

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 2000367-2000367A
2307- JRT -DAKOTA II

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by 84 Components - #2383.

Pages or sheets covered by this seal: I41377982 thru I41378003

My license renewal date for the state of North Carolina is December 31, 2020.

North Carolina COA: C-0844



May 21, 2020

Sevier, Scott

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job 2000367-2000367A	Truss A	Truss Type ROOF TRUSS	Qty 10	Ply 1	2307-JRT-DAKOTA II	I41377982
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84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:01:53 2020 Page 1
ID:ceuvEDckNGn_oUah?G0U8dzEclS-SLjawL7XTJun88gGxhDR615kiJenG7ZIBzrNLzEbj

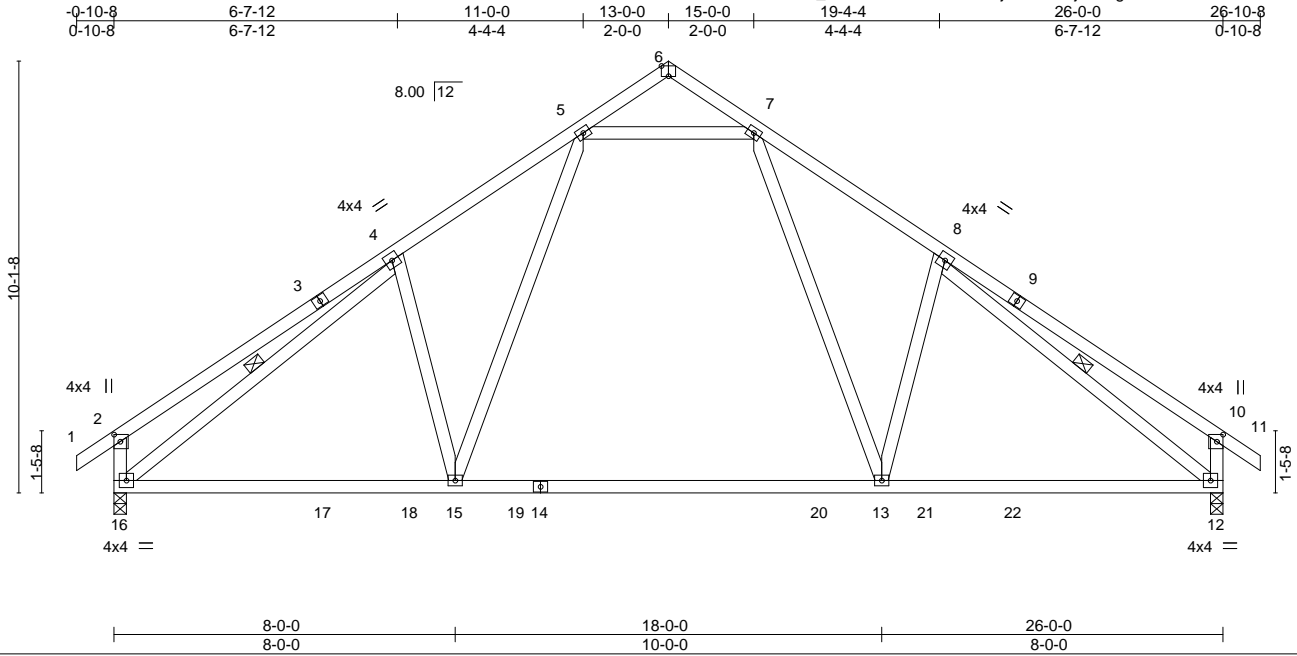


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [6:0-2-0,Edge], [10:0-2-0,0-1-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.64	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.76	Vert(LL) -0.39 13-15 >798 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.44	Vert(CT) -0.56 13-15 >551 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 164 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-9-12 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 4-16, 8-12

REACTIONS. (size) 16=0-3-8, 12=0-3-8
 Max Horz 16=273(LC 11)
 Max Uplift 16=126(LC 12), 12=126(LC 13)
 Max Grav 16=1165(LC 20), 12=1165(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-381/239, 4-5=-1323/338, 7-8=-1323/338, 8-10=-381/239, 2-16=-403/228, 10-12=-402/228
 BOT CHORD 15-16=-130/1191, 13-15=-11/927, 12-13=-82/1056
 WEBS 7-13=-152/617, 8-13=-265/281, 5-15=-151/617, 4-15=-265/281, 4-16=-1197/24, 8-12=-1196/24, 5-7=-791/286

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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
 - All plates are 3x4 MT20 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 12. This connection is for uplift only and does not consider lateral forces.
 - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss A1	Truss Type Common	Qty 2	Ply 1	2307- JRT -DAKOTA II	I41377983
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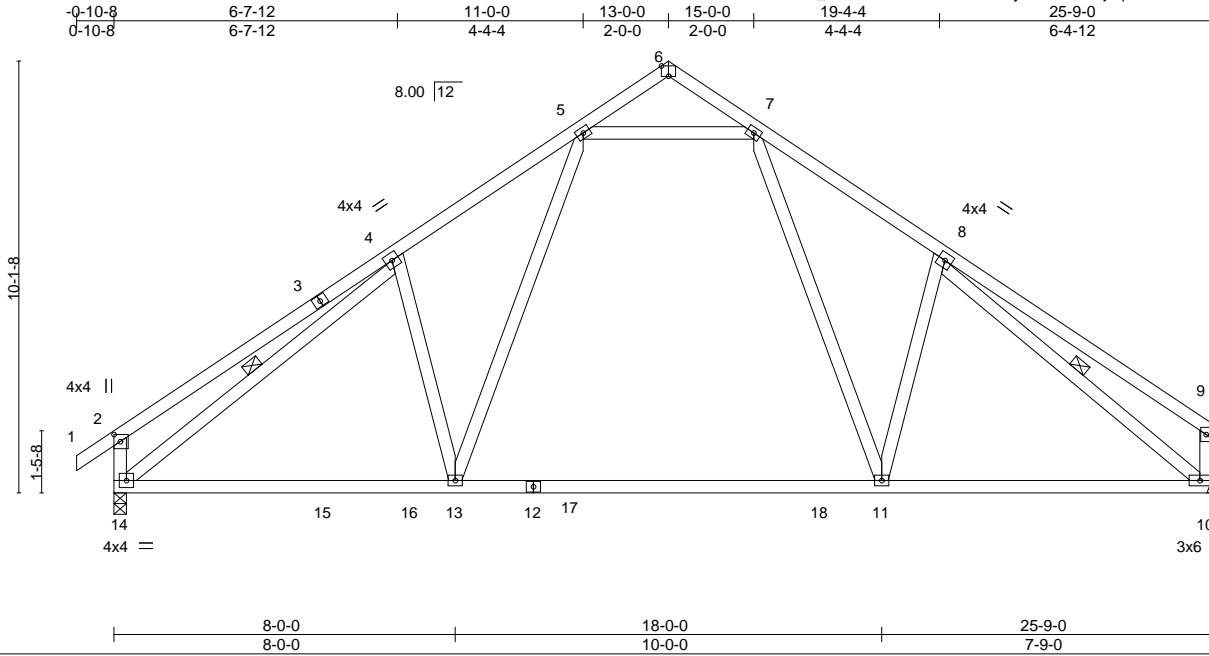
84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:01:54 2020 Page 1

ID:ceuvEDckNGn_oUaH?G0U8dzEclS-xXGy7GMlInslPljsqfCSzJrHZ6efWIOjXriPvozEbjh

Job Reference (optional)



Scale = 1:54.0

Plate Offsets (X,Y)--	[2:0-2-0,0-1-12], [6:0-2-0,Edge]				
LOADING (psf)	SPACING- 2-0-0	CSI.	DEFL. in (loc) l/defl L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.42 11-13 >728 240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.77	Vert(CT) -0.59 11-13 >514 180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.44	Horz(CT) 0.03 10 n/a n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS		Weight: 161 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-8-2 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 4-14, 8-10

REACTIONS. (size) 14=0-3-8, 10=Mechanical
 Max Horz 14=270(LC 11)
 Max Uplift 14=-125(LC 12), 10=-103(LC 13)
 Max Grav 14=1142(LC 19), 10=1049(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-369/232, 4-5=-1291/330, 7-8=-1237/329, 8-9=-255/166, 2-14=-392/223, 9-10=-267/148
 BOT CHORD 13-14=-144/1158, 11-13=-43/883, 10-11=-123/975
 WEBS 4-13=-262/277, 5-13=-144/626, 7-11=-140/526, 8-11=-236/271, 4-14=-1174/29, 8-10=-1218/107, 5-7=-762/287

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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) All plates are 3x4 MT20 unless otherwise indicated.
 - 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 6) Refer to girder(s) for truss to truss connections.
 - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 10=103.
 - 8) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14. This connection is for uplift only and does not consider lateral forces.



May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss A1E	Truss Type Common Supported Gable	Qty 1	Ply 1	2307- JRT -DAKOTA II	I41377984
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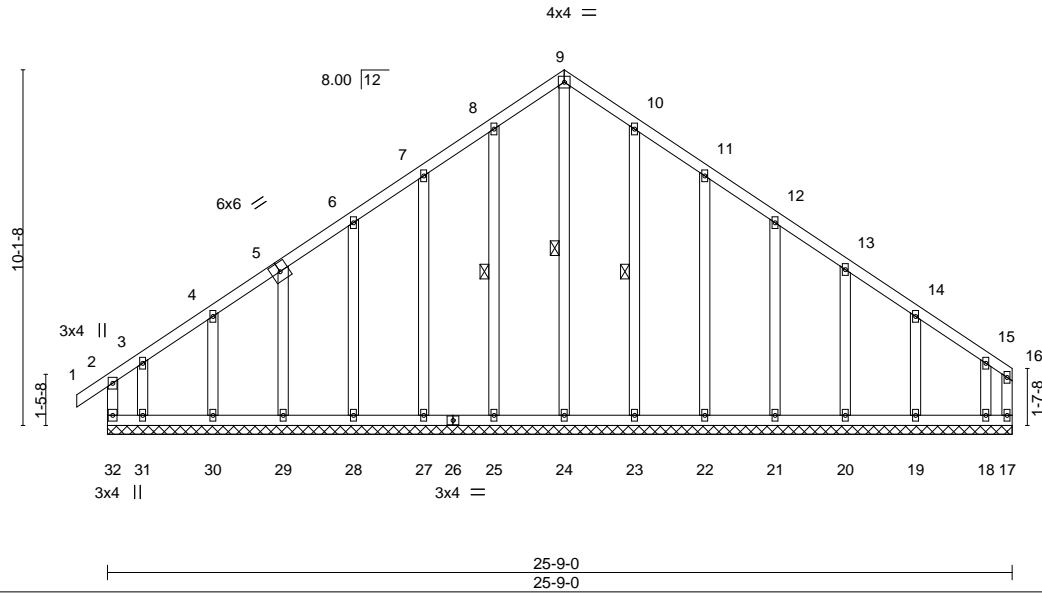
84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:01:57 2020 Page 1

ID:ceuvEDckNGn_oUaH?G0U8dzEclS-L6y5IIOdaiEKGIrRVnm9byTtJq7j7k9Dpx3W7zEbj

-0-10-8 13-0-0 25-9-0
0-10-8 13-0-0 12-9-0



Scale = 1:65.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.28	Vert(LL) -0.00	1	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.15	Vert(CT) -0.00	1	n/r	90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.14	Horz(CT) -0.00	17	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-R						
							Weight: 191 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, Except: 10-0-0 oc bracing: 31-32,30-31,29-30.
WEBS 1 Row at midpt 9-24, 8-25, 10-23

REACTIONS. All bearings 25-9-0.
(lb) - Max Horz 32=270(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 25, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 32=281(LC 8), 17=302(LC 11), 31=282(LC 9), 18=268(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 25, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 32=335(LC 9), 17=306(LC 8), 24=270(LC 13), 31=332(LC 10), 18=349(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-221/274, 8-9=-265/324, 9-10=-265/324, 10-11=-222/274
WEBS 9-24=-291/175

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 32, 17, 25, 27, 28, 29, 30, 31, 23, 22, 21, 20, 19, and 18. This connection is for uplift only and does not consider lateral forces.



May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MiTek Affiliate

818 Soundside Road
Edenton, NC 27932

Job 2000367-2000367A	Truss A2	Truss Type Roof Special	Qty 4	Ply 1	2307- JRT -DAKOTA II	I41377985
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84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:01:58 2020 Page 1

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Scale = 1:62.7

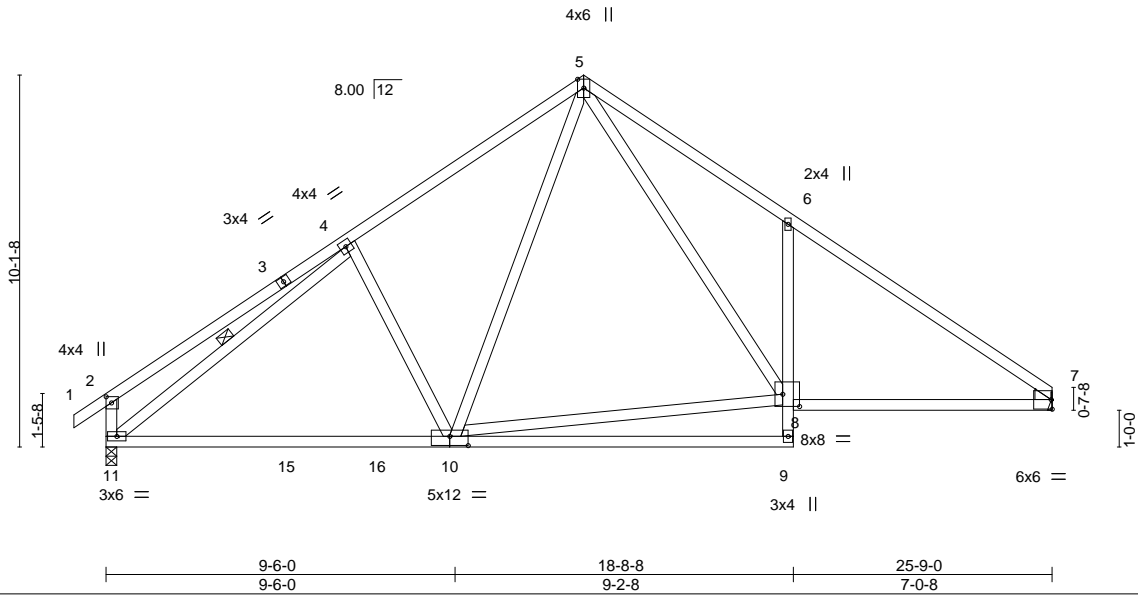


Plate Offsets (X,Y)-- [2:0-2-0,0-1-12], [7:0-3-13,0-0-4], [7:0-0-3,0-0-2], [7:Edge,0-3-2], [8:0-5-8,0-4-0], [10:0-6-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.54	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.87	Vert(LL) -0.17 10-11 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.52	Vert(CT) -0.34 9-10 >917 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 7 n/a n/a		
	Code IRC2015/TPI2014			Weight: 161 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
6-9: 2x4 SP No.3
WEBS 2x4 SP No.3
WEDGE
Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-3-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-11

REACTIONS. (size) 11=0-3-8, 7=Mechanical
Max Horz 11=-250(LC 10)
Max Uplift 11=-125(LC 12), 7=-104(LC 13)
Max Grav 11=1087(LC 1), 7=1023(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-380/197, 4-5=-1106/324, 5-6=-1426/447, 6-7=-1459/270, 2-11=-403/196
BOT CHORD 10-11=-185/1016, 6-8=-422/297, 7-8=-119/1127
WEBS 4-10=-280/266, 5-10=-111/458, 8-10=-39/659, 5-8=-257/776, 4-11=-990/85

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Refer to girder(s) for truss to truss connections.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=104.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 11. This connection is for uplift only and does not consider lateral forces.



May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

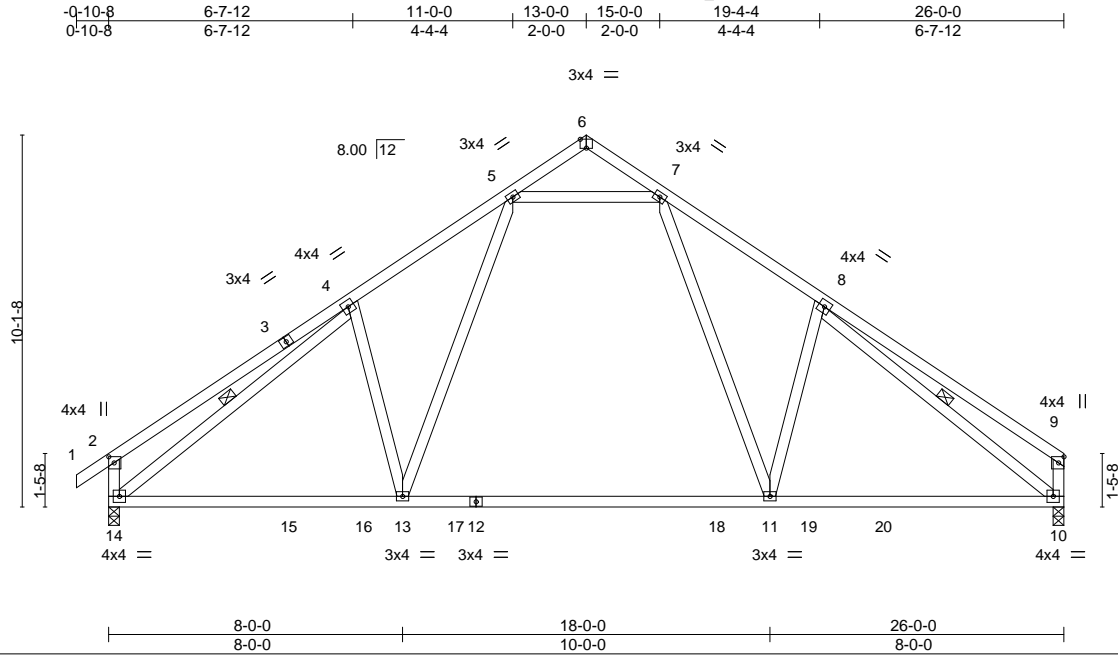
Job 2000367-2000367A	Truss A3	Truss Type ROOF TRUSS	Qty 8	Ply 1	2307- JRT -DAKOTA II	141377986
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84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:00 2020 Page 1

ID:ceuvEDckNGn_oUaH?G0U8dzEclS-lheENJRWtdcv7DA0BvJsDa5JNXiFwPsbvn9j7RzEbjb



Scale = 1:62.7

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.61	Vert(LL) -0.39	11-13	>798	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.76	Vert(CT) -0.56	11-13	>551	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.46	Horz(CT) 0.03	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS					Weight: 162 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 4-9-9 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS 1 Row at midpt 4-14, 8-10

REACTIONS. (size) 14=0-3-8, 10=0-3-8
 Max Horz 14=268(LC 9)
 Max Uplift 14=-126(LC 12), 10=-105(LC 13)
 Max Grav 14=1166(LC 20), 10=1106(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-4=-371/232, 4-5=-1320/333, 7-8=-1329/336, 8-9=-291/175, 2-14=-394/223, 9-10=-292/156
 BOT CHORD 13-14=-144/1184, 11-13=-37/920, 10-11=-123/1053
 WEBS 7-11=-148/619, 8-11=-269/279, 5-13=-145/607, 4-13=-257/277, 4-14=-1203/32, 8-10=-1250/97, 5-7=-795/288

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 14 and 10. This connection is for uplift only and does not consider lateral forces.
 - 6) ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

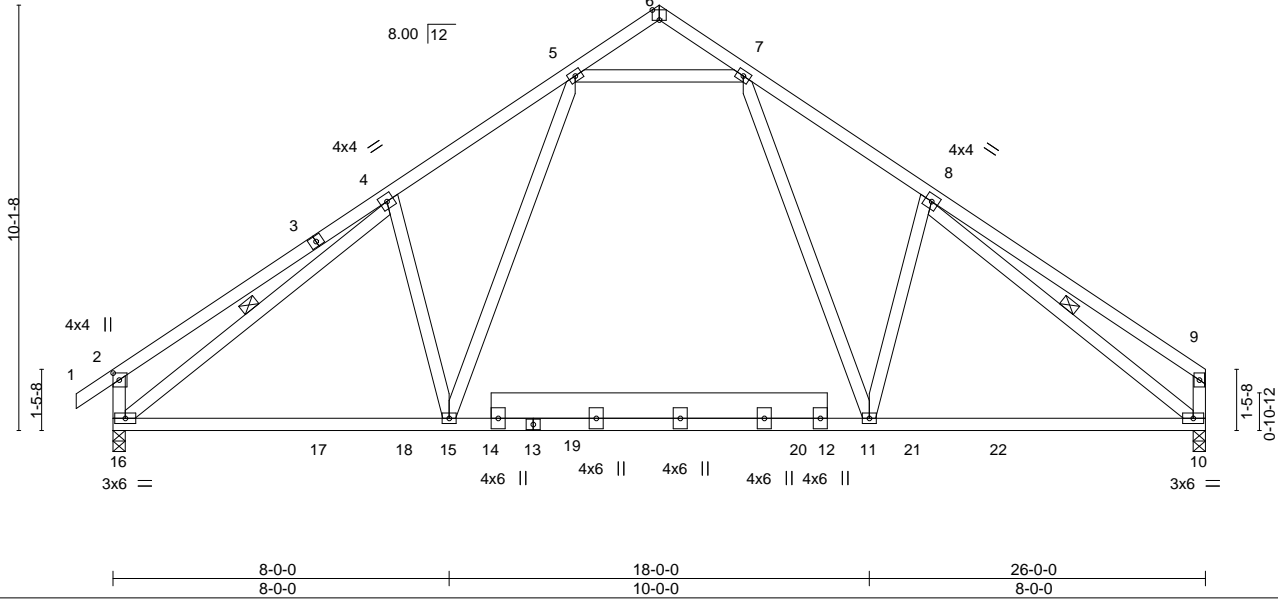
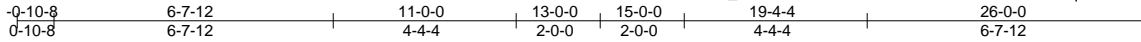


818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss A3A	Truss Type ROOF TRUSS	Qty 1	Ply 1	2307- JRT -DAKOTA II	141377987
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84 Components (Dunn), Dunn, NC - 28334, 8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:01 2020 Page 1

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Scale = 1:54.8

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

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.84	Vert(LL) -0.17 15-16 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.44	Vert(CT) -0.24 15-16 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS	Horz(CT) 0.03 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 187 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2 *Except*
12-14: 2x8 SP No.2
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-10-6 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 4-16, 8-10

REACTIONS. (size) 16=0-3-8, 10=0-3-8
Max Horz 16=268(LC 9)
Max Uplift 16=-126(LC 12), 10=-105(LC 13)
Max Grav 16=1159(LC 20), 10=1099(LC 21)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-384/226, 4-5=-1282/338, 7-8=-1291/341, 8-9=-319/169, 2-16=-412/219, 9-10=-307/152
BOT CHORD 15-16=-147/1155, 11-15=-40/897, 10-11=-126/1025
WEBS 7-11=-149/596, 8-11=-271/278, 5-15=-146/583, 4-15=-260/275, 4-16=-1133/44, 8-10=-1179/109, 5-7=-772/291

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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
 - All plates are 3x4 MT20 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 16 and 10. This connection is for uplift only and does not consider lateral forces.
 - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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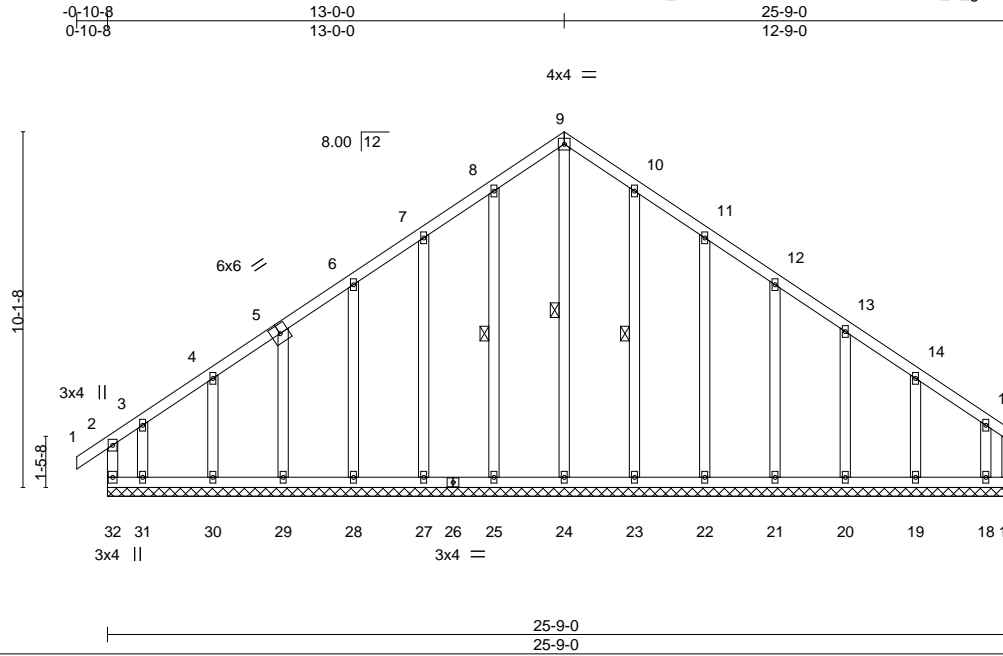
Job 2000367-2000367A	Truss A4E	Truss Type Common Supported Gable	Qty 1	Ply 1	2307- JRT -DAKOTA II	I41377989
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84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:03 2020 Page 1

ID:ceuvEDckNGn_oUaH?G0U8dzEclS-AGJM?LTOAY_T_gvbs2tZrDjuoktX7rD2bkONkmzEbjY



Scale = 1:65.6

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.28	Vert(LL)	-0.00	1	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	-0.00	1	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Horz(CT)	-0.00	17	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R						
	Code IRC2015/TPI2014						Weight: 191 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, Except: 10-0-0 oc bracing: 31-32,30-31,29-30.
WEBS 1 Row at midpt 9-24, 8-25, 10-23

REACTIONS. All bearings 25-9-0.
(lb) - Max Horz 32=270(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 25, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 32=281(LC 8), 17=302(LC 11), 31=282(LC 9), 18=268(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 25, 27, 28, 29, 30, 23, 22, 21, 20, 19 except 32=335(LC 9), 17=306(LC 8), 24=270(LC 13), 31=332(LC 10), 18=349(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=-221/274, 8-9=-265/324, 9-10=-265/324, 10-11=-222/274
WEBS 9-24=-291/175

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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Job 2000367-2000367A	Truss AE	Truss Type GABLE	Qty 1	Ply 1	2307-JRT-DAKOTA II	I41377990
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84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:05 2020 Page 1

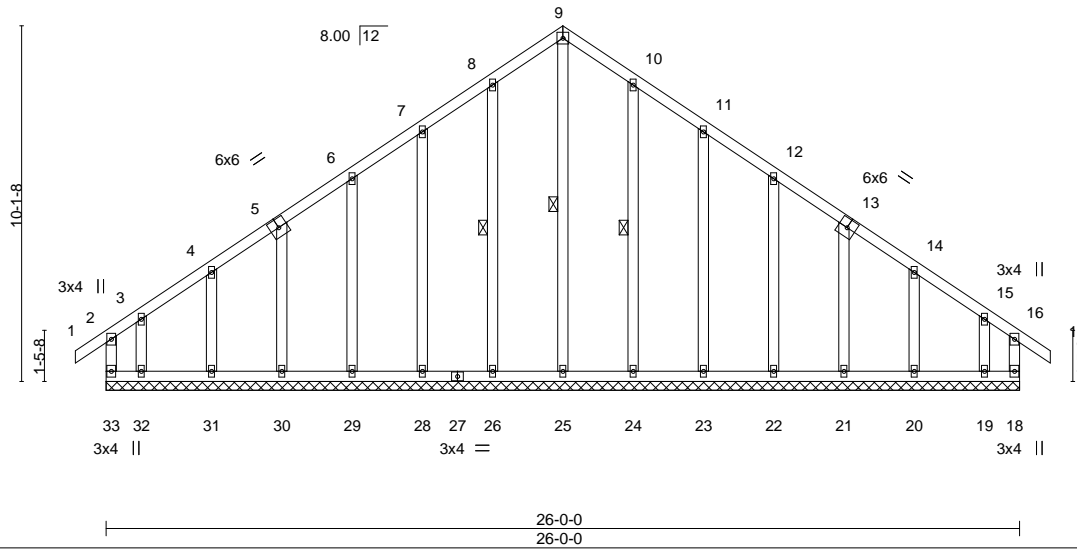
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Job Reference (optional)

$0-10-8$ $11-0-0$ $13-0-0$ $15-0-0$ $26-0-0$ $26-10-8$
 $0-10-8$ $11-0-0$ $2-0-0$ $2-0-0$ $11-0-0$ $0-10-8$

4x4 =

Scale = 1:65.6



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.27	Vert(LL)	-0.00	17	n/r	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.15	Vert(CT)	-0.00	17	n/r		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.14	Horz(CT)	0.01	18	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-R						
	Code IRC2015/TPI2014						Weight: 194 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.
WEBS 1 Row at midpt 9-25, 8-26, 10-24

REACTIONS. All bearings 26-0-0.
(lb) - Max Horz 33=273(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 26, 28, 29, 30, 31, 24, 23, 22, 21, 20 except 33=260(LC 8), 18=209(LC 9), 32=255(LC 9), 19=216(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 18, 26, 28, 29, 30, 31, 24, 23, 22, 21, 20 except 33=303(LC 11), 25=269(LC 13), 32=320(LC 10), 19=279(LC 11)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 7-8=218/276, 8-9=262/327, 9-10=262/327, 10-11=218/276
WEBS 9-25=294/172

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - N/A
 - ATTIC SPACE SHOWN IS DESIGNED AS UNINHABITABLE.



May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

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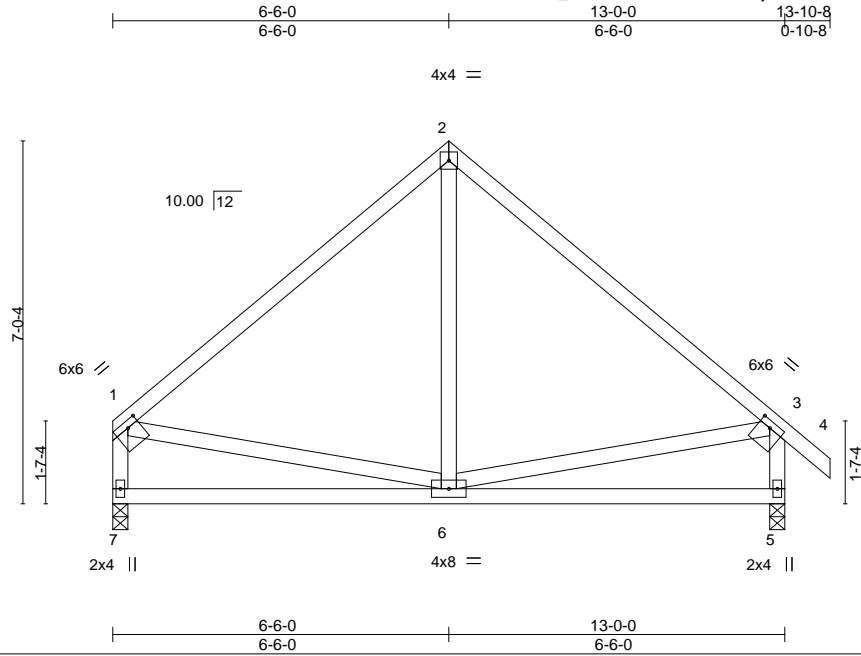
Job 2000367-2000367A	Truss B	Truss Type Common	Qty 1	Ply 1	2307- JRT -DAKOTA II	141377991
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84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:07 2020 Page 1

ID:ceuvEDckNGn_oUaH?G0U8dzEclS-21ZtrjWvEmUvSHCM5txV?3tUsLBD3g4dWMMbtXzEbjU



Scale = 1:44.6

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.66	Vert(LL) -0.03	6-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.36	Vert(CT) -0.07	6-7	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT) 0.00	5	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS					Weight: 78 lb	FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 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.

(size) 7=0-3-8, 5=0-3-8
 Max Horz 7=-195(LC 10)
 Max Uplift 7=-42(LC 12), 5=-61(LC 13)
 Max Grav 7=506(LC 1), 5=572(LC 1)

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

TOP CHORD 1-2=-473/120, 2-3=-480/127, 1-7=-449/126, 3-5=-515/169
 BOT CHORD 6-7=-187/265

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.



May 21, 2020

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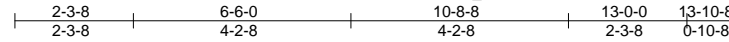
Job 2000367-2000367A	Truss B1	Truss Type Roof Special	Qty 1	Ply 1	2307- JRT -DAKOTA II	I41377992
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84 Components (Dunn),

Dunn, NC - 28334,

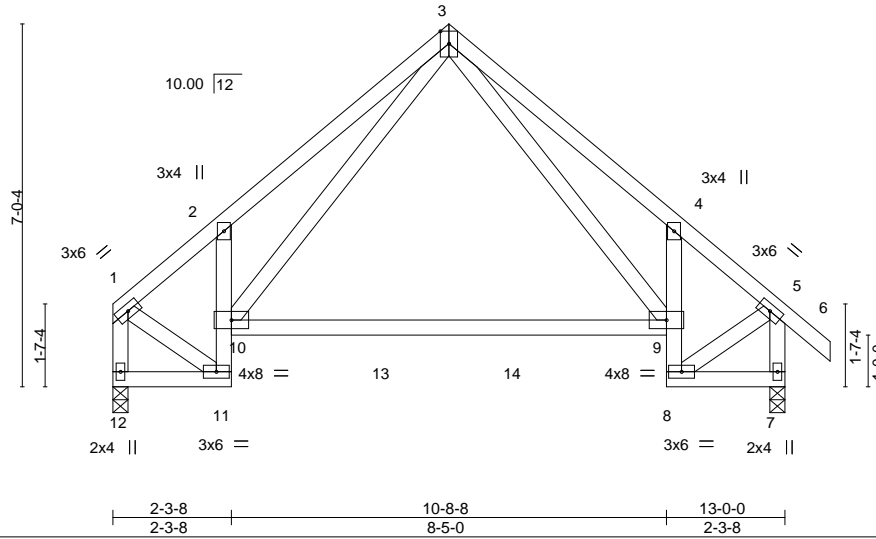
8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:08 2020 Page 1

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4x6 ||

Scale = 1:44.6

**LOADING** (psf)

TCLL 20.0
 TC DL 10.0
 BC LL 0.0 *
 BC DL 10.0

SPACING-

2-0-0
 Plate Grip DOL 1.15
 Lumber DOL 1.15
 Rep Stress Incr YES
 Code IRC2015/TPI2014

CSI.

TC 0.23
 BC 0.76
 WB 0.17
 Matrix-MS

DEFL.

	in (loc)	l/defl	L/d
Vert(LL)	-0.20 9-10	>762	240
Vert(CT)	-0.42 9-10	>362	180
Horz(CT)	0.11 7	n/a	n/a

PLATES

MT20

GRIP 244/190

Weight: 85 lb

FT = 20%

LUMBER-

TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 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.

(size) 12=0-3-8, 7=0-3-8
 Max Horz 12=-195(LC 8)
 Max Uplift 12=-42(LC 12), 7=-61(LC 13)
 Max Grav 12=506(LC 1), 7=572(LC 1)

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

TOP CHORD 1-2=-449/110, 2-3=-823/271, 3-4=-730/257, 4-5=-442/111, 1-12=-538/102, 5-7=-601/151
 BOT CHORD 2-10=-375/218, 9-10=-31/338, 4-9=-357/202
 WEBS 3-9=-153/441, 3-10=-172/523, 1-11=-79/358, 5-8=-48/353

NOTES-

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BC DL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BC DL = 10.0psf.
- One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 7. This connection is for uplift only and does not consider lateral forces.



May 21, 2020

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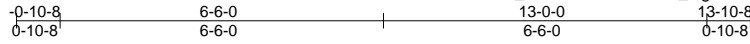
818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss BE	Truss Type Common Supported Gable	Qty 1	Ply 1	2307- JRT -DAKOTA II	141377993
					Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:09 2020 Page 1

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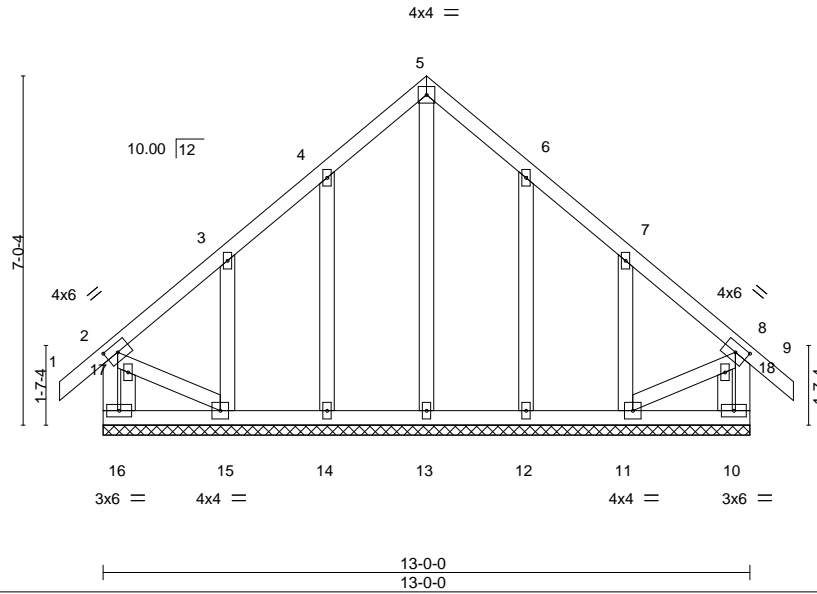


Plate Offsets (X,Y)-- [2:0-2-14,0-2-0], [8:0-2-14,0-2-0]

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.07	Vert(LL)	-0.00	9	n/r	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	-0.00	9	n/r		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.10	Horz(CT)	0.00	11	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 95 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. All bearings 13-0-0.
 (lb) - Max Horz 16--202(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 12 except 15--169(LC 12), 11--165(LC 13)
 Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCCL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss BGR	Truss Type Roof Special Girder	Qty 1	Ply 2	2307-JRT-DAKOTA II	I41377994
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84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:12 2020 Page 1

ID:ceuvEDckNGn_oUaH?G0U8dzEclS-P?MmuQa2217CZ35KuRXgi6bRNmNkm5Mge3MYlzEbjP

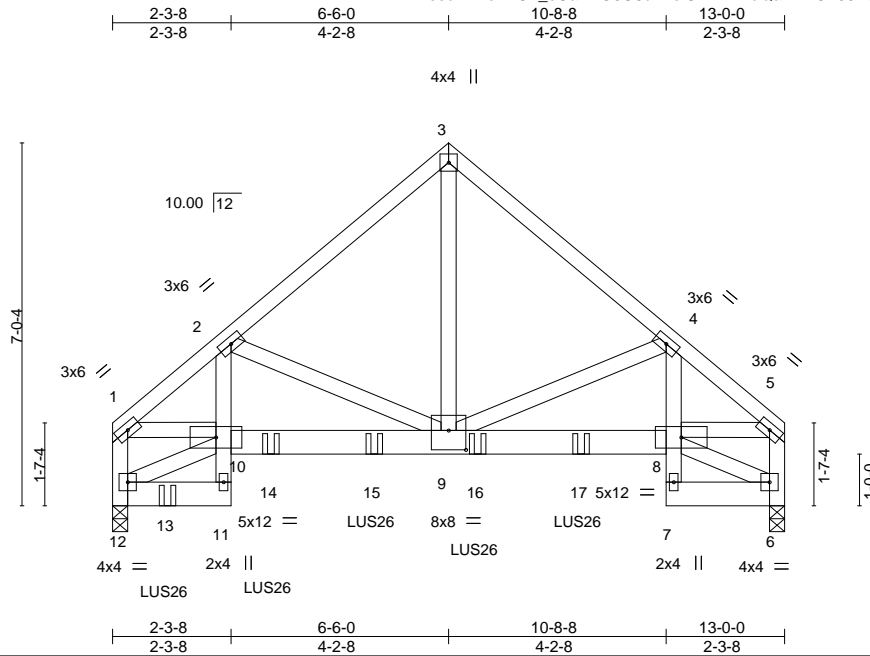


Plate Offsets (X,Y)-- [9:0-4-0,0-4-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.29	Vert(LL) -0.04	9-10	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.87	Vert(CT) -0.09	9-10	>999	180		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.74	Horz(CT) 0.06	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MS					Weight: 197 lb	FT = 20%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2 *Except*
2-11,4-7: 2x4 SP No.3
WEBS 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. (size) 12=0-3-8, 6=0-3-8
Max Horz 12=178(LC 11)
Max Uplift 12=-413(LC 12), 6=-362(LC 13)
Max Grav 12=3735(LC 1), 6=3288(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-4156/562, 2-3=-3092/450, 3-4=-3092/450, 4-5=-4254/553, 1-12=-3176/425, 5-6=-3255/423
BOT CHORD 10-11=-44/458, 2-10=-171/1009, 9-10=-468/3281, 8-9=-453/3338, 4-8=-154/1095
WEBS 3-9=-449/3582, 4-9=-1141/267, 2-9=-1078/274, 1-10=-380/3096, 5-8=-414/3223

- NOTES-**
- 2-ply truss to be connected together with 10d (0.120"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, 2x4 - 1 row at 0-7-0 oc.
Webs 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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Bearing at joint(s) 12, 6 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12 and 6. This connection is for uplift only and does not consider lateral forces.
 - Use Simpson Strong-Tie LUS26 (4-10d Girder, 4-10d Truss) or equivalent spaced at 2-0-0 oc max. starting at 1-0-12 from the left end to 9-0-12 to connect truss(es) to back face of bottom chord.
 - Fill all nail holes where hanger is in contact with lumber.
 - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 997 lb down and 123 lb up at 10-10-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
Continued on page 2



May 21, 2020

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818 Soundside Road
Edenton, NC 27932

Job 2000367-2000367A	Truss BGR	Truss Type Roof Special Girder	Qty 1	Ply 2	2307- JRT -DAKOTA II Job Reference (optional)	I41377994
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84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:12 2020 Page 2
ID:ceuvEDckNGn_oUaH?G0U8dzEclS-P?MmuQa22I7CZ35KuRXgi6bRNMmNkm5Mge3MYIzEbjP

LOAD CASE(S) Standard

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

Uniform Loads (plf)

Vert: 1-3=-60, 3-5=-60, 11-12=-20, 8-10=-20, 6-7=-20

Concentrated Loads (lb)

Vert: 8=-997(B) 13=-998(B) 14=-1003(B) 15=-1003(B) 16=-1003(B) 17=-1003(B)

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818 Soundside Road
Edenton, NC 27932

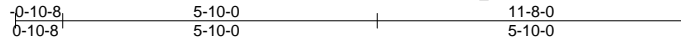
Job 2000367-2000367A	Truss C	Truss Type Common	Qty 2	Ply 1	2307- JRT -DAKOTA II	I41377995
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84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:13 2020 Page 1

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4x4 =

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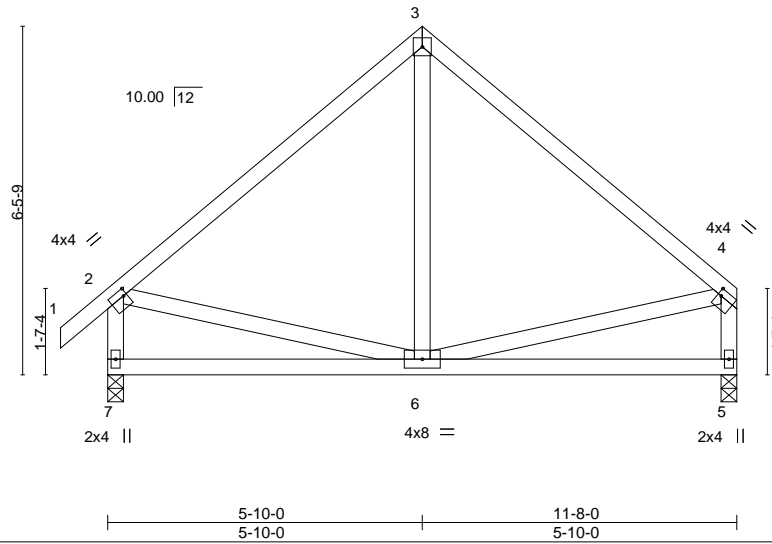


Plate Offsets (X,Y)-- [2:0-0-12,0-1-8], [4:0-0-12,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.50	Vert(LL)	-0.02	5-6	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.28	Vert(CT)	-0.05	5-6	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.08	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-MS						
	Code IRC2015/TPJ2014						Weight: 71 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 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. (size) 7=0-3-8, 5=0-3-8
 Max Horz 7=181(LC 9)
 Max Uplift 7=-56(LC 12), 5=-37(LC 13)
 Max Grav 7=519(LC 1), 5=452(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-422/118, 3-4=-415/112, 2-7=-468/160, 4-5=-401/117

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 7 and 5. This connection is for uplift only and does not consider lateral forces.



May 21, 2020

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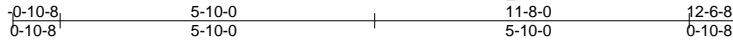


Job 2000367-2000367A	Truss CE	Truss Type Common Supported Gable	Qty 1	Ply 1	2307- JRT -DAKOTA II	I41377996
					Job Reference (optional)	

84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:14 2020 Page 1

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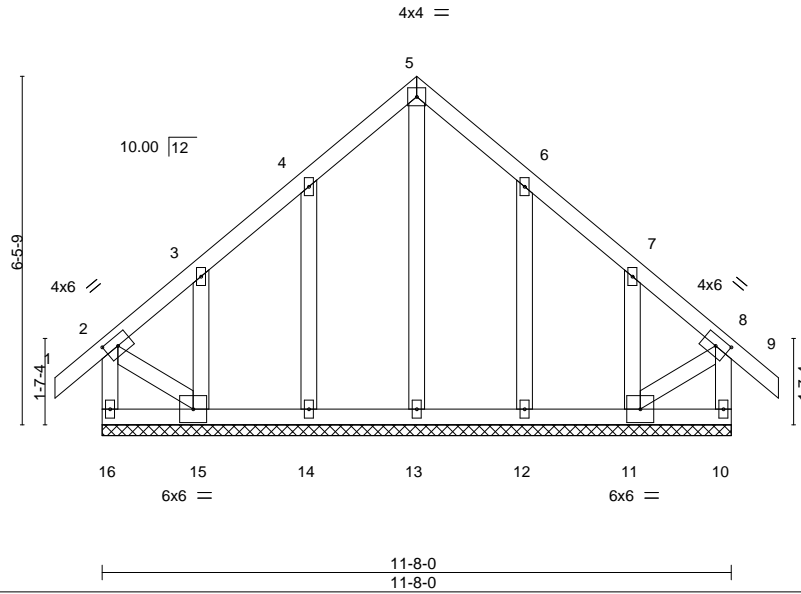


Plate Offsets (X,Y)-- [2:0-2-14,0-2-0], [8:0-2-14,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.07	Vert(LL) -0.00	9	n/r	120	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.04	Vert(CT) -0.00	9	n/r	90		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.08	Horz(CT) 0.00	10	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 82 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. All bearings 11-8-0.
(lb) - Max Horz 16=188(LC 11)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 12 except 15=159(LC 12), 11=154(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



May 21, 2020

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ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job 2000367-2000367A	Truss CGR	Truss Type Common Girder	Qty 1	Ply 2	2307- JRT -DAKOTA II Job Reference (optional)	I41377997
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84 Components (Dunn), Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:16 2020 Page 2
ID:ceuvEDckNGn_oUaH?G0U8dzEclS-HmcHkodY6Xdd2gO57Gccsy!78z89gdkybG1ZhWzEbjL

LOAD CASE(S) Standard

- 1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
Uniform Loads (plf)
Vert: 1-2=-60, 2-3=-60, 4-6=-20
Concentrated Loads (lb)
Vert: 5=-997(B) 7=-997(B) 8=-997(B) 9=-997(B) 10=-997(B)

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818 Soundside Road
Edenton, NC 27932

Job 2000367-2000367A	Truss M1	Truss Type Monopitch	Qty 9	Ply 1	2307- JRT -DAKOTA II	141377998
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84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:16 2020 Page 1

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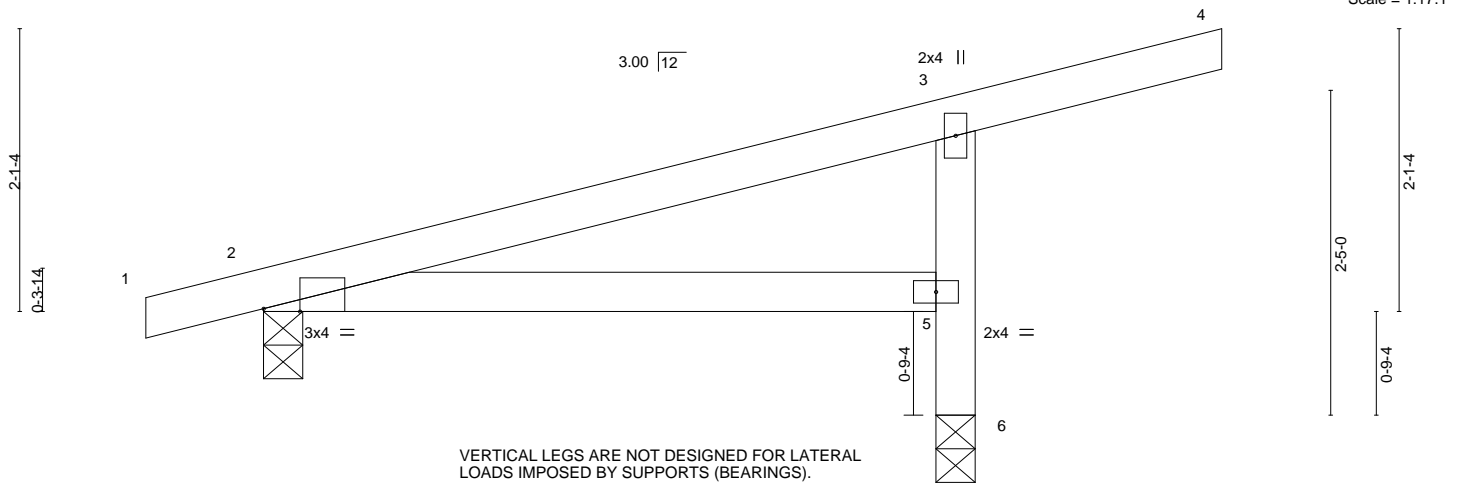
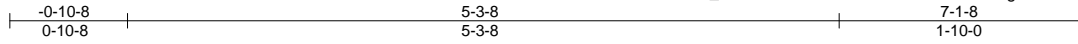


Plate Offsets (X,Y)-- [2:0-3-4,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 2-0-0	TC 0.28	Vert(LL) 0.03	5-9	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.24	Vert(CT) -0.06	5-9	>999	180		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.00	Horz(CT) 0.00	6	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-MP					Weight: 23 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 WEBS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-3-8 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 6=0-3-8
 Max Horz 2=92(LC 11)
 Max Uplift 2=-58(LC 8), 6=-96(LC 12)
 Max Grav 2=240(LC 1), 6=343(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 5-6=-343/231, 3-5=-283/242

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) 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.
 - 5) One H2.5A Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.



May 21, 2020

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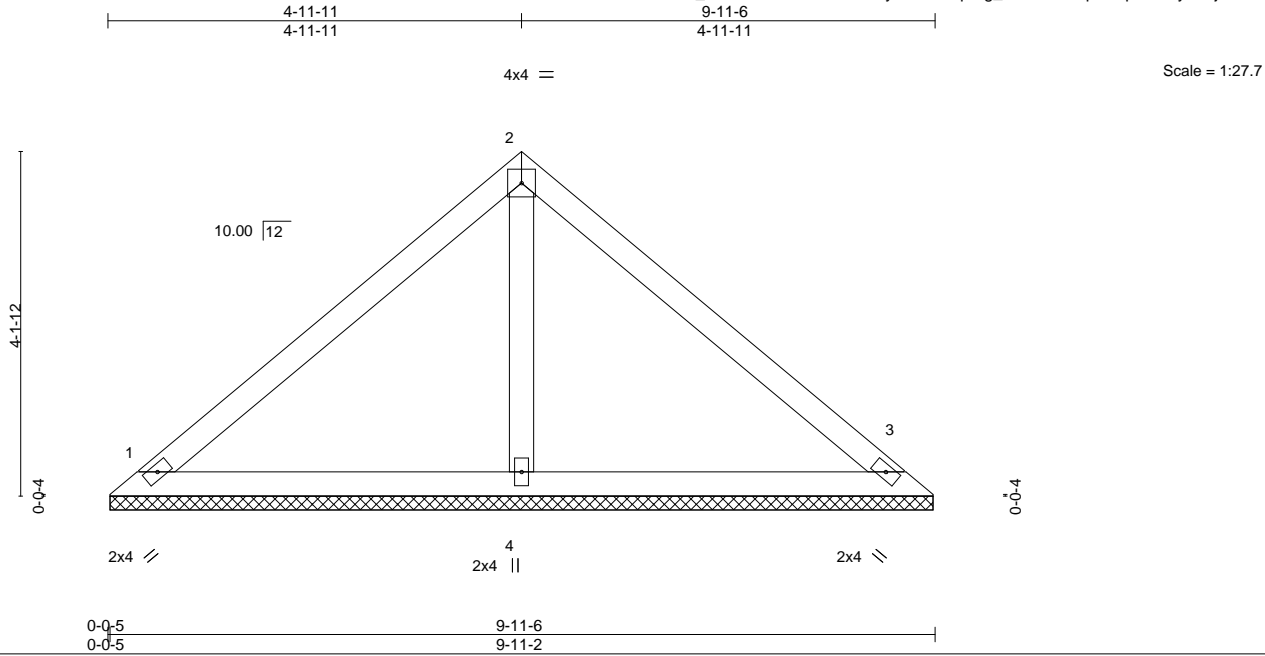
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ENGINEERING BY
TRENCO
A MITEK Affiliate

818 Soundside Road
Edenton, NC 27932

Job 2000367-2000367A	Truss V1	Truss Type Valley	Qty 1	Ply 1	2307- JRT -DAKOTA II	I41377999
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84 Components (Dunn), Dunn, NC - 28334, 8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:17 2020 Page 1
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LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.21	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.07	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S					Weight: 38 lb	FT = 20%

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

REACTIONS. (size) 1=9-10-13, 3=9-10-13, 4=9-10-13
 Max Horz 1=-94(LC 8)
 Max Uplift 1=-32(LC 13), 3=-43(LC 13), 4=-7(LC 12)
 Max Grav 1=194(LC 1), 3=194(LC 1), 4=344(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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



Job 2000367-2000367A	Truss V3	Truss Type Valley	Qty 1	Ply 1	2307- JRT -DAKOTA II	141378001
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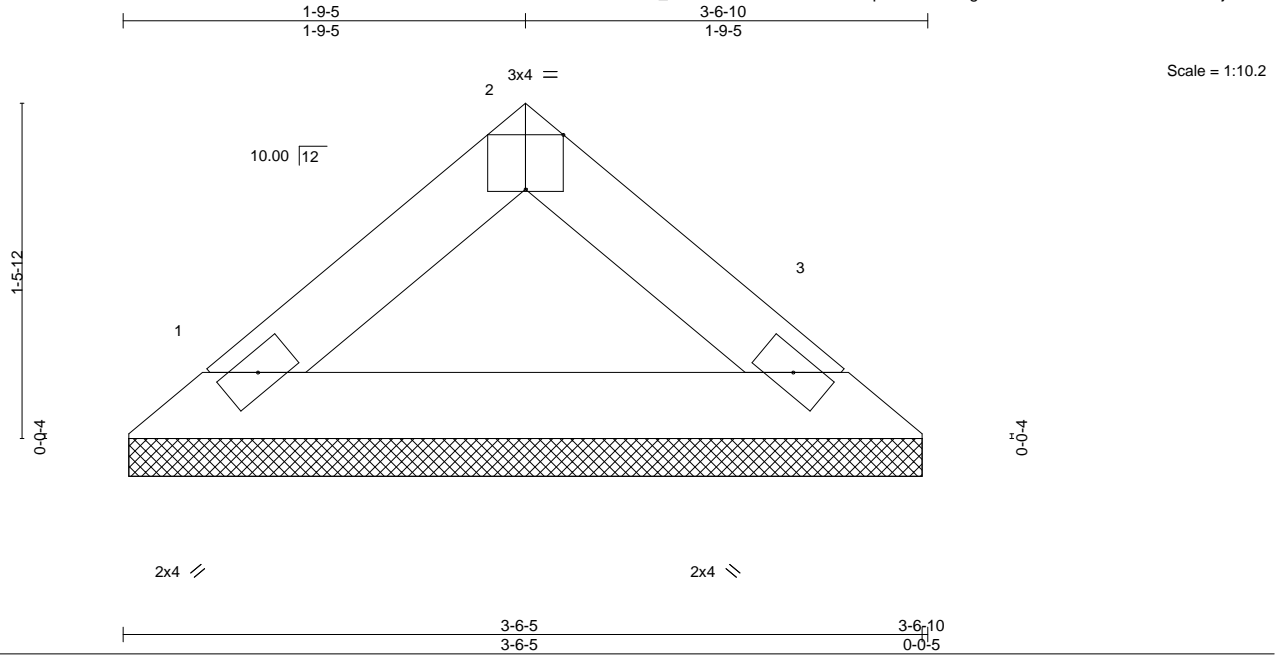
84 Components (Dunn),

Dunn, NC - 28334,

8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:19 2020 Page 1

ID:ceuvEDckNGn_oUaH?G0U8dzEclS-iLHPMpRPS?Cv77goP9JUbnhiBLDi6POHEGDirzEbjl

Job Reference (optional)



Scale = 1:10.2

LOADING (psf)		SPACING-		CSI.		DEFL.				PLATES		GRIP	
TCLL	20.0	Plate Grip DOL	2-0-0	TC	0.03	Vert(LL)	n/a	-	n/a	999	MT20	244/190	
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	n/a	-	n/a	999	Weight: 11 lb FT = 20%		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	3	n/a	n/a			
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-P									

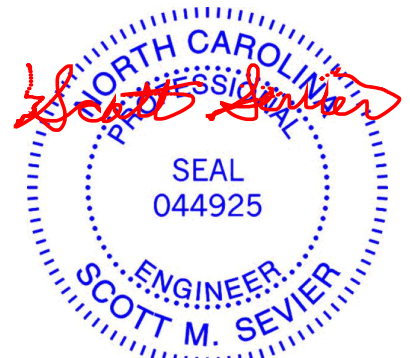
LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 3-6-10 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=3-6-0, 3=3-6-0
 Max Horz 1=-28(LC 8)
 Max Uplift 1=-10(LC 12), 3=-10(LC 13)
 Max Grav 1=110(LC 1), 3=110(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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCCL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



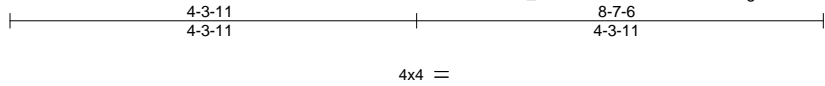
May 21, 2020

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

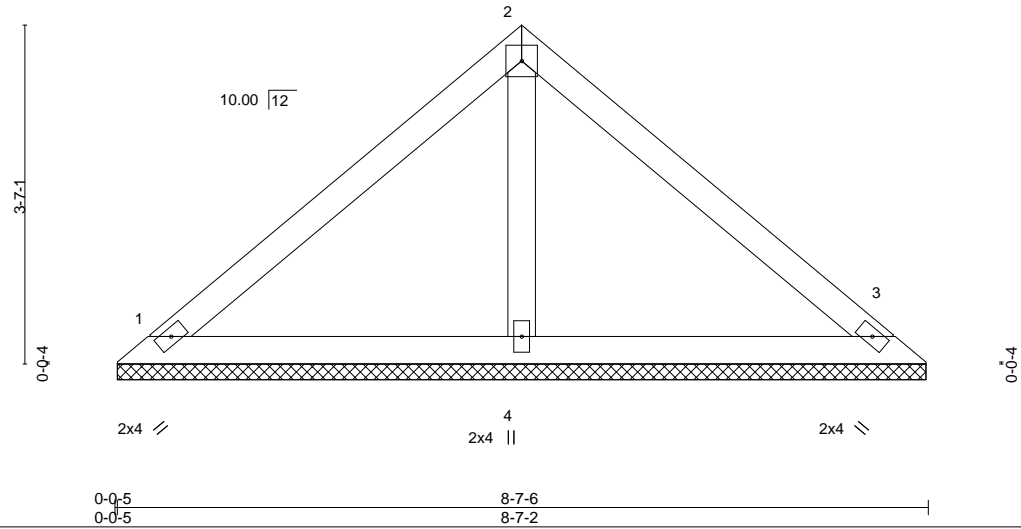
ENGINEERING BY
TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job 2000367-2000367A	Truss V4	Truss Type Valley	Qty 1	Ply 1	2307- JRT -DAKOTA II	141378002
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84 Components (Dunn), Dunn, NC - 28334, 8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:20 2020 Page 1
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Scale = 1:24.4



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.30	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.04	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 32 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

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

REACTIONS. (size) 1=8-6-13, 3=8-6-13, 4=8-6-13
 Max Horz 1=-80(LC 8)
 Max Uplift 1=-37(LC 13), 3=-47(LC 13)
 Max Grav 1=179(LC 1), 3=179(LC 1), 4=266(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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.

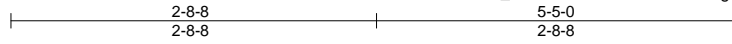


May 21, 2020

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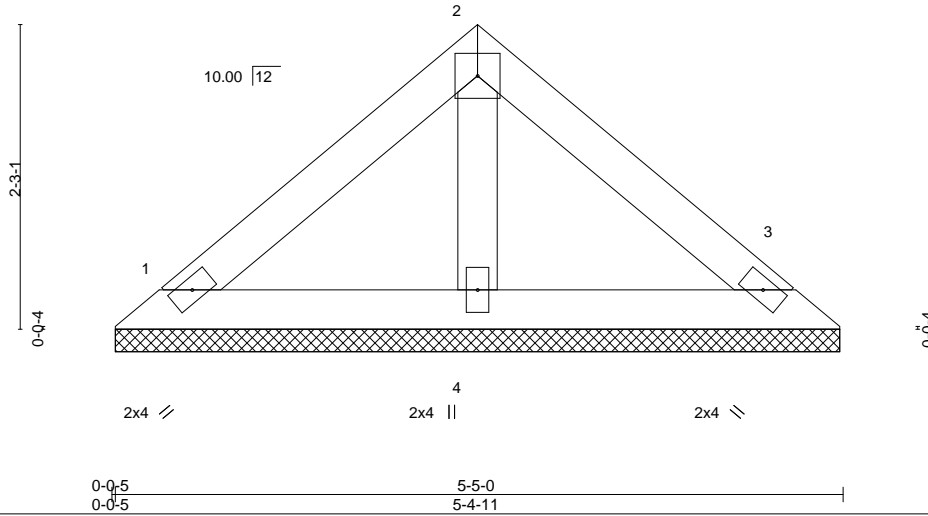
Job 2000367-2000367A	Truss V5	Truss Type Valley	Qty 1	Ply 1	2307- JRT -DAKOTA II	141378003
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84 Components (Dunn), Dunn, NC - 28334, 8.330 s May 6 2020 MiTek Industries, Inc. Wed May 20 13:02:20 2020 Page 1
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4x4 =

Scale = 1:17.1



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.09	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.05	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P					Weight: 19 lb	FT = 20%

LUMBER-
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.2
 OTHERS 2x4 SP No.3

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 5-5-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=5-4-6, 3=5-4-6, 4=5-4-6
 Max Horz 1=-48(LC 8)
 Max Uplift 1=-22(LC 13), 3=-28(LC 13)
 Max Grav 1=106(LC 1), 3=106(LC 1), 4=157(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 7-10; Vult=130mph (3-second gust) Vasd=103mph; TC DL=6.0psf; BCDL=6.0psf; h=30ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.



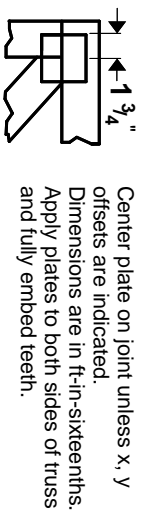
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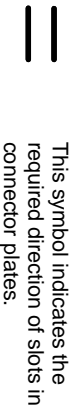
ENGINEERING BY
TRENCO
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Symbols

PLATE LOCATION AND ORIENTATION



For 4 x 2 orientation, locate plates 0- 1/16" from outside edge of truss.



* Plate location details available in **MITrak 20/20 software or upon request.**

PLATE SIZE

4 X 4

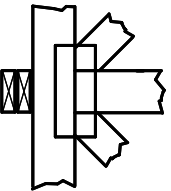
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



Indicated by symbol shown and/or by text in the bracing section of the output. Use T or I bracing if indicated.

BEARING

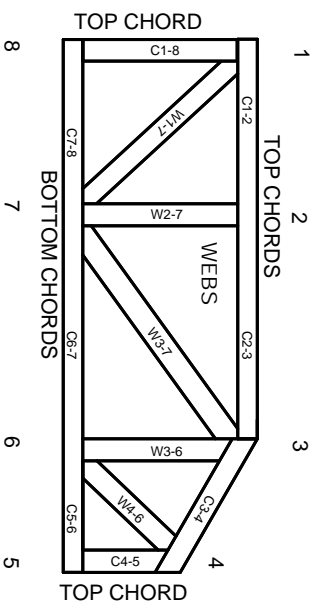


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI 1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



JOINTS ARE GENERALLY NUMBERED/LETTERED CLOCKWISE AROUND THE TRUSS STARTING AT THE JOINT FARTHEST TO THE LEFT.

CHORDS AND WEBS ARE IDENTIFIED BY END JOINT NUMBERS/LETTERS.

PRODUCT CODE APPROVALS

ICC-ES Reports:

ESR-1311, ESR-1352, ESR1988
ER-3907, ESR-2362, ESR-1397, ESR-3282

Trusses are designed for wind loads in the plane of the truss unless otherwise shown.

Lumber design values are in accordance with ANSI/TPI 1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.