or plates without prior written approval of an engineer, unless specifically noted on the TDD
7. Piggyback assemblies shall be braced as per BCSI-B3 unless otherwise specified in the Construction Documents
8. For floor trusses, when specified, Strongbacking shall be installed per BCSI-B7 unless otherwise specified in the Construction Documents
9. For IBC 2021 and newer, truss chords without a diaphragm require a project specific bracing design prepared by a registered design professional

Symbols and Nomenclature

5x7 Plate size, the first digit is the plate width (perp to the slots) and the second digit is the plate length (parallel to the slots)

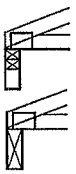
5x7-18 -18, -18S5, or -18S6 following the plate size indicates different 18 gauge plate types

II = ≤≤ These symbols following the plate size indicate the direction of the plate length (and tooth slots) for square and nearly square plates

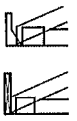
10-3-14 Dimensions are shown in feet-inches-sixteenths (for this example, the dimension is 10'-3 14/16")

Joints are numbered left to right, first along the top chord and then along the bottom chord Mid-panel splice joint numbers are not shown on the drawing Members are identified using their end joint numbers (e g , TC 2-3)

When this symbol is shown, permanent lateral restraint is required Lateral restraint may be applied to either edge of the member See Note 3 under Handling, Installing, Restraint & Bracing for more information



Bearing supports (wall, beam, etc.), locations at which the truss is required to have full bearing Minimum required bearing width for the given reactions are reported on the TDD Required bearing widths are based on the truss material and indicated PSI of the support material The Building Designer is responsible for verifying that the capacity of the support material exceeds the indicated PSI, and for all other bearing design considerations



Truss-to-Truss or Truss-to-Structural Element connection, which require a hanger or other structural connection (e g , toe-nail) that has adequate capacity to resist the maximum reactions specified in the Reaction Summary Structural connection type is not limited by type shown on TDD Toe-nails may be used where hanger type shown where allowed by detail or other connection design information Design of the Structural Element and the connection of the Truss to a Structural Element is by others

Note These symbols are for graphical interpretation only, they are not intended to give any indication of the geometry requirements of the actual item that is represented

Materials and Fabrication

1. Design assumes truss is manufactured in accordance with the TDD and the quality criteria in ANSI/TPI 1 Chapter 3, unless more restrictive criteria are part of the contract specifications
2. Unless specifically stated, lumber shall not exceed 19% moisture content at time of fabrication or in service
3. Design is not applicable for use with fire retardant, preservative treated or green lumber unless specifically stated on the TDD
4. Plate type, size, orientation and location indicated are based on the specified design parameters Larger plate sizes may be substituted in accordance with ANSI/TPI, Section 3 6 3 Plates shall be embedded within ANSI/TPI 1 tolerances on both faces of the truss at each joint, unless noted otherwise
5. Truss plates shall be centered on the joint unless otherwise specified

Referenced Standards

ANSI/TPI 1: National Design Standard for Metal Plate Connected Wood Truss Construction, a Truss Plate Institute publication (www tpinst org)

BCSI: Guide to Good Practice for Handling, Installing, Restraining & Bracing Metal Plate Connected Wood Trusses, a joint publication of the Truss Plate Institute (www tpinst.org) and the Structural Building Components Association (www sbcindustry com)

DSB-89 Recommended Design Specification for Temporary Bracing of Metal Plate Connected Wood Trusses, a Truss Plate Institute publication (www tpinst org)

NDS: National Design Specification for Wood Construction published by American Forest & Paper Association and American Wood Council

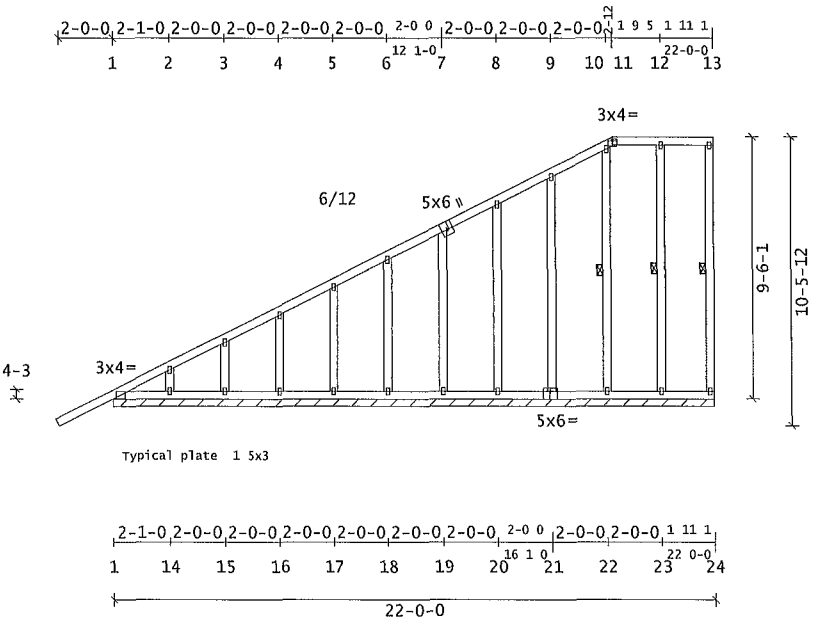
ESR-2762 Simpson Strong-Tie® AS Truss Plates are covered under ESR-2762 published by the International Code Council Evaluation Service (www icc-es org)

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 1	Truss: GE1

Customer: Valued Customer

SID 0002947337
TID 235539
Date 06 / 07 / 24
Page 1 of 1

Truss Mfr Contact Chris Wallington



Truss Weight = 162 5 lb

Code/Design FBC-2023/TPI-2014				
PSF	Live	Dead	Dur Factors	
TC	20 0	10 0	Live 1 25	Wind 1 60 Snow N/A
BC	0 0	10 0	Lum 1 25	1 60 N/A
Total	40 0	Plt 1 25	1 60	N/A

Spacing 2-00-00 o c Plies 1
Repetitive Member Increase Yes
Green Lumber No Wet Service No
Fab Tolerance 20% Creep (Kcr) = 2 0
OH Soffit Load 2 0 psf

----------Snow Load Specs--- ------	
ASCE7-22 Ground Snow(Pg) = N/A	
Risk Cat II	Terrain Cat C
Roof Exposure Sheltered	
Thermal Condition All Others(1 0)	
Unobstructed Slippery Roof	No
Low-Slope Minimums(Pfmin)	No
Unbalanced Snow Loads	No
Rain Surcharge No Ice Dam Chk	No

--- ------Wind Load Specs----------	
ASCE7-22 Wind Speed(V) = 140 mph	
Risk Cat II	Exposure Cat C
Bldg Dims L = 97 2 ft	B = 78 3 ft
M R H(h) = 25 0 ft	Kzt = 1 0
Bldg Enclosure Enclosed	
Wind DL(psf) TC = 5 0	BC = 5 0
End Vertical Exposed L = Yes	R = Yes
Wind Uplift Reporting ASCE7 MWFRS	
Hurricane Prone Region	
C&C End Zone 7-10-00	

----- -Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP	(ALSC6-2013)	#1
BC	2x4	SP	(ALSC6-2013)	#1
Webs	2x4	SP	(ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	1 - 1	0 53
Max CSI in BC PANEL	1 - 14	0 30
Max CSI in Web	24 - 13	0 95

Mem	Ten	Comp	CSI
TC 1- 7	117	0	0 53
7-11	228	286	0 07
11-13	242	205	0 06
BC 1-21	863	240	0 30
21-24	242	205	0 03
Web 2-14	140	196	0 02
3-15	239	229	0 03
4-16	169	222	0 03
5-17	144	222	0 05
6-18	158	227	0 09
7-19	147	221	0 12
8-20	172	212	0 16
9 21	232	226	0 22
10-22	229	205	0 07
12-23	163	223	0 08
13-24	78	107	0 95

Reaction Summary

---------- -Reaction Summary(Lbs)----- ----------						
Jnt	--X-Loc-	React	-Up-	--Width-	Reqd	-Mat PSI
1	03-04	557	111	22-00-00		
14	2-01-00	218	183	22-00-00		

Reactions not shown down < 400 and up < 150

---- Reaction Summary (plf) -----

Jnt-Jnt	React	-Up-	--Width
1- 24	50	15	22-00-00 (reduced)

Max Horiz = -258 / +548 at Joint 18

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [20-01-14] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

If this truss is exposed to wind load perpendicular to the plane of the truss, gable studs must be braced according to the Construction Documents, BCSI-B3, or a gable stud bracing detail matching the design wind speed shown Lateral bracing of the truss itself to resist out-of-plane wind load must be in accordance with the Construction Documents
The maximum rake overhang length is 12 0"
Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(0 00)	1-14
Vert DL		L/120	L/999(0 00)	1 14
Vert CR		L/180	L/999(0 00)	1-14
Horz LL		0 75in	(0 01)	@Jt 1
Horz CR		1 25in	(0 01)	@Jt 1
Ohng CR		2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

-- ---- ----Bracing Data ----------

Chords Sheathing required or bracing indicated

---------- -Purlins--------- --

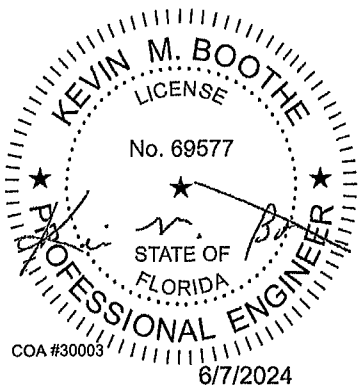
	---oc---	--From--	---To---	#Bays
TC	5-11-00	-2-01-09	19-03-04	5
TC	2-00-00	19-03-04	21-00-07	1
TC	11-00	21-00-07	22-00-00	2
BC	7-04-00	0	22-00-00	3

------- Web Bracing -- CLR ----- -----

Single 22-10 23-12 24-13
Continuous Restraint Bracing Req'd
See BCSI B3 3 0

Plate offsets (X, Y)

(None unless indicated below)
Jnt7(-00-04,00-07), Jnt11(0,-00-12), Jnt21(0, 01-00)



SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

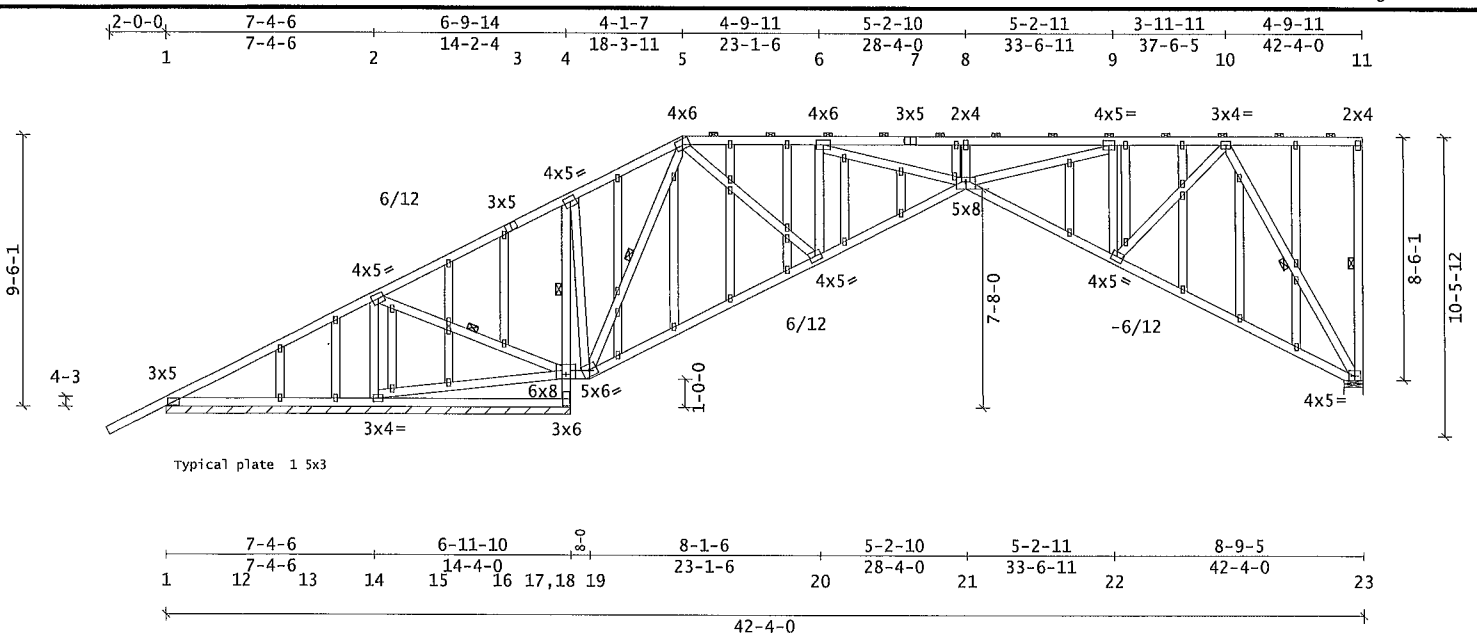
EngDrwg 2021r5RGT PS

P-23-228 - 421 SE Alfred Markham Rd HOUSE | **Qty: 1** | **Truss: GE2**

Customer: Valued Customer

SID 0002947338
TID 235539
Date 06 / 07 / 24
Page 1 of 1

Truss Mfr Contact: Chris Wallington



Truss Weight = 373 5 lb

Code/Design FBC-2023/TPI-2014

PSF	Live	Dead	Dur Factors
TC	20 0	10 0	Live Wind Snow
BC	0 0	10 0	Lum 1 25 1 60 N/A
Total	40 0	Plt 1 25	1 60 N/A

Spacing 2 00-00 o c Plies 1
Repetitive Member Increase Yes
Green Lumber No Wet Service No
Fab Tolerance 20% Creep (Kcr) = 2 0
OH Soffit Load 2 0 psf

----------Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs-- -------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks------

10 psf Non Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	2 - 3	0 87
Max CSI in BC PANEL	18 - 19	0 96
Max CSI in Web	23 - 11	0 70

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 53
	1 2	616	693	0 55
	2- 3	1860	1402	0 87
	3- 4	1912	1380	0 79
	4- 5	1580	1039	0 56
	5- 6	367	185	0 29
	6- 7	1127	1939	0 40
	7- 8	1127	1939	0 32
	8- 9	1127	1939	0 39
	9-10	572	911	0 25
	10-11	0	173	0 34
	11-OH	0	0	0 00
BC	1-12	194	463	0 34
	12-13	194	463	0 11
	13-14	194	463	0 08
	14-15	10	24	0 03
	15-16	10	24	0 03
	16-17	10	24	0 03
	18-19	906	1633	0 96
	19-20	506	864	0 61
	20-21	163	198	0 46
	21-22	1031	655	0 64
	22-23	528	409	0 68
Web	2-14	655	290	0 10
	2-18	944	1308	0 29
	4-18	1418	2376	0 44
	4-19	1865	905	0 37
	5-19	1033	1651	0 53
	5-20	981	534	0 21
	6-20	624	830	0 22
	6-21	1996	1264	0 40
	8-21	271	325	0 03
	9-21	1067	792	0 25
	9-22	428	562	0 15
	10-22	692	315	0 10
	10-23	514	894	0 33
	11-23	97	211	0 70
	14-18	190	443	0 32
	17-18	1921	2926	0 24

Reaction Summary

----------Reaction Summary(Lbs)- ----------

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
23	42-02-04	763	292	03-08	01-08	SPF	425
14	7-04-06	316	547	14-04-00			
17	14 02-04	2944	1199	14-04-00			

Reactions not shown down < 400 and up < 150
-- - Reaction Summary (plf) -----

Jnt-Jnt	React	-Up-	--Width-	
1- 17	10	0	14-04-00	(reduced)

Max Horiz = -237 / +531 at Joint 1

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [30-03-14] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

If this truss is exposed to wind load perpendicular to the plane of the truss, gable studs must be braced according to the Construction Documents, BCSI-B3, or a gable stud bracing detail matching the design wind speed shown Lateral bracing of the truss itself to resist out-of-plane wind load must be in accordance with the Construction Documents
The maximum rake overhang length is 12 0"
Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(-0 22)	22-23
Vert DL		L/120	L/999(-0 25)	22-23
Vert CR		L/180	L/721(-0 46)	22-23
Horz LL		0 75in	(0 15)	@Jt23
Horz CR		1 25in	(0 30)	@Jt23
Ohng CR		2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

----------Bracing Data-- ---------
Chords Sheathing required or bracing indicated

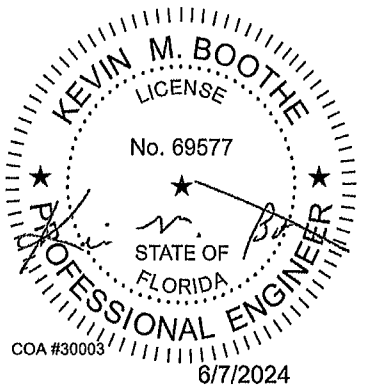
------- -----Purlins-- ----- ---

	---oc---	--From--	---To---	#Bays
TC	5-11-00	-2-01-09	19-03-04	5
TC	2-00-00	19-03-04	41 04-07	11
TC	11-00	41-04-07	42-04-00	2
BC	4-11-00	0	42-00 08	10

-------- Web Bracing - CLR ----------
Single 2-18 18- 4 19 5 10-23 23-11
Continuous Restraint Bracing Req'd
See BCSI B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt18(0,01-04), Jnt19(-00-01,00-01), Jnt21(0,-00-09), Jnt23(0,00-05)

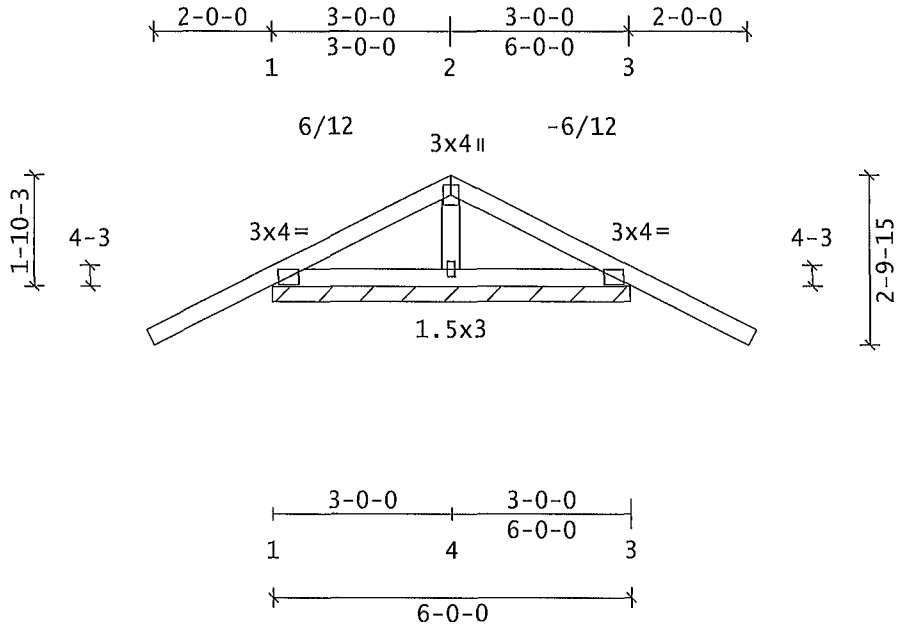


SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

EngDrwg 2021r5RGT Eng

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 1	Truss: GE3
Customer: Valued Customer		SID 0002947339
		TID 235539
		Date 06 / 07 / 24
Truss Mfr Contact. Chris Wallington		Page 1 of 1



Truss Weight = 27 8 lb

Code/Design FBC-2023/TPI-2014					
PSF	Live	Dead	Dur Factors		
TC	20 0	10 0	Live	Wind	Snow
BC	0 0	10 0	Lum 1 25	1 60	N/A
Total		40 0	Plt 1 25	1 60	N/A
Spacing	2-00-00 o c		Plies	1	
Repetitive Member Increase Yes					
Green Lumber No		Wet Service		No	
Fab Tolerance 20%		Creep (Kcr)	= 2 0		
OH Soffit Load 2 0 psf					

--- -------Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs----- ---
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	1 - 1	0 53
Max CSI in BC PANEL	1 - 4	0 28
Max CSI in Web	4 - 2	0 03

Mem		Ten	Comp	CSI
TC	1- 2	117	0	0 53
	2- 3	117	0	0 50
BC	1- 3	383	182	0 28
Web	2- 4	312	207	0 03

Reaction Summary

Reactions not shown down < 400 and up < 150

---- Reaction Summary (plf) ----

Jnt-Jnt	React	-Up-	--Width-
1- 3	125	49	6-00-00

Max Horiz = -48 / +48 at Joint 4

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [3-00-00] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

If this truss is exposed to wind load perpendicular to the plane of the truss, gable studs must be braced according to the Construction Documents, BCSI-B3, or a gable stud bracing detail matching the design wind speed shown Lateral bracing of the truss itself to resist out-of-plane wind load must be in accordance with the Construction Documents

The maximum rake overhang length is 12 0"

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees

Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints

Lumber and plating have been applied symmetrically

Deflection Summary

TrussSpan	Limit	Actual(in)	Location
Vert LL	L/240	L/999(0 00)	4- 3
Vert DL	L/120	L/999(0 00)	4- 3
Vert CR	L/180	L/999(0 00)	4- 3
Horz LL	0 75in	(0 01)	@Jt 3
Horz CR	1 25in	(0 01)	@Jt 3
Ohng CR	2L/180	2L/692(0 07)	1- 1
Ohng CR	2L/180	2L/692(0 07)	3- 3

Bracing Data Summary

-- --------Bracing Data--- --------

Chords; Sheathing required or bracing indicated

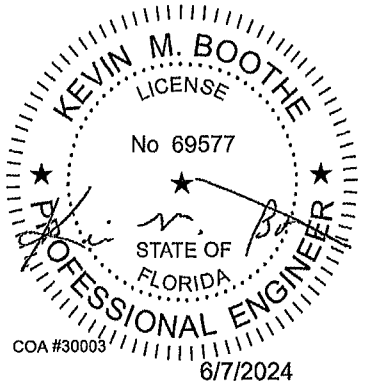
----- - ----Purlins----- ------

	---oc---	- From--	---To	- #Bays
TC	5-08-00	-2-01-09	8-01-09	3
BC	6-00-00	0	6-00-00	1

Web Bracing -- None

Plate offsets (X, Y):

(None unless indicated below)



6/7/2024

SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

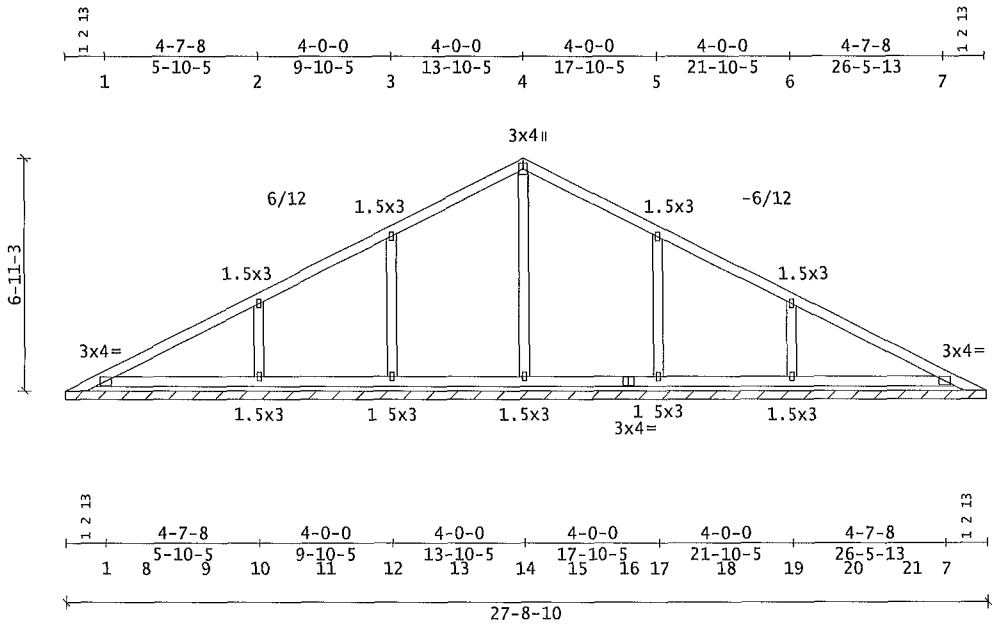
EngDrwg 202 r5RGT PS

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 25	Truss: PB01

Customer: Valued Customer

Truss Mfr Contact: Chris Wallington

SID 0002947340
TID 235539
Date 06 / 07 / 24
Page: 1 of 1



Truss Weight = 108 4 lb

Code/Design FBC-2023/TPI-2014					
PSF	Live	Dead	Dur Factors		
TC	20 0	10 0	Live	Wind	Snow
BC	0 0	1 0	Lum 1 25	1 60	N/A
Total	31 0	Plt 1 25	1 60	N/A	
Spacing	2-00-00 o c	Plies	1		
Repetitive Member Increase Yes					
Green Lumber No Wet Service No					
Fab Tolerance 20% Creep (Kcr) = 2 0					
OH Soffit Load 2 0 psf					

----------Snow Load Specs----------
ASCE7 22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs----------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 1 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	2 - 3	0 25
Max CSI in BC PANEL	1 - 8	0 17
Max CSI in Web	14 - 4	0 16

	Mem	Ten	Comp	CSI
TC	1- 2	86	152	0 24
	2- 3	104	70	0 25
	3- 4	255	95	0 24
	4- 5	255	95	0 24
	5- 6	104	70	0 25
	6- 7	86	152	0 24
BC	1- 8	242	74	0 17
	7-21	242	74	0 17
	8- 9	242	74	0 09
	9-10	242	74	0 03
	10-11	242	74	0 02
	11-12	242	74	0 02
	12-13	242	74	0 03
	13-14	242	74	0 03
	14-15	242	74	0 02
	15-16	242	74	0 02
	16-17	242	74	0 02
	17-18	242	74	0 02
	18-19	242	74	0 02
	19-20	242	74	0 03
	20-21	242	74	0 09
Web	2-10	485	315	0 05
	3-12	304	306	0 09
	4-14	0	255	0 16
	5-17	304	306	0 09
	6-19	485	315	0 05

Reaction Summary

----------Reaction Summary(Lbs)------ ---------

Jnt	--X-Loc-	React -Up-	--Width-	-Reqd	-Mat	PSI
10	5-10-05	321	211	27-08-10		
12	9-10-05	311	188	27-08-10		
17	17-10-05	310	189	27-08 10		
19	21-10-05	321	211	27-08-10		

Reactions not shown down < 400 and up < 150

---- Reaction Summary (plf) -----

Jnt-Jnt	React -Up-	--Width-	
1- 7	16	5 27-08 10	(reduced)

Max Horiz = -223 / +223 at Joint 14

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [13-10-05] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints

Deflection Summary

TrussSpan	Limit	Actual(in)	Location
Vert LL	L/240	L/999(-0 00)	1- 8
Vert DL	L/120	L/999(-0 00)	21- 7
Vert CR	L/180	L/999(-0 01)	21- 7
Horz LL	0 75in	(0 01)	@Jt 1
Horz CR	1 25in	(0 01)	@Jt 1

Bracing Data Summary

--------- --Bracing Data-- -------

Chords, Sheathing required or bracing indicated

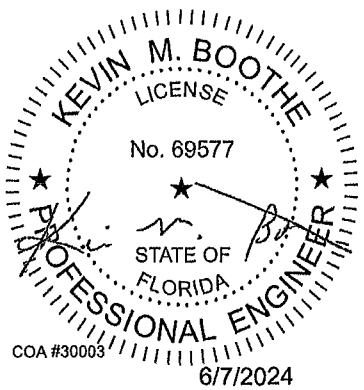
---------- Purlins-- ---------

	--oc---	--From--	---To---	#Bays
TC	5-01-00	0	27-08-10	7
BC	8-07-00	11-09	26-09-01	4

Web Bracing -- None

Plate offsets (X, Y):

(None unless indicated below)



6/7/2024

NOTICE A copy of this design shall be furnished to the erection contractor The design of this individual truss is based on design criteria and requirements supplied by the Truss Manufacturer and relies upon the accuracy and completeness of the information set forth by the Building Designer A seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown See the cover page and the Important Information & General Notes" page for additional information All connector plates shall be manufactured by Simpson Strong Tie Company, Inc in accordance with ESR-2762 All connector plates are 20 gauge unless the specified plate size is followed by a 18 which indicates an 18 gauge plate or 'S# 18' which indicates a high tension 18 gauge plate

SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

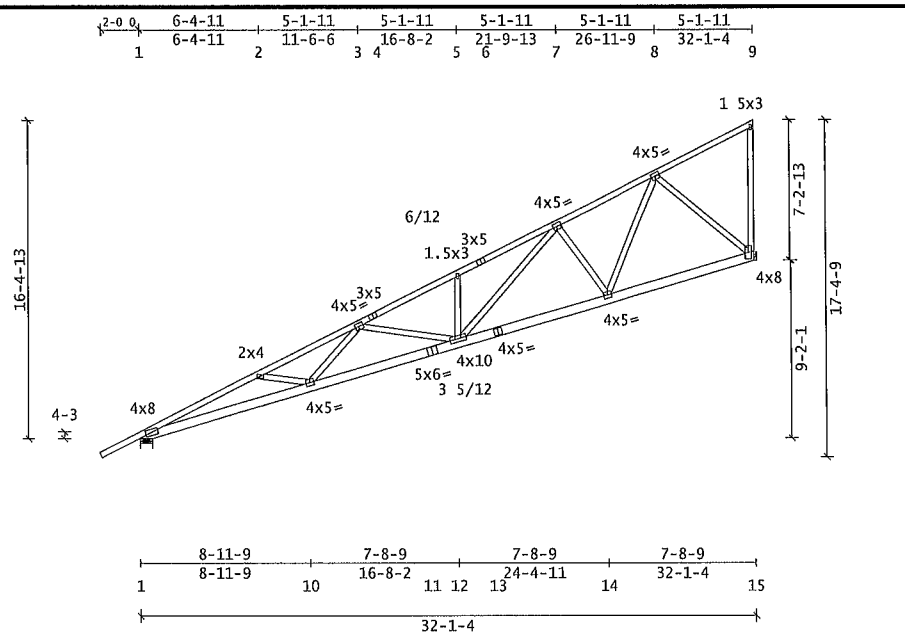
EngDrwg 2021r5RGT PS

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 28	Truss: T01

Customer Valued Customer

Truss Mfr Contact Chris Wallington

SID 0002947341
TID 235539
Date 06 / 07 / 24
Page 1 of 1



Truss Weight = 207 9 lb

Code/Design FBC-2023/TPI-2014

PSF	Live	Dead	Dur Factors
TC	20 0	10 0	Live Wind Snow
BC	0 0	10 0	Lum 1 25 1 60 N/A
Total	40 0	Plt 1 25	1 60 N/A

Spacing 2 00-00 o c Plies 1
Repetitive Member Increase Yes
Green Lumber No Wet Service No
Fab Tolerance 20% Creep (Kcr) = 2 0
OH Soffit Load 2 0 psf

----------Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs----------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks------

10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP	(ALSC6-2013)	#1
BC	2x6	SP	(ALSC6-2013)	SS
Webs	2x4	SP	(ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	1 - 2	0 97
Max CSI in BC PANEL	1 - 10	0 96
Max CSI in Web	8 - 15	0 82

	Mem	Ten	Comp	CSI
TC	OH- 1	114	0	0 51
	1- 2	3172	4628	0 97
	2- 3	2734	4227	0 82
	3- 4	2044	3208	0 53
	4- 5	2063	3187	0 48
	5- 6	2233	3198	0 44
	6- 7	2251	3167	0 47
	7- 8	1117	1618	0 50
	8- 9	119	269	0 41
	9-OH	0	7	0 00
BC	1-10	4229	3785	0 96
	10-11	3714	3273	0 74
	11-12	3721	3255	0 62
	12-13	1952	1842	0 17
	13-14	1984	1836	0 21
	14-15	1009	1067	0 18
	15-OH	0	3	0 00
Web	2-10	584	395	0 07
	3-10	438	147	0 06
	3-12	708	752	0 33
	5-12	367	320	0 06
	7-12	1443	1141	0 61
	7-14	801	867	0 29
	8-14	1232	844	0 33
	8-15	1219	1245	0 82
	9-15	280	218	0 47

Reaction Summary

----------Reaction Summary(Lbs)----------

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	04-00	1434	554	08-00	02-04	SPF	425
15	31-11-08	1274	497	01-09	HGR	SPF	565

Max Horiz = -206 / +717 at Joint 1
Max Horiz = -206 / +717 at Joint 15

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [32-01-04] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(-0 31)	10-12
Vert DL		L/120	L/999(-0 31)	10-12
Vert CR		L/180	L/614(-0 62)	10-12
Horz LL		0 75in	(0 04)	@Jt15
Horz CR		1 25in	(0 08)	@Jt15
Ohng CR		2L/180	2L/813(0 06)	1- 1

Bracing Data Summary

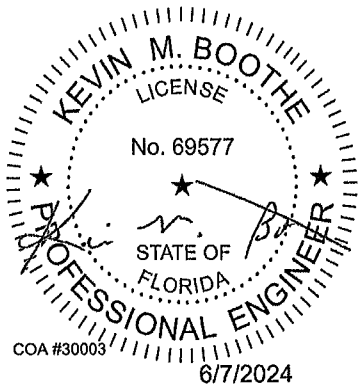
----------Bracing Data----------
Chords Sheathing required or bracing indicated

-----	-------Purlins----------			
	---oc---	--From--	---To---	#Bays
TC	2-05 00	-2-01-09	32-01-04	16
BC	6-00-00	0	32-01-04	6

Web Bracing -- None

Plate offsets (X, Y):

(None unless indicated below)



6/7/2024

SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

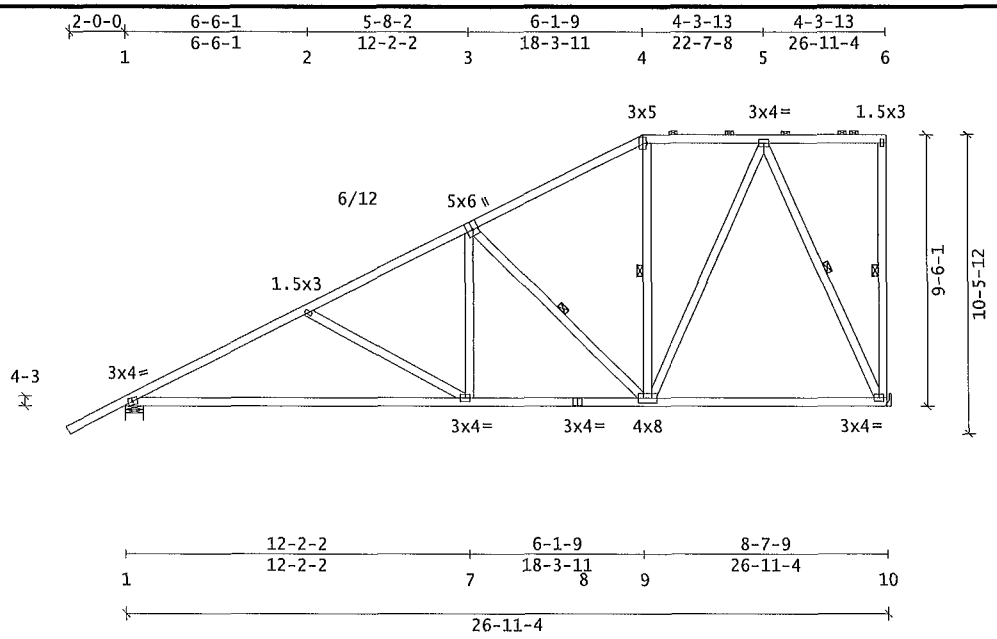
EngDrwg 2021r5RGT Eng

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 11	Truss: T02

Customer: Valued Customer

Truss Mfr Contact: Chris Wallington

SID 0002947342
TID 235539
Date 06 / 07 / 24
Page 1 of 1



Truss Weight = 168 9 lb

Code/Design FBC-2023/TPI-2014
PSF Live Dead Dur Factors
TC 20 0 10 0 Live Wind Snow
BC 0 0 10 0 Lum 1 25 1 60 N/A
Total 40 0 Plt 1 25 1 60 N/A
Spacing 2-00-00 o c Plies 1
Repetitive Member Increase Yes
Green Lumber No Wet Service No
Fab Tolerance 20% Creep (Kcr) = 2 0
OH Soffit Load 2 0 psf

----------Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----- ----Wind Load Specs----------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks -----
10 psf Non-Concurrent BCLL Yes
20 psf BC Limited Storage Yes
200 lb BC Accessible Ceiling Yes
300 lb TC Maintenance Load Yes
2000 lb TC Safe Load No
Unbalanced TCLL Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL 1 - 2 0 99
Max CSI in BC PANEL 1 - 7 1 00
Max CSI in Web 10 - 6 0 90

Mem		Ten	Comp	CSI
TC	OH- 1	117	0	0 52
	1- 2	1209	1785	0 99
	2- 3	944	1404	0 71
	3- 4	724	843	0 55
	4- 5	731	673	0 33
	5- 6	230	199	0 30
	6-OH	0	0	0 00
BC	1- 7	1532	1394	1 00
	7- 8	1183	1013	0 80
	8- 9	1183	1013	0 76
	9-10	402	418	0 81
	10-OH	0	0	0 00
Web	2- 7	512	393	0 26
	3- 7	474	137	0 07
	3- 9	576	718	0 22
	4 9	132	72	0 02
	5- 9	684	480	0 28
	5-10	834	975	0 40
	6-10	124	199	0 90

Reaction Summary

----------Reaction Summary(Lbs)----------

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	1225	405	08-00	01-15	SPF	425
10	26-09-08	1081	360	03-00	HGR	SPF	565

Max Horiz = 258 / +548 at Joint 1
Max Horiz = -258 / +548 at Joint 10

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [22 07-08] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span Limit	Actual(in)	Location
Vert LL	L/240	L/771(-0 41)	1- 7
Vert DL	L/120	L/793(-0 40)	1- 7
Vert CR	L/180	L/391(-0 81)	1 7
Horz LL	0 75in	(0 02)	@Jt10
Horz CR	1 25in	(0 04)	@Jt10
Ohng CR	2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

----------Bracing Data----------
Chords Sheathing required or bracing indicated

	---oc---	-From--	-- To---	#Bays
TC	4-07-00	-2-01-09	19-03-04	6
TC	2-00-00	19-03-04	25-11-11	4
TC	11-00	25 11-11	26-11-04	2
BC	7-11-00	0	26-11-04	4

------- Web Bracing -- CLR - ---------
Single 3- 9 9- 4 5-10 10- 6
Continuous Restraint Bracing Req'd
See BCSI B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt1(0,00-01), Jnt3(00-04,00-07), Jnt4(-01-12,0)

KEVIN M. BOOTHE LICENSE No. 69577 STATE OF FLORIDA PROFESSIONAL ENGINEER
COA #30003
6/7/2024

SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

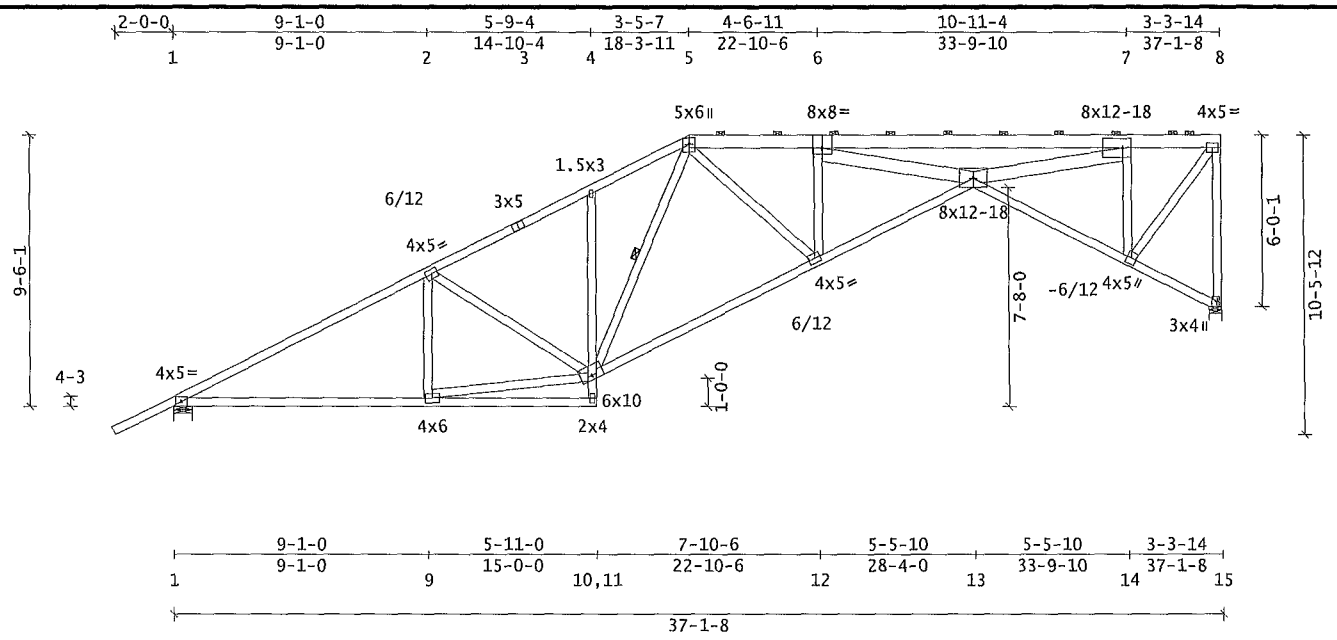
EngDrwg 202 r5R3T PS

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 6	Truss: T02-A

Customer Valued Customer

Truss Mfr Contact Chris Wallington

SID 0002947343
TID 235539
Date 06 / 07 / 24
Page 1 of 1



Truss Weight = 268 2 lb

Code/Design FBC-2023/TPI 2014			
PSF	Live	Dead	Dur Factors
TC	20 0	10 0	Live Wind Snow
BC	0 0	10 0	Lum 1 25 1 60 N/A
Total		40 0	Plt 1 25 1 60 N/A
Spacing	2-00-00 o c		Plies 1
Repetitive Member Increase Yes			
Green Lumber No Wet Service No			
Fab Tolerance 20% Creep (Kcr) = 2 0			
OH Soffit Load 2 0 psf			

----------Snow Load Specs------ ---	
ASCE7-22 Ground Snow(Pg) = N/A	
Risk Cat II Terrain Cat C	
Roof Exposure Sheltered	
Thermal Condition All Others(1 0)	
Unobstructed Slippery Roof No	
Low-Slope Minimums(Pfmin) No	
Unbalanced Snow Loads No	
Rain Surcharge No Ice Dam Chk No	

--- ------Wind Load Specs------ ---	
ASCE7-22 Wind Speed(V) = 140 mph	
Risk Cat II Exposure Cat C	
Bldg Dims L = 97 2 ft B = 78 3 ft	
M R H(h) = 25 0 ft Kzt = 1 0	
Bldg Enclosure Enclosed	
Wind DL(psf) TC = 5 0 BC = 5 0	
End Vertical Exposed L = Yes R = Yes	
Wind Uplift Reporting ASCE7 MWFRS	
Hurricane Prone Region	
C&C End Zone 7-10-00	

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	5 6 6-8
BC	2x4	SP (ALSC6-2013)	#1	
Webs	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	6-13 13-7

Member Forces Summary

Max CSI in TC PANEL	1 - 2	1 00
Max CSI in BC PANEL	12 - 13	0 99
Max CSI in Web	15 - 8	0 72

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 51
	1- 2	1764	2602	1 00
	2- 3	1698	2307	0 83
	3- 4	1710	2222	0 44
	4- 5	1851	2277	0 35
	5- 6	2388	3126	0 26
	6 7	4230	6528	0 66
	7- 8	834	1132	0 21
	8-OH	0	0	0 00
BC	1 9	2224	1667	0 67
	9-10	44	33	0 42
	11-12	2325	1608	0 77
	12-13	3567	2444	0 99
	13-14	1273	845	0 44
	14-15	819	263	0 22
	15-OH	5	0	0 00
Web	2- 9	342	199	0 06
	2-11	388	316	0 22
	4-11	315	318	0 23
	5-11	146	371	0 09
	5-12	1438	939	0 28
	6-12	1085	1354	0 35
	6-13	3464	2070	0 33
	7-13	5563	3500	0 52
	7-14	1308	1906	0 49
	8-14	1871	1170	0 28
	8-15	902	1471	0 72
	9-11	2208	1655	0 40
	10-11	111	0	0 08

Reaction Summary

----- ------- -Reaction Summary(Lbs)----------

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	1631	557	08-00	02-09	SPF	425
15	36-11-12	1478	490	05-08	01-14	SPF	531

Max Horiz = -158 / +457 at Joint 1
Max Horiz = -158 / +457 at Joint 15

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [27-08 10] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(-0 33)	13-14
Vert DL		L/120	L/991(-0 44)	11-12
Vert CR		L/180	L/586(-0 75)	11-12
Horz LL		0 75in	(0 28)	@Jt15
Horz CR		1 25in	(0 56)	@Jt15
Ohng CR	2L/180	2L/805	(0 06)	1- 1

Bracing Data Summary

----------Bracing Data--------- --

Chords Sheathing required or bracing indicated

----------Purlins--- --------

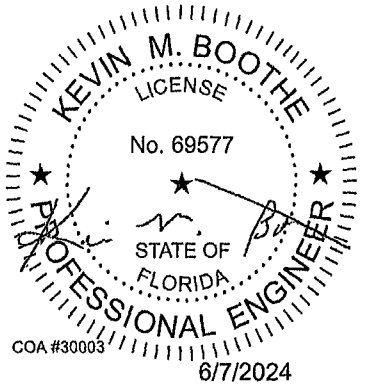
	---oc---	--From -	---To- -	#Bays
TC	2-10-00	-2-01-09	19-03-04	9
TC	2-00-00	19-03-04	36-01-15	9
TC	11-00	36-01-15	37-01-08	2
BC	5-07-00	0	37-01-08	8

------- Web Bracing -- CLR ---- ------

Single 11- 5
Continuous Restraint Bracing Req'd
See BCSI-B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt1(0,00-02), Jnt5(0,-00-05), Jnt6(0,01-08), Jnt7(-02-08,0), Jnt11(-00-09,01-02), Jnt13(0,00-01), Jnt15(-00-13,-00-01)



SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

EngDrwg 202 r5BG7 Eng

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 5	Truss: T02-B

Customer: Valued Customer

Truss Mfr Contact. Chris Wallington

SID 0002947344
TID 235539
Date 06 / 07 / 24
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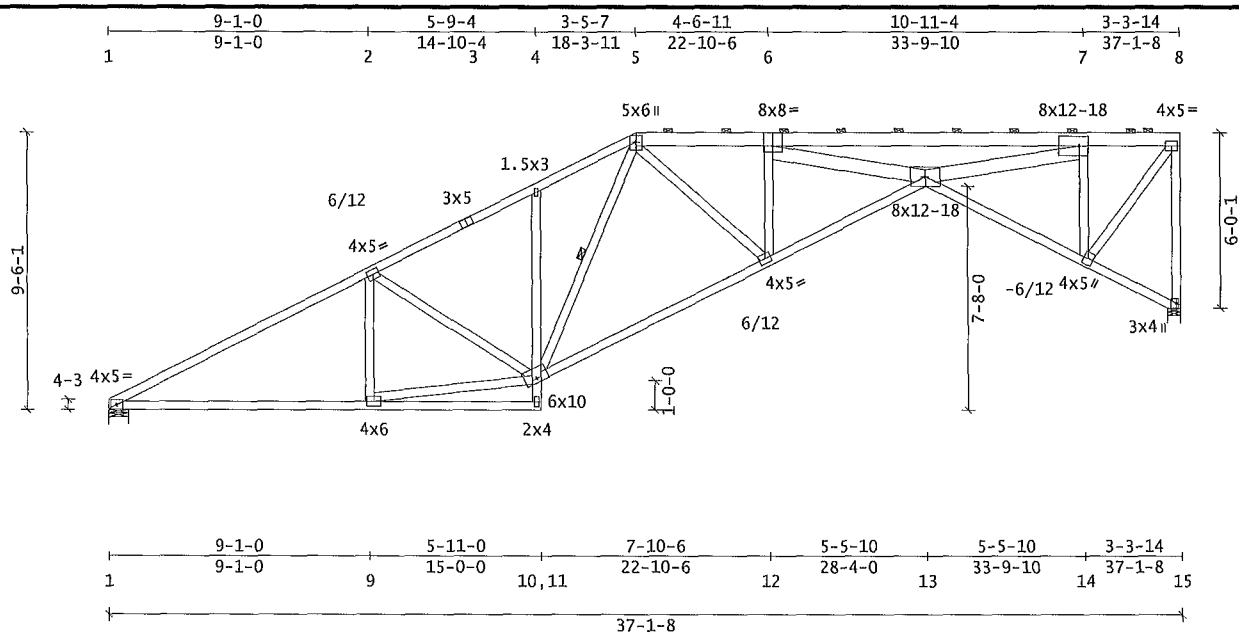


Truss Weight = 265 1 lb

Code/Design FBC-2023/TPI-2014				
PSF	Live	Dead	Dur Factors	
TC	20 0	10 0	Live Wind	Snow
BC	0 0	10 0	Lum 1 25 1 60	N/A
Total		40 0	Plt 1 25 1 60	N/A
Spacing 2-00-00 o c Plies 1				
Repetitive Member Increase Yes				
Green Lumber No Wet Service No				
Fab Tolerance 20% Creep (Kcr) = 2 0				
OH Soffit Load 2 0 psf				

----------Snow Load Specs------- --
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs----------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10 00

-------Additional Design Checks------	
10 psf Non Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	5 6
6-8				
BC	2x4	SP (ALSC6-2013)	#1	
Webs	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	6-13
13-7				

Member Forces Summary

Max CSI in TC PANEL	1 2	1 00
Max CSI in BC PANEL	12 - 13	0 99
Max CSI in Web	15 - 8	0 73

	Mem	Ten	Comp	CSI
TC	1- 2	1903	2618	1 00
	2- 3	1784	2314	0 99
	3- 4	1795	2224	0 39
	4- 5	1921	2283	0 30
	5- 6	2462	3132	0 26
	6- 7	4359	6540	0 67
	7- 8	851	1133	0 18
	8-OH	0	0	0 00
BC	1- 9	2240	1838	0 70
	9-10	44	36	0 44
	11-12	2331	1674	0 77
	12-13	3574	2524	0 99
	13-14	1275	850	0 44
	14-15	748	234	0 22
	15-OH	5	0	0 00
Web	2- 9	334	187	0 06
	2-11	496	328	0 23
	4-11	307	314	0 22
	5-11	145	339	0 08
	5-12	1439	950	0 28
	6-12	1097	1355	0 35
	6-13	3469	2085	0 33
	7-13	5573	3616	0 52
	7-14	1336	1909	0 49
	8-14	1873	1196	0 28
	8-15	924	1472	0 73
	9-11	2224	1826	0 41
	10-11	109	0	0 06

Reaction Summary

--- ----------Reaction Summary(Lbs)---------- ----						
Jnt	--X-Loc	React	-Up-	--Width-	-Reqd	-Mat PSI
1	03-04	1489	480	08-00	02-05	SPF 425
15	36-11-12	1480	493	05-08	01-14	SPF 531
Max Horiz =	-181 /	+429 at Joint 1				
Max Horiz =	-181 /	+429 at Joint 15				

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [27-08-10] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

TrussSpan	Limit	Actual(in)	Location
Vert LL	L/240	L/999(-0 33)	13-14
Vert DL	L/120	L/995(-0 44)	11-12
Vert CR	L/180	L/589(-0 75)	11-12
Horz LL	0 75in	(0 28)	@Jt15
Horz CR	1 25in	(0 57)	@Jt15

Bracing Data Summary

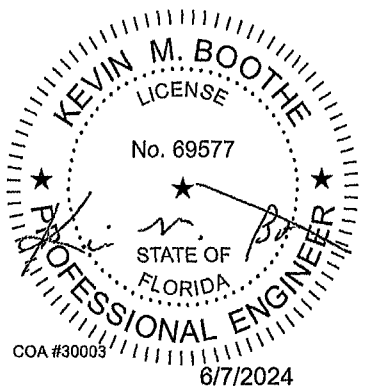
-------- ---Bracing Data---- ---- --
Chords; Sheathing required or bracing indicated
--------- ---Purlins---- ---- --

	---oc---	--From--	---To- -	#Bays
TC	2-09-00	0	19-03-04	8
TC	2-00-00	19-03-04	36-01-15	9
TC	11-00	36-01-15	37-01-08	2
BC	5-07-00	0	37-01-08	8

----- - Web Bracing -- CLR --------- -
Single 11- 5
Continuous Restraint Bracing Req'd
See BCSI-B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt1(0,00-02), Jnt5(0,-00-05), Jnt6(0,01-08), Jnt7(-02-08,0), Jnt11(-00-09,01-02), Jnt13(0,00-01), Jnt15(-00-13,-00-01)



SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

EngDrwg 2021r5RGT Eng

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 1	Truss: T03

Customer: Valued Customer

SID 0002947345
TID 235539
Date 06 / 07 / 24
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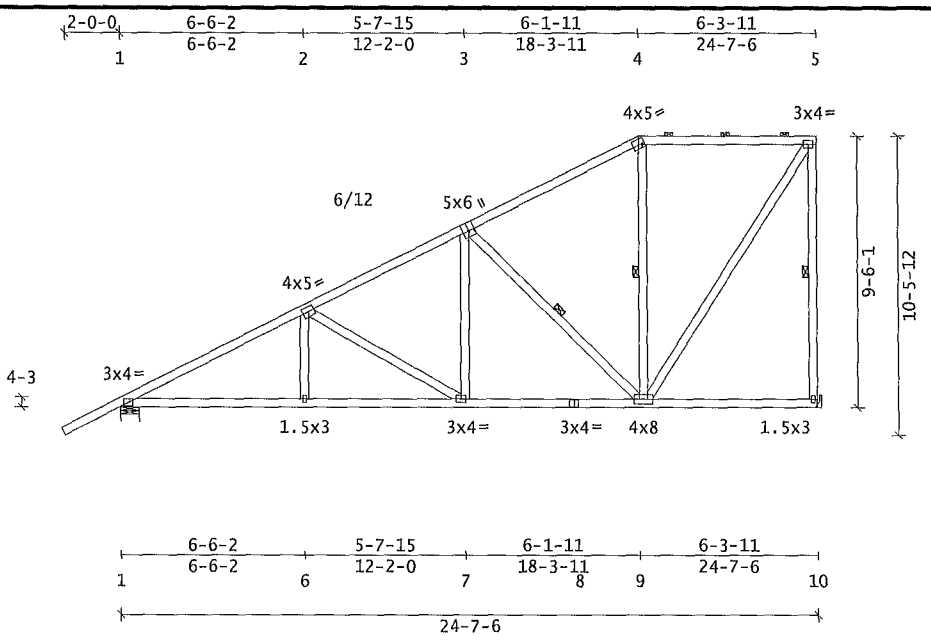
Truss Mfr Contact: Chris Wallington



Truss Weight = 155 6 lb

Code/Design FBC-2023/TPI-2014
PSF Live Dead Dur Factors
TC 20 0 10 0 Live Wind Snow
BC 0 0 10 0 Lum 1 25 1 60 N/A
Total 40 0 Plt 1 25 1 60 N/A
Spacing 2-00 00 o c Plies 1
Repetitive Member Increase Yes
Green Lumber No Wet Service No
Fab Tolerance 20% Creep (Kcr) = 2 0
OH Soffit Load 2 0 psf

---------Snow Load Specs---------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs----------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks------
10 psf Non-Concurrent BCLL Yes
20 psf BC Limited Storage Yes
200 lb BC Accessible Ceiling Yes
300 lb TC Maintenance Load Yes
2000 lb TC Safe Load No
Unbalanced TCLL Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL 1 - 2 0 95
Max CSI in BC PANEL 1 - 6 0 74
Max CSI in Web 10 - 5 1 00

Mem		Ten	Comp	CSI
TC	OH- 1	117	0	0 52
	1- 2	997	1648	0 95
	2- 3	808	1178	0 56
	3- 4	566	638	0 51
	4- 5	596	492	0 66
	5-OH	0	0	0 00
BC	1- 6	1400	1270	0 74
	6- 7	1400	1270	0 74
	7 8	983	938	0 45
	8- 9	983	938	0 47
	9-10	815	237	0 42
	10-OH	0	0	0 00
Web	2- 6	255	0	0 04
	2- 7	456	476	0 30
	3- 7	412	179	0 06
	3- 9	582	690	0 21
	4- 9	286	169	0 06
	5- 9	901	741	0 56
	5-10	798	926	1 00

Reaction Summary

----------Reaction Summary(Lbs)----------

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	1133	374	08-00	01-12	SPF	425
10	24-05-10	978	331	03-00	HGR	SPF	565

Max Horiz = -258 / +548 at Joint 1
Max Horiz = -258 / +548 at Joint 10

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [21-05-09] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

TrussSpan	Limit	Actual(in)	Location
Vert LL	L/240	L/999(-0 06)	9-10
Vert DL	L/120	L/999(-0 06)	6- 7
Vert CR	L/180	L/999(-0 12)	6- 7
Horz LL	0 75in	(0 02)	@Jt10
Horz CR	1 25in	(0 03)	@Jt10
Ohng CR	2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

----------Bracing Data----------
Chords Sheathing required or bracing indicated

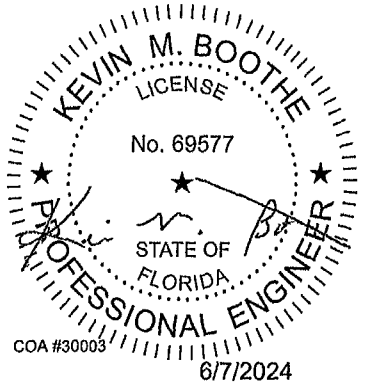
------ ------Purlins---------- -

	---oc---	--From--	--To--	#Bays
TC	4-07-00	-2 01-09	19-03-04	6
TC	2-00-00	19-03-04	23-07-13	2
TC	11-00	23-07-13	24-07-06	2
BC	8-02-00	0	24-07-06	4

--- --- Web Bracing -- CLR ----------
Single 3- 9 9- 4 10- 5
Continuous Restraint Bracing Req'd
See BCSI-B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt3(-00 04,00-07), Jnt4(-01-12,0)



SIMPSON Strong-Tie

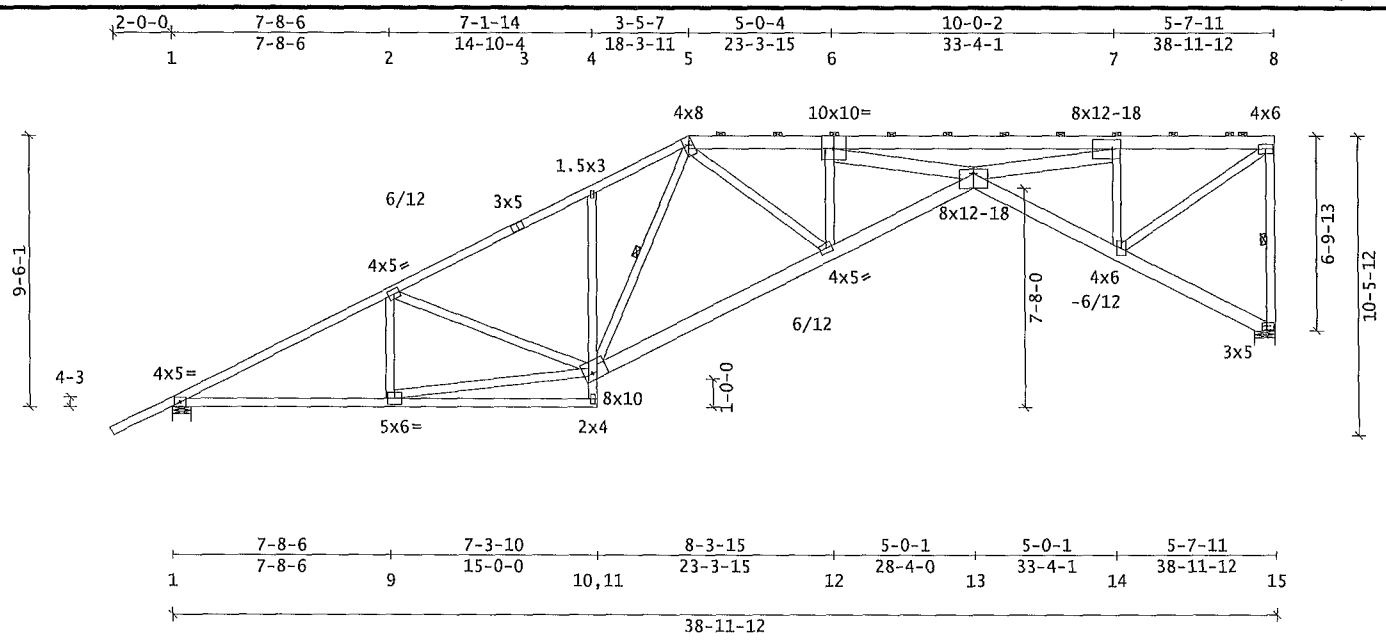
Component Solutions
Truss Studio V
2023 9 2 1

P-23-228 - 421 SE Alfred Markham Rd HOUSE | **Qty: 1** | **Truss: T03-A**

Customer: Valued Customer

SID 0002947346
TID 235539
Date 06 / 07 / 24
Page 1 of 1

Truss Mfr Contact: Chris Wallington



Truss Weight = 303 7 lb

Code/Design FBC-2023/TPI-2014			
PSF	Live	Dead	Dur Factors
TC	20 0	10 0	Live Wind Snow
BC	0 0	10 0	Lum 1 25 1 60 N/A
Total		40 0	Plt 1 25 1 60 N/A
Spacing	2-00-00 o c		Plies 1
Repetitive Member Increase Yes			
Green Lumber No Wet Service No			
Fab Tolerance 20% Creep (Kcr) = 2 0			
OH Soffit Load 2 0 psf			

---- ------Snow Load Specs----------	
ASCE7-22 Ground Snow(Pg)	= N/A
Risk Cat II Terrain Cat	C
Roof Exposure Sheltered	
Thermal Condition All Others(1 0)	
Unobstructed Slippery Roof	No
Low Slope Minimums(Pfmin)	No
Unbalanced Snow Loads	No
Rain Surcharge No Ice Dam Chk	No

----------Wind Load Specs----------	
ASCE7-22 Wind Speed(V)	= 140 mph
Risk Cat II Exposure Cat	C
Bldg Dims L = 97 2 ft B =	78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0	
Bldg Enclosure Enclosed	
Wind DL(psf) TC = 5 0 BC =	5 0
End Vertical Exposed L = Yes R =	Yes
Wind Uplift Reporting ASCE7 MWFRS	
Hurricane Prone Region	
C&C End Zone 7-10-00	

-------Additional Design Checks-----	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	5-6 6-8
BC	2x6	SP (ALSC6-2013)	SS	
	2x4	SP (ALSC6-2013)	#1	1-10
Webs	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	6-13 13-7

Member Forces Summary

Max CSI in TC PANEL	1 - 2	0 97
Max CSI in BC PANEL	12 - 13	0 97
Max CSI in Web	9 - 11	0 66

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 51
	1- 2	1881	2831	0 97
	2- 3	1785	2549	0 74
	3- 4	1797	2427	0 62
	4- 5	2007	2536	0 62
	5- 6	2727	3726	0 27
	6- 7	5351	8557	0 83
	7- 8	1306	1945	0 17
	8-OH	0	0	0 00
BC	1- 9	2443	1792	0 94
	9-10	50	36	0 53
	11-12	2581	1786	0 38
	12-13	4249	2784	0 97
	13-14	2173	1393	0 31
	14-15	836	276	0 12
Web	2- 9	355	212	0 05
	2-11	382	337	0 30
	4-11	448	388	0 27
	5-11	166	403	0 09
	5-12	1814	1130	0 37
	6-12	1252	1681	0 36
	6-13	4925	3006	0 42
	7-13	6817	4229	0 57
	7-14	1449	2194	0 47
	8-14	2394	1429	0 56
	8-15	922	1514	0 53
	9-11	2417	1773	0 66
	10-11	131	0	0 11

Reaction Summary

Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	1705	576	08-00	02-11	SPF	425
15	38-10-00	1549	512	04-12	02-07	SPF	425

Max Horiz = -184 / +479 at Joint 1
Max Horiz = -184 / +479 at Joint 15

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [28-07-12] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/980(-0 47)	13-14
Vert DL		L/120	L/967(-0 48)	13-14
Vert CR		L/180	L/487(-0 95)	13-14
Horz LL		0 75in	(0 38)	@Jt15
Horz CR		1 25in	(0 76)	@Jt15
Ohng CR	2L/180	2L/805	(0 06)	1- 1

Bracing Data Summary

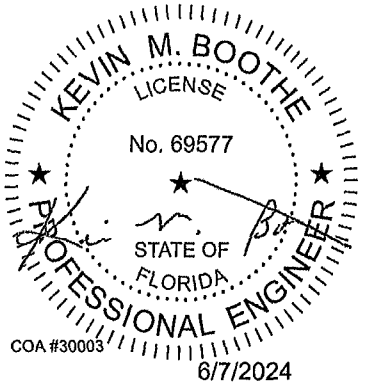
----------Bracing Data----------
Chords Sheathing required or bracing indicated

---------- --Purlins----- ------				
	---oc--	- From--	- -To---	#Bays
TC	2-11-00	-2-01-09	19-03-04	9
TC	2 00-00	19-03-04	38-00-03	10
TC	11-00	38-00-03	38-11-12	2
BC	6-10-00	0	38-08-04	7

--- --- Web Bracing -- CLR ----------
Single 11- 5 15- 8
Continuous Restraint Bracing Req'd
See BCSI-B3 3 0

Plate offsets (X, Y):

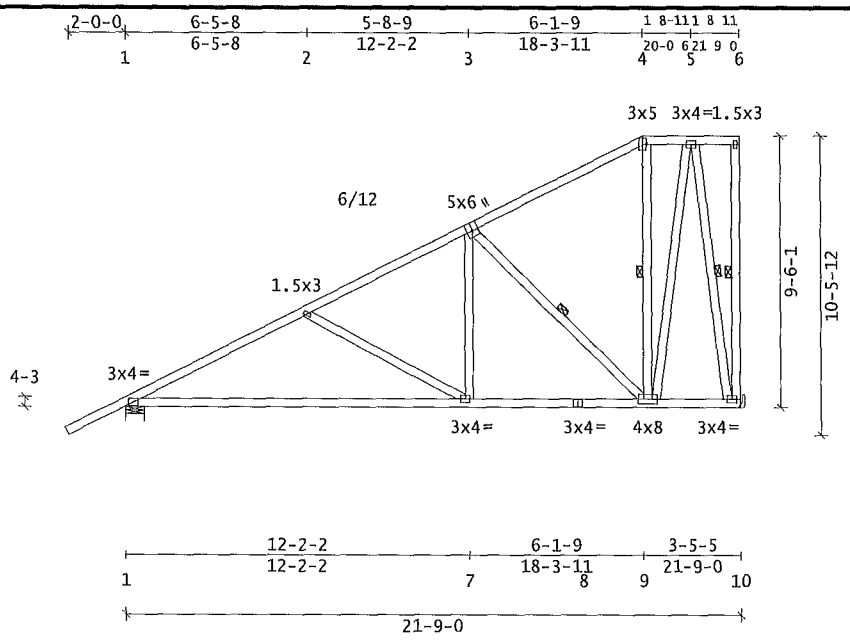
(None unless indicated below)
Jnt1(0,00-02), Jnt5(0,-00-09), Jnt6(0,00-08), Jnt7(-02-08,0), Jnt11(00-10,01-11), Jnt13(0,-02-02), Jnt15(00-08,0)



SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 12	Truss: T04
Customer: Valued Customer		SID 0002947347
		TID: 235539
		Date 06 / 07 / 24
Truss Mfr Contact Chris Wallington		Page 1 of 1



Truss Weight = 153 2 lb

Code/Design FBC-2023/TPI-2014					
PSF	Live	Dead	Dur Factors		
TC	20 0	10 0	Live	Wind	Snow
BC	0 0	10 0	Lum 1 25	1 60	N/A
Total		40 0	Plt 1 25	1 60	N/A
Spacing 2-00-00 o c Plies 1					
Repetitive Member Increase Yes					
Green Lumber No Wet Service No					
Fab Tolerance 20% Creep (Kcr) = 2 0					
OH Soffit Load 2 0 psf					

Snow Load Specs	
ASCE7-22 Ground Snow(Pg) = N/A	
Risk Cat II Terrain Cat C	
Roof Exposure Sheltered	
Thermal Condition All Others(1 0)	
Unobstructed Slippery Roof No	
Low-Slope Minimums(Pfmin) No	
Unbalanced Snow Loads No	
Rain Surcharge No Ice Dam Chk No	

Wind Load Specs	
ASCE7-22 Wind Speed(V) = 140 mph	
Risk Cat II Exposure Cat C	
Bldg Dims L = 97 2 ft B = 78 3 ft	
M R H(h) = 25 0 ft Kzt = 1 0	
Bldg Enclosure Enclosed	
Wind DL(psf) TC = 5 0 BC = 5 0	
End Vertical Exposed L = Yes R = Yes	
Wind Uplift Reporting ASCE7 MWFRS	
Hurricane Prone Region	
C&C End Zone 7 10-00	

Additional Design Checks	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6 2013)	#1
Webs	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	1	2	0 97
Max CSI in BC PANEL	1 -	7	0 86
Max CSI in Web	10 -	6	0 95

Mem		Ten	Comp	CSI
TC	OH- 1	117	0	0 53
	1- 2	877	1351	0 97
	2- 3	604	962	0 61
	3- 4	384	377	0 50
	4- 5	425	254	0 17
	5- 6	243	205	0 05
	6-OH	0	0	0 00
BC	1- 7	1147	1207	0 86
	7- 8	786	831	0 79
	8- 9	786	831	0 24
	9-10	729	308	0 16
	10-OH	0	0	0 00
Web	2- 7	524	405	0 27
	3- 7	520	134	0 08
	3- 9	623	749	0 23
	4- 9	346	187	0 06
	5- 9	721	761	0 33
	5-10	784	788	0 28
	6-10	72	96	0 95

Reaction Summary

Reaction Summary(Lbs)

Jnt	X-Loc	React	-Up-	Width	Reqd	Mat	PSI
1	03-04	1019	335	08 00	01-10	SPF	425
10	21-07-04	861	297	01-08	HGR	SPF	565

Max Horiz = -258 / +548 at Joint 1
Max Horiz = -258 / +548 at Joint 10

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [20-00-06] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cg at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/651(-0 39)	1- 7
Vert DL		L/120	L/674(-0 38)	1- 7
Vert CR		L/180	L/331(-0 77)	1- 7
Horz LL		0 75in	(0 02)	@Jt 1
Horz CR		1 25in	(0 03)	@Jt 1
Ohng CR		2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

Chords Sheathing required or bracing indicated

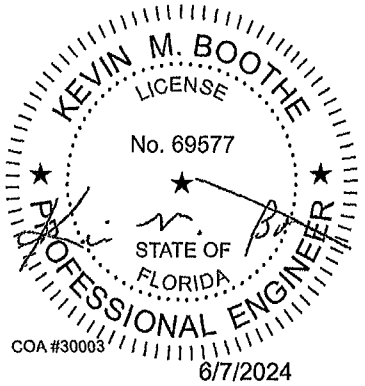
	oc	From	To	#Bays
TC	5-03-00	-2-01-09	19-03-04	5
TC	2-00-00	19-03-04	20-09-07	1
TC	11-00	20-09-07	21-09-00	2
BC	7-03-00	0	21-09-00	3

Web Bracing -- CLR

Single 3- 9 9- 4 5-10 10- 6
Continuous Restraint Bracing Req'd
See BCSI-B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt3(-00 04,00-07), Jnt4(-01-12,0)

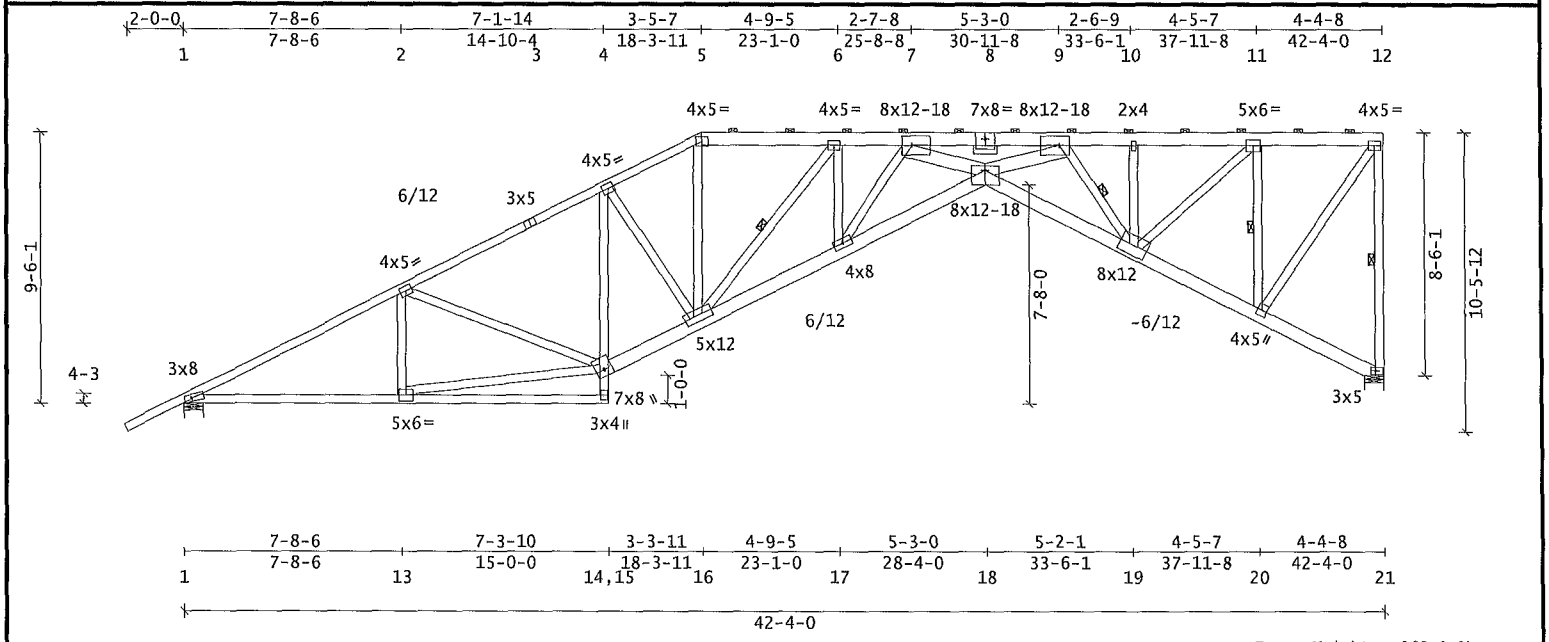


SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

EngBrwg 202 x5R6 RC

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 7	Truss: T04-A
Customer Valued Customer		SID 0002947348
		TID 235539
		Date 06 / 07 / 24
Truss Mfr Contact Chris Wallington		Page 1 of 1



Truss Weight = 369 9 lb

Code/Design FBC-2023/TPI-2014					
PSF	Live	Dead	Dur Factors		
TC	20 0	10 0	Live Wind	Snow	
BC	0 0	10 0	Lum 1 25 1 60	N/A	
Total		40 0	Plt 1 25 1 60	N/A	
Spacing	2-00-00 o c		Plies 1		
Repetitive Member Increase Yes					
Green Lumber No		Wet Service No			
Fab Tolerance 20% Creep (Kcr) = 2 0					
OH Soffit Load 2 0 psf					

----------Snow Load Specs----------
ASCE7-22 Ground Snow(Pg) = N/A
Risk Cat II Terrain Cat C
Roof Exposure Sheltered
Thermal Condition All Others(1 0)
Unobstructed Slippery Roof No
Low-Slope Minimums(Pfmin) No
Unbalanced Snow Loads No
Rain Surcharge No Ice Dam Chk No

----------Wind Load Specs----------
ASCE7-22 Wind Speed(V) = 140 mph
Risk Cat II Exposure Cat C
Bldg Dims L = 97 2 ft B = 78 3 ft
M R H(h) = 25 0 ft Kzt = 1 0
Bldg Enclosure Enclosed
Wind DL(psf) TC = 5 0 BC = 5 0
End Vertical Exposed L = Yes R = Yes
Wind Uplift Reporting ASCE7 MWFRS
Hurricane Prone Region
C&C End Zone 7-10-00

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	5-8
8-12				
BC	2x6	SP (ALSC6-2013)	SS	
	2x4	SP (ALSC6-2013)	#1	1 14
Webs	2x4	SP (ALSC6-2013)	#1	
	2x6	SP (ALSC6-2013)	SS	7-18
18-9				
SB	2x4	SP (ALSC6-2013)	#1	

Member Forces Summary

Max CSI in TC PANEL	1 - 2	1 00
Max CSI in BC PANEL	17 - 18	0 97
Max CSI in Web	17 - 7	0 92

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 51
	1- 2	2010	3115	1 00
	2- 3	1986	2886	0 75
	3- 4	1997	2764	0 60
	4- 5	2238	3067	0 64
	5- 6	2023	2683	0 16
	6- 7	3041	4367	0 23
	7- 8	6981	11429	0 99
	8- 9	6981	11429	0 98
	9-10	1808	2914	0 12
	10-11	1808	2914	0 11
	11-12	757	1045	0 10
	12-OH	0	0	0 00
BC	1-13	2696	1957	0 70
	13-14	56	39	0 54
	15-16	2822	1989	0 21
	16-17	4889	3166	0 51
	17-18	6691	4303	0 97
	18-19	5436	3442	0 66
	19-20	1189	802	0 10
	20-21	858	276	0 08
Web	2-13	374	253	0 06
	2-15	356	310	0 28
	4-15	574	719	0 50
	4-16	325	163	0 08
	5-16	1142	746	0 22
	6-16	1675	2771	0 70
	6-17	1847	1032	0 28
	7-17	1907	3039	0 92
	7-18	6009	3683	0 40
	9-18	7228	4518	0 48
	9-19	2361	3697	0 44
	10-19	230	355	0 08
	11-19	2524	1520	0 45
	11-20	1233	1959	0 32
	12-20	1846	1069	0 53
	12-21	974	1644	0 77
	13-15	2667	1938	0 74
	14-15	132	0	0 12

Reaction Summary

Reaction Summary(Lbs)							
Jnt	--X-Loc-	React	-Up-	--Width-	-Reqd	-Mat	PSI
1	03-04	1838	611	08-00	02-14	SPF	425
21	42-02-04	1683	552	04-08	02-10	SPF	425
Max Horiz =		-234 /	+519	at Joint	1		
Max Horiz =		-234 /	+519	at Joint	21		

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [30-03-14] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

TrussSpan	Limit	Actual(in)	Location
Vert LL	L/240	L/806(-0 62)	18-19
Vert DL	L/120	L/804(-0 63)	17-18
Vert CR	L/180	L/403(-1 25)	17-18
Horz LL	0 75in	(0 52)	@Jt21
Horz CR	1 25in	(1 04)	@Jt21
Ohng CR	2L/180	2L/805(0 06)	1- 1

Bracing Data Summary

----------Bracing Data----------
Chords, Sheathing required or bracing indicated

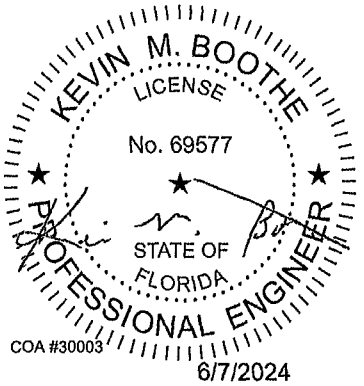
	---oc---	--From--	---To--	#Bays
	---- --- ----Purlins------ -----			
TC	2 08-00	-2-01-09	19-03-04	9
TC	2-00-00	19-03-04	41-04-07	11
TC	11-00	41-04-07	42-04-00	2
BC	5-04-00	0	42-00-08	9

------ Web Bracing -- CLR --------

Single 16- 6 9-19 20-11 21-12
Continuous Restraint Bracing Req'd
See BCSI B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt1(01-00,00-08), Jnt7(01-12,0), Jnt8(0,-00-12), Jnt9(-01-12,0), Jnt15(-00-09,01-02), Jnt17(00-01,00-01), Jnt18(0,-02-02), Jnt21(00-08,0)



SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

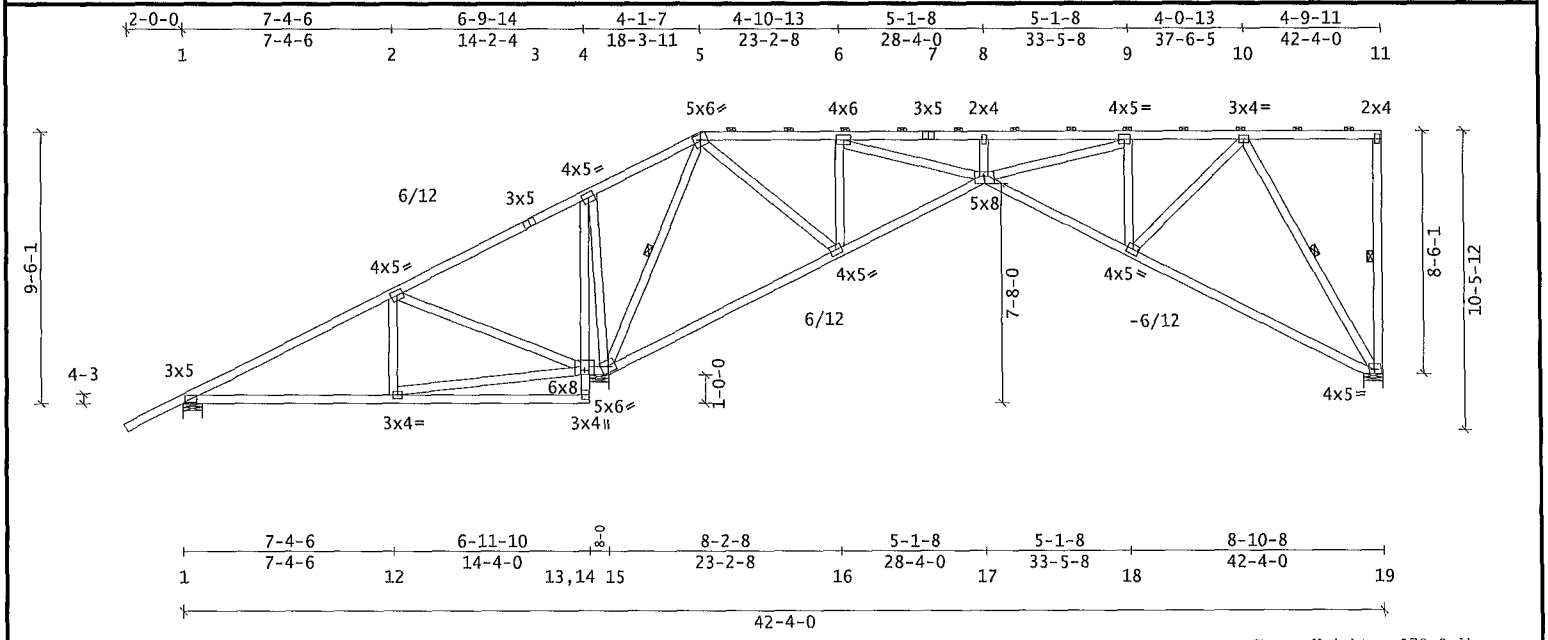
EngDrwg 202 r5RGT Reg

P-23-228 - 421 SE Alfred Markham Rd HOUSE | **Qty: 5** | **Truss: T04-B**

Customer: Valued Customer

SID 0002947349
TID 235539
Date 06 / 07 / 24
Page 1 of 1

Truss Mfr Contact: Chris Wallington



Truss Weight = 272 2 lb

Code/Design FBC-2023/TPI-2014				
PSF	Live	Dead	Dur Factors	
TC	20 0	10 0	Live Wind	Snow
BC	0 0	10 0	Lum 1 25 1 60	N/A
Total		40 0	Plt 1 25 1 60	N/A
Spacing	2-00-00 o c		Plies 1	
Repetitive Member Increase Yes				
Green Lumber No Wet Service No				
Fab Tolerance 20% Creep (Kcr) = 2 0				
OH Soffit Load 2 0 psf				

----------Snow Load Specs----------	
ASCE7-22 Ground Snow(Pg) = N/A	
Risk Cat II Terrain Cat C	
Roof Exposure Sheltered	
Thermal Condition All Others(1 0)	
Unobstructed Slippery Roof No	
Low-Slope Minimums(Pfmin) No	
Unbalanced Snow Loads No	
Rain Surcharge No Ice Dam Chk No	

----------Wind Load Specs----------	
ASCE7-22 Wind Speed(V) = 140 mph	
Risk Cat II Exposure Cat C	
Bldg Dims L = 97 2 ft B = 78 3 ft	
M R H(h) = 25 0 ft Kzt = 1 0	
Bldg Enclosure Enclosed	
Wind DL(psf) TC = 5 0 BC = 5 0	
End Vertical Exposed L = Yes R = Yes	
Wind Uplift Reporting ASCE7 MWFRS	
Hurricane Prone Region	
C&C End Zone 7 10-00	

-------Additional Design Checks------	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP	(ALSC6-2013)	#1
BC	2x4	SP	(ALSC6-2013)	#1
Webs	2x4	SP	(ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	2 - 3	0 78
Max CSI in BC PANEL	14 - 15	0 95
Max CSI in Web	2 14	0 73

	Mem	Ten	Comp	CSI
TC	OH- 1	117	0	0 53
	1 2	1101	917	0 61
	2- 3	1698	1284	0 78
	3- 4	1750	1262	0 68
	4- 5	1746	1128	0 59
	5- 6	556	230	0 32
	6- 7	1081	1720	0 37
	7- 8	1081	1720	0 31
	8- 9	1081	1720	0 35
	9-10	540	873	0 25
	10-11	193	173	0 35
	11-OH	0	0	0 00
BC	1-12	822	949	0 54
	12-13	22	26	0 46
	14-15	1512	1490	0 95
	15-16	599	999	0 66
	16-17	294	192	0 49
	17-18	988	652	0 65
	18-19	716	406	0 68
Web	2-12	410	65	0 06
	2-14	758	899	0 73
	4-14	173	152	0 05
	4-15	553	476	0 29
	5-15	1069	1727	0 55
	5-16	962	518	0 22
	6-16	601	797	0 20
	6-17	1864	1229	0 39
	8-17	271	325	0 03
	9-17	880	749	0 24
	9-18	420	514	0 13
	10-18	651	308	0 11
	10-19	508	857	0 32
	11-19	97	211	0 70
	12-14	808	932	0 68
	13-14	121	0	0 04

Reaction Summary

----------Reaction Summary(Lbs)----------

Jnt	--X-Loc-	React	Up-	--Width-	-Reqd	Mat	PSI
1	03-04	302	343	08-00	01-08	SPF	425
15	14-10-04	2735	970	08-00	04-05	SPF	425
19	42-02-04	740	415	04-08	01-08	SPF	425

Max Horiz = -237 / +531 at Joint 1
Max Horiz = 237 / +531 at Joint 15
Max Horiz = -237 / +531 at Joint 19

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [30 03-14] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Continuous Lateral Restraint (CLR) rows require diagonal bracing per D-WEBCLRBRACE Alternatively, see D-WEBREINFORCE
Less than 0 25/12 pitch requires adequate drainage to prevent ponding

Deflection Summary

Truss	Span	Limit	Actual(in)	Location
Vert LL		L/240	L/999(-0 22)	18-19
Vert DL		L/120	L/999(-0 25)	18-19
Vert CR		L/180	L/699(-0 47)	18-19
Horz LL		0 75in	(0 14)	@Jt19
Horz CR		1 25in	(0 26)	@Jt19
Ohng CR	2L/180	2L/805	(0 06)	1- 1

Bracing Data Summary

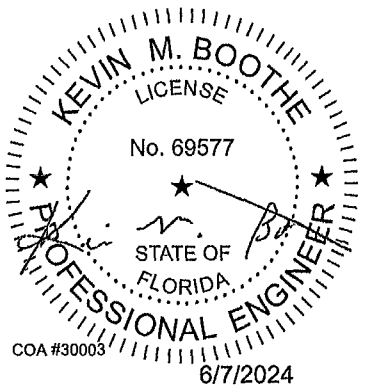
------ ----Bracing Data----------
Chords, Sheathing required or bracing indicated
----------Purlins- ----------

	---oc---	--From-	-- To---	#Bays
TC	5-11-00	-2-01-09	19-03-04	5
TC	2-00-00	19-03-04	41 04-07	11
TC	11-00	41 04-07	42-04-00	2
BC	5-01-00	0	42-00-08	9

-- ---- Web Bracing -- CLR ----------
Single 15- 5 10-19 19-11
Continuous Restraint Bracing Req'd
See BCSI B3 3 0

Plate offsets (X, Y):

(None unless indicated below)
Jnt5(00-01,-00-01), Jnt14(0,01-04), Jnt15(00-01,00-01), Jnt17(0,-00-09), Jnt19(00-04,00-05)



SIMPSON Strong-Tie

Component Solutions
Truss Studio V
2023 9 2 1

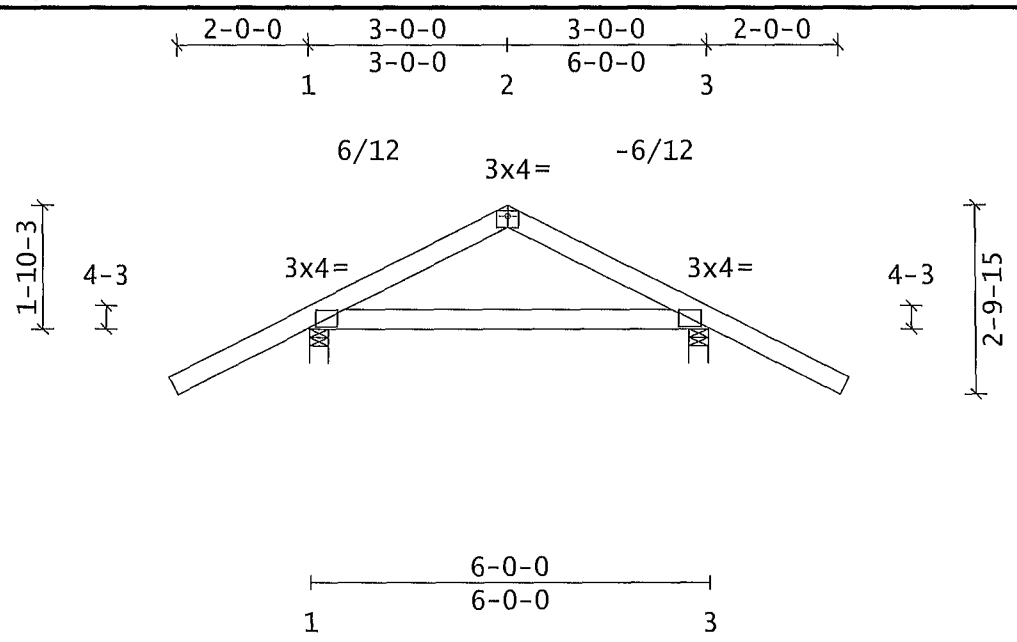
EngDrwg 2021r5RGT PS

P-23-228 - 421 SE Alfred Markham Rd HOUSE	Qty: 2	Truss: T05

Customer: Valued Customer

SID 0002947350
TID 235539
Date 06 / 07 / 24
Page 1 of 1

Truss Mfr Contact: Chris Wallington



Truss Weight = 25 8 lb

Code/Design FBC-2023/TPI-2014					
PSF	Live	Dead	Dur Factors		
TC	20 0	10 0	Live	Wind	Snow
BC	0 0	10 0	Lum 1 25	1 60	N/A
Total		40 0	Plt 1 25	1 60	N/A
Spacing	2 00-00 o c		Plies 1		
Repetitive Member Increase Yes					
Green Lumber No	Wet Service No				
Fab Tolerance 20%	Creep (Kcr) = 2 0				
OH Soffit Load 2 0 psf					

Snow Load Specs	
ASCE7-22 Ground Snow(Pg) = N/A	
Risk Cat II	Terrain Cat C
Roof Exposure Sheltered	
Thermal Condition All Others(1 0)	
Unobstructed Slippery Roof No	
Low Slope Minimums(Pfmin) No	
Unbalanced Snow Loads No	
Rain Surcharge No	Ice Dam Chk No

Wind Load Specs	
ASCE7-22 Wind Speed(V) = 140 mph	
Risk Cat II	Exposure Cat C
Bldg Dims L = 97 2 ft	B = 78 3 ft
M R H(h) = 25 0 ft	Kzt = 1 0
Bldg Enclosure Enclosed	
Wind DL(psf) TC = 5 0	BC = 5 0
End Vertical Exposed L = Yes	R = Yes
Wind Uplift Reporting ASCE7 MWFRS	
Hurricane Prone Region	
C&C End Zone 7-10-00	

Additional Design Checks	
10 psf Non-Concurrent BCLL	Yes
20 psf BC Limited Storage	Yes
200 lb BC Accessible Ceiling	Yes
300 lb TC Maintenance Load	Yes
2000 lb TC Safe Load	No
Unbalanced TCLL	Yes

Material Summary

TC	2x4	SP (ALSC6-2013)	#1
BC	2x4	SP (ALSC6-2013)	#1

Member Forces Summary

Max CSI in TC PANEL	1 - 1	0 53	
Max CSI in BC PANEL	1 - 3	0 24	

Mem		Ten	Comp	CSI
TC	OH- 1	117	0	0 53
	1- 2	173	286	0 23
	2- 3	173	286	0 23
	3-OH	117	0	0 50
BC	1- 3	235	23	0 24

Reaction Summary

Reaction Summary(Lbs)

Jnt	X-Loc	React	-Up-	Width	Reqd	Mat	PSI
1	01-12	454	147	03-08	01-08	SPF	531
3	5-10-04	454	147	03-08	01-08	SPF	531

Max Horiz = -48 / +48 at Joint 1

Loads Summary

This truss has been designed for the effects of an unbalanced top chord live load occurring at [3-00-00] using a 1 00 Full and 0 00 Reduced load factor

See Loadcase Report for load combinations and additional details

Notes

Plates designed for Cq at 0 80 and Rotational Tolerance of 10 0 degrees
Plates located at TC pitch breaks meet the prescriptive minimum size requirement to transfer unblocked diaphragm loads across those joints
Lumber and plating have been applied symmetrically

Deflection Summary

Truss	Span Limit	Actual(in)	Location
Vert LL	L/240	L/999(-0 02)	1- 3
Vert DL	L/120	L/999(-0 01)	1- 3
Vert CR	L/180	L/999(-0 04)	1- 3
Horz LL	0 75in	(0 01)	@Jt 1
Horz CR	1 25in	(0 01)	@Jt 1
Ohng CR	2L/180	2L/692(0 07)	1- 1
Ohng CR	2L/180	2L/692(0 07)	3- 3

Bracing Data Summary

Bracing Data---- ---- --

Chords Sheathing required or bracing indicated

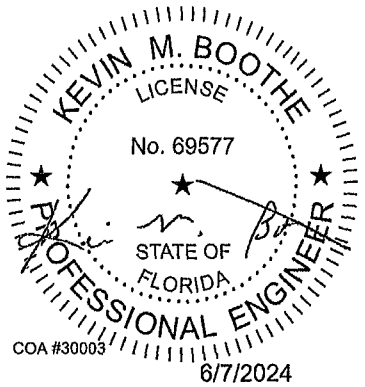
Purlins--------

	oc	From -	To	#Bays
TC	5-08-00	-2-01-09	8-01-09	3
BC	6 00-00	0	6-00-00	1

Web Bracing -- None

Plate offsets (X, Y):

(None unless indicated below)
Jnt2(0,-00-09)



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PIGGYBACK TRUSS CONNECTION DETAIL

TD-CPS-0001

Date 09/04/2014 | Rev D | Pg 1 of 1

This detail provides minimum connection requirements between a cap truss and a base truss of a piggyback assembly for assemblies that meet the following conditions and design requirements

- the cap truss has continuous bearing or bearings at 2' o c max ,
- the cap truss contains vertical web members at 4' o c. max,
- the cap trusses are spaced no greater than 24" o c.,
- the pitch does not exceed 12/12,
- the cap truss span does not exceed 100', for spans > 36', see Table 2 Footnote 5
- the cap truss supports no point loads or drag loads (see detail TD-CPS-0002 for drag load connection requirements)

Design Requirements:

Max Wind Speed 140 mph (nominal)
Max Mean Roof Height 30'
Exp Category B or C

Load Duration Factor 1 6
Lumber SPF or Better
(Min SG = 0 42)

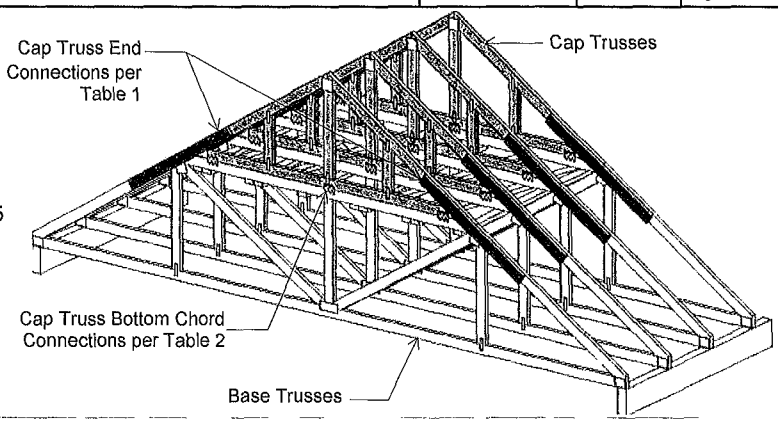


TABLE 1 - Connection Requirements At Each End of Cap Truss (One Face Only)

Cap Truss Span	Max. Wind Speed (mph)		End Connection Options	Fasteners[1]
	Nominal	Ultimate		
Up to 18'	100	125	Sheathing - See Note 2	---
	140	180	4' 2x Scab	16-10d nails
			LSTA18 or CS20 Strap	14-10dx1 5 nails
18' < Span <= 100'	120	150	4' 2x Scab	16-10d nails
	130	160	LSTA18 or CS20 Strap	14-10dx1 5 nails
	140	180	6' 2x Scab	24-10d nails
				10-SDS 1/4x3
			LSTA30 or CS18 Strap	20-10dx1 5

See footnotes below

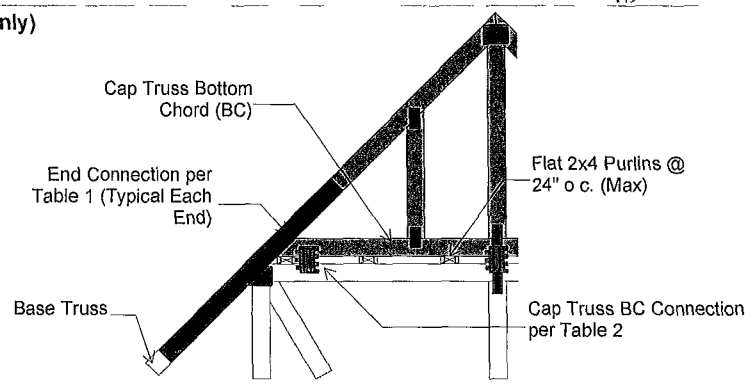


Figure 1 - Typical Piggyback Assembly with 1 1/2" Gap Between Cap and Base

TABLE 2 - Connection Requirements Along Cap Truss Bottom Chord

Condition	Max Wind Speed (mph)		Connection Options Along BC	Fasteners
	Nominal	Ultimate		
With 1 5' Gap (See Fig 1)	140	180	Nails into purlins installed on base truss at 24" o c. (max)	Purlin-to-Base 2-10d nails (ea purlin) Cap-to-purlin 2-10d toe-nails (ea purlin)
			(3) 7"x7 'x7/16' Plywood/OSB Gussets (each face)	6-6d nails per Gusset (see note 1 & 5)
			(3) LTP5 Framing Angles (one face)	8-8dx1 5 nails per LTP5 (see note 1 & 5)
No Gap (See Fig 2)	130	160	(2) LTP4 Framing Angles (one face)	12-8dx1 5 nails per LTP4 (see note 1 & 5)
	140	180	Toe-Nails @ 24" o c.	2-10d toe-nails along BC @ 24" o c
			(3) 7' x7"x7/16 ' Plywood/OSB Gussets (each face)	6-6d nails per Gusset (see note 1& 5)
			(3) LTP4 Framing Angles (one face)	12-8dx1 5 nails per LTP4 (see note 1 & 5)

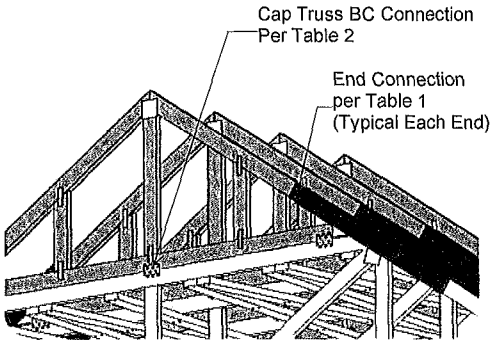


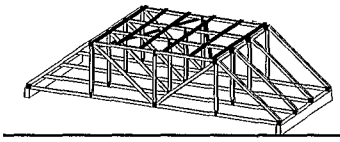
Figure 2 - Typical Piggyback Assembly with No Gap Between Cap and Base

1 Where noted install half of the specified fasteners in each member being connected
2 An additional end connection is not required for wind speeds up to 100 mph (nominal) and cap truss spans up to 18 if the sheathing is continuous and extends at least 12' beyond the intersection
3 When using (2) connectors along the cap truss BC, install one at each end of the bottom chord when using (3) connectors, install one on each end and one in the center of the bottom chord
4 NAILS 10d=0 148" dia x3" long 10dx1 5=0 148 dia x1½" long 8dx1 5=0 131 dia x1½ long, 6d=0 113 dia x2" long
5 For piggyback truss spans greater than 36' and less than or equal to 100' where there is a 1 5" gap between BC of cap truss and TC of base truss, attach BC of cap truss to the TC of base truss with 7"x7"x7/16" Plywood/OSB Gussets (each face) with 6-6d nails per gusset or LTP5 Framing Angles (one face) with 8-8dx1 5" nails per LTP5 under each vertical web at 4' on center Where there is no gap between BC of cap truss and TC of base truss attach BC of cap truss to the TC of base truss with 7"x7"x7/16" Plywood/OSB Gussets (each face) with 6-6d nails per gusset or LTP4 Framing Angles (one face) with 12-8dx1 5" nails per LTP4 under each vertical web at 4' on center Note spacing for vertical webs must not exceed 4' on center

Bracing for the Base Truss Flat Top Chord n a Piggyback Assembly

The flat top chords of the supporting base trusses must be adequately braced to prevent them from buckling out from under the cap trusses One option for acomplishing this is with flat 2x4 purlins in combination with diagonal bracing that gets repeated at max 10' intervals Other methods may be required as specified in the Construction Documents See BCSI-B3 for additional information

Base Trusses



KEVIN M. BOOTHE LICENSE No. 69577 STATE OF FLORIDA PROFESSIONAL ENGINEER
COA #30003
6/7/2024

SIMPSON StrongTie

PIGGYBACK TRUSS CONNECTION DETAIL WITH DRAG LOADS

TD-CPS-0002

Date 09/04/2014 | Rev | Pg 1 of 1

This detail provides minimum connection requirements between a cap truss and a base truss of a piggyback assembly to resist drag loads This detail applies to assemblies that meet the following conditions and design requirements

- the cap truss has continuous bearing or bearings at 2' o c max ,
- the cap truss contains vertical web members at 4' o c. max,
- the cap trusses are spaced no greater than 24" o c ,
- the pitch does not exceed 12/12,
- the cap truss span does not exceed 36',
- the cap truss is not a mono truss ,

Design Requirements:

Load Duration Factor 1 6

Lumber SPF or Better (Min SG = 0 42)

See also TD-CPS-0001D for connection requirements for wind loads The piggyback connections must satisfy both the drag load and wind load requirements

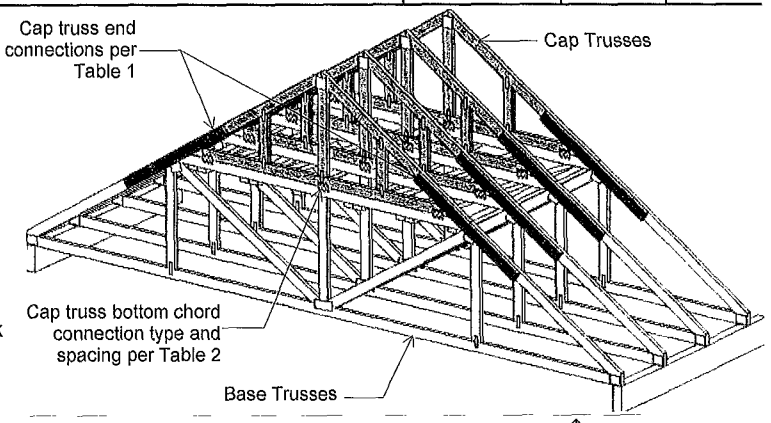


Table 1 - Maximum Cap Truss Span Based on Cap Truss End Connections

Max. Drag Load (plf)	End Connection Type									
	LSTA18 or CS20 with 14-10dx1.5		4' 2x Scab with 16-10d		6' 2x Scab with 10-SDS1/4x3		LSTA30 or CS18 with 20-10dx1.5		6' 2x Scab with 24-10d	
	One Face	Both Faces	One Face	Both Faces	One Face	Both Faces	One Face	Both Faces	One Face	Both Faces
100	18'	36'	24'	36'	24'	36'	24'	36'	36'	36'
200	9'	18'	12'	24'	12'	24'	12'	24'	18'	36'
400	--	9'	--	12'	--	12'	--	12'	9'	18'
600	--	--	--	--	--	9'	--	9'	--	12'
700	--	--	--	--	--	--	--	--	--	9'

1 Install half of the specified fasteners in each member being connected
2 NAILS 10d = 0 148 dia x 3" long 10d x1 5 = 0 148 dia x1 ½ long

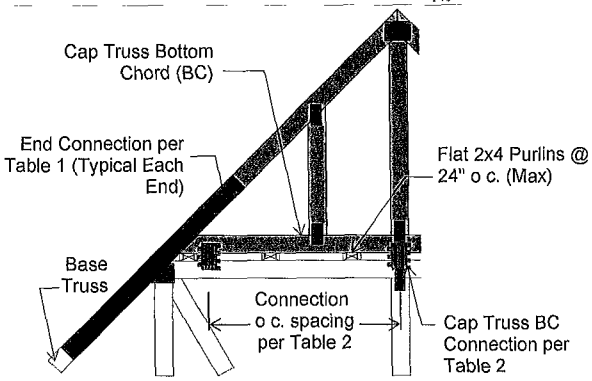


Figure 1 - Typical Piggyback Assembly with 1 1/2" Gap Between Cap and Base

Table 2 - Maximum On-Center Spacing of Connections Along Cap Truss BC

Max. Drag Load (plf)	Connection Type					
	1.5" Gap Between Cap & Base Truss (See Figure 1)			No Gap Between Cap Base Truss (See Figure 2)		
	2-10d Toe-nails into Purlins on Base Truss[1]	7"x7"x7/16" Plywood/OSB with 6-6d (ea face)[2,3]	LTP5 with 8-8dx1.5 (ea face)[2,3]	2-10d Toe-nails	7"x7"x7/16" Plywood/OSB with 6-6d (ea face)[2,3]	LTP4 with 12-8dx1.5 (ea face)[2,3]
100	2' o c	3'-6" o c.	6' o c	2' o c	3'-6" o c.	9' o c
200	--	2' o c	3' o c	--	2' o c	5' o c
400	--	1' o c	1'-6" o c	--	1' o c	2'-6" o c
600	--	--	1' o c	--	--	1'-6" o c
700	--	--	1' o c	--	--	1'-6" o c

1 Purlins must be fastened to the base truss (at 24" o c. max) with min 2-10d nails (each purlin)
2 Install half of the specified fasteners in each member being connected
3 Connections shall be staggered on the opposite face
4 NAILS 10d=0 148 dia x 3" long 8dx1 5=0 131" dia x 1 ½" long 6d = 0 113 dia x 2" long

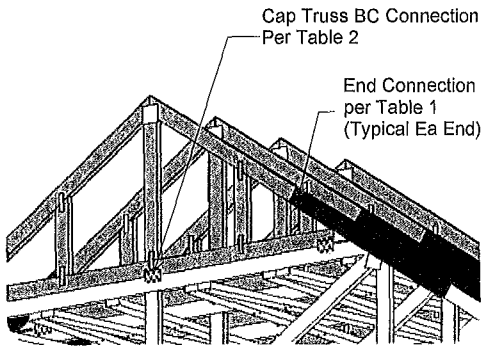
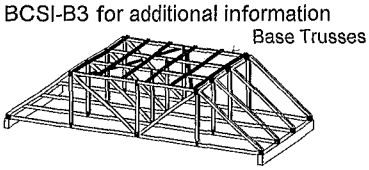


Figure 2 - Typical Piggyback Assembly with No Gap Between Cap and Base

Bracing for the Base Truss Flat Top Chord in a Piggyback Assembly

The flat top chords of the supporting base trusses must be adequately braced to prevent them from buckling out from under the cap trusses One option for accomplishing this is with flat 2x4 purlins in combination with diagonal bracing that gets repeated at max 10' intervals Other methods may be required as specified in the Construction Documents See BCSI-B3 for additional information



KEVIN M. BOOTHE LICENSE No. 69577 STATE OF FLORIDA PROFESSIONAL ENGINEER
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6/7/2024

SIMPSON Strong-Tie

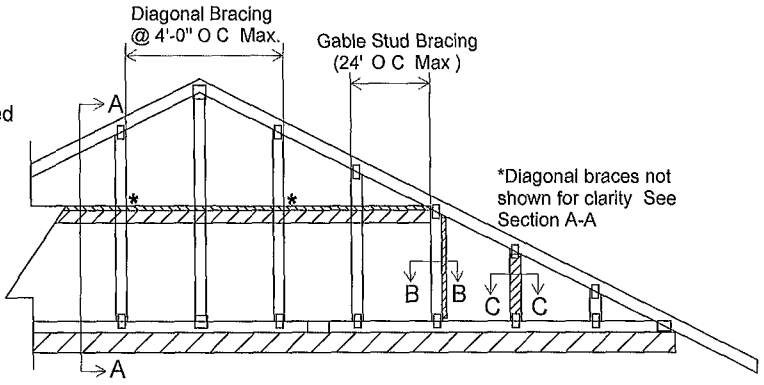
GABLE STUD BRACING DETAIL - 110 MPH (NOMINAL), 140 MPH (ULTIMATE)

TD-GBL-0004B

Date 06/11/2014 | Rev B | Pg 1 of 1

NOTES:

1 This detail provides bracing/reinforcement options for the gable studs to resist the out-of-plane wind loading Refer to the individual truss design drawing for bracing/reinforcement requirements for resisting the vertical (in-plane) loads assumed in the design of the gable end frame Additional bracing/reinforcement at the end of the building and/or at the gable end wall may be required Refer to the Building Designer/Construction Documents for all gable end frame and roof system bracing requirements For additional information, see BCSI-B3
2 This detail does not apply to structural gables
3 Connection requirements between the gable end frame and the wall to be specified by the Building Designer
4 The gable end frame must match the profile of the adjacent trusses Do not use a gable end frame with a flat bottom chord next to trusses with sloped bottom chords, such as scissor or vaulted trusses

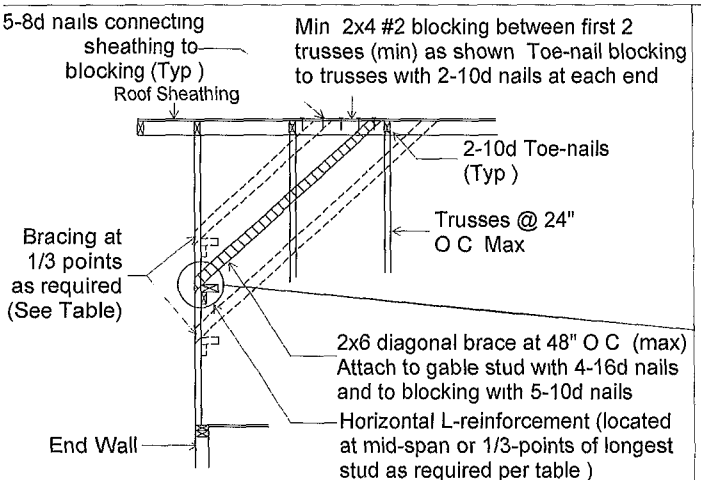


GABLE END WITH STUD BRACING/REINFORCEMENT

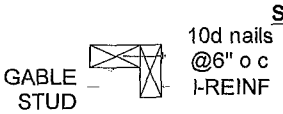
MINIMUM GABLE STUD SIZE, SPECIES & GRADE	MAX. GABLE STUD SPACING	WITHOUT BRACE	L-REINFORCEMENT [1]	SCAB REINFORCEMENT [1]	DIAGONAL BRACING @ MID-SPAN [2]	DIAGONAL BRACING @ 1/3 POINTS [2]
		MAXIMUM STUD LENGTH [3]				
2X4 SPF STUD or STANDARD	12" O C	4-6-0	7-11-4	9-0-4	9-0-4	13-6-8
	16" O C	4-1-0	7-0-4	8-2-4	8-2-4	12-3-8
	24" O C	3-5-8	5-8-12	6-11-0	6-11-0	10-4-8

DETAIL LIMITATIONS:
Max Mean Roof Height. 30'
Category II
Exposure B or C
Load Duration Factor· 1 6
Wind Speed 110 mph Nominal
(140 mph Ultimate)

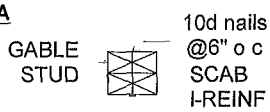
1 L- and Scab Reinforcements shall be minimum 2x4 stud grade and must be a minimum of 90% of the gable stud length Fasten the reinforcement member to the gable stud with 10d nails @ 6" o c.
2 Attach horizontal reinforcing member at mid-span (or 1/3 points as required) of the longest stud and install diagonal bracing @ 4' o c. (max) as shown in Section A-A
3 Tabulated maximum stud lengths are based on components and cladding wind pressures using the wind design parameters listed in the detail limitations Gable stud deflection criteria is L/240



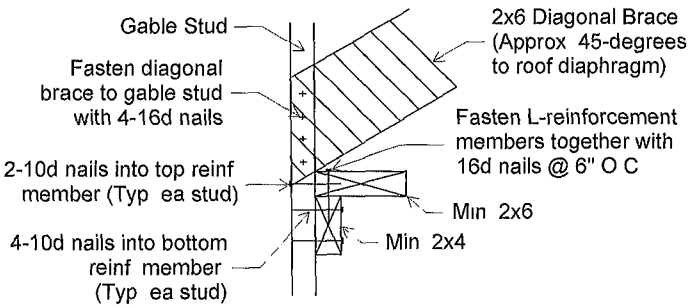
Section A-A



Section B-B



Section C-C



NOTE Diagonal braces over 6'-3" require a 2x4 T-brace attached to one narrow edge Diagonal braces over 12'-6" require 2x4s attached on both narrow edges The braces must cover 90% of the diagonal brace and shall be fastened to the narrow edge with 10d nails at 6" o c (min 3" end distance) When attached on both narrow edges, stagger the nails on each side by 3"

Nail Dimension
16d = 3 5" x 0 162"
10d = 3" x 0 148"
8d = 2 5" x 0 131"

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SIMPSON Strong-Tie®

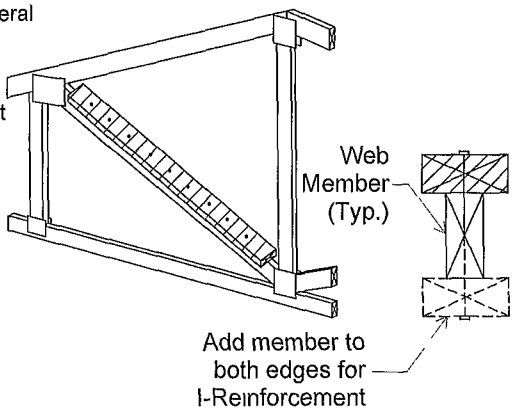
INDIVIDUAL WEB REINFORCEMENT DETAIL

D-WEBREINFORCE

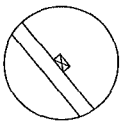
Date 01/19/2024 | Rev A | Pg 1 of 1

NOTES:

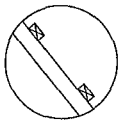
1 This detail provides web reinforcement options that may be used as an alternative to continuous lateral restraint (CLR) when installing CLRs in combination with diagonal bracing is not practical or desired
2 Refer to the truss design drawing for web lateral restraint requirements A ⊠ on the truss design drawing indicates that continuous lateral restraint is required at the locations shown (either at the midpoint or 1/3-points of the web member) Refer to the tables below for acceptable web reinforcement options that may be used in place of one or two rows of CLR
3 T-, L-, I- and scab web reinforcements must be the same or better species and grade of the web member as indicated on the truss design drawing
4 All reinforcements must extend to within 6" of each end of the web member
5 This detail does not apply to single-ply webs that exceed 14' in length



T- Reinforcement
(I-Reinforcement similar)



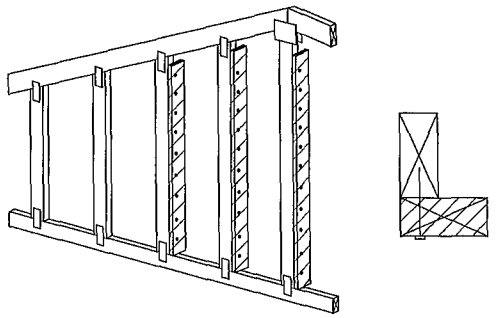
1 Row of CLR @ Web Mid-point



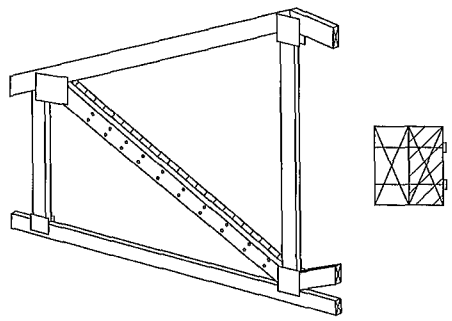
2 Rows of CLRs @ Web 1/3 points

WEB REINFORCEMENT OPTIONS FOR SINGLE-PLY TRUSSES [1]						
Specified Web Member Lateral Restraint (CLRs)	Web Member Size	Acceptable Web Reinforcement Substitutions - Type & Size				Reinforcement-to-Web Connection Requirements
		T-	L-	Scab	I-	
1 Row @ Mid-point	2x4	2x4	2x4	2x4	---	16d gun nails @ 6" on-center
	2x6	2x6	2x6	2x6	---	
	2x8	2x8	2x8	2x8	---	
2 Row @ 1/3-points	2x4	No substitutions allowed			2-2x4	
	2x6				2-2x6	
	2x8				2-2x8	

WEB REINFORCEMENT OPTIONS FOR 2-PLY TRUSSES [2]						
Specified Web Member Lateral Restraint (CLRs)	Web Member Size	Acceptable Web Reinforcement Substitutions - Type & Size				Reinforcement-to-Web Connection Requirements
		T-	L-	Scab	I-	
1 Row @ Mid-point	2x4	2x4	2x4	---	---	16d gun nails @ 6" on-center
	2x6	2x6	2x6	---	---	
	2x8	2x8	2x8	---	---	
2 Row @ 1/3-points	2x4	No substitutions allowed			2-2x4	
	2x6				2-2x6	
	2x8				2-2x8	



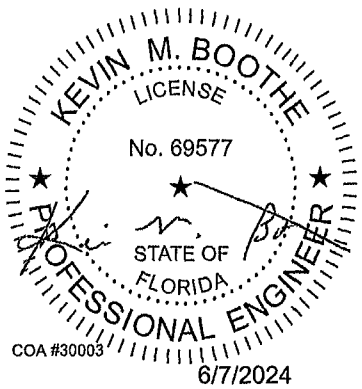
L- Reinforcement



Scab Reinforcement

1 The maximum allowable web length for single-ply trusses is 14'
2 For 2-ply trusses, the reinforcement must be nailed to both plies of the web with the nailing pattern specified in the table
3 For the scab reinforcement, 2 rows of 10d gun nails @ 6" o c may be used in place of 16d gun nails for attaching the reinforcement to the web
4 For I-reinforcement, attach each 2x_member to opposite edges of the web using the nailing pattern specified in the table

Nail Dimension
16d = 3 5" x 0 131"
10d = 3" x 0 120"



6/7/2024

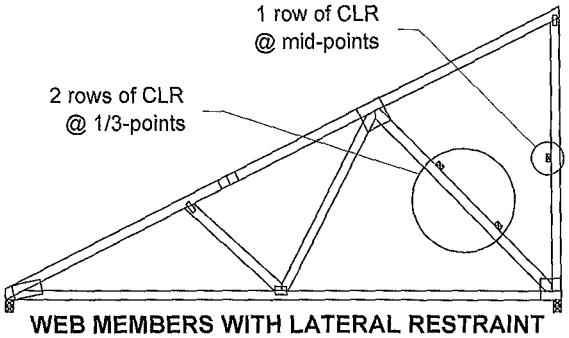
SIMPSON Strong-Tie

LATERAL RESTRAINT & DIAGONAL BRACING DETAILS FOR WEB MEMBERS

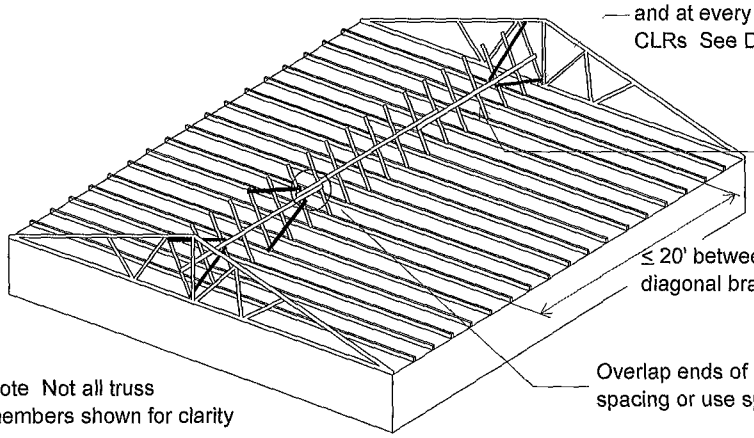
D-WEBCLRBRACE

Date 05/24/2021 | Rev A | Pg 1 of 1

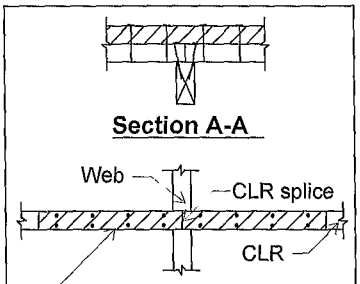
This detail provides information for laterally restraining and bracing web members to prevent lateral buckling using continuous lateral restraints (CLRs) in combination with diagonal bracing In addition to the CLRs indicated on the truss design drawing, diagonal bracing must be installed as indicated in this detail and BCSI-B3 See WEBREINFORCE for web reinforcement options that may be used as an alternative to this detail when installing CLRs and diagonal bracing is not practical or desired Properly attached full-length sheathing satisfies (may replace) any bracing requirements specified for end vertical webs Refer to the Construction Documents for additional bracing requirements For trusses with spacing greater than 2' o c. refer to BCSI-B10



WEB MEMBERS WITH LATERAL RESTRAINT



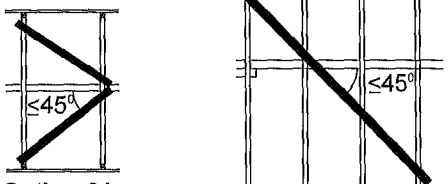
Note Not all truss members shown for clarity



Min 2'-long 2x_ scab block centered over the CLR splice and web Attach to CLR with min 8-10d nails on each side of splice

Detail 1 - CLR Splice

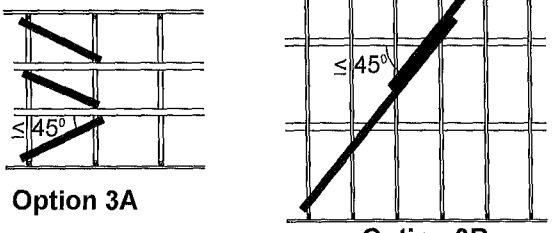
For webs with one row of CLRs, diagonal bracing shall be installed using Option 2A or 2B Attach diagonal braces to each truss with min 2-10d nails



Option 2A Option 2B

Detail 2 - Diagonal Bracing for 1 Row of CLRs

For webs with 2 rows of CLRs, diagonal bracing shall be installed using Option 3A or 3B Attach diagonal braces to each truss with min 2-10d nails



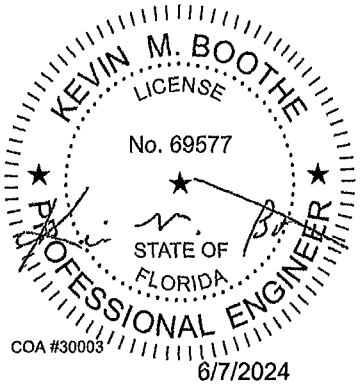
Option 3A Option 3B

Detail 3 - Diagonal Bracing for 2 Rows of CLRs

DETAIL LIMITATIONS:

1 Restraint and Bracing Material min 2x4 stress graded lumber
2 This detail does not address permanent building stability bracing to resist lateral forces acting on the building
3 This detail shall not supersede any project-specific truss member permanent bracing design for the roof framing structural system
4 This detail is not applicable for trusses with spacing greater than 2' o c.

Nail Dimensions:
10d = 3" x 0 128"



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