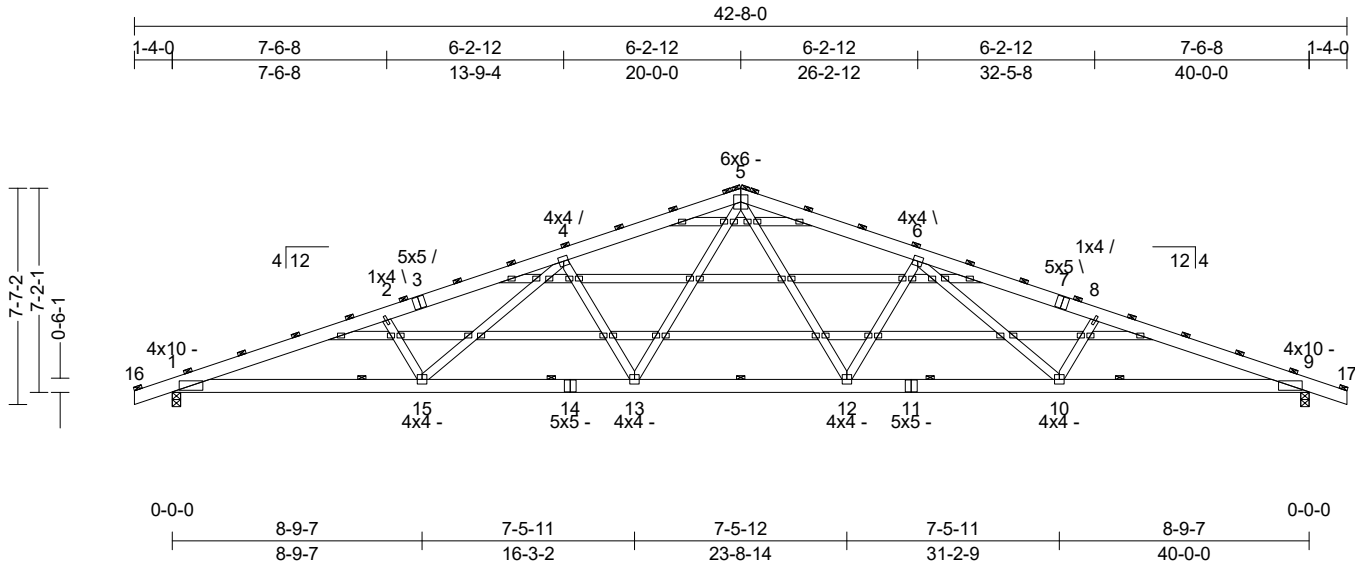




WATSON METALS
 2425 MCMINNVILLE HWY
 PHONE: (931)-616-0055
 MANCHESTER TN 37355

Truss: GABLE
 Job: STOCK 40S
 Designer: RYAN WATSON
 Date: 07/27/23 08:20:58
 Page: 1 of 2

SPAN 40-0-0	PITCH 4/12	QTY 1	OHL 1-4-0	OHR 1-4-0	CANT L 0-0-0	CANT R 0-0-0	PLYS 1	SPACING 48 in	WGT/PLY 319 lbs
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All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2009/	TC: 0.72 (8-9)	Vert TL: 0.61 in	L/776	(12-13)	L/120
TCDL: 5(rake)	TPI 1-2007	BC: 0.88 (15-1)	Vert LL: 0.39 in	L/999	(12-13)	L/180
BCLL: 0	Rep Mbr: No	Web: 0.49 (6-12)	Horz TL: 0.18 in		9	
BCDL: 5	Lumber D.O.L.: 125%					

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	3.5 in	3.02 in	2,557 lbs	.	-631 lbs	-650 lbs	-650 lbs	29 lbs
9	1	3.5 in	3.02 in	2,557 lbs	.	-631 lbs	-650 lbs	-650 lbs	.

Material

TC: SYP#1 2 x 6
 BC: SYP#1 2 x 6
 Web: SYP#2 2 x 4

Bracing

TC: Purlins at 24" OC, Purlin design by Others.
 BC: Sheathed or Purlins at 6-8-0, Purlin design by Others.

Loads

- 1) This truss has been designed for the effects of balanced (12.6 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 05 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Building Category I (I = 0.80), Thermal (Ct = 1.20), DOL = 1.15. Unobstructed slippery surface. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 05 with the following user defined input: 90 mph, Exposure C, Partial, Gable/Hip, Building Category I (I = 0.87), h = 15 ft, Not End Zone Truss, Both end webs considered. DOL = 1.60
- 4) Unbalanced roof live loads have not been considered.
- 5) Minimum storage attic loading has not been applied in accordance with IBC 1607.1
- 6) In accordance with IBC 1607.1, minimum BCLL's do not apply.
- 7) This truss is designed as an agricultural truss which for the purposes of this program is defined as a structure that represents a low hazard to people and property. See BCSI-10 for installation and temporary bracing.

Member Forces

Table indicates: Member ID, max CSL, max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

TC	1-2	0.723	-6,267 lbs	4-5	0.418	-4,579 lbs	6-8	0.545	-5,948 lbs
	2-4	0.545	-5,948 lbs	5-6	0.418	-4,579 lbs	8-9	0.723	-6,267 lbs
BC	9-10	0.884	5,857 lbs (-1,318 lbs)	12-13	0.479	3,647 lbs (-634 lbs)	15-1	0.884	5,857 lbs (-1,318 lbs)
	10-12	0.620	4,768 lbs (-983 lbs)	13-15	0.620	4,768 lbs (-983 lbs)			
Web	2-15	0.100	-642 lbs	4-13	0.489	-1,060 lbs	5-12	0.285	1,242 lbs (-274 lbs)
	4-15	0.241	1,070 lbs (-229 lbs)	5-13	0.285	1,242 lbs (-274 lbs)	6-12	0.489	-1,060 lbs
							6-10	0.241	1,070 lbs (-229 lbs)
							8-10	0.100	-642 lbs



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Truss: GABLE
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Designer: RYAN WATSON
Date: 07/27/23 08:20:58
Page: 2 of 2

SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
40-0-0	4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	48 in	319 lbs

Notes

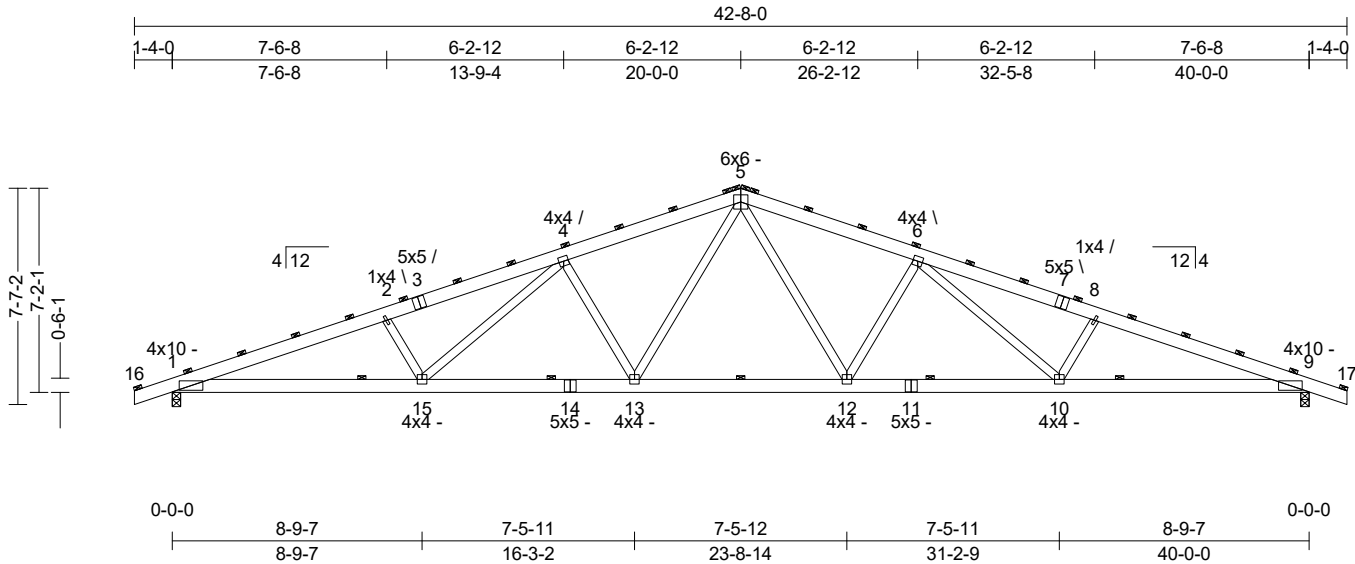
- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Gable webs placed at 24" OC, U.N.O.
- 3) Attach structural gable blocks with 2x3 20ga plates, U.N.O.
- 4) Bracing shown is for in-plane requirements. For out-of-plane requirements, refer to BCSI-B3 published by the SBCA.
- 5) Building Designer shall verify self weight of the truss and other dead load materials do not exceed TC DL 5 psf.
- 6) Building Designer shall verify self weight of the truss and other dead load materials do not exceed BC DL 5 psf.
- 7) Design assumes minimum 2x (vertical orientation, visually graded) purlins attached to the TC at purlin spacing shown with at least 2-10d nails.
- 8) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
- 9) A creep factor of 1.00 has been applied for this truss analysis.
- 10) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 11) Listed wind uplift reactions based on MWFRS & C&C loading.



WATSON METALS
 2425 MCMINNVILLE HWY
 PHONE: (931)-616-0055
 MANCHESTER TN 37355

Truss: REG
 Job: STOCK 40S
 Designer: RYAN WATSON
 Date: 07/27/23 08:20:58
 Page: 1 of 2

SPAN 40-0-0	PITCH 4/12	QTY 1	OHL 1-4-0	OHR 1-4-0	CANT L 0-0-0	CANT R 0-0-0	PLYS 1	SPACING 48 in	WGT/PLY 247 lbs
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All plates shown to be Eagle 20 unless otherwise noted.

Loading (psf)	General	CSI	Deflection	L/	(loc)	Allowed
TCLL: 20	Bldg Code: IBC 2009/ TPI 1-2007	TC: 0.72 (8-9) BC: 0.88 (15-1) Web: 0.49 (6-12)	Vert TL: 0.61 in Vert LL: 0.39 in Horz TL: 0.18 in	L/776 L/999	(12-13) (12-13) 9	L/120 L/180
TCDL: 5(rake)	Rep Mbr: No					
BCLL: 0	Lumber D.O.L.: 125%					
BCDL: 5						

Reaction

JT	Brg Combo	Brg Width	Rqd Brg Width	Max React	Max Grav Uplift	Max MWFRS Uplift	Max C&C Uplift	Max Uplift	Max Horiz
1	1	3.5 in	3.02 in	2,557 lbs	.	-631 lbs	-650 lbs	-650 lbs	29 lbs
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Material

TC: SYP#1 2 x 6
 BC: SYP#1 2 x 6
 Web: SYP#2 2 x 4

Bracing

TC: Purlins at 24" OC, Purlin design by Others.
 BC: Sheathed or Purlins at 6-8-0, Purlin design by Others.

Loads

- 1) This truss has been designed for the effects of balanced (12.6 psf) and unbalanced sloped roof snow loads in accordance with ASCE7 - 05 with the following user defined input: 20 psf GSL, Terrain C, Exposure (Ce = 1.0), Building Category I (I = 0.80), Thermal (Ct = 1.20), DOL = 1.15. Unobstructed slippery surface. If the roof configuration differs from hip/gable, Building Designer shall verify snow loads.
- 2) This truss has been designed to account for the effects of ice dams forming at the eaves.
- 3) This truss has been designed for the effects of wind loads in accordance with ASCE7 - 05 with the following user defined input: 90 mph, Exposure C, Partial, Gable/Hip, Building Category I (I = 0.87), h = 15 ft, Not End Zone Truss, Both end webs considered. DOL = 1.60
- 4) Unbalanced roof live loads have not been considered.
- 5) Minimum storage attic loading has not been applied in accordance with IBC 1607.1
- 6) In accordance with IBC 1607.1, minimum BCLL's do not apply.
- 7) This truss is designed as an agricultural truss which for the purposes of this program is defined as a structure that represents a low hazard to people and property. See BCSI-10 for installation and temporary bracing.

Member Forces

Table indicates: Member ID, max CSL max axial force, (max compr. force if different from max axial force). Only forces greater than 300lbs are shown in this table.

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							6-10	0.241	1,070 lbs (-229 lbs)
							8-10	0.100	-642 lbs

Notes

- 1) Unless noted otherwise, do not cut or alter any truss member or plate without prior approval from a Professional Engineer.
- 2) Building Designer shall verify self weight of the truss and other dead load materials do not exceed TCCL 5 psf.
- 3) Building Designer shall verify self weight of the truss and other dead load materials do not exceed BCDL 5 psf.



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Truss: REG
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SPAN	PITCH	QTY	OHL	OHR	CANT L	CANT R	PLYS	SPACING	WGT/PLY
40-0-0	4/12	1	1-4-0	1-4-0	0-0-0	0-0-0	1	48 in	247 lbs

- 4) Design assumes minimum 2x_ (vertical orientation, visually graded) purlins attached to the TC at purlin spacing shown with at least 2-10d nails.
- 5) Brace bottom chord with approved sheathing or purlins per Bracing Summary.
- 6) Lateral bracing shown is for illustration purposes only and may be placed on either edge of truss member.
- 7) A creep factor of 1.00 has been applied for this truss analysis.
- 8) The "SYP" label shown in the "Material Summary" above indicates the new SPIB design values effective June 1, 2013 were used.
- 9) Listed wind uplift reactions based on MWFRS & C&C loading.