

Job 72433774	Truss A01	Truss Type Truss	Qty 1	Ply 2	SDH - BENSON II CFI Job Reference (optional)
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Gina Tolley

Run: 8.81 S Sep 13 2024 Print: 8.810 S Sep 13 2024 MiTek Industries, Inc. Mon Oct 28 14:41:06

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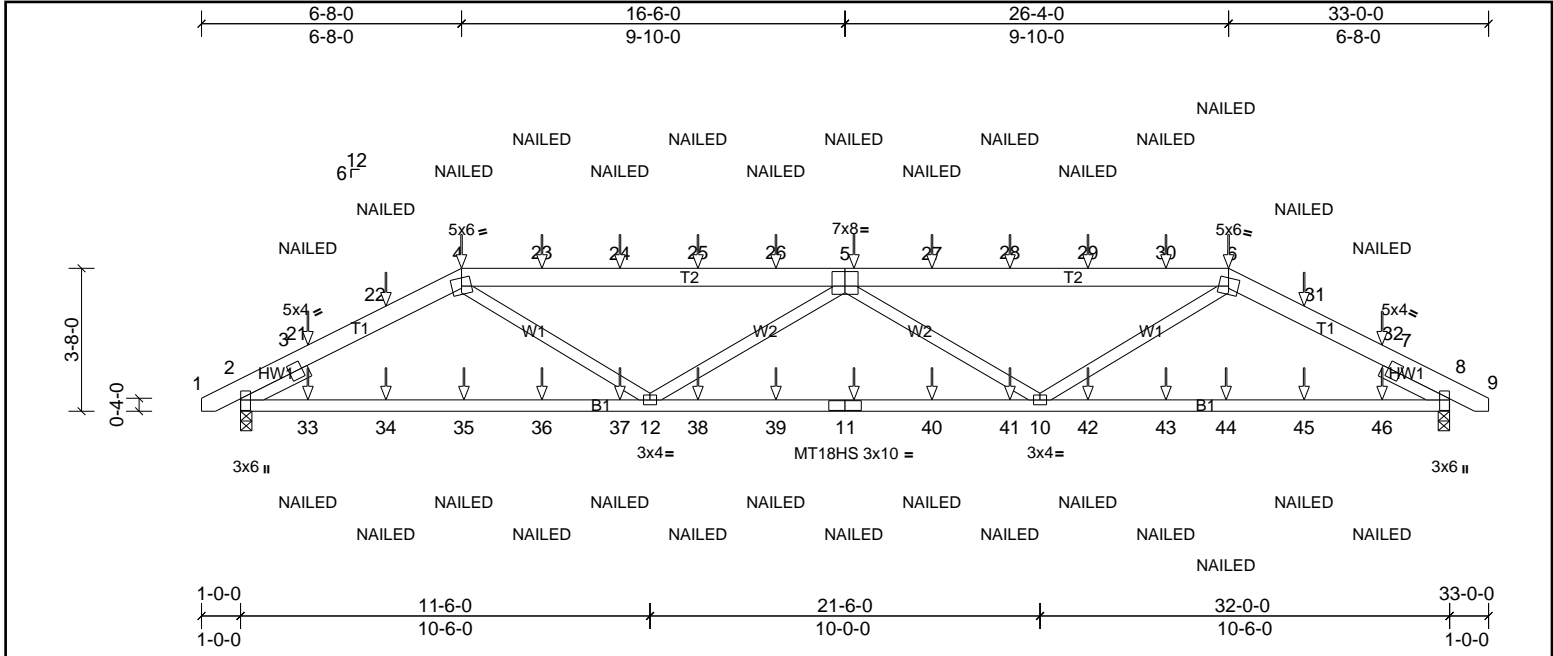


Plate Offsets (X, Y): [2:0-3-10,0-0-1], [5:0-4-0,0-4-8], [8:0-3-10,0-0-1]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.44	Vert(LL)	0.16	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.88	Vert(CT)	-0.32	10-12	>999	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.28	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH								
											Weight: 335 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except 2-0-0 oc purlins (6-0-0 max.): 4-6.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		
SLIDER	Left 2x4 SP No.3 -- 1-11-0, Right 2x4 SP No.3 -- 1-11-0		
<b>REACTIONS</b>	(lb/size) 2=1745/0-3-8, (min. 0-1-8), 8=1752/0-3-8, (min. 0-1-8) Max Horiz 2=57 (LC 8) Max Uplift 2=472 (LC 5), 8=478 (LC 4)		
<b>FORCES</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		
TOP CHORD	2-3=-1649/268, 3-21=-2816/951, 21-22=-2788/937, 4-22=-2677/943, 4-23=-3540/1065, 23-24=-3540/1065, 24-25=-3540/1065, 25-26=-3540/1065, 5-26=-3540/1065, 5-27=-3547/1069, 27-28=-3547/1069, 28-29=-3547/1069, 29-30=-3547/1069, 6-30=-3547/1069, 6-31=-2689/955, 31-32=-2800/949, 7-32=-2828/963, 7-8=-1580/269		
BOT CHORD	2-33=-805/2430, 33-34=-805/2430, 34-35=-805/2430, 35-36=-805/2430, 36-37=-805/2430, 12-37=-805/2430, 12-38=-1512/4240, 38-39=-1512/4240, 11-39=-1512/4240, 11-40=-1512/4240, 40-41=-1512/4240, 10-41=-1512/4240, 10-42=-782/2436, 42-43=-782/2436, 43-44=-782/2436, 44-45=-782/2436, 45-46=-782/2436, 8-46=-782/2436		
WEBS	4-12=-280/1399, 5-12=-851/611, 5-10=-842/606, 6-10=-272/1390		

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-0 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 472 lb uplift at joint 2 and 478 lb uplift at joint 8.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
Uniform Loads (lb/ft)  
Vert: 1-4=-60, 4-6=-60, 6-9=-60, 13-17=-20  
Concentrated Loads (lb)  
Vert: 4=-39 (F), 5=-39 (F), 6=-39 (F), 11=-22 (F), 21=-41 (F), 22=-39 (F), 23=-39 (F), 24=-39 (F), 25=-39 (F), 26=-39 (F), 27=-39 (F), 28=-39 (F), 29=-39 (F), 30=-39 (F), 31=-39 (F), 32=-41 (F), 33=-20 (F), 34=-22 (F), 35=-22 (F), 36=-22 (F), 37=-22 (F), 38=-22 (F), 39=-22 (F), 40=-22 (F), 41=-22 (F), 42=-22 (F), 43=-22 (F), 44=-22 (F), 45=-22 (F), 46=-20 (F)



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



Job 72433774	Truss A02	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Gina Tolley

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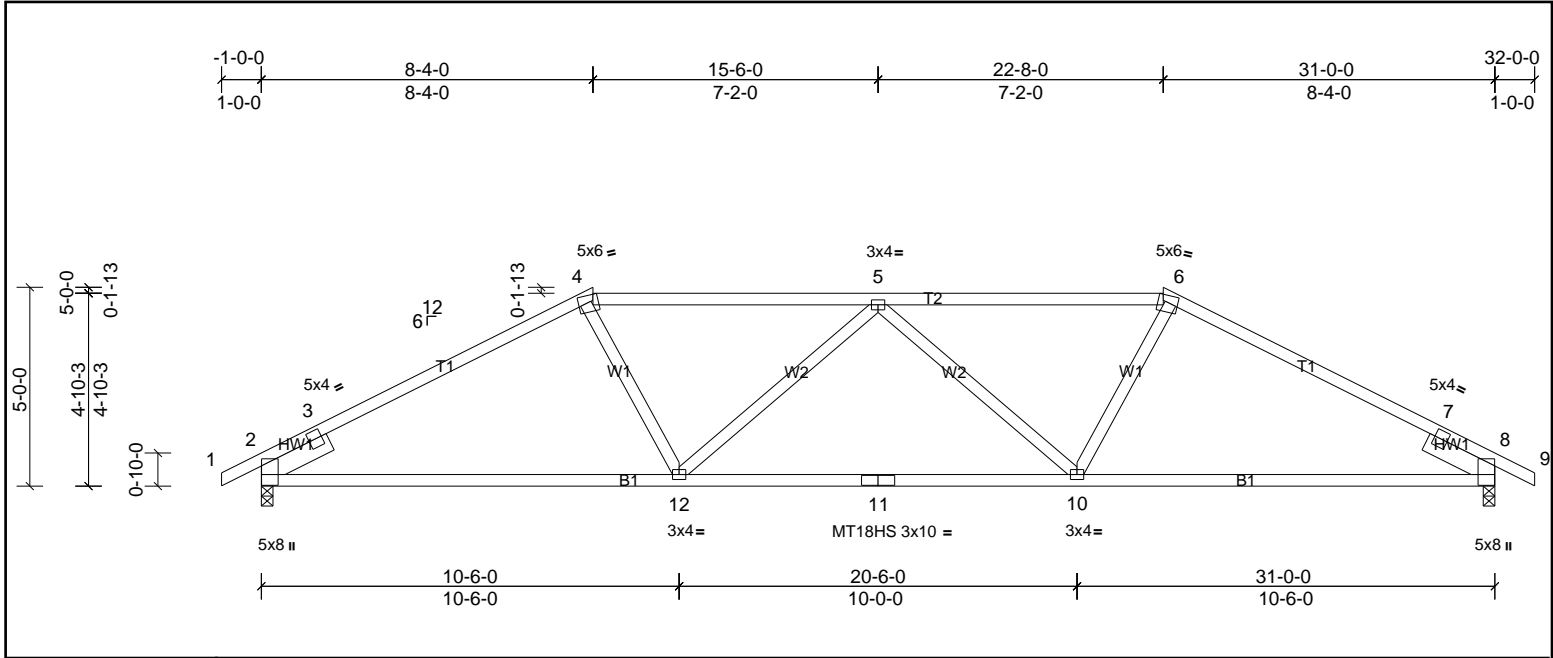
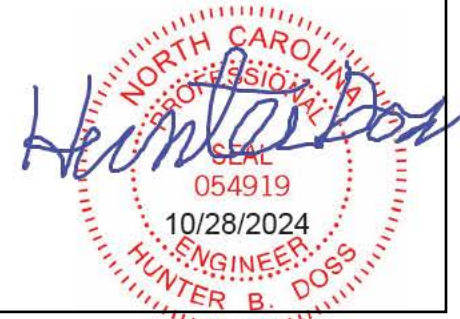


Plate Offsets (X, Y): [2:0-5-13,0-0-1], [4:0-1-8,0-1-12], [6:0-1-8,0-1-12], [8:0-5-13,0-0-1]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.81	Vert(LL)	-0.17	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.41	10-12	>916	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 142 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP SS *Except* T2:2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-5-6 oc purlins, except 2-0-0 oc purlins (3-1-2 max.): 4-6.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	2x4 SP No.3		
SLIDER	Left 2x6 SP No.2 -- 1-11-0, Right 2x6 SP No.2 -- 1-11-0		
<b>REACTIONS</b>	(lb/size) 2=1300/0-3-8, (min. 0-1-9), 8=1300/0-3-8, (min. 0-1-9) Max Horiz 2=80 (LC 11) Max Uplift 2=126 (LC 10), 8=126 (LC 11)		
<b>FORCES</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown. TOP CHORD 2-3=-868/0, 3-4=-1975/254, 4-5=-1935/241, 5-6=-1935/241, 6-7=-1975/254, 7-8=-726/0 BOT CHORD 2-12=-282/1673, 11-12=-289/2178, 10-11=-289/2178, 8-10=-140/1673 WEBS 4-12=-15/547, 5-12=-471/216, 5-10=-471/216, 6-10=-15/547		

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 126 lb uplift at joint 2 and 126 lb uplift at joint 8.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



Job 72433774	Truss A03	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Gina Tolley

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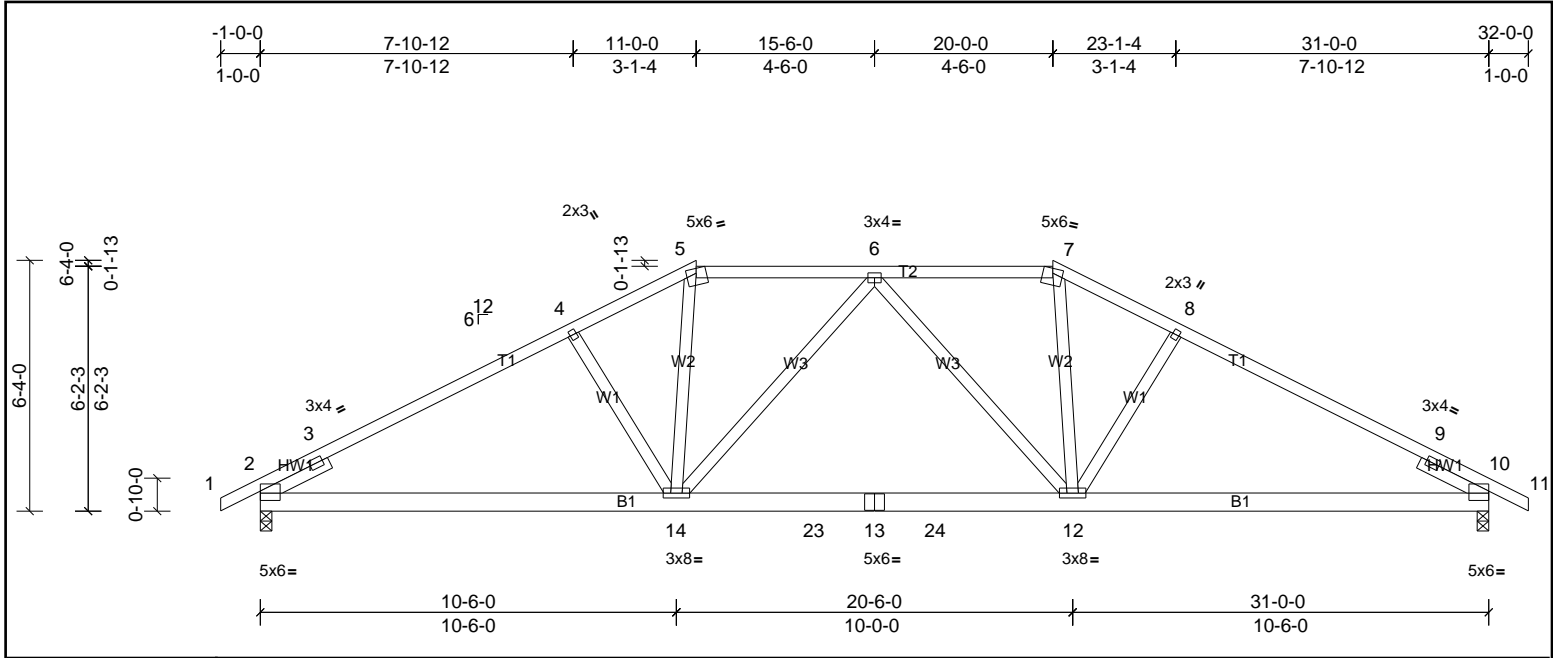


Plate Offsets (X, Y): [2:Edge,0-2-13], [10:Edge,0-2-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	-0.15	12-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.26	12-14	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 184 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 2-8-8 oc purlins, except 2-0-0 oc purlins (4-1-11 max.): 5-7.
BOT CHORD 2x6 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
SLIDER Left 2x4 SP No.3 -- 1-11-0, Right 2x4 SP No.3 -- 1-11-0	
<b>REACTIONS</b>	
(lb/size) 2=1300/0-3-8, (min. 0-1-10), 10=1300/0-3-8, (min. 0-1-10)	
Max Horiz 2=103 (LC 11)	
Max Uplift 2=155 (LC 10), 10=155 (LC 11)	
Max Grav 2=1390 (LC 2), 10=1390 (LC 2)	
<b>FORCES</b>	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-948/0, 3-4=-2398/209, 4-5=-2232/204, 5-6=-1911/188, 6-7=-1911/188, 7-8=-2232/205, 8-9=-2398/209, 9-10=-818/0	
BOT CHORD 2-14=-220/2055, 14-23=-103/2009, 13-23=-103/2009, 13-24=-103/2009, 12-24=-103/2009, 10-12=-65/2055	
WEBS 5-14=-57/788, 6-14=-334/146, 4-14=-261/206, 7-12=-57/788, 8-12=-261/207, 6-12=-334/146	

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 155 lb uplift at joint 2 and 155 lb uplift at joint 10.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job 72433774	Truss A04	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Gina Tolley

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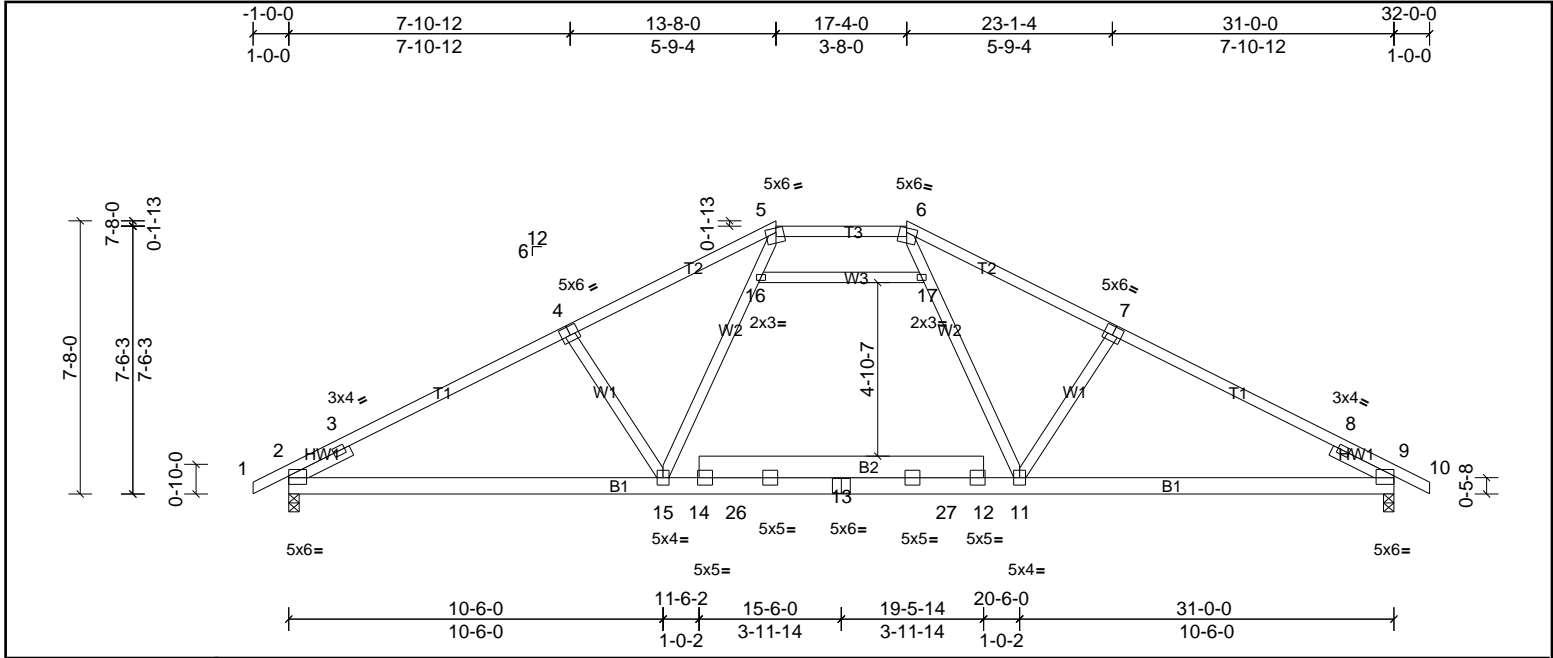


Plate Offsets (X, Y): [2:Edge,0-2-13], [4:0-3-0,0-3-0], [5:0-2-8,0-1-8], [6:0-2-8,0-1-8], [7:0-3-0,0-3-0], [9:Edge,0-2-13]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.60	Vert(LL)	-0.28	11-20	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.72	Vert(CT)	-0.36	11-20	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 201 lb	FT = 20%

**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x6 SP No.2 \*Except\* B2:2x8 SP No.2  
WEBS 2x4 SP No.3  
SLIDER Left 2x4 SP No.3 -- 1-11-0, Right 2x4 SP No.3 -- 1-11-0

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 3-2-7 oc purlins, except 2-0-0 oc purlins (4-6-6 max.): 5-6.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS**  
(lb/size) 2=1300/0-3-8, (min. 0-1-11), 9=1300/0-3-8, (min. 0-1-11)  
Max Horiz 2=127 (LC 11)  
Max Uplift 2=178 (LC 10), 9=178 (LC 11)  
Max Grav 2=1412 (LC 2), 9=1412 (LC 2)

**FORCES**  
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-971/0, 3-4=-2441/242, 4-5=-2266/245, 5-6=-1686/218, 6-7=-2266/245, 7-8=-2441/242, 8-9=-856/0  
BOT CHORD 2-15=-233/2098, 14-15=-55/1607, 14-26=-59/1596, 13-26=-58/1604, 13-27=-55/1604, 12-27=-56/1596, 11-12=-55/1607, 9-11=-99/2098  
WEBS 4-15=-390/265, 15-16=-81/756, 5-16=-81/754, 7-11=-390/265, 6-17=-81/754, 11-17=-81/756

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 178 lb uplift at joint 9 and 178 lb uplift at joint 2.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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Job 72433774	Truss A07	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Gina Tolley

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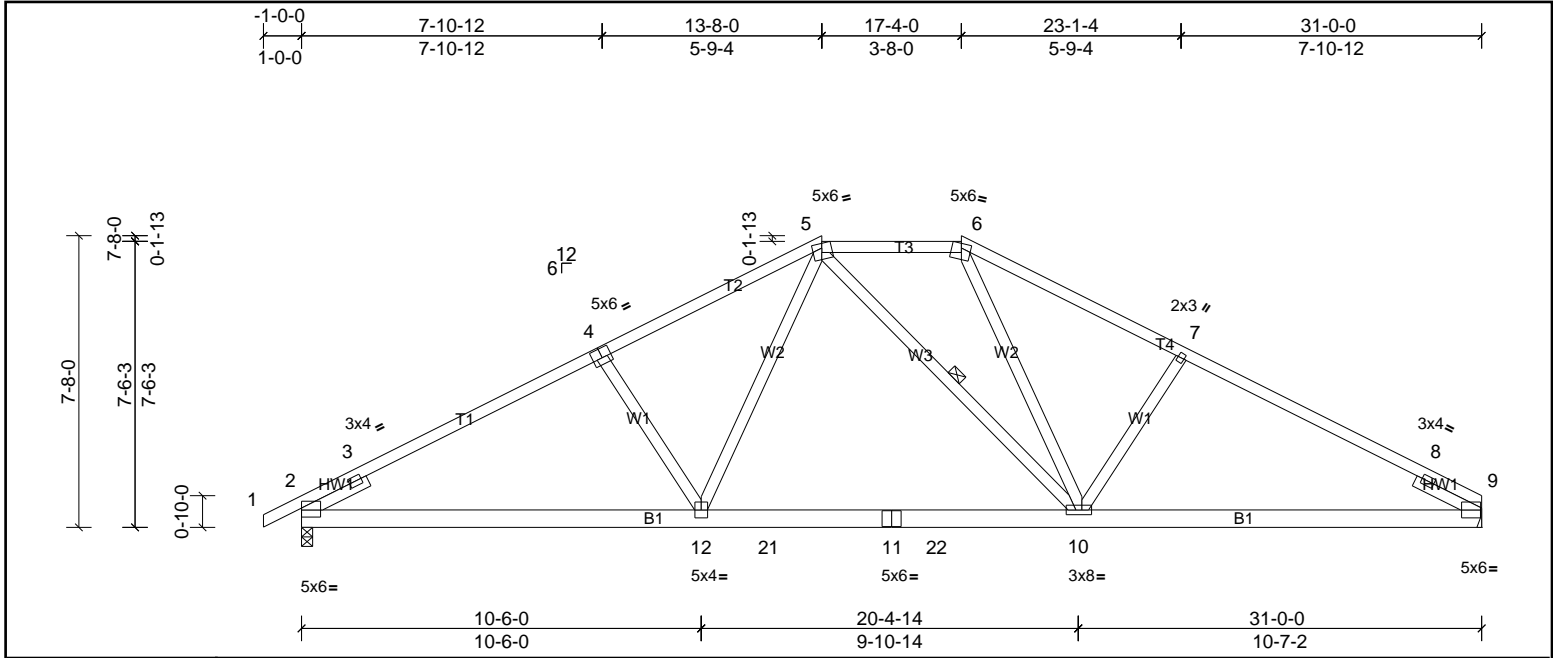
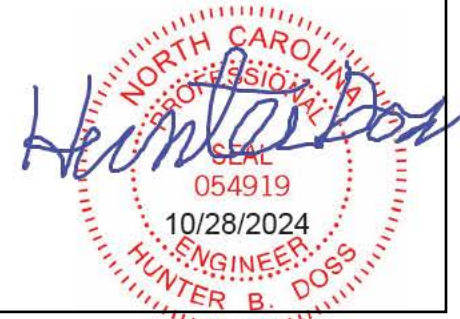


Plate Offsets (X, Y): [2:Edge,0-2-13], [4:0-3-0,0-3-0], [9:0-0-5,0-3-1]

Loading	(psf)	Spacing	2-0-0	CSI	DEFLL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.57	Vert(LL)	-0.17	10-12	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.27	10-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.29	Horz(CT)	0.05	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 182 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 3-2-0 oc purlins, except 2-0-0 oc purlins (4-6-7 max.): 5-6.
BOT CHORD	2x6 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3	WEBS	1 Row at midpt 5-10
SLIDER	Left 2x4 SP No.3 -- 1-11-0, Right 2x4 SP No.3 -- 1-11-0		
REACTIONS			
(lb/size)	2=1301/0-3-8, (min. 0-1-10), 9=1239/ Mechanical, (min. 0-1-8)		
Max Horiz	2=135 (LC 10)		
Max Uplift	2=178 (LC 10), 9=155 (LC 11)		
Max Grav	2=1404 (LC 2), 9=1348 (LC 2)		
FORCES			
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.			
TOP CHORD	2-3=-968/0, 3-4=-2435/261, 4-5=-2262/270, 5-6=-1679/267, 6-7=-2247/268, 7-8=-2428/263, 8-9=-844/0		
BOT CHORD	2-12=-260/2090, 12-21=-80/1600, 11-21=-80/1600, 11-22=-80/1600, 10-22=-80/1600, 9-10=-133/2083		
WEBS	4-12=-355/240, 5-12=-106/754, 6-10=-34/741, 7-10=-357/241		

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 155 lb uplift at joint 9 and 178 lb uplift at joint 2.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.







Job 72433774	Truss A09	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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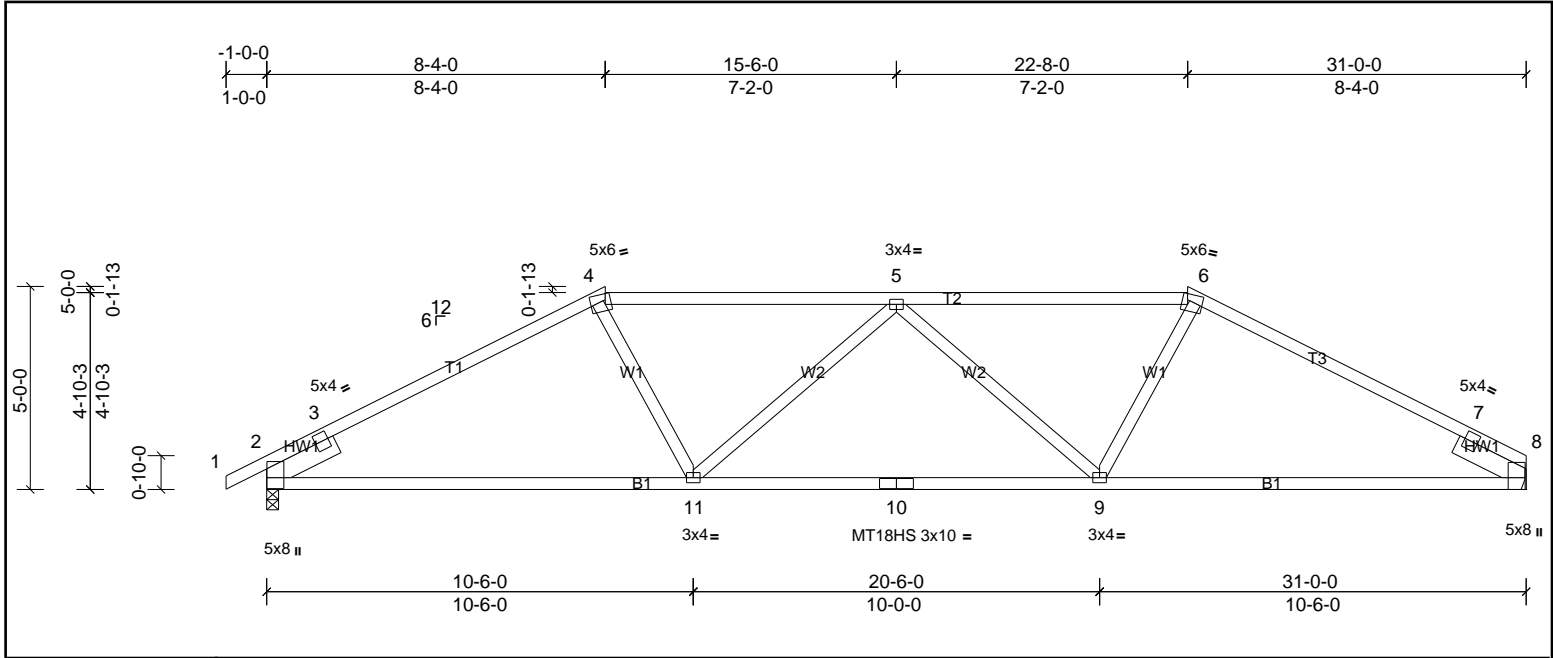


Plate Offsets (X, Y): [2:0-5-13,0-0-1], [4:0-1-8,0-1-12], [6:0-1-8,0-1-12], [8:0-6-1,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	1.00	Vert(LL)	-0.18	9-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	1.00	Vert(CT)	-0.41	9-11	>916	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.11	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 140 lb	FT = 20%

LUMBER	BRACING
TOP CHORD	2x4 SP SS *Except* T2:2x4 SP No.2, T3:2x4 SP No.1
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.3
SLIDER	Left 2x6 SP No.2 -- 1-11-0, Right 2x6 SP No.2 -- 1-11-0
REACTIONS	(lb/size) 2=1301/0-3-8, (min. 0-1-9), 8=1239/ Mechanical, (min. 0-1-8)
	Max Horiz 2=89 (LC 14)
	Max Uplift 2=126 (LC 10), 8=105 (LC 6)
FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	2-3=-868/0, 3-4=-1977/254, 4-5=-1937/242, 5-6=-1939/241, 6-7=-1979/254, 7-8=-744/0
BOT CHORD	2-11=-289/1671, 10-11=-302/2177, 9-10=-302/2177, 8-9=-150/1674
WEBS	4-11=-15/548, 5-11=-473/216, 5-9=-471/216, 6-9=-15/546

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - All plates are MT20 plates unless otherwise indicated.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 105 lb uplift at joint 8 and 126 lb uplift at joint 2.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



Job 72433774	Truss A010	Truss Type Truss	Qty 1	Ply 2	SDH - BENSON II CFI Job Reference (optional)
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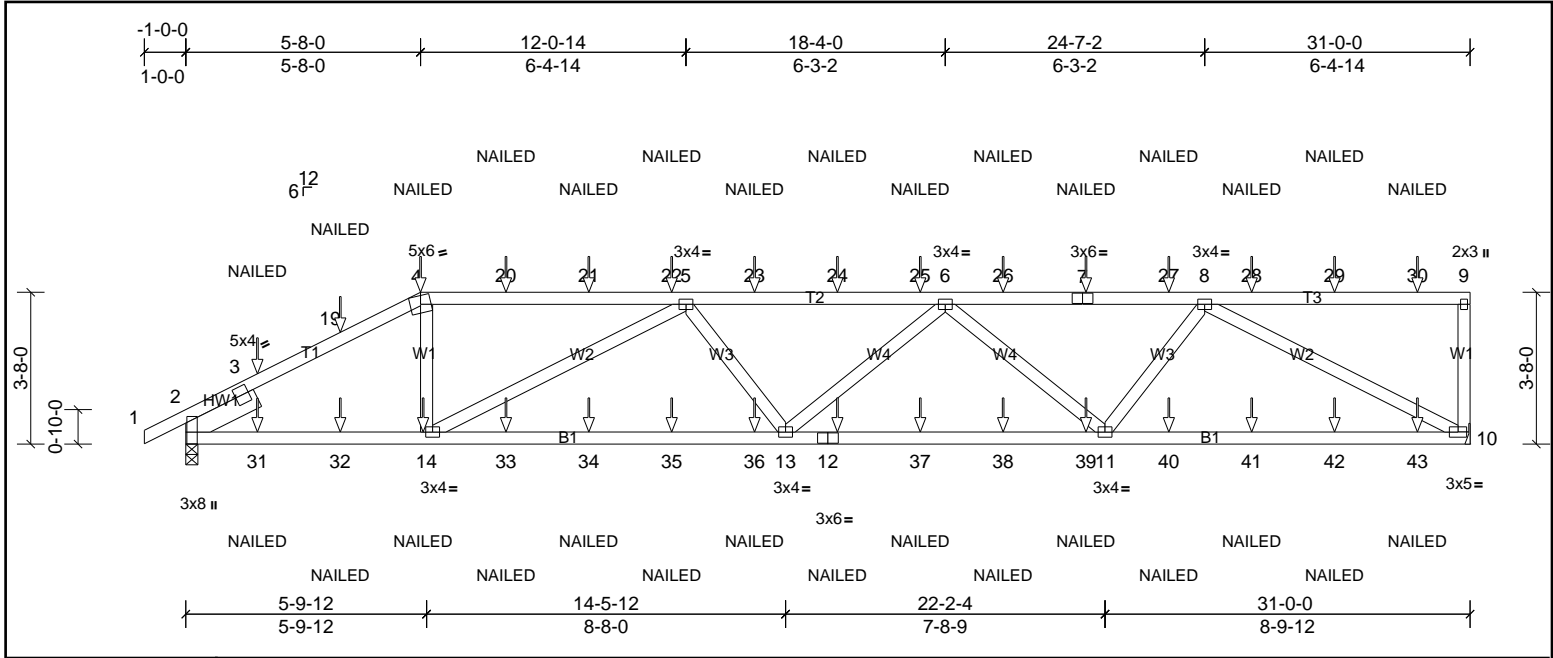


Plate Offsets (X, Y): [2:0-6-1,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.73	Vert(LL)	0.18	13-14	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.76	Vert(CT)	-0.37	13-14	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.65	Horz(CT)	0.08	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 311 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 5-8-3 oc purlins, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 4-9.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
SLIDER Left 2x6 SP No.2 -- 1-11-0	

**REACTIONS** (lb/size) 2=1746/0-3-8, (min. 0-1-8), 10=1701/ Mechanical, (min. 0-1-8)

Max Horiz 2=132 (LC 8)

Max Uplift 2=480 (LC 5), 10=597 (LC 5)

Max Grav 2=1746 (LC 1), 10=1707 (LC 18)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

TOP CHORD 2-3=-971/235, 3-19=-2743/831, 4-19=-2663/839, 4-20=-2396/773, 20-21=-2396/773, 21-22=-2396/773, 5-22=-2396/773, 5-23=-3910/1302, 23-24=-3910/1302, 24-25=-3910/1302, 6-25=-3910/1302, 6-26=-3182/1047, 7-26=-3182/1047, 7-27=-3182/1047, 8-27=-3182/1047

BOT CHORD 2-31=-766/2358, 31-32=-766/2358, 14-32=-766/2358, 14-33=-1357/3773, 33-34=-1357/3773, 34-35=-1357/3773, 35-36=-1357/3773, 13-36=-1357/3773, 12-13=-1367/3810, 12-37=-1367/3810, 37-38=-1367/3810, 38-39=-1367/3810, 11-39=-1367/3810, 11-40=-958/2586, 40-41=-958/2586, 41-42=-958/2586, 42-43=-958/2586, 10-43=-958/2586

WEBS 4-14=-157/922, 5-13=0/380, 5-14=-1615/682, 6-11=-851/425, 8-11=-155/1028, 8-10=-2865/1078

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - Provide adequate drainage to prevent water ponding.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 597 lb uplift at joint 10 and 480 lb uplift at joint 2.
  - Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.

**LOAD CASE(S)** Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

Uniform Loads (lb/ft)

Vert: 1-4=-60, 4-9=-60, 10-15=-20

Concentrated Loads (lb)

Vert: 4=-39 (B), 7=-39 (B), 12=-22 (B), 14=-22 (B), 3=-41 (B), 19=-39 (B), 20=-39 (B), 21=-39 (B), 22=-39 (B), 23=-39 (B), 24=-39 (B), 25=-39 (B), 26=-39 (B), 27=-39 (B), 28=-39 (B), 29=-39 (B), 30=-39 (B), 31=-20 (B), 32=-22 (B), 33=-22 (B), 34=-22 (B), 35=-22 (B), 36=-22 (B), 37=-22 (B), 38=-22 (B), 39=-22 (B), 40=-22 (B), 41=-22 (B), 42=-22 (B), 43=-22 (B)



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



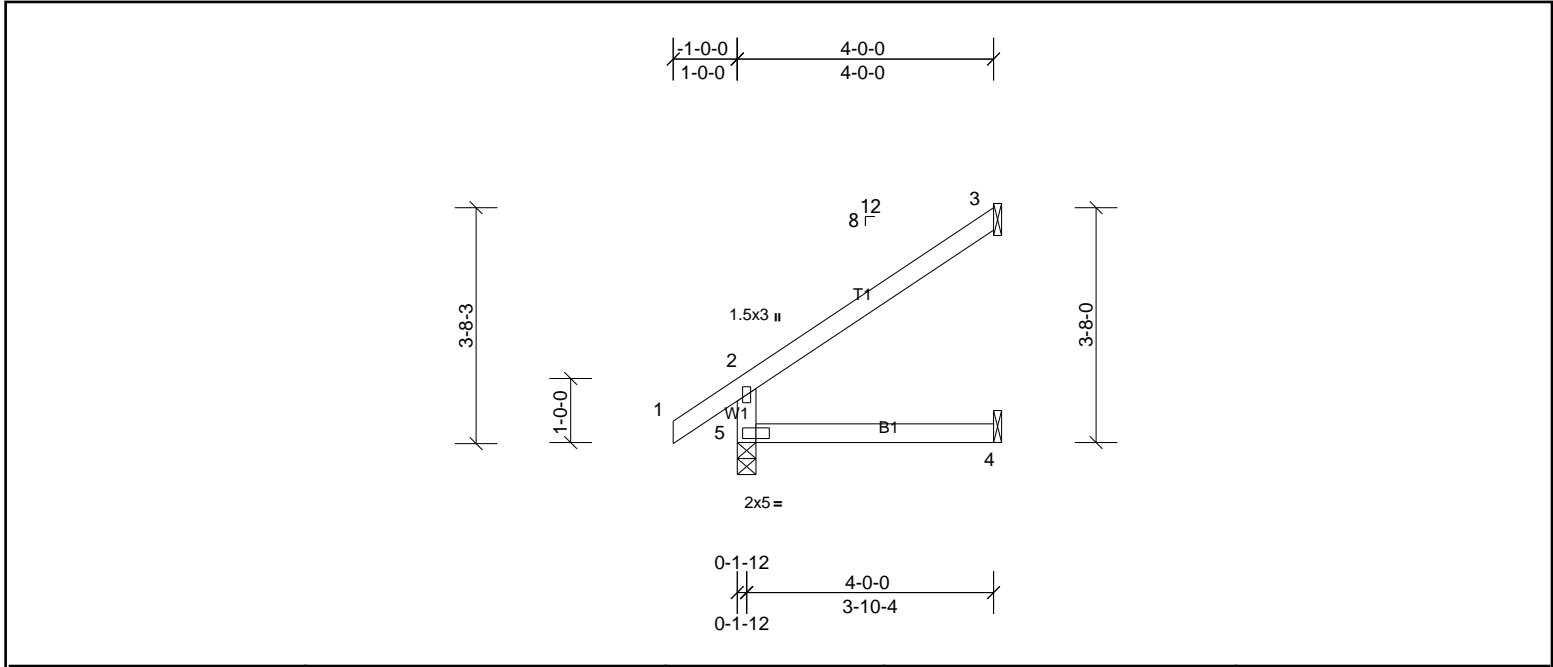
Job 72433774	Truss AJ1	Truss Type Truss	Qty 24	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Gina Tolley

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.23	Vert(LL)	0.02	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.02	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 16 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	

REACTIONS	(lb/size)	3=99/ Mechanical, (min. 0-1-8), 4=42/ Mechanical, (min. 0-1-8), 5=231/0-3-8, (min. 0-1-8)
Max Horiz	5=118 (LC 10)	
Max Uplift	3=85 (LC 10), 5=4 (LC 10)	
Max Grav	3=113 (LC 18), 4=72 (LC 3), 5=231 (LC 1)	

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 85 lb uplift at joint 3 and 4 lb uplift at joint 5.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



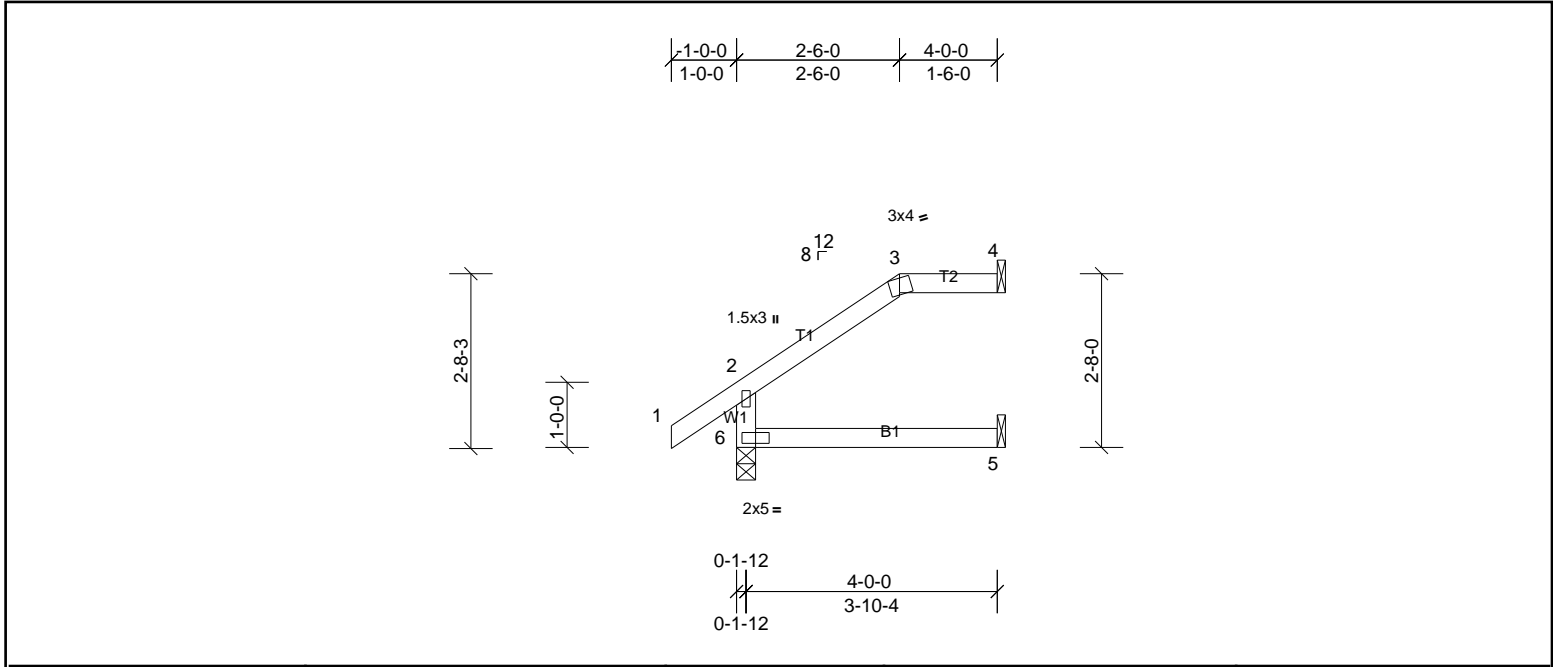
Job 72433774	Truss AJ2	Truss Type Truss	Qty 3	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	0.01	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.04	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 16 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end
BOT CHORD 2x4 SP No.2	verticals, and 2-0-0 oc purlins: 3-4.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(lb/size)	4=99/ Mechanical, (min. 0-1-8), 5=42/ Mechanical, (min. 0-1-8), 6=231/0-3-8, (min. 0-1-8)
Max Horiz	6=80 (LC 10)	
Max Uplift	4=46 (LC 7), 6=28 (LC 10)	
Max Grav	4=99 (LC 1), 5=72 (LC 3), 6=231 (LC 1)	

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 46 lb uplift at joint 4 and 28 lb uplift at joint 6.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



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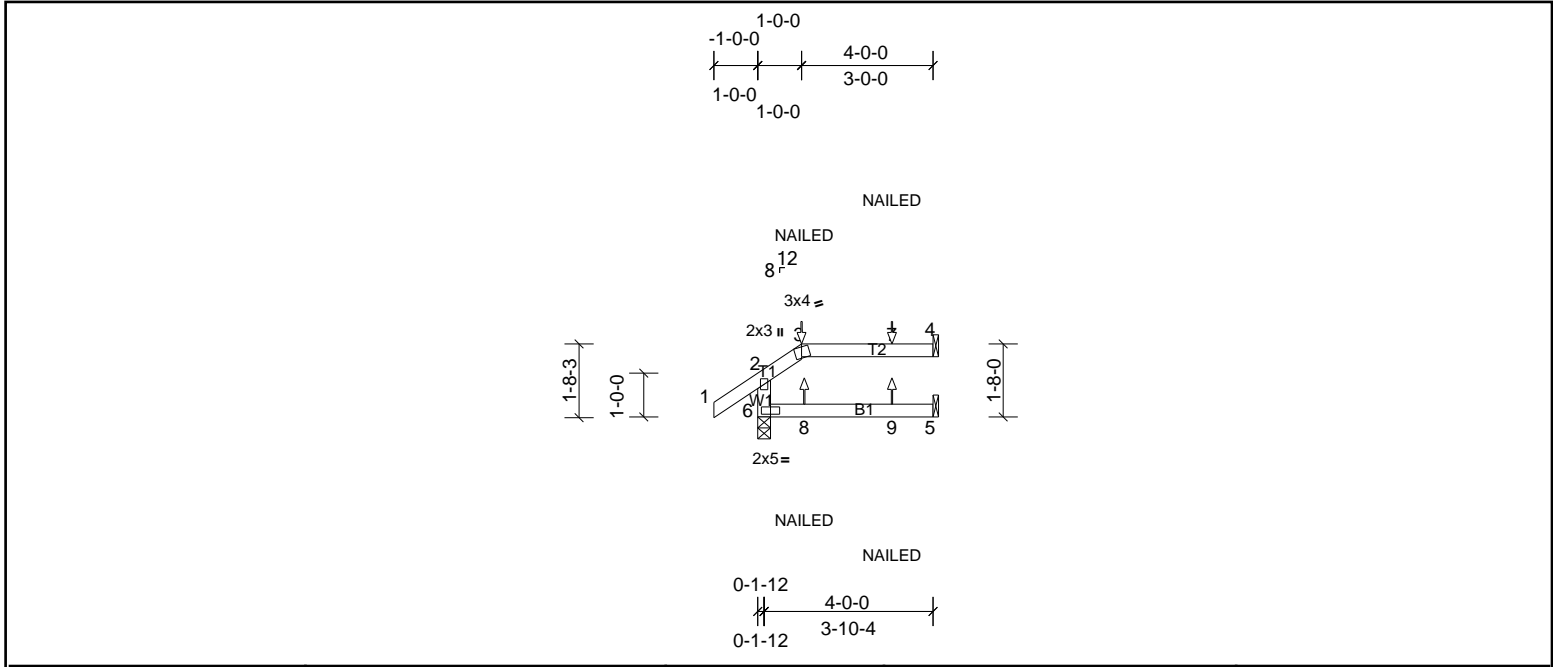
Job 72433774	Truss AJ3	Truss Type Truss	Qty 3	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.24	Vert(LL)	-0.01	5-6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	-0.02	5-6	>999	180		
BCLL	0.0*	Rep Stress Incr		NO	0.00	Horz(CT)	0.02	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 15 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end
BOT CHORD 2x4 SP No.2	verticals, and 2-0-0 oc purlins: 3-4.
WEBS 2x4 SP No.3	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS	(lb/size)	4=100/ Mechanical, (min. 0-1-8), 5=38/ Mechanical, (min. 0-1-8), 6=227/0-3-8, (min. 0-1-8)
	Max Horiz	6=43 (LC 5)
	Max Uplift	4=-49 (LC 5), 6=-35 (LC 8)
	Max Grav	4=101 (LC 22), 5=71 (LC 3), 6=227 (LC 1)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Provide adequate drainage to prevent water ponding.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - 6) Bearing at joint(s) 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 49 lb uplift at joint 4 and 35 lb uplift at joint 6.
  - 8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
  - 9) "NAILED" indicates Girder: 3-10d (0.148" x 3") toe-nails per NDS guidelines.
  - 10) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

LOAD CASE(S)	Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15	
Uniform Loads (lb/ft)	
	Vert: 1-2=-60, 2-3=-60, 3-4=-60, 5-6=-20
Concentrated Loads (lb)	
	Vert: 8=3 (B), 9=3 (B)



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.





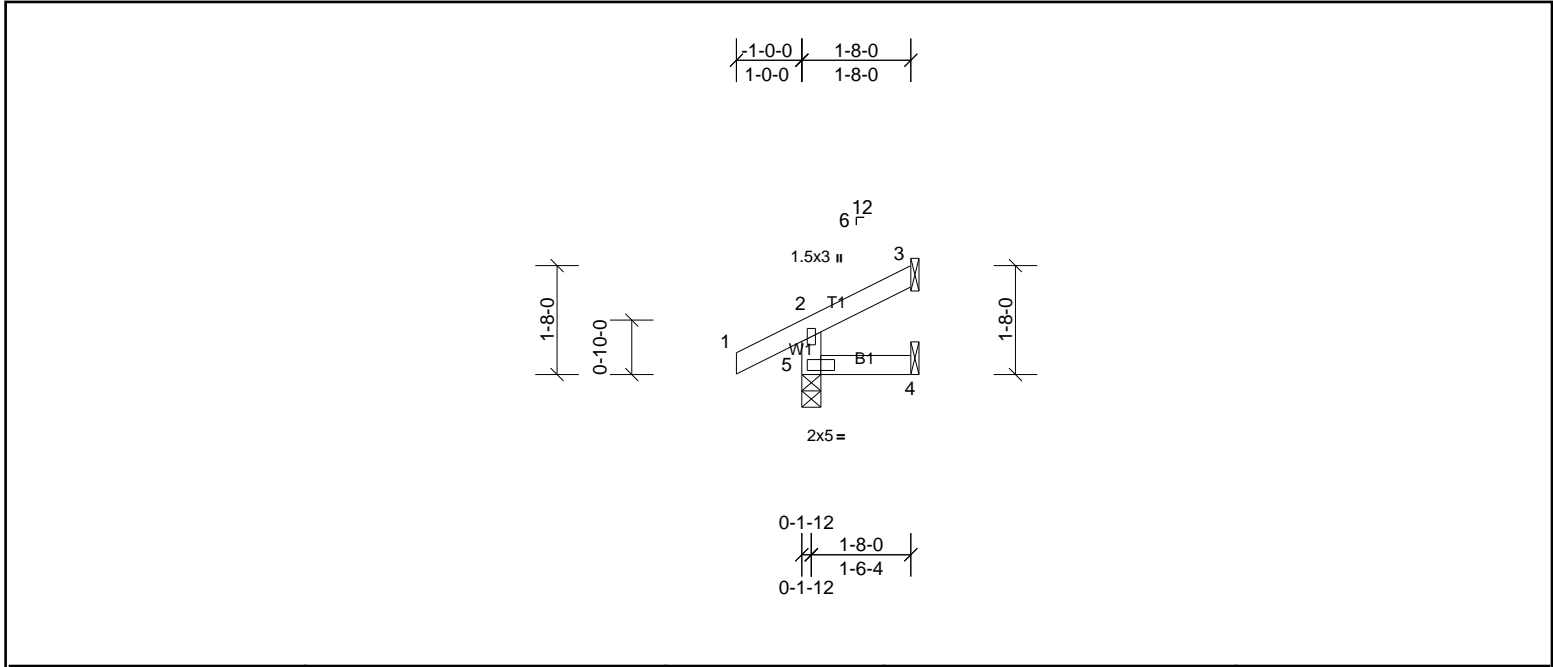
Job 72433774	Truss AJ4	Truss Type Truss	Qty 6	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	0.00	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 8 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 1-8-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS	(lb/size)	3=25/ Mechanical, (min. 0-1-8), 4=9/ Mechanical, (min. 0-1-8), 5=155/0-3-8, (min. 0-1-8)
Max Horiz	5=42 (LC 7)	
Max Uplift	3=26 (LC 10), 5=26 (LC 10)	
Max Grav	3=25 (LC 1), 4=26 (LC 3), 5=155 (LC 1)	

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 26 lb uplift at joint 3 and 26 lb uplift at joint 5.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



Job 72433774	Truss B01	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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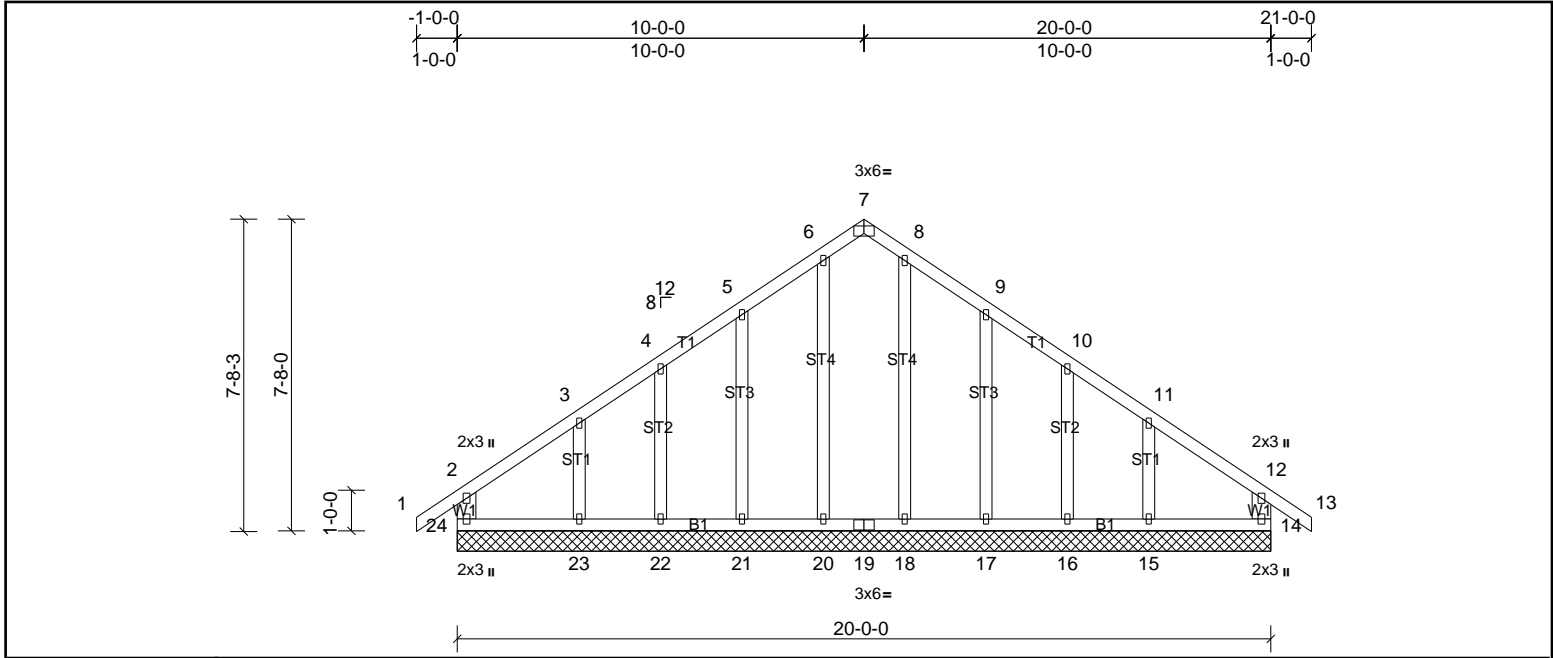


Plate Offsets (X, Y): [7:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFLL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.12	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.11	Horz(CT)	0.00	14	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 126 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6'-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10'-0-0 oc bracing.
WEBS 2x6 SP No.2	
OTHERS 2x4 SP No.3	

**REACTIONS** All bearings 20'-0-0.  
 (lb) - Max Horiz 24=-221 (LC 8)  
 Max Uplift All uplift 100 (lb) or less at joint(s) 14, 16, 22, 24 except 15=-145 (LC 11), 17=-106 (LC 11), 21=-105 (LC 10), 23=-150 (LC 10)  
 Max Grav All reactions 250 (lb) or less at joint(s) 14, 15, 16, 17, 18, 20, 21, 22, 24 except 23=257 (LC 18)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only.
  - All plates are 1.5x3 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2'-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3'-0-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 24, 14, 22, 16 except (jt=lb) 21=105, 23=149, 17=106, 15=144.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



Job 72433774	Truss B02	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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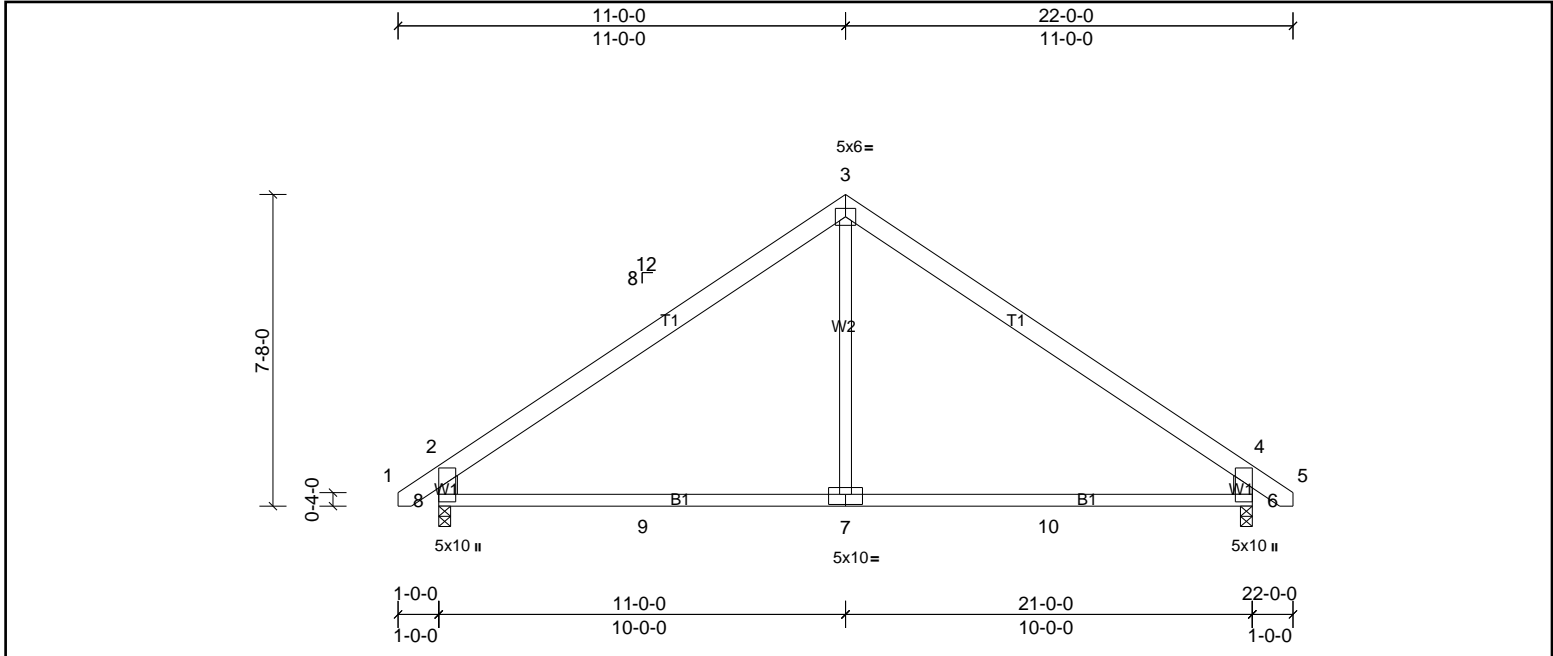


Plate Offsets (X, Y): [6:Edge,0-2-12], [7:0-5-0,0-3-0], [8:Edge,0-2-12]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.61	Vert(LL)	-0.22	6-7	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.85	Vert(CT)	-0.38	6-7	>622	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.02	6	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 105 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x6 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-7-4 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.1	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x6 SP No.2 *Except* W2:2x4 SP No.3		
REACTIONS			
(lb/size)	6=846/0-3-8, (min. 0-1-8), 8=846/0-3-8, (min. 0-1-8)		
Max Horiz	8=-214 (LC 8)		
Max Uplift	6=-119 (LC 11), 8=-119 (LC 10)		
Max Grav	6=999 (LC 19), 8=999 (LC 18)		
FORCES			
	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		
TOP CHORD	2-3=-1175/154, 3-4=-1176/154, 2-8=-950/182, 4-6=-952/182		
BOT CHORD	8-9=-6/831, 7-9=-6/831, 7-10=-6/831, 6-10=-6/831		
WEBS	3-7=0/604		

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 119 lb uplift at joint 8 and 119 lb uplift at joint 6.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



Job 72433774	Truss B03	Truss Type Truss	Qty 1	Ply 2	SDH - BENSON II CFI Job Reference (optional)
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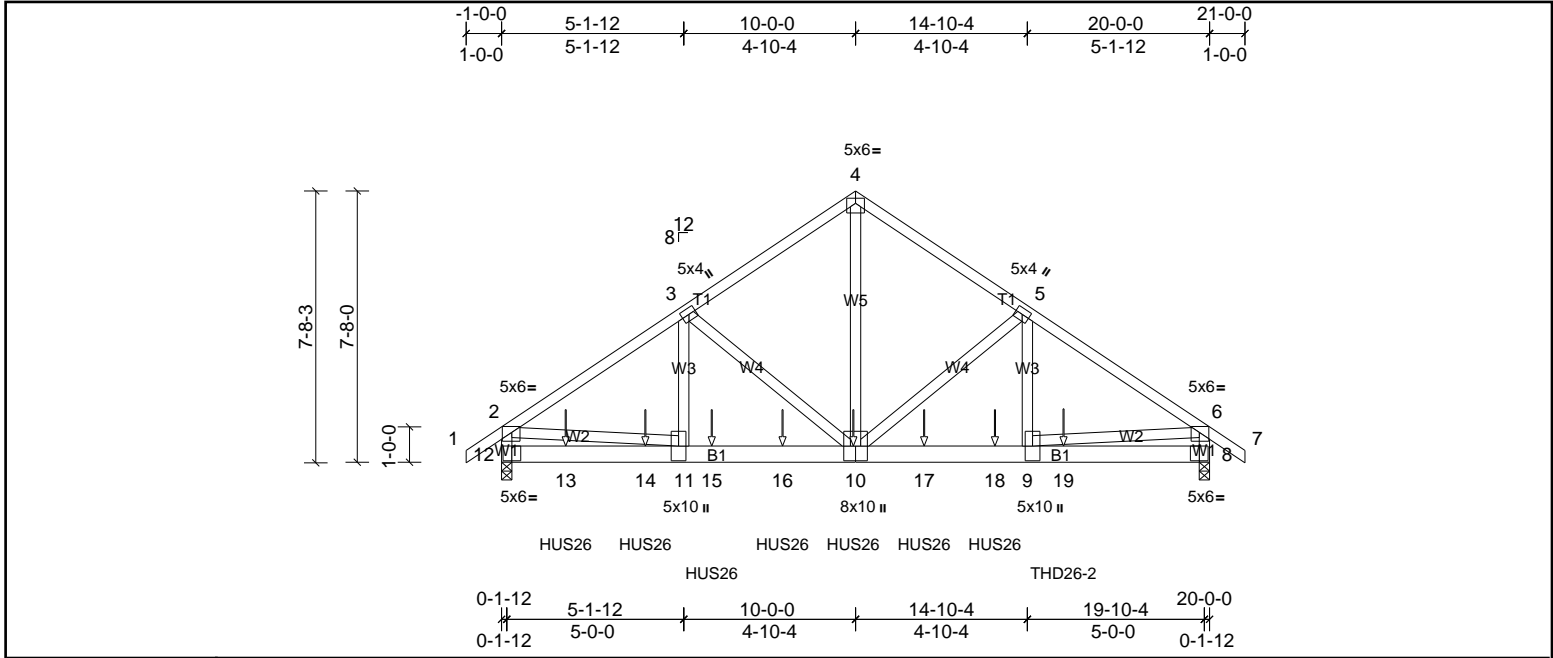


Plate Offsets (X, Y): [2:0-3-4,Edge], [4:0-3-0,0-1-12], [6:0-3-4,Edge], [8:0-3-0,Edge], [12:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.98	Vert(LL)	-0.11	9-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.87	Vert(CT)	-0.21	9-10	>999	180		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.76	Horz(CT)	0.03	8	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 281 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 3-10-1 oc purlins, except end verticals.
BOT CHORD 2x6 SP No.1	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* W4,W3:2x4 SP No.3	
<b>REACTIONS</b>	
(lb/size) 8=5576/0-3-8, (min. 0-1-8), 12=6352/0-3-8, (min. 0-1-8)	
Max Horiz 12=-216 (LC 6)	
Max Uplift 8=-1034 (LC 9), 12=-965 (LC 8)	
Max Grav 8=5576 (LC 1), 12=6583 (LC 2)	
<b>FORCES</b>	
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.	
TOP CHORD 2-3=-8169/1200, 3-4=-5874/962, 4-5=-5875/962, 5-6=-7773/1367, 2-12=-5449/846, 6-8=-5270/954	
BOT CHORD 12-13=-359/1510, 13-14=-359/1510, 11-14=-359/1510, 11-15=-1005/6716, 15-16=-1005/6716, 10-16=-1005/6716, 10-17=-1043/6376, 17-18=-1043/6376, 9-18=-1043/6376, 9-19=-261/961, 8-19=-261/961	
WEBS 4-10=-945/6186, 5-10=-2129/643, 5-9=-528/2227, 3-10=-2438/464, 3-11=-319/2639, 2-11=-711/5377, 6-9=-834/5484	

- NOTES**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.  
Bottom chords connected as follows: 2x6 - 2 rows staggered at 0-6-0 oc.  
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 12, 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 965 lb uplift at joint 12 and 1034 lb uplift at joint 8.
  - Use MiTek HUS26 (With 14-16d nails into Girder & 6-16d nails into Truss) or equivalent spaced at 2-3-0 oc max. starting at 1-9-12 from the left end to 13-11-4 to connect truss(es) to back face of bottom chord.
  - Use MiTek THD26-2 (With 18-16d nails into Girder & 12-10d nails into Truss) or equivalent at 15-10-8 from the left end to connect truss(es) to back face of bottom chord.
  - Fill all nail holes where hanger is in contact with lumber.

LOAD CASE(S)	Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15	
Uniform Loads (lb/ft)	Vert: 1-2=-60, 2-4=-60, 4-6=-60, 6-7=-60, 8-12=-20
Concentrated Loads (lb)	Vert: 10=-1219 (B), 13=-1219 (B), 14=-1219 (B), 15=-1219 (B), 16=-1219 (B), 17=-1219 (B), 18=-1219 (B), 19=-1681 (B)



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



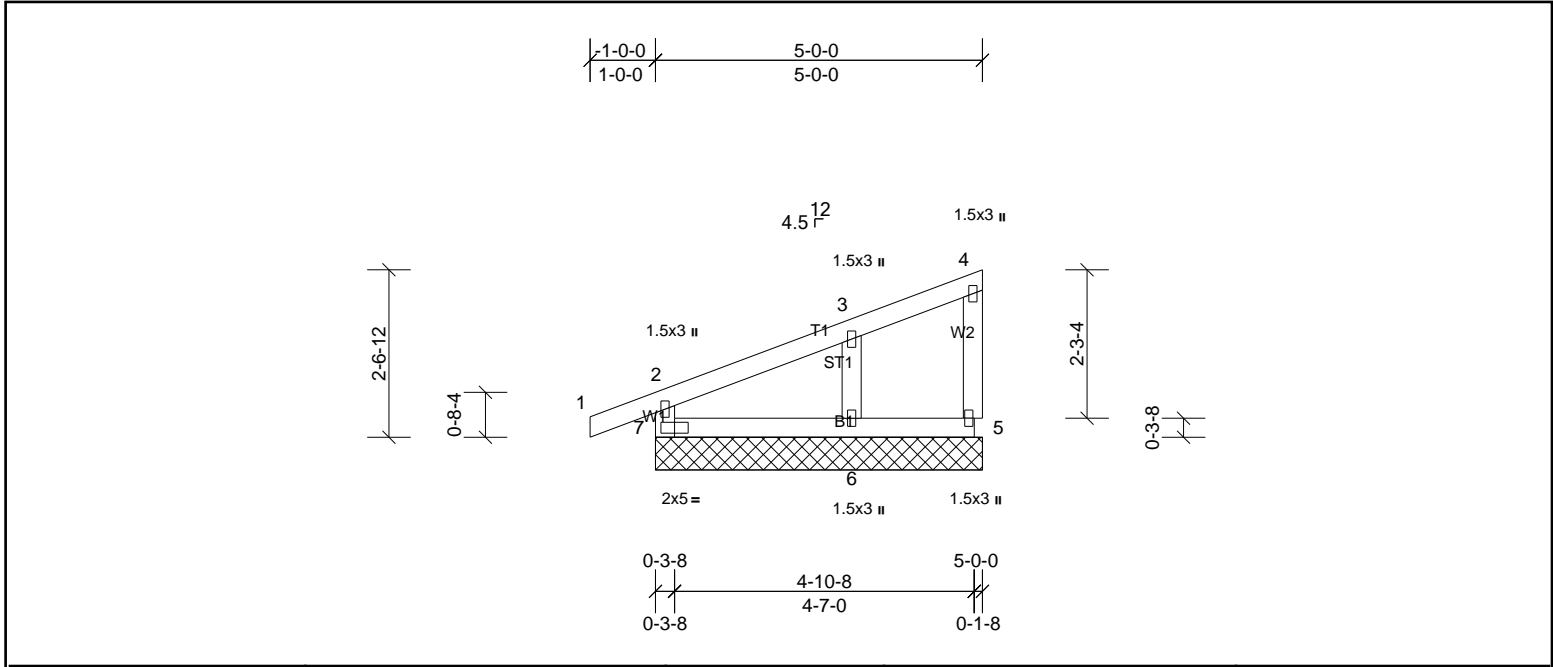
Job 72433774	Truss J01	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 22 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		
OTHERS	2x4 SP No.3		

REACTIONS	(lb/size)	5=49/5-0-0, (min. 0-1-8), 6=215/5-0-0, (min. 0-1-8), 7=181/5-0-0, (min. 0-1-8)
Max Horiz	7=82 (LC 6)	
Max Uplift	5=-11 (LC 10), 6=-74 (LC 10), 7=-41 (LC 6)	

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only.
  - Gable requires continuous bottom chord bearing.
  - Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 7 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 41 lb uplift at joint 7, 11 lb uplift at joint 5 and 74 lb uplift at joint 6.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.





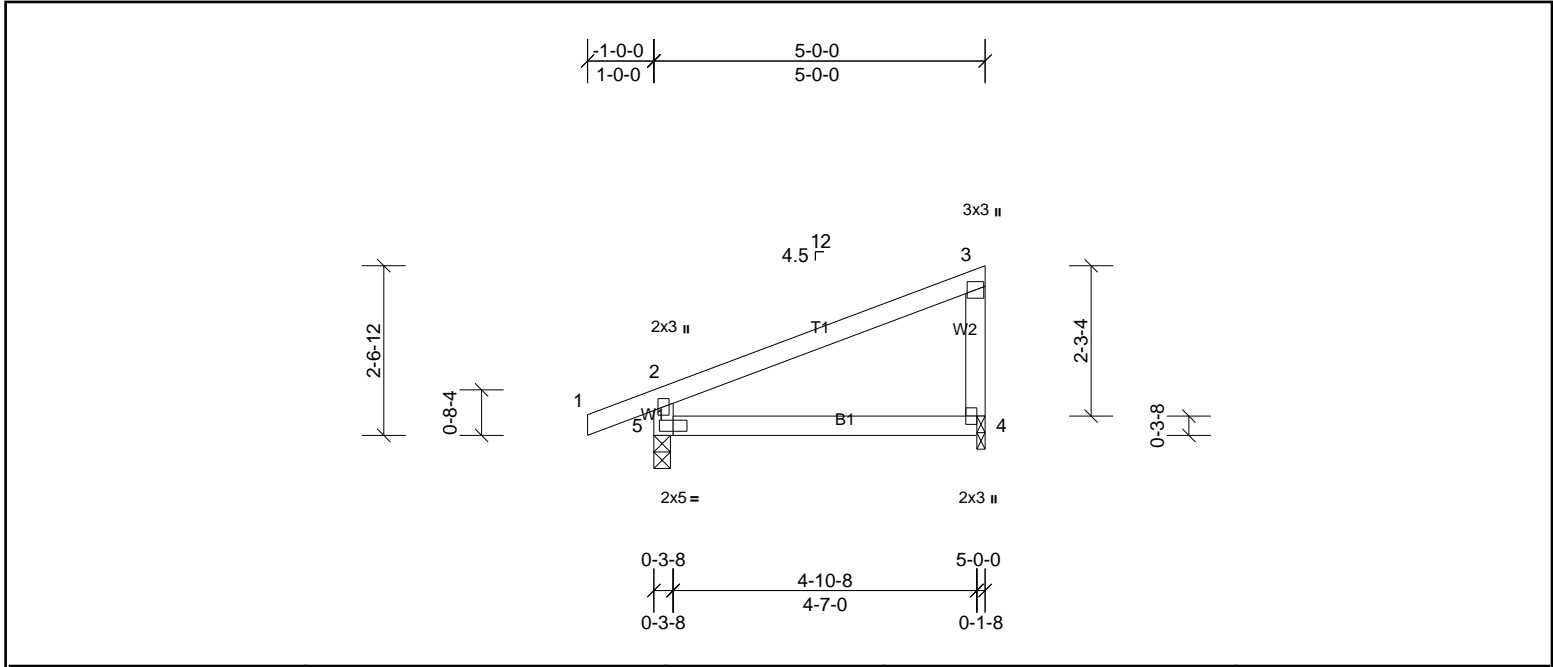
Job 72433774	Truss J02	Truss Type Truss	Qty 6	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.26	Vert(LL)	0.02	4-5	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	-0.04	4-5	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MR							Weight: 20 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-0-0 oc purlins, except end verticals.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	2x4 SP No.3		

REACTIONS	(lb/size)	4=180/0-1-8, (min. 0-1-8), 5=265/0-3-0, (min. 0-1-8)
Max Horiz	5=82 (LC 6)	
Max Uplift	4=92 (LC 6), 5=109 (LC 6)	

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left exposed; porch left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Bearing at joint(s) 5, 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
  - Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 109 lb uplift at joint 5 and 92 lb uplift at joint 4.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



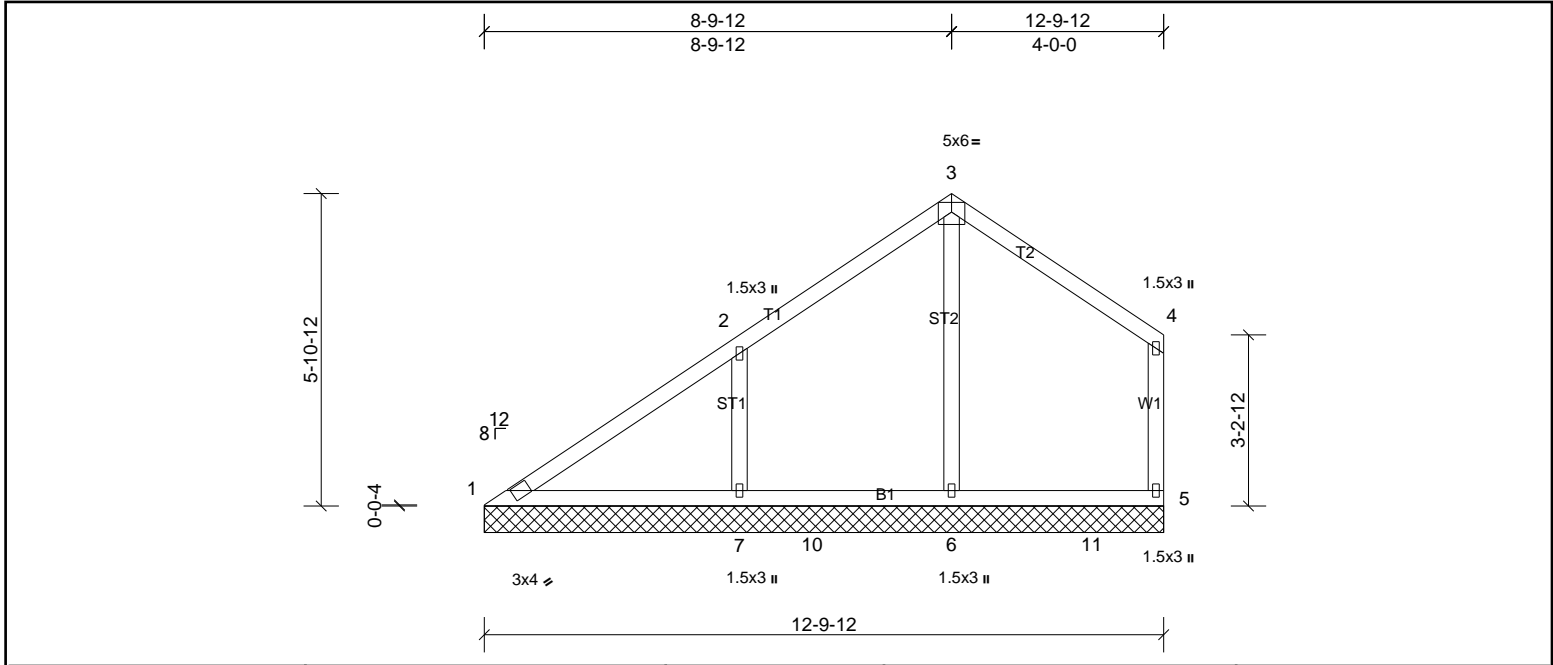
Job 72433774	Truss V1	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 57 lb	FT = 20%

LUMBER	BRACING
TOP CHORD 2x4 SP No.2	TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD 2x4 SP No.2	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.3	
OTHERS 2x4 SP No.3	

REACTIONS	All bearings 12-9-12.
(lb) - Max Horiz	1=172 (LC 10)
Max Uplift	All uplift 100 (lb) or less at joint(s) 1, 5 except 7=180 (LC 10)
Max Grav	All reactions 250 (lb) or less at joint(s) 1, 5 except 6=391 (LC 18), 7=536 (LC 18)

FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-280/142
BOT CHORD	1-7=-85/250
WEBS	2-7=-379/211

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 1 except (jt=lb) 7=180.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



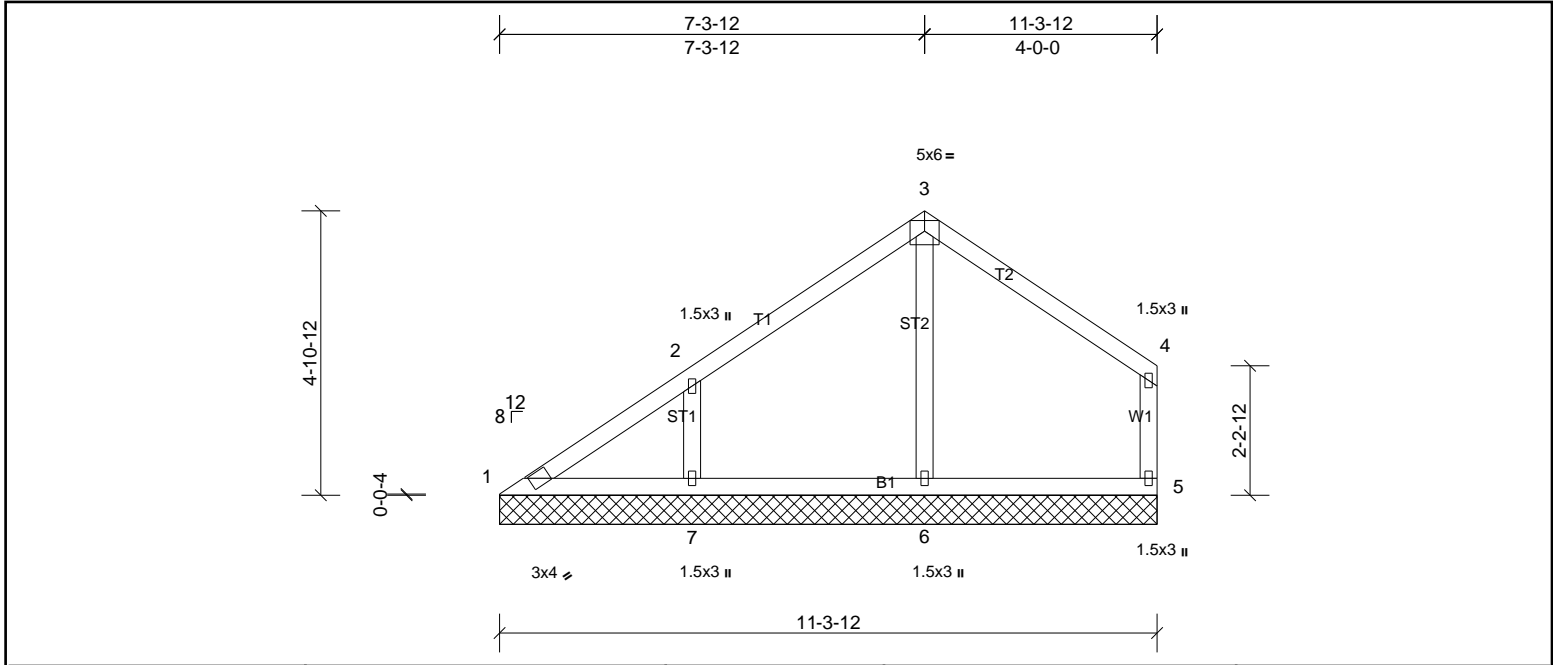
Job 72433774	Truss V2	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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UFP Mid Atlantic LLC, 5631 S. NC 62, Burlington, NC, Gina Tolley

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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 48 lb	FT = 20%

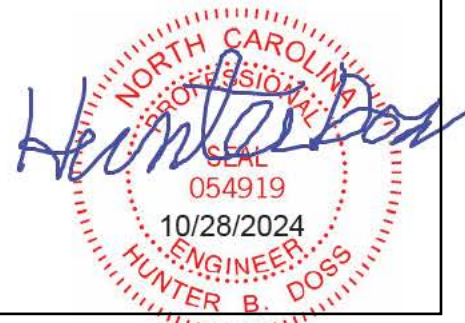
**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS**  
All bearings 11-3-12.  
(lb) - Max Horiz 1=132 (LC 10)  
Max Uplift All uplift 100 (lb) or less at joint(s) 1, 5 except 7=146 (LC 10)  
Max Grav All reactions 250 (lb) or less at joint(s) 1, 5 except 6=286 (LC 18), 7=364 (LC 18)

**FORCES**  
(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
WEBS 2-7=-320/182

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 1 except (jt=lb) 7=146.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



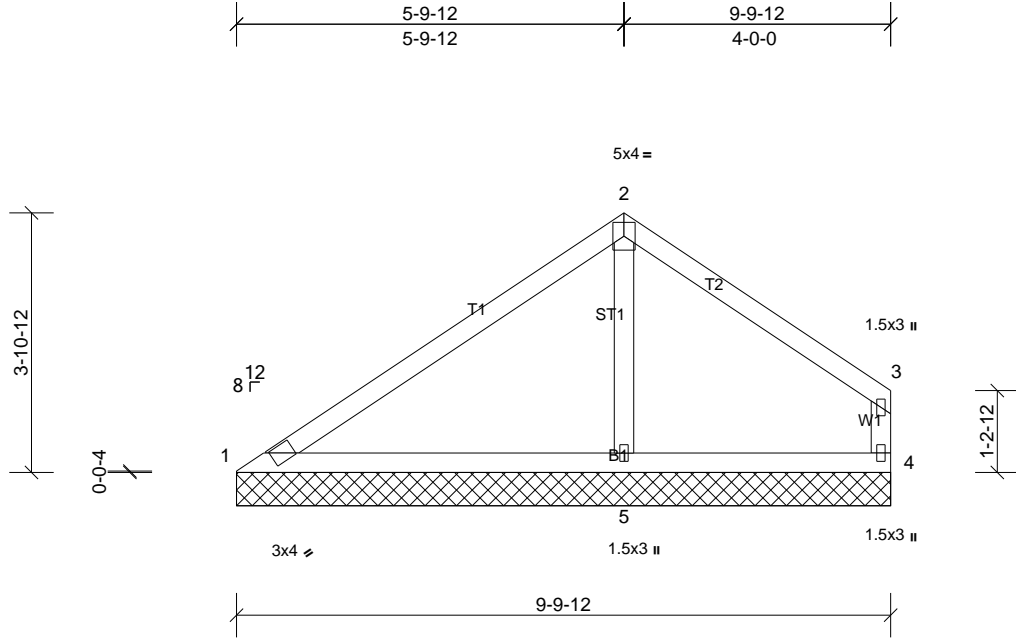
Job 72433774	Truss V3	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.38	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.40	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horiz(TL)	0.01	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 38 lb	FT = 20%

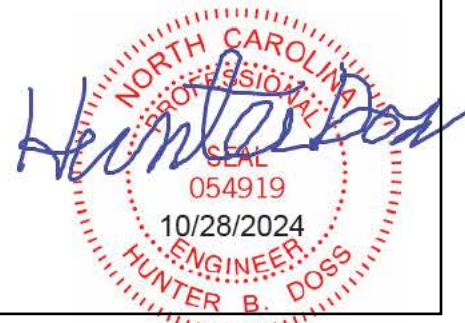
**LUMBER**  
TOP CHORD 2x4 SP No.2  
BOT CHORD 2x4 SP No.2  
WEBS 2x4 SP No.3  
OTHERS 2x4 SP No.3

**BRACING**  
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

**REACTIONS** (lb/size) 1=190/9-9-12, (min. 0-1-8), 4=89/9-9-12, (min. 0-1-8), 5=494/9-9-12, (min. 0-1-8)  
Max Horiz 1=93 (LC 7)  
Max Uplift 1=40 (LC 11), 4=72 (LC 11), 5=93 (LC 10)  
Max Grav 1=190 (LC 1), 4=142 (LC 25), 5=523 (LC 18)

**FORCES** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-292/161  
BOT CHORD 1-5=-87/271  
WEBS 2-5=-351/114

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 40 lb uplift at joint 1, 72 lb uplift at joint 4 and 93 lb uplift at joint 5.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.



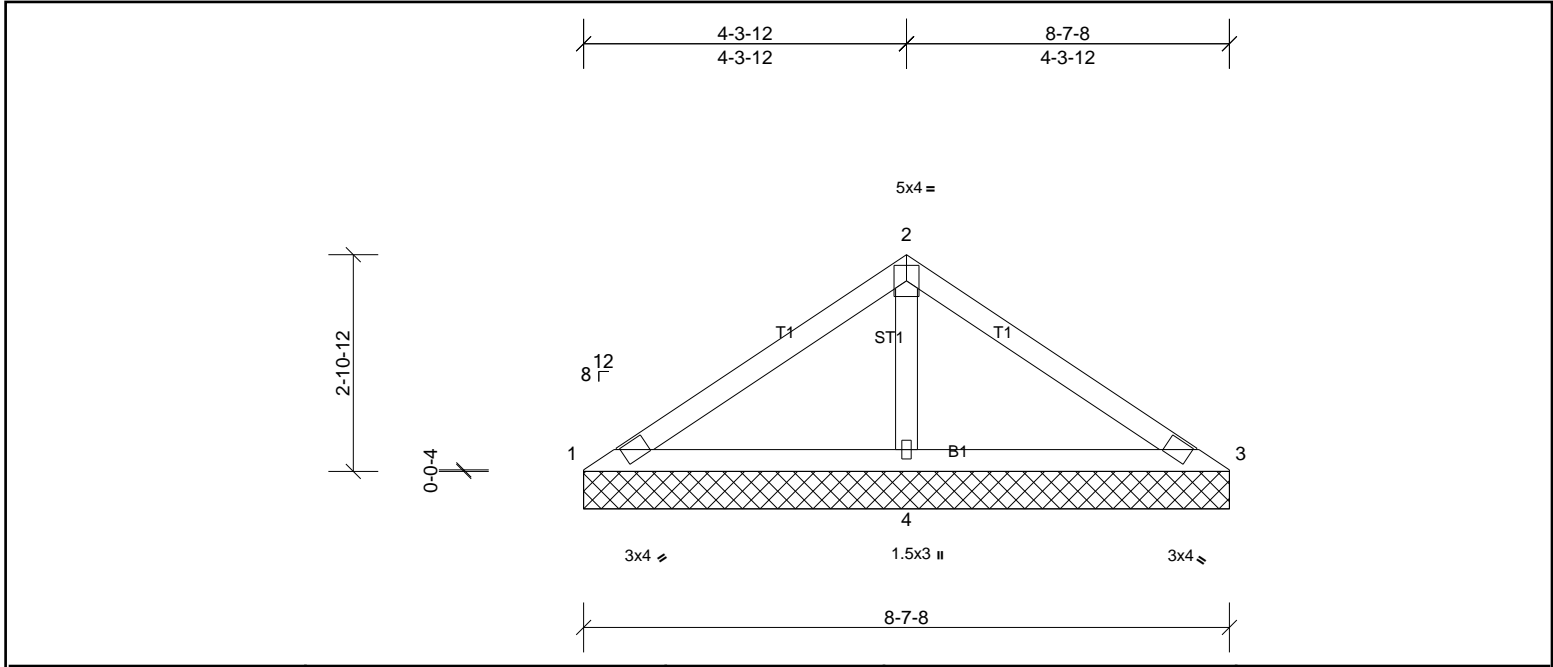
Job 72433774	Truss V4	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CFI Job Reference (optional)
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Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.20	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 30 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 8-4-2 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.
OTHERS	2x4 SP No.3		

REACTIONS	(lb/size)	1=45/8-7-8, (min. 0-1-8), 3=45/8-7-8, (min. 0-1-8), 4=601/8-7-8, (min. 0-1-8)
Max Horiz	1=70 (LC 6)	
Max Uplift	1=10 (LC 25), 3=15 (LC 6), 4=89 (LC 10)	
Max Grav	1=76 (LC 24), 3=76 (LC 25), 4=601 (LC 1)	

FORCES	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD	1-2=-69/289, 2-3=-39/289
WEBS	2-4=-535/108

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
  - 2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 3) Gable requires continuous bottom chord bearing.
  - 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - 5) \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 1, 15 lb uplift at joint 3 and 89 lb uplift at joint 4.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.





Job 72433774	Truss V5	Truss Type Truss	Qty 1	Ply 1	SDH - BENSON II CF1 Job Reference (optional)
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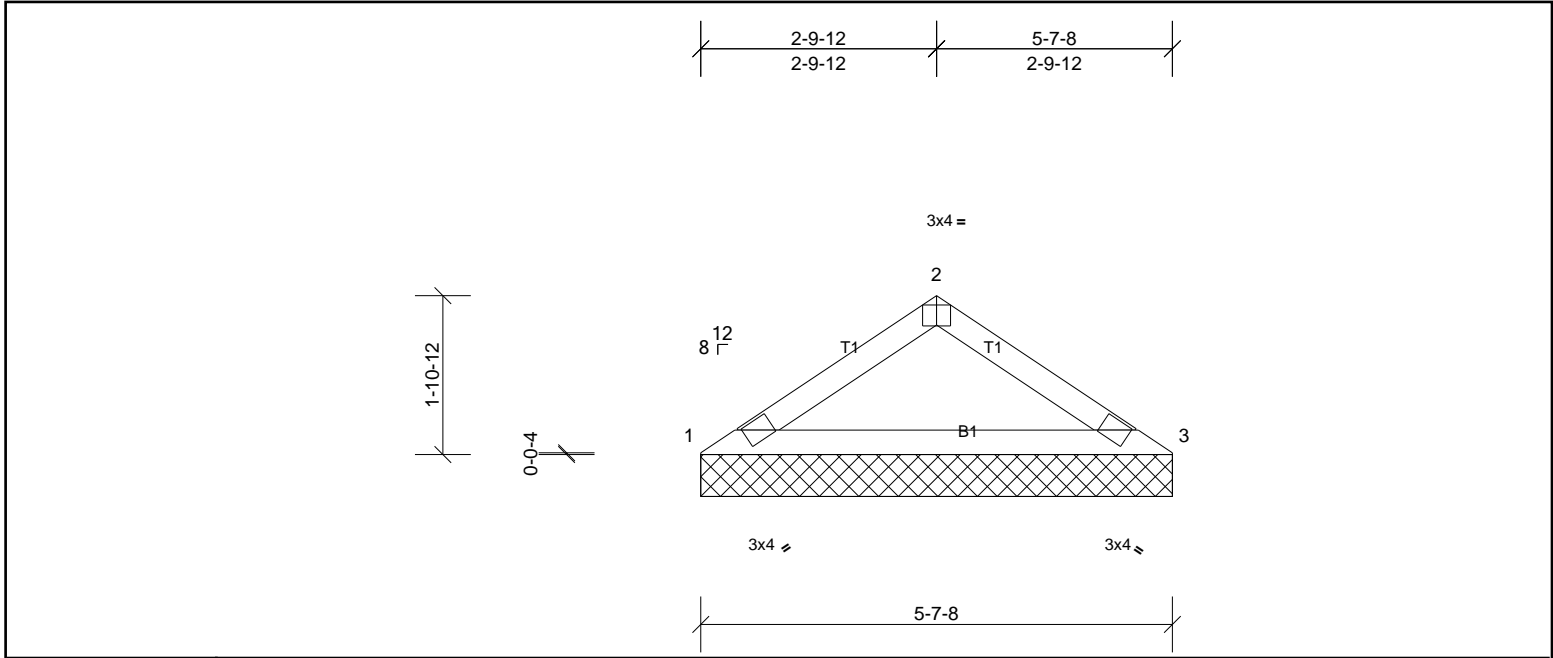


Plate Offsets (X, Y): [2:0-2-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.15	TC	0.22	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.01	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 17 lb	FT = 20%

LUMBER		BRACING	
TOP CHORD	2x4 SP No.2	TOP CHORD	Structural wood sheathing directly applied or 5-7-8 oc purlins.
BOT CHORD	2x4 SP No.2	BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
<b>REACTIONS</b>	(lb/size)	1=225/5-7-8, (min. 0-1-8), 3=225/5-7-8, (min. 0-1-8)	
	Max Horiz	1=44 (LC 8)	
	Max Uplift	1=29 (LC 10), 3=29 (LC 11)	
<b>FORCES</b>	(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.		
TOP CHORD	1-2=-426/50, 2-3=-274/52		
BOT CHORD	1-3=-55/336		

- NOTES**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) exterior zone and C-C Exterior (2) zone; cantilever left and right exposed; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Gable requires continuous bottom chord bearing.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 1 and 29 lb uplift at joint 3.



This design is based upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of the Building Designer. Building Designer shall verify all design information on this sheet for conformance with conditions and requirements of the specific building and governing codes and ordinances. Building Designer accepts responsibility for the correctness or accuracy of the design information as it may relate to a specific building. Certification is valid only when truss is fabricated by a UFPI plant. Bracing shown is for lateral support of truss members only and does not replace erection and permanent bracing. Refer to Building Component Safety Information (BCSI) for general guidance regarding storage, erection and bracing available from SBCA and Truss Plate Institute.

