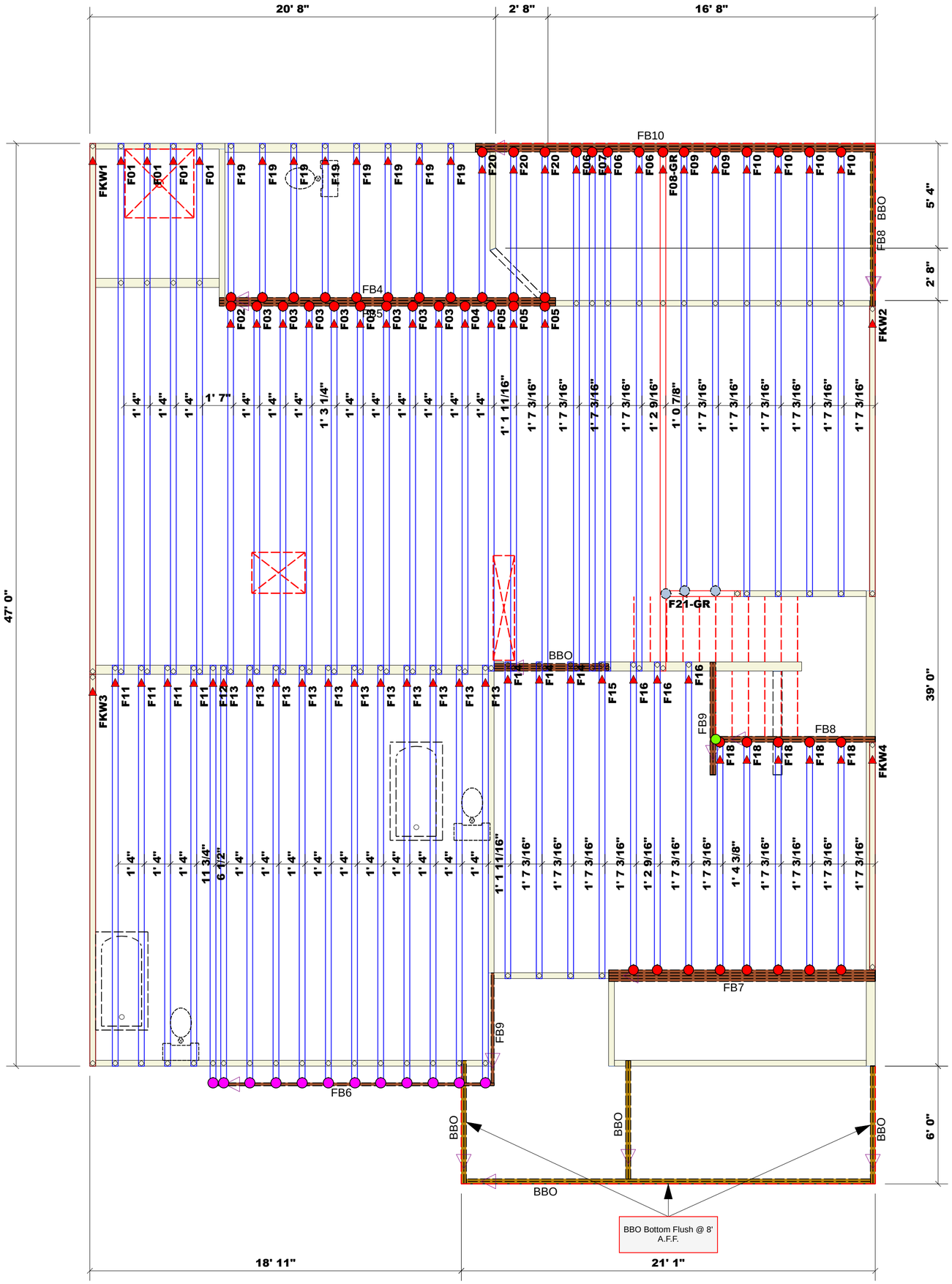


Truss Placement Plan
SCALE: NTS

Plumbing Drop Notes
1. Plumbing drop locations shown are NOT exact.
2. Contractor to verify ALL plumbing drop locations prior to setting Floor Trusses.
3. Adjust spacing as needed not to exceed 19.2"oc U.N.O..

Dimension Notes
1. All exterior wall to wall dimensions are to face of stud unless noted otherwise
2. All interior wall dimensions are to face of stud unless noted otherwise
3. All exterior wall to truss dimensions are to face of stud unless noted otherwise

All Walls Shown Are Considered Load Bearing

▲ = Indicates Left End of Truss (Reference Engineered Truss Drawing) Do Not Erect Trusses Backwards

WALL SCHEDULE

- 1st Floor Walls
- 2nd Floor Walls
- Non-Bearing Walls
- Garage Walls Dropped

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	JUS414	USP	51	NA	16d/3-1/2"	16d/3-1/2"
	IHFL3514	USP	12	NA	16d/3-1/2"	16d/3-1/2"
	HD416	USP	1	NA	16d/3-1/2"	16d/3-1/2"
	MSH422	USP	3	Varies	10d/3"	10d/3"

Products					
PlotID	Length	Product	Plies	Net Qty	Fab Type
FB4	18' 0"	1-3/4"x 14" LVL Kerto-S	1	1	FF
FB5	18' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF
FB6	15' 0"	1-3/4"x 14" LVL Kerto-S	1	1	FF
FB7	14' 0"	1-3/4"x 14" LVL Kerto-S	4	4	FF
FB8	9' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF
FB8	8' 0"	1-3/4"x 14" LVL Kerto-S	1	1	FF
FB9	6' 0"	1-3/4"x 14" LVL Kerto-S	1	1	FF
FB9	6' 0"	1-3/4"x 14" LVL Kerto-S	2	2	FF
FB10	21' 0"	1-3/4"x 23-7/8" LVL Kerto-S	3	3	FF

▲ = Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Truss Backwards

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature Johnnie Baggett

Johnnie Baggett

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))

NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (3# TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (4# TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (5# TO)	REQ'D STUDS FOR (4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	New Home Inc
JOB NAME	Lot 42 Duncan's Creek
PLAN	The Garner - Craftsman - Face
SEAL DATE	Seal Date
QUOTE #	B0325-1177
JOB #	J0525-2660
CITY / CO.	Lillington / Harnett
ADDRESS	757 Beacon Hill Road
MODEL	Floor
DATE REV.	5/19/25
DRAWN BY	Johnnie Baggett
SALES REP.	Johnnie Baggett

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0525-2660
Lot 42 Duncan's Creek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I73598603 thru I73598626

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844

May 20,2025

Gilbert, Eric

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	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F01	Floor	4	1	I73598603
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:06 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

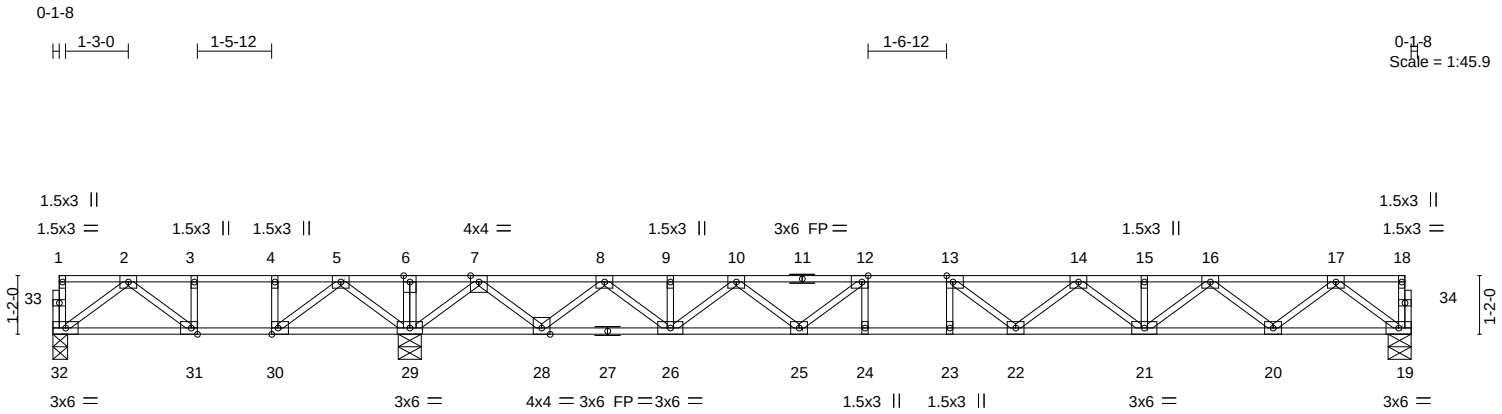


Plate Offsets (X,Y)-- [12:0-1-8,Edge], [13:0-1-8,Edge], [30:0-1-8,Edge], [31:0-1-8,Edge]

LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.70	Vert(LL)	-0.24	23	>983	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.33	22-23	>718	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.04	19	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 137 lb	FT = 20%F, 11%E

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

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) 32=0-3-8, 29=0-5-8, 19=0-5-8
Max Uplift 32=-165(LC 4)
Max Grav 32=179(LC 3), 29=1309(LC 1), 19=642(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-175/662, 3-4=-175/662, 4-5=-175/662, 5-6=0/1645, 6-7=0/1645, 8-9=-1535/0, 9-10=-1535/0, 10-12=-2325/0, 12-13=-2675/0, 13-14=-2654/0, 14-15=-2255/0, 15-16=-2255/0, 16-17=-1360/0
BOT CHORD 30-31=-662/175, 29-30=-1182/0, 28-29=-638/0, 26-28=0/964, 25-26=0/2021, 24-25=0/2675, 23-24=0/2675, 22-23=0/2675, 21-22=0/2570, 20-21=0/1891, 19-20=0/806
WEBS 2-32=-222/302, 2-31=-537/0, 5-29=-727/0, 5-30=0/808, 4-30=-368/0, 17-19=-1009/0, 17-20=0/722, 16-20=-691/0, 16-21=0/465, 14-21=-401/0, 13-22=-257/192, 7-29=-1264/0, 7-28=0/992, 8-28=-956/0, 8-26=0/741, 10-26=-630/0, 10-25=0/438, 12-25=-564/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 165 lb uplift at joint 32.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

May 20,2025

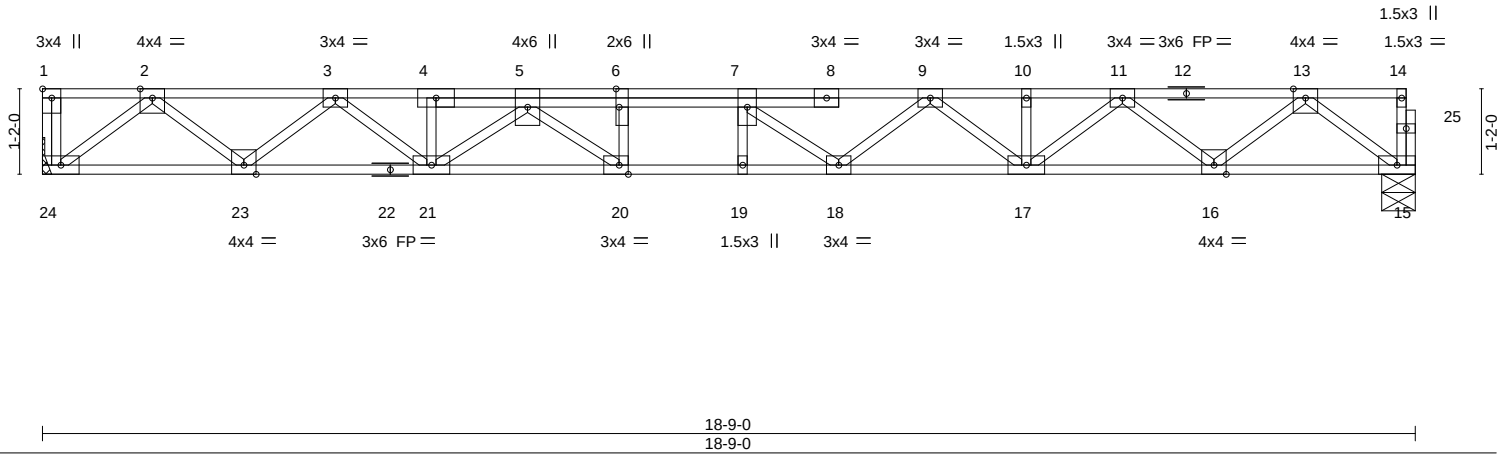
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F02	FLOOR	1	1	I73598604
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:07 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-3-0 1-6-0 0-1-8

Scale = 1:31.5



18-9-0
18-9-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [6:0-3-0,Edge], [20:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.30	Vert(LL)	-0.25	19	>887	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.34	19	>646	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.07	15	n/a	n/a		
BCDL	5.0	Code IRC2021/TPI2014		Matrix-S							Weight: 104 lb	FT = 20%F, 11%E

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

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) 24=Mechanical, 15=0-5-8
Max Grav 24=806(LC 1), 15=801(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1712/0, 3-4=-2881/0, 4-5=-2884/0, 5-6=-3722/0, 6-7=-3722/0, 7-9=-3493/0, 9-10=-2881/0, 10-11=-2881/0, 11-13=-1711/0
BOT CHORD 23-24=0/1009, 21-23=0/2388, 20-21=0/3404, 19-20=0/3722, 18-19=0/3722, 17-18=0/3251, 16-17=0/2387, 15-16=0/1008
WEBS 2-24=-1265/0, 2-23=0/915, 3-23=-880/0, 3-21=0/629, 13-15=-1263/0, 13-16=0/915, 11-16=-880/0, 11-17=0/630, 9-17=-473/0, 9-18=0/412, 5-21=-653/0, 5-20=-32/643, 6-20=-329/7, 7-18=-445/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x6 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

May 20,2025

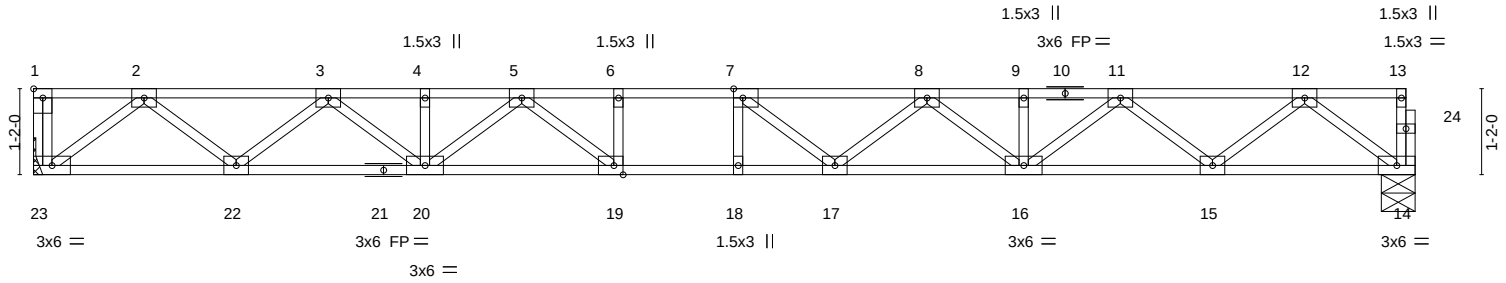
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F03	FLOOR	8	1	I73598605
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:07 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-3-0 1-6-0 0-1-8

Scale = 1:31.3



2-9-0 10-10-8 16-0-0 18-9-0
2-9-0 8-1-8 5-1-8 2-9-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [7:0-1-8,Edge], [19:0-1-8,Edge]

LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.24	18	>919	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.33	18	>670	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 96 lb	FT = 20%F, 11%E

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

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) 23=Mechanical, 14=0-5-8
Max Grav 23=678(LC 1), 14=674(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1443/0, 3-4=-2422/0, 4-5=-2422/0, 5-6=-2980/0, 6-7=-2980/0, 7-8=-2896/0, 8-9=-2418/0, 9-11=-2418/0, 11-12=-1442/0
BOT CHORD 22-23=0/850, 20-22=0/2009, 19-20=0/2741, 18-19=0/2980, 17-18=0/2980, 16-17=0/2768, 15-16=0/2012, 14-15=0/849
WEBS 12-14=-1063/0, 2-23=-1067/0, 12-15=0/772, 2-22=0/771, 11-15=-742/0, 3-22=-737/0, 11-16=0/519, 3-20=0/528, 8-16=-446/0, 5-20=-407/0, 8-17=0/280, 5-19=-7/485, 7-17=-318/119

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

May 20,2025

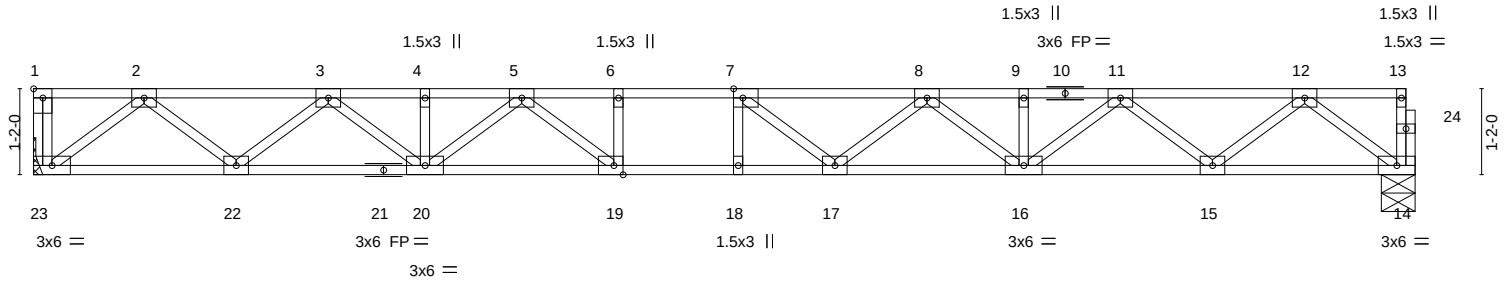
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F04	FLOOR	1	1	I73598606
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:07 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-3-0 1-6-0 0-1-8

Scale = 1:31.3



2-9-0 10-10-8 16-0-0 18-9-0
2-9-0 8-1-8 5-1-8 2-9-0

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [7:0-1-8,Edge], [19:0-1-8,Edge]

LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.37	Vert(LL)	-0.24	18	>919	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.71	Vert(CT)	-0.33	18	>670	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.05	14	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 96 lb	FT = 20%F, 11%E

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

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) 23=Mechanical, 14=0-5-8
Max Grav 23=678(LC 1), 14=674(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1443/0, 3-4=-2422/0, 4-5=-2422/0, 5-6=-2980/0, 6-7=-2980/0, 7-8=-2896/0, 8-9=-2418/0, 9-11=-2418/0, 11-12=-1442/0
BOT CHORD 22-23=0/850, 20-22=0/2009, 19-20=0/2741, 18-19=0/2980, 17-18=0/2980, 16-17=0/2768, 15-16=0/2012, 14-15=0/849
WEBS 12-14=-1063/0, 2-23=-1067/0, 12-15=0/772, 2-22=0/771, 11-15=-742/0, 3-22=-737/0, 11-16=0/519, 3-20=0/528, 8-16=-446/0, 5-20=-407/0, 8-17=0/280, 5-19=-7/485, 7-17=-318/119

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F05	FLOOR	3	1	I73598607
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:08 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

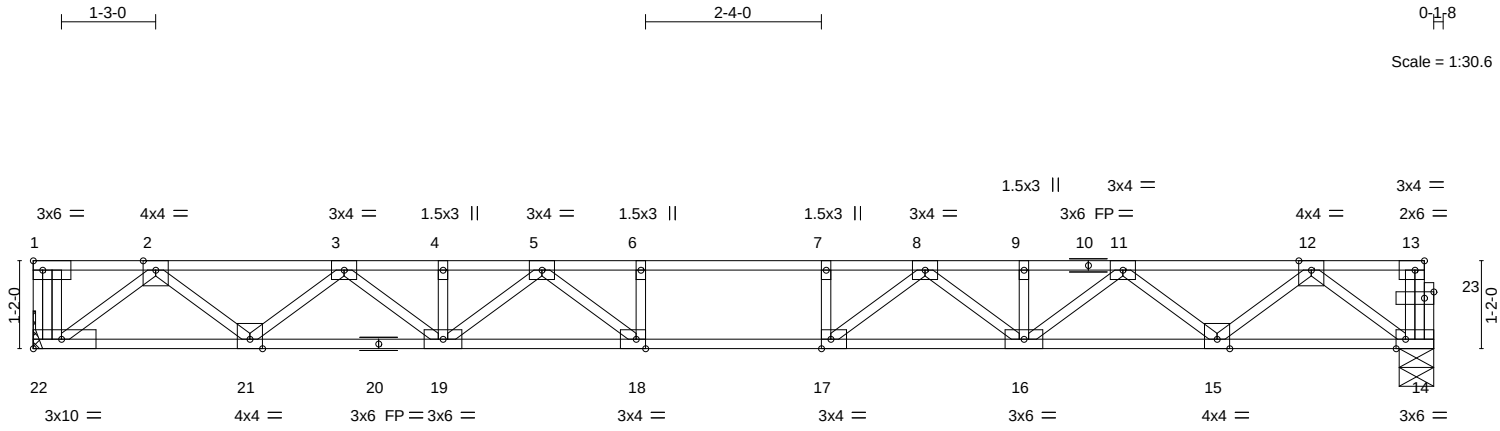


Plate Offsets (X,Y)-- [13:0-1-8,Edge], [14:0-1-8,Edge], [17:0-1-8,Edge], [18:0-1-8,Edge], [23:0-1-8,0-1-0]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.56	Vert(LL)	-0.26	17-18	>831	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(CT)	-0.36	17-18	>604	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.06	14	n/a	n/a		
BCDL	5.0	Code IRC2021/TPI2014		Matrix-S							Weight: 96 lb	FT = 20%F, 11%E

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

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) 14=0-5-8, 22=Mechanical
Max Grav 14=796(LC 1), 22=806(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1778/0, 3-4=-2915/0, 4-5=-2915/0, 5-6=-3501/0, 6-7=-3501/0, 7-8=-3501/0, 8-9=-2915/0, 9-11=-2915/0, 11-12=-1778/0
BOT CHORD 21-22=0/1090, 19-21=0/2439, 18-19=0/3263, 17-18=0/3501, 16-17=0/3262, 15-16=0/2439, 14-15=0/1089
WEBS 12-14=-1321/0, 12-15=0/897, 11-15=-861/0, 11-16=0/608, 8-16=-444/0, 8-17=-38/591, 7-17=-276/0, 2-22=-1328/0, 2-21=0/896, 3-21=-859/0, 3-19=0/608, 5-19=-444/0, 5-18=-38/591, 6-18=-276/0

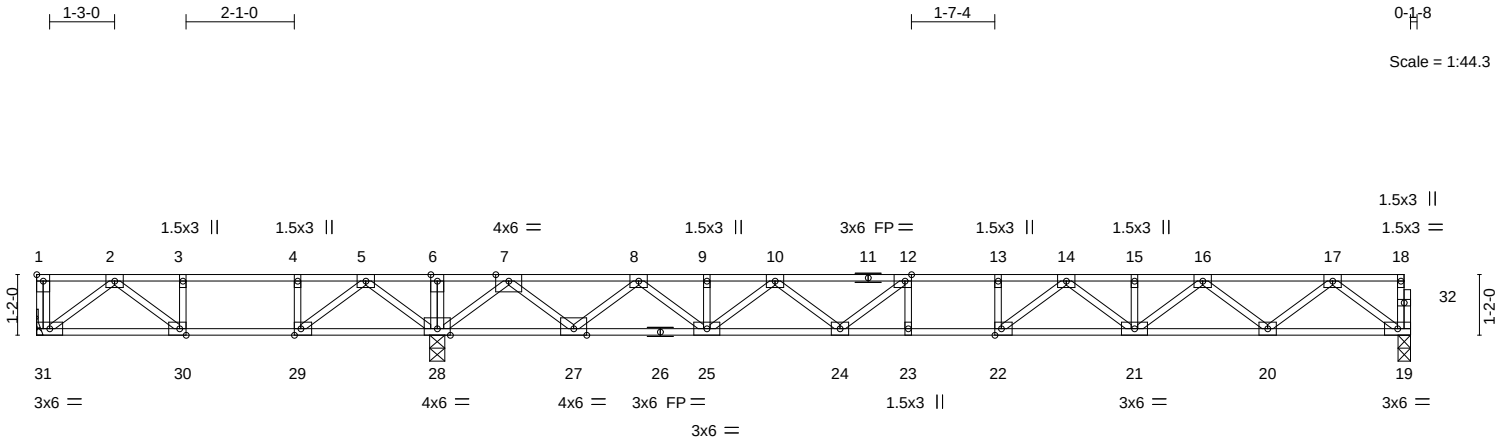
NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F06	Floor	3	1	I73598608
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:08 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



7-8-8 / 7-8-8 — 26-5-4 / 18-8-12

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [12:0-1-8,Edge], [22:0-1-8,Edge], [29:0-1-8,Edge], [30:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	-0.23	23	>974	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.31	22-23	>717	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.05	19	n/a	n/a		
BCDL	5.0	Code IRC2021/TPI2014		Matrix-S							Weight: 134 lb	FT = 20%F, 11%E

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

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) 31=Mechanical, 28=0-3-8, 19=0-2-14
Max Uplift 31=-89(LC 4)
Max Grav 31=274(LC 3), 28=1416(LC 1), 19=744(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-367/488, 3-4=-367/488, 4-5=-367/488, 5-6=0/1438, 6-7=0/1438, 7-8=-682/0, 8-9=-2034/0, 9-10=-2034/0, 10-12=-2789/0, 12-13=-3035/0, 13-14=-3035/0, 14-15=-2587/0, 15-16=-2587/0, 16-17=-1565/0
BOT CHORD 30-31=-149/284, 29-30=-488/367, 28-29=-969/13, 27-28=-329/0, 25-27=0/1454, 24-25=0/2533, 23-24=0/3035, 22-23=0/3035, 21-22=0/2883, 20-21=0/2171, 19-20=0/933
WEBS 2-31=-357/187, 2-30=-433/106, 5-28=-748/0, 5-29=0/835, 4-29=-393/0, 7-28=-1391/0, 7-27=0/1071, 8-27=-1026/0, 8-25=0/761, 10-25=-653/0, 10-24=0/422, 12-24=-504/0, 17-19=-1168/0, 17-20=0/824, 16-20=-788/0, 16-21=0/531, 14-21=-378/0, 14-22=-115/428

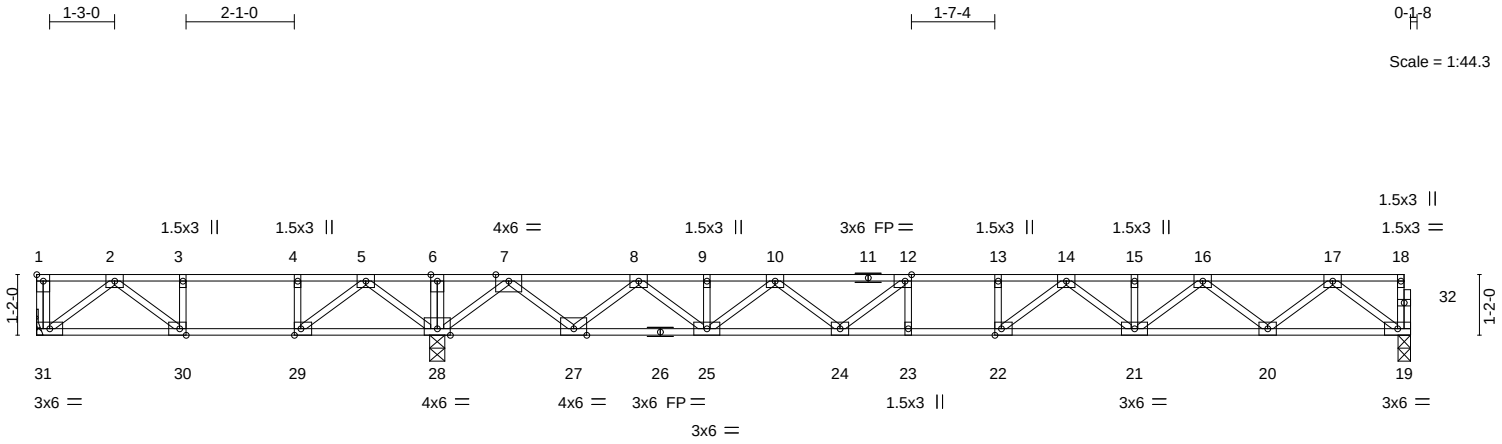
NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 19.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 31.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
8) CAUTION, Do not erect truss backwards.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F07	FLOOR	1	1	I73598609
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:09 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



7-8-8 / 7-8-8 — 26-5-4 / 18-8-12

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [12:0-1-8,Edge], [22:0-1-8,Edge], [29:0-1-8,Edge], [30:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	-0.23	23	>974	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.63	Vert(CT)	-0.31	22-23	>717	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.51	Horz(CT)	0.05	19	n/a	n/a		
BCDL	5.0	Code IRC2021/TPI2014		Matrix-S							Weight: 134 lb	FT = 20%F, 11%E

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

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) 31=Mechanical, 28=0-3-8, 19=0-2-14
Max Uplift 31=-89(LC 4)
Max Grav 31=274(LC 3), 28=1416(LC 1), 19=744(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-367/488, 3-4=-367/488, 4-5=-367/488, 5-6=0/1438, 6-7=0/1438, 7-8=-682/0, 8-9=-2034/0, 9-10=-2034/0, 10-12=-2789/0, 12-13=-3035/0, 13-14=-3035/0, 14-15=-2587/0, 15-16=-2587/0, 16-17=-1565/0
BOT CHORD 30-31=-149/284, 29-30=-488/367, 28-29=-969/13, 27-28=-329/0, 25-27=0/1454, 24-25=0/2533, 23-24=0/3035, 22-23=0/3035, 21-22=0/2883, 20-21=0/2171, 19-20=0/933
WEBS 2-31=-357/187, 2-30=-433/106, 5-28=-748/0, 5-29=0/835, 4-29=-393/0, 7-28=-1391/0, 7-27=0/1071, 8-27=-1026/0, 8-25=0/761, 10-25=-653/0, 10-24=0/422, 12-24=-504/0, 17-19=-1168/0, 17-20=0/824, 16-20=-788/0, 16-21=0/531, 14-21=-378/0, 14-22=-115/428

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 19.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 89 lb uplift at joint 31.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
8) CAUTION, Do not erect truss backwards.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F08-GR	Floor Girder	1	1	I73598610
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:10 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

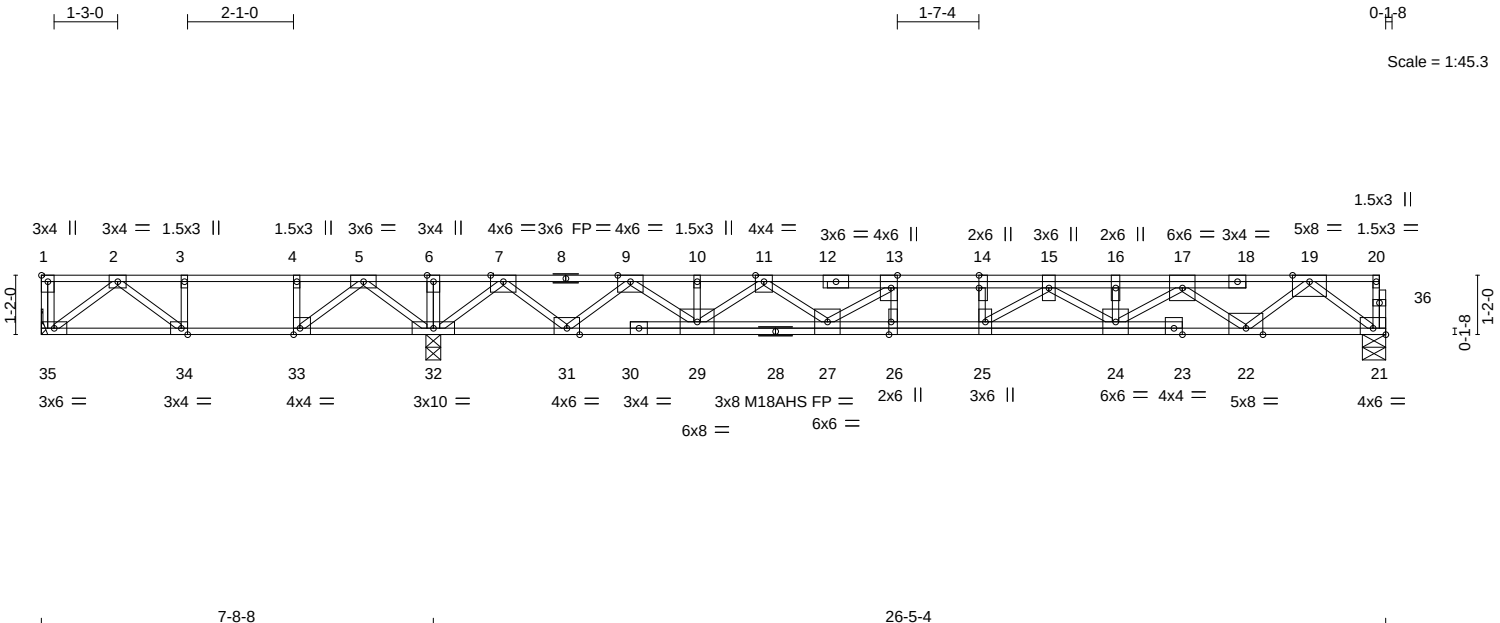


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [13:0-3-0,Edge], [14:0-3-0,0-0-0], [21:Edge,0-1-8], [26:0-3-0,Edge], [33:0-1-8,Edge], [34:0-1-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.74	Vert(LL)	-0.26	25	>868	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.70	Vert(CT)	-0.35	25	>629	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.91	Horz(CT)	0.05	21	n/a	n/a		
BCDL	5.0	Code IRC2021/TPI2014		Matrix-S							Weight: 160 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat) *Except*
21-28: 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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) 35=Mechanical, 32=0-3-8, 21=0-5-8
Max Uplift 35=-110(LC 4)
Max Grav 35=307(LC 3), 32=1910(LC 1), 21=1454(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-328/610, 3-4=-328/610, 4-5=-328/610, 5-6=0/1802, 6-7=0/1802, 7-9=-1191/0, 9-10=-3385/0, 10-11=-3385/0, 11-13=-4888/0, 13-14=-5709/0, 14-15=-5709/0, 15-16=-5554/0, 16-17=-5554/0, 17-19=-3287/0
BOT CHORD 34-35=-177/310, 33-34=-610/328, 32-33=-1216/0, 31-32=-297/23, 29-31=0/2365, 27-29=0/4182, 26-27=0/5709, 25-26=0/5709, 24-25=0/5794, 22-24=0/4938, 21-22=0/1818
WEBS 2-35=-389/223, 2-34=-553/23, 3-34=-39/267, 5-32=-916/0, 5-33=0/1055, 4-33=-517/0, 19-21=-2277/0, 19-22=0/1907, 17-22=-2103/0, 17-24=0/751, 7-32=-1953/0, 7-31=0/1543, 9-31=-1550/0, 9-29=0/1295, 11-29=-1016/0, 11-27=0/931, 13-27=-1220/0, 15-24=-293/172, 15-25=-552/148, 13-26=0/316

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 110 lb uplift at joint 35.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 742 lb down at 22-6-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.
9) 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 21-35=-10, 1-20=-100
Concentrated Loads (lb)
Vert: 17=-662(B)

May 20,2025

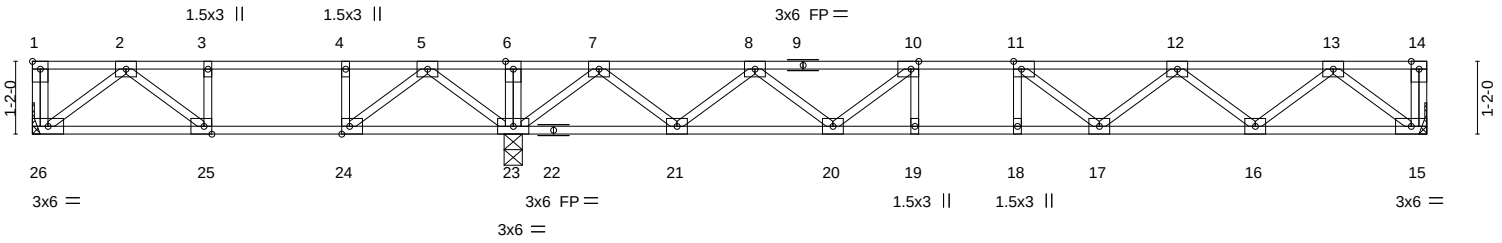
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F09	Floor	2	1	I73598611
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:10 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

1-3-0 2-1-0 1-6-4

Scale = 1:36.9



7-8-8 22-4-4
7-8-8 14-7-12

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [10:0-1-8,Edge], [11:0-1-8,Edge], [24:0-1-8,Edge], [25:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.42	Vert(LL)	-0.10	18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.56	Vert(CT)	-0.14	18	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.03	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 112 lb	FT = 20%F, 11%E

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

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) 26=Mechanical, 23=0-3-8, 15=Mechanical
Max Grav 26=298(LC 3), 23=1120(LC 1), 15=597(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-454/159, 3-4=-454/159, 4-5=-454/159, 5-6=0/781, 6-7=0/781, 7-8=-828/0, 8-10=-1632/0, 10-11=-1930/0, 11-12=-1798/0, 12-13=-1192/0
BOT CHORD 25-26=-25/317, 24-25=-159/454, 23-24=-427/156, 21-23=-22/266, 20-21=0/1356, 19-20=0/1930, 18-19=0/1930, 17-18=0/1930, 16-17=0/1630, 15-16=0/729
WEBS 2-26=-398/31, 5-23=-594/0, 5-24=0/566, 4-24=-278/0, 13-15=-915/0, 13-16=0/602, 12-16=-570/0, 12-17=0/256, 11-17=-286/45, 7-23=-1054/0, 7-21=0/754, 8-21=-712/0, 8-20=0/389, 10-20=-477/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F10	Floor	4	1	I73598612
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:11 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

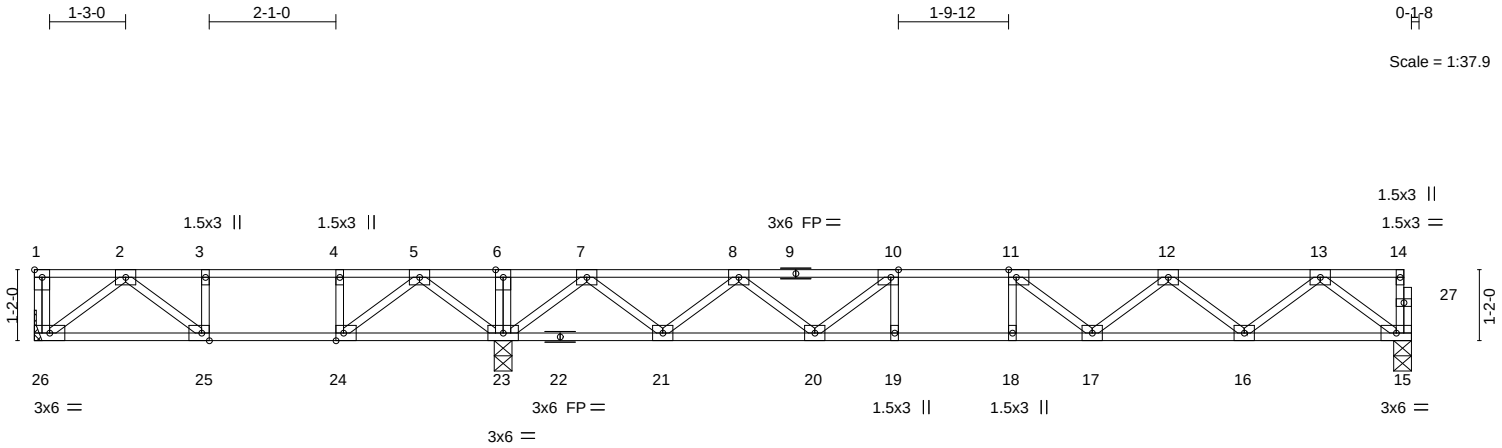


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [10:0-1-8,Edge], [11:0-1-8,Edge], [24:0-1-8,Edge], [25:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.43	Vert(LL)	-0.11	17-18	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.15	17-18	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.03	15	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 113 lb	FT = 20%F, 11%E

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

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) 26=Mechanical, 23=0-3-8, 15=0-3-8
Max Grav 26=298(LC 3), 23=1135(LC 1), 15=605(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-453/167, 3-4=-453/167, 4-5=-453/167, 5-6=0/793, 6-7=0/793, 7-8=-842/0, 8-10=-1679/0, 10-11=-2002/0, 11-12=-1858/0, 12-13=-1222/0
BOT CHORD 25-26=-28/317, 24-25=-167/453, 23-24=-441/154, 21-23=-20/264, 20-21=0/1384, 19-20=0/2002, 18-19=0/2002, 17-18=0/2002, 16-17=0/1675, 15-16=0/744
WEBS 2-26=-397/35, 5-23=-598/0, 5-24=0/572, 4-24=-281/0, 7-23=-1076/0, 7-21=0/772, 8-21=-730/0, 8-20=0/413, 10-20=-511/0, 13-15=-931/0, 13-16=0/622, 12-16=-590/0, 12-17=0/273, 11-17=-306/31

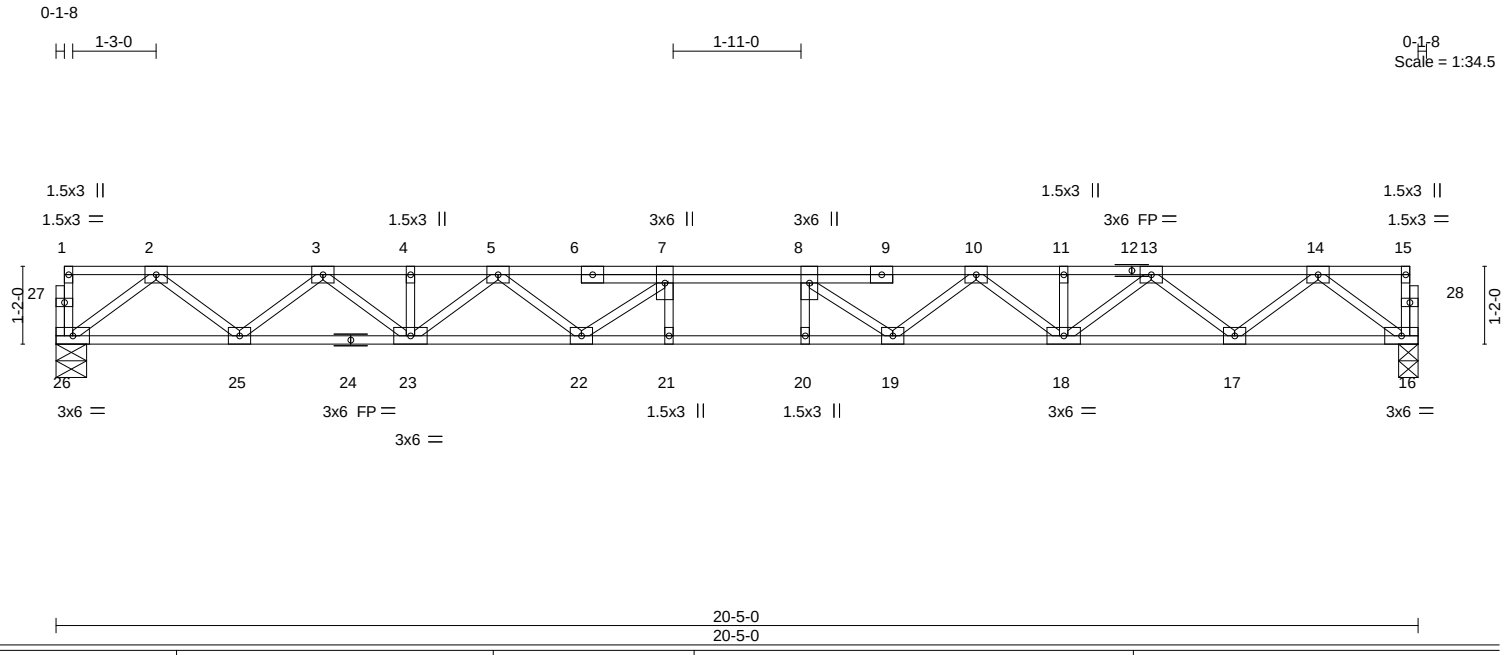
NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F11	Floor	4	1	I73598613
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:11 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.23	Vert(LL)	-0.27	20-21	>882	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.70	Vert(CT)	-0.38	20-21	>640	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.41	Horz(CT)	0.07	16	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 109 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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) 26=0-5-8, 16=0-3-8
Max Grav 26=735(LC 1), 16=735(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1594/0, 3-4=-2732/0, 4-5=-2732/0, 5-7=-3405/0, 7-8=-3706/0, 8-10=-3405/0, 10-11=-2732/0, 11-13=-2732/0, 13-14=-1594/0
BOT CHORD 25-26=0/929, 23-25=0/2235, 22-23=0/3109, 21-22=0/3706, 20-21=0/3706, 19-20=0/3706, 18-19=0/3109, 17-18=0/2235, 16-17=0/929
WEBS 2-26=-1164/0, 2-25=0/865, 3-25=-835/0, 3-23=0/634, 14-16=-1164/0, 14-17=0/865, 13-17=-835/0, 13-18=0/634, 10-18=-482/0, 10-19=0/470, 8-19=-524/0, 5-23=-482/0, 5-22=0/470, 7-22=-524/0

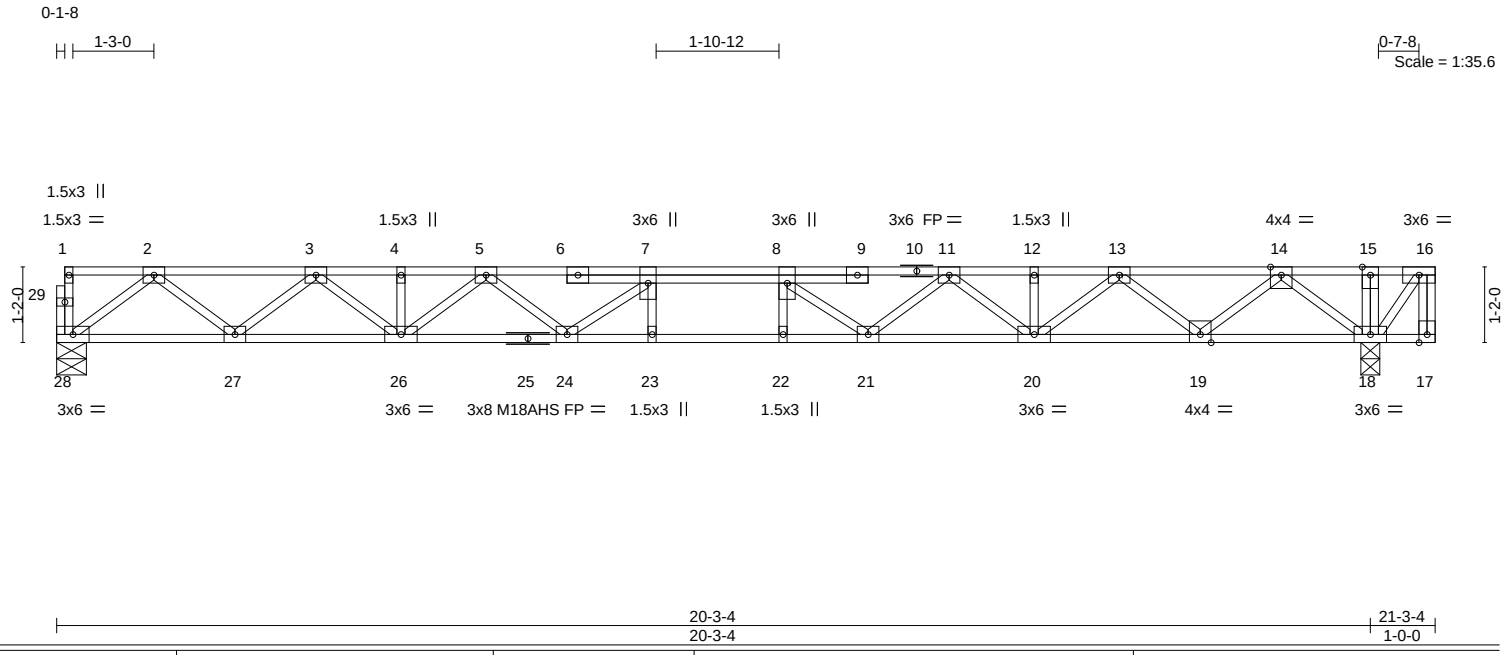
NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F12	FLOOR	1	1	I73598614
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:12 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.27	22-23	>887	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.37	22-23	>656	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.07	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 117 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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, Except: 6-0-0 oc bracing: 18-19.

REACTIONS. (size) 28=0-5-8, 18=0-3-8
Max Grav 28=728(LC 3), 18=1327(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1574/0, 3-4=-2693/0, 4-5=-2693/0, 5-7=-3345/0, 7-8=-3629/0, 8-11=-3317/0, 11-12=-2629/0, 12-13=-2629/0, 13-14=-1473/0, 14-15=0/439, 15-16=0/438
BOT CHORD 27-28=0/919, 26-27=0/2207, 24-26=0/3063, 23-24=0/3629, 22-23=0/3629, 21-22=0/3629, 20-21=0/3014, 19-20=0/2124, 18-19=-175/804
WEBS 2-28=-1151/0, 2-27=0/853, 3-27=-823/0, 3-26=0/621, 5-26=-473/0, 5-24=0/452, 7-24=-502/7, 14-18=-1169/0, 14-19=0/897, 13-19=-875/0, 13-20=0/672, 11-20=-516/0, 11-21=0/509, 8-21=-575/0, 16-18=-674/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x4 MT20 unless otherwise indicated.
4) Plates checked for a plus or minus 1 degree rotation about its center.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

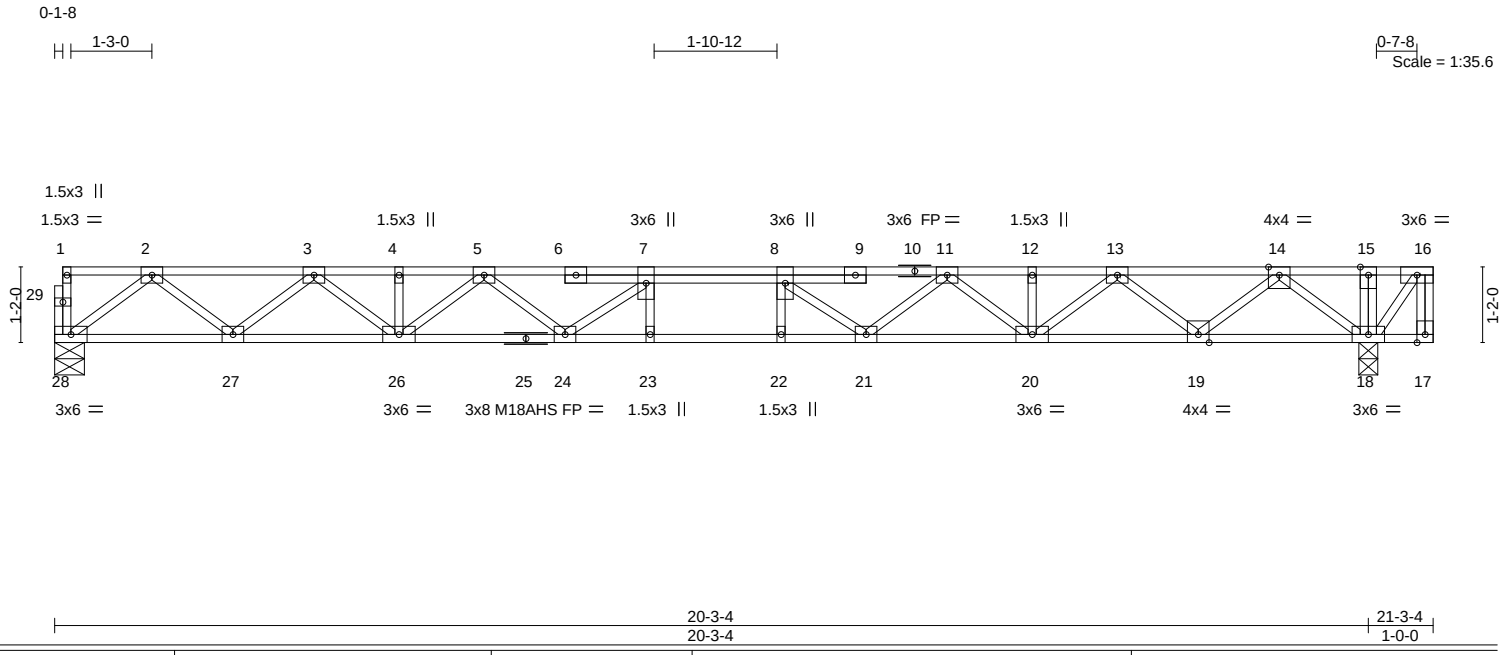
LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-28=-7, 1-16=-67
Concentrated Loads (lb)
Vert: 16=-500

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F13	Floor	11	1	I73598615
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:12 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



LOADING (psf)		SPACING-	1-4-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.25	Vert(LL)	-0.27	22-23	>887	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.37	22-23	>656	360	M18AHS	186/179
BCLL	0.0	Rep Stress Incr	NO	WB	0.43	Horz(CT)	0.07	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 117 lb	FT = 20%F, 11%E

LUMBER-
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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, Except: 6-0-0 oc bracing: 18-19.

REACTIONS. (size) 28=0-5-8, 18=0-3-8
Max Grav 28=728(LC 3), 18=1327(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1574/0, 3-4=-2693/0, 4-5=-2693/0, 5-7=-3345/0, 7-8=-3629/0, 8-11=-3317/0, 11-12=-2629/0, 12-13=-2629/0, 13-14=-1473/0, 14-15=0/439, 15-16=0/438
BOT CHORD 27-28=0/919, 26-27=0/2207, 24-26=0/3063, 23-24=0/3629, 22-23=0/3629, 21-22=0/3629, 20-21=0/3014, 19-20=0/2124, 18-19=-175/804
WEBS 2-28=-1151/0, 2-27=0/853, 3-27=-823/0, 3-26=0/621, 14-18=-1169/0, 14-19=0/897, 13-19=-875/0, 13-20=0/672, 11-20=-516/0, 11-21=0/509, 8-21=-575/0, 5-26=-473/0, 5-24=0/452, 7-24=-502/7, 16-18=-674/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x4 MT20 unless otherwise indicated.
4) Plates checked for a plus or minus 1 degree rotation about its center.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 17-28=-7, 1-16=-67
Concentrated Loads (lb)
Vert: 16=-500

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F14	Floor	3	1	I73598616
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:13 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

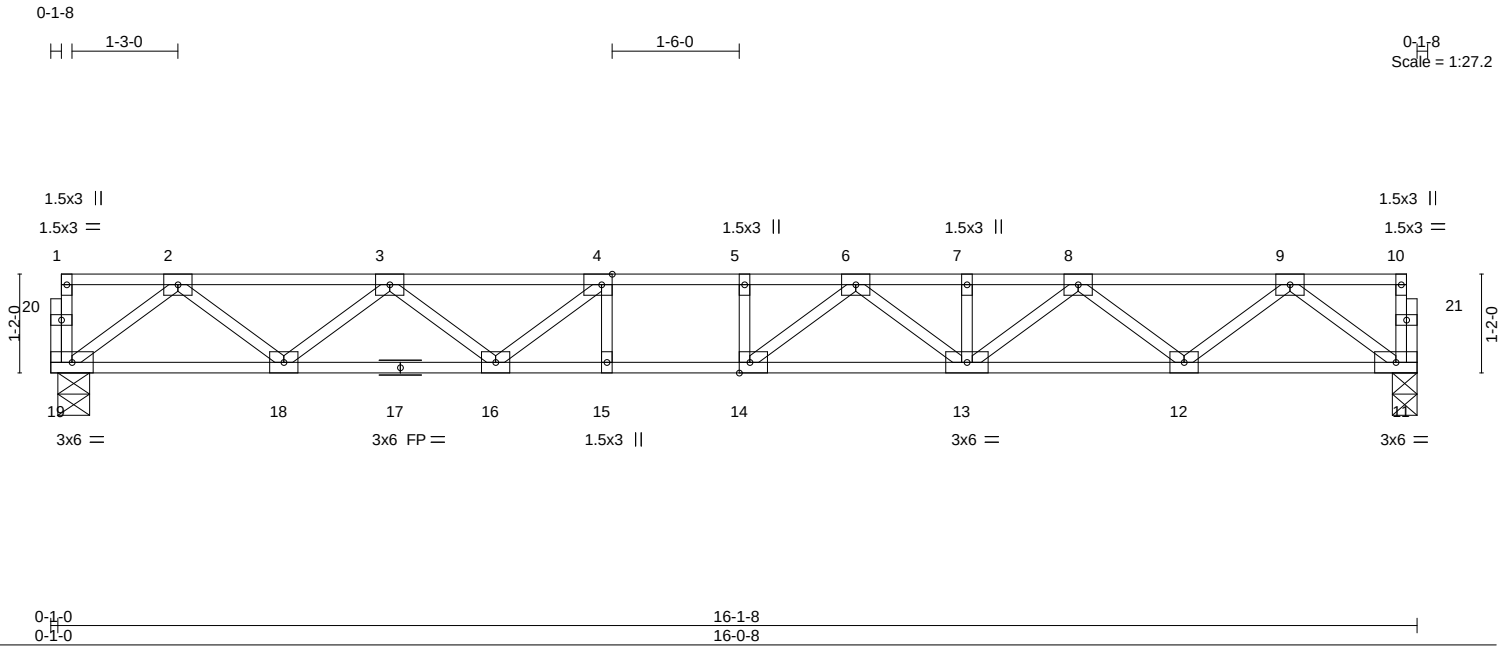


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [14:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	-0.16	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.23	13-14	>844	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.04	11	n/a	n/a		
BCDL	5.0	Code IRC2021/TPI2014		Matrix-S							Weight: 82 lb	FT = 20%F, 11%E

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

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) 19=0-4-8, 11=0-3-8
Max Grav 19=693(LC 1), 11=693(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1443/0, 3-4=-2295/0, 4-5=-2621/0, 5-6=-2621/0, 6-7=-2340/0, 7-8=-2340/0, 8-9=-1438/0
BOT CHORD 18-19=0/864, 16-18=0/1991, 15-16=0/2621, 14-15=0/2621, 13-14=0/2569, 12-13=0/1986, 11-12=0/866
WEBS 2-19=-1082/0, 2-18=0/753, 3-18=-714/0, 3-16=0/431, 4-16=-524/0, 9-11=-1084/0, 9-12=0/745, 8-12=-713/0, 8-13=0/452, 6-13=-293/0, 6-14=-156/328

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F15	Floor	1	1	I73598617
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:13 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

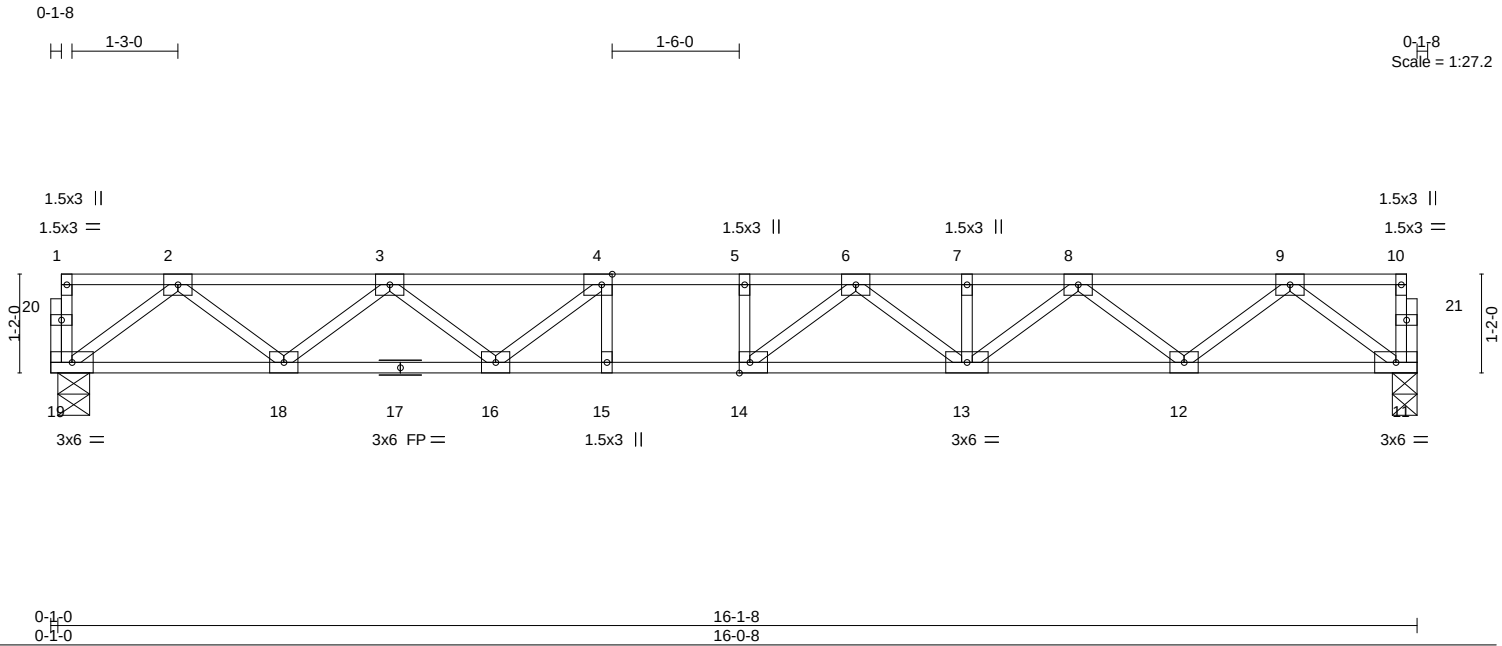


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [14:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.33	Vert(LL)	-0.16	13-14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.62	Vert(CT)	-0.23	13-14	>844	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.36	Horz(CT)	0.04	11	n/a	n/a		
BCDL	5.0	Code IRC2021/TPI2014		Matrix-S							Weight: 82 lb	FT = 20%F, 11%E

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

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) 19=0-4-8, 11=0-3-8
Max Grav 19=693(LC 1), 11=693(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1443/0, 3-4=-2295/0, 4-5=-2621/0, 5-6=-2621/0, 6-7=-2340/0, 7-8=-2340/0, 8-9=-1438/0
BOT CHORD 18-19=0/864, 16-18=0/1991, 15-16=0/2621, 14-15=0/2621, 13-14=0/2569, 12-13=0/1986, 11-12=0/866
WEBS 2-19=-1082/0, 2-18=0/753, 3-18=-714/0, 3-16=0/431, 4-16=-524/0, 9-11=-1084/0, 9-12=0/745, 8-12=-713/0, 8-13=0/452, 6-13=-293/0, 6-14=-156/328

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F16	Floor	3	1	I73598618
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:13 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

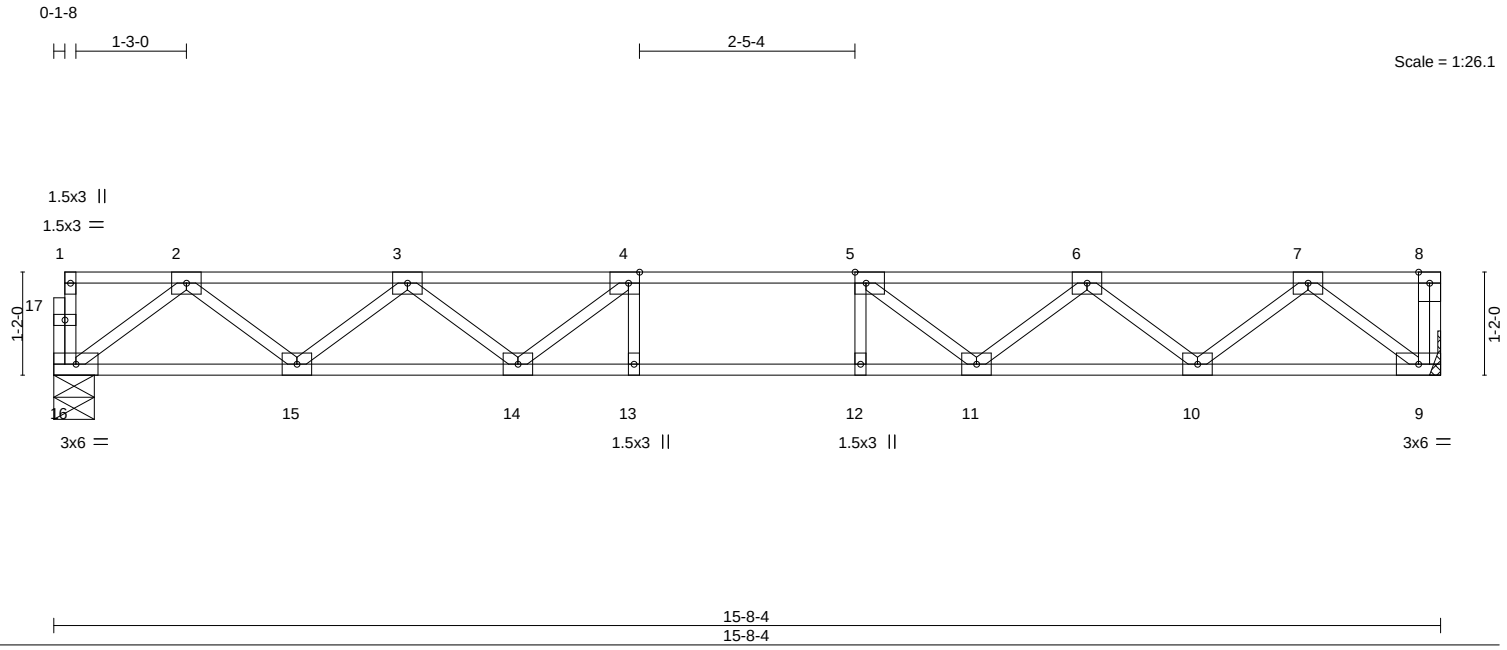


Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.36	Vert(LL)	-0.16	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.68	Vert(CT)	-0.21	11-12	>904	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.34	Horz(CT)	0.04	9	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 77 lb	FT = 20%F, 11%E

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

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) 16=0-5-8, 9=Mechanical
Max Grav 16=674(LC 1), 9=679(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1394/0, 3-4=-2201/0, 4-5=-2478/0, 5-6=-2201/0, 6-7=-1394/0
BOT CHORD 15-16=0/838, 14-15=0/1923, 13-14=0/2478, 12-13=0/2478, 11-12=0/2478, 10-11=0/1923, 9-10=0/839
WEBS 2-16=-1049/0, 2-15=0/724, 3-15=-688/0, 3-14=0/412, 4-14=-515/0, 7-9=-1052/0, 7-10=0/724, 6-10=-687/0, 6-11=0/412, 5-11=-515/0

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F18	FLOOR	5	1	I73598619
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:14 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

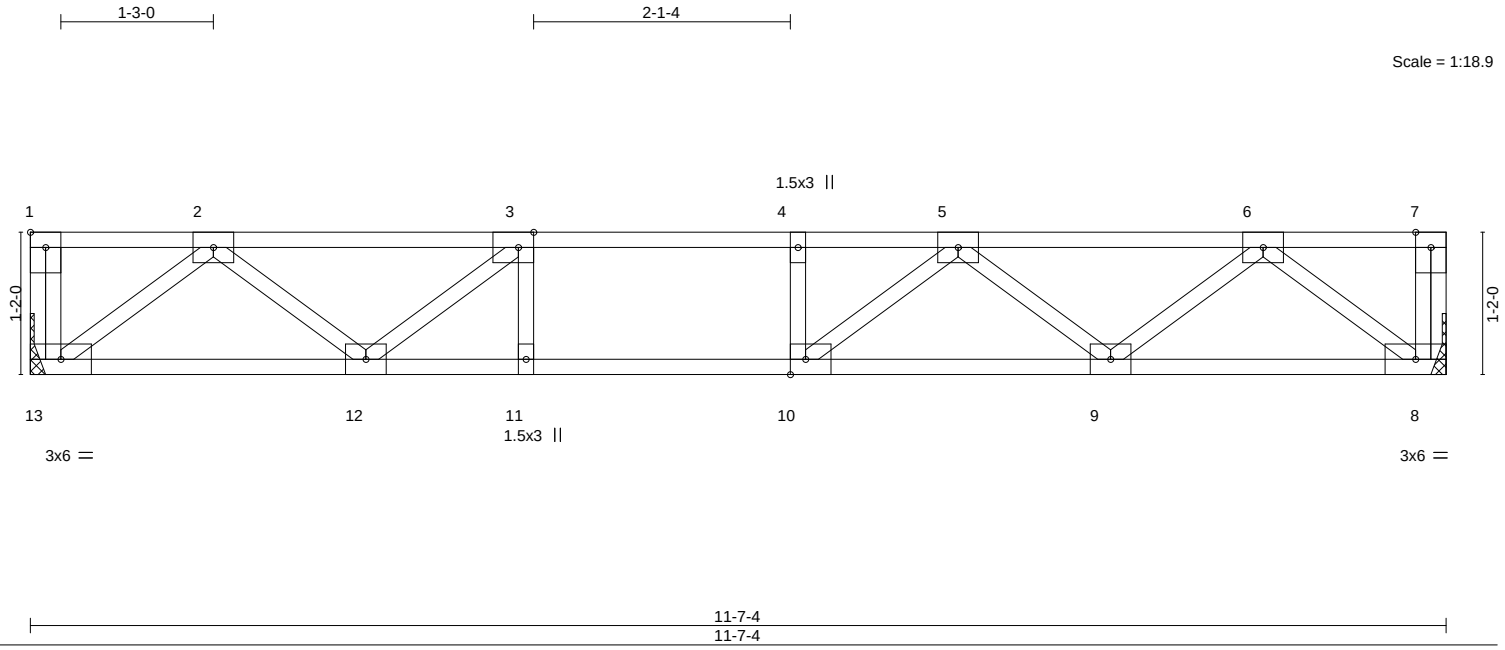


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [3:0-1-8,Edge], [10:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.35	Vert(LL)	-0.09	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.47	Vert(CT)	-0.11	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 59 lb	FT = 20%F, 11%E

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

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) 13=Mechanical, 8=Mechanical
Max Grav 13=499(LC 1), 8=499(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-944/0, 3-4=-1317/0, 4-5=-1317/0, 5-6=-947/0
BOT CHORD 12-13=0/596, 11-12=0/1317, 10-11=0/1317, 9-10=0/1243, 8-9=0/608
WEBS 2-13=-747/0, 2-12=0/454, 3-12=-493/0, 6-8=-763/0, 6-9=0/441, 5-9=-386/0, 5-10=-37/279

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x4 MT20 unless otherwise indicated.
3) Plates checked for a plus or minus 1 degree rotation about its center.
4) Refer to girder(s) for truss to truss connections.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F19	Floor	8	1	I73598620
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:14 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

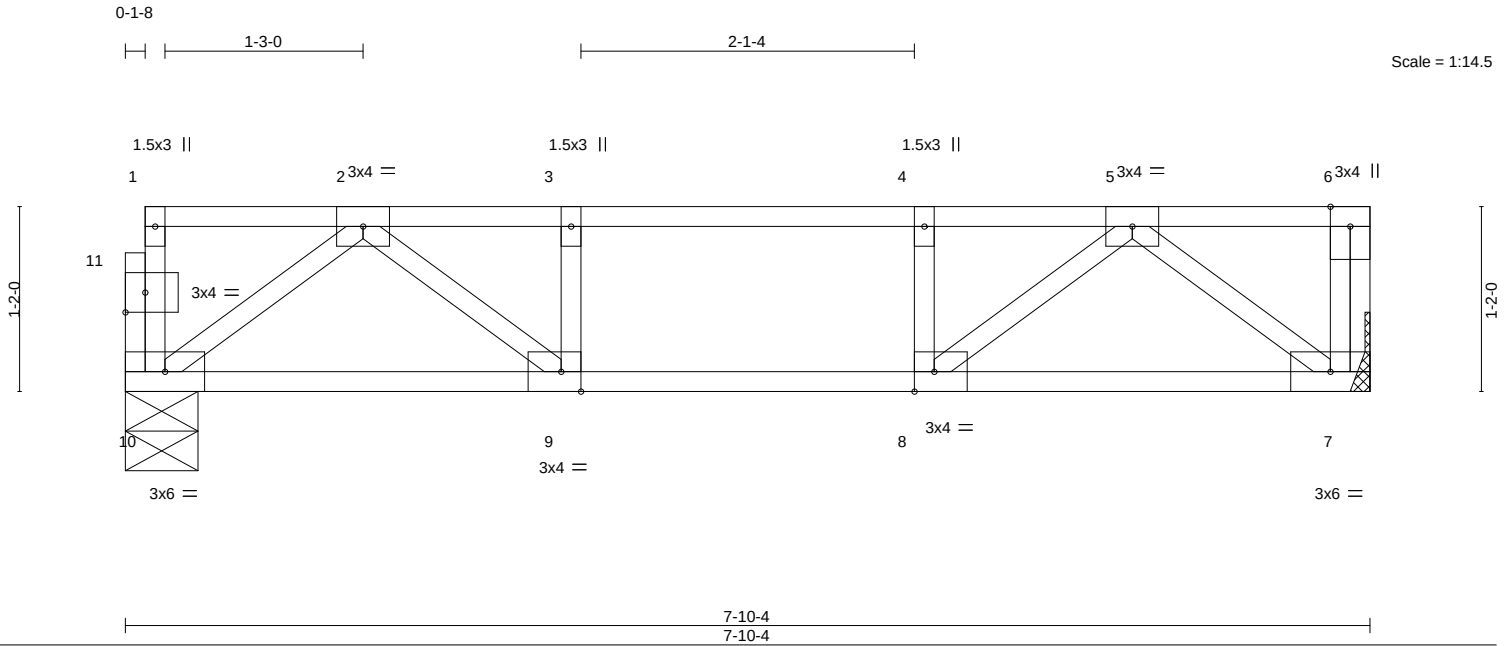


Plate Offsets (X,Y)-- [8:0-1-8,Edge], [9:0-1-8,Edge], [11:0-1-8,0-1-8]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.19	Vert(LL)	-0.02	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.16	Vert(CT)	-0.03	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.15	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 40 lb	FT = 20%F, 11%E

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

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) 10=0-5-8, 7=Mechanical
Max Grav 10=329(LC 1), 7=334(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-584/0, 3-4=-584/0, 4-5=-584/0
BOT CHORD 9-10=0/365, 8-9=0/584, 7-8=0/366
WEBS 2-10=-454/0, 2-9=0/315, 5-7=-459/0, 5-8=0/315

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F20	Floor	3	1	I73598621
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:14 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

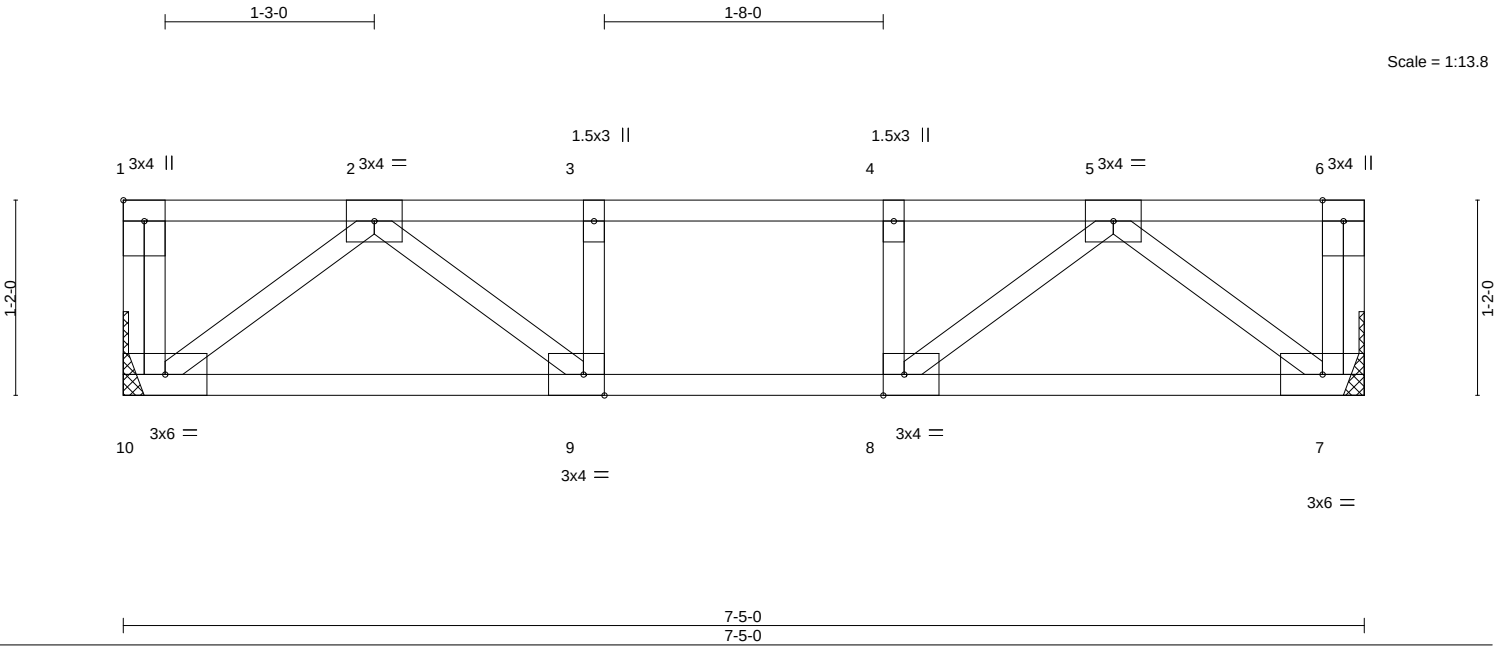


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-1-8,Edge], [9:0-1-8,Edge]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.14	Vert(LL)	-0.02	7-8	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.14	Vert(CT)	-0.02	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	7	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 39 lb	FT = 20%F, 11%E

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

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) 10=Mechanical, 7=Mechanical
Max Grav 10=315(LC 1), 7=315(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-526/0, 3-4=-526/0, 4-5=-526/0
BOT CHORD 9-10=0/342, 8-9=0/526, 7-8=0/342
WEBS 5-7=-430/0, 2-10=-430/0, 5-8=0/267, 2-9=0/267

NOTES-
1) Unbalanced floor live loads have been considered for this design.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Refer to girder(s) for truss to truss connections.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	F21-GR	FLOOR GIRDER	1	1	I73598622
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:15 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

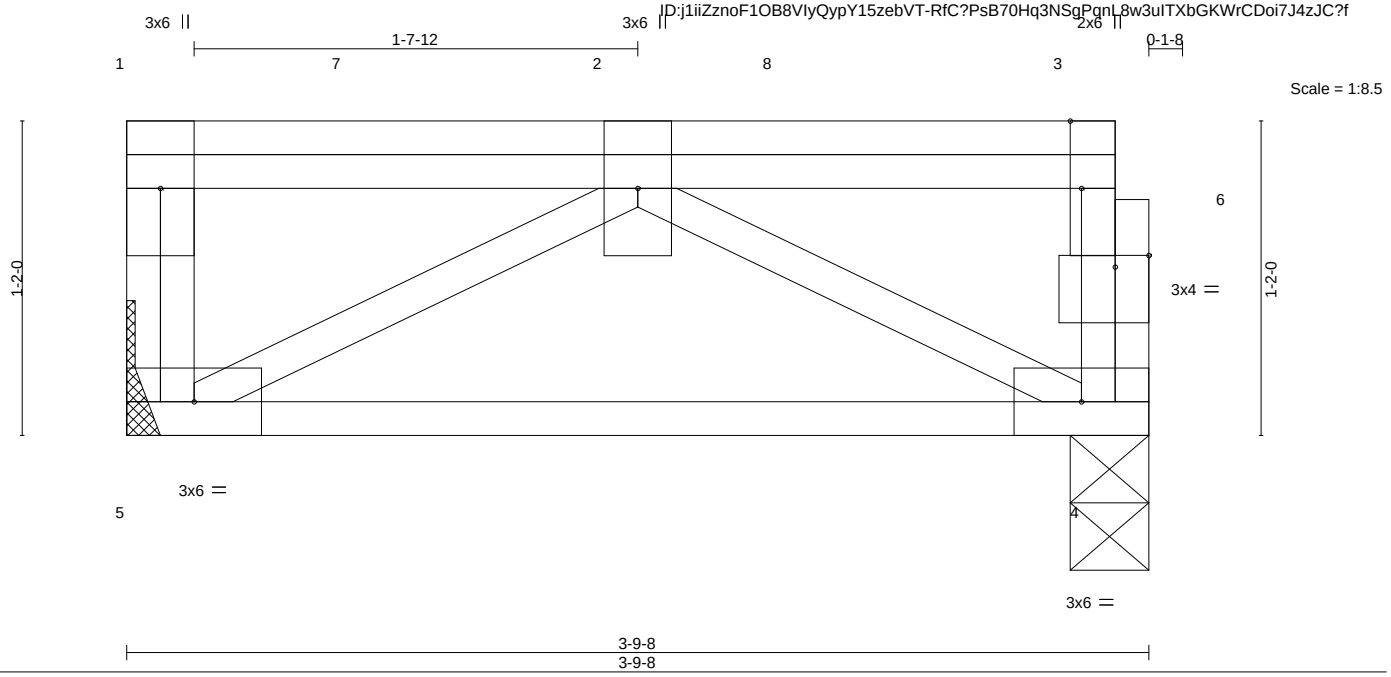


Plate Offsets (X,Y)-- [3:0-3-0,Edge], [6:0-1-8,0-0-8]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.32	Vert(LL)	0.00	5	****	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.25	Vert(CT)	-0.02	4-5	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.23	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 27 lb	FT = 20%F, 11%E

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-9-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 5=Mechanical, 4=0-3-8
Max Grav 5=762(LC 1), 4=657(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-5=-282/0
BOT CHORD 4-5=0/835
WEBS 2-5=-955/0, 2-4=-941/0

NOTES-
1) Plates checked for a plus or minus 1 degree rotation about its center.
2) Refer to girder(s) for truss to truss connections.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.
5) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 517 lb down at 0-11-2, and 517 lb down at 2-6-5 on top chord. The design/selection of such connection device(s) is the responsibility of others.
6) 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 + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 4-5=-10, 1-3=-100
Concentrated Loads (lb)
Vert: 7=-517(B) 8=-517(B)

May 20,2025

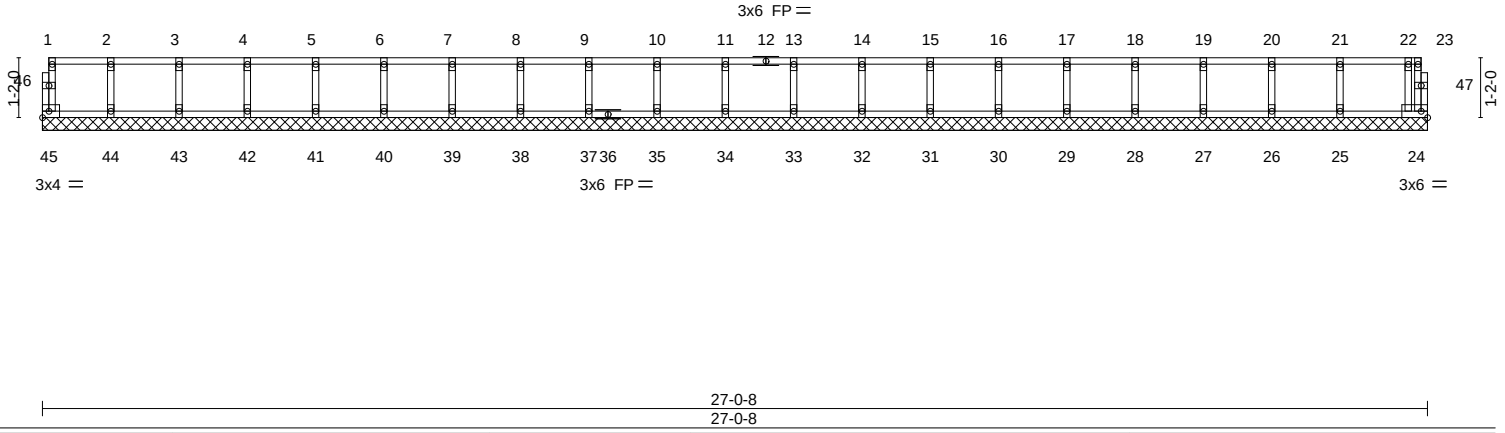
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	FKW1	Floor Supported Gable	1	1	I73598623
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:15 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8 0-1-8

Scale = 1:45.0



LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	24	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 112 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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 27-0-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 45, 24, 44, 43, 42, 41, 40, 39, 38, 37, 35, 34, 33, 32, 31, 30, 29, 28, 27, 26, 25

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

May 20,2025

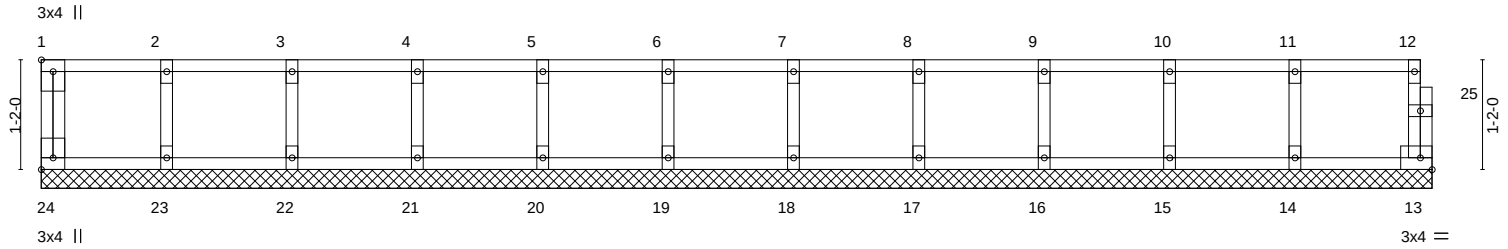
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	FKW2	Floor Supported Gable	1	1	I73598624
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:16 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

Scale = 1:24.5



14-9-8
14-9-8

Plate Offsets (X,Y)-- [1:Edge,0-1-8], [24:Edge,0-1-8]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 63 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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 14-9-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 14

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

NOTES-

1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

May 20,2025

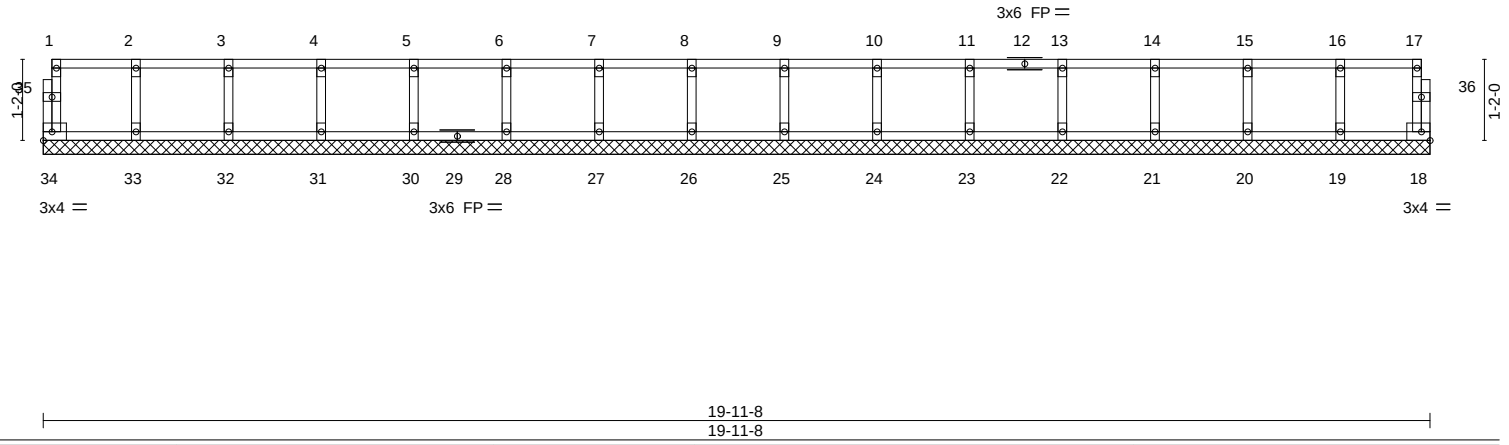
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	FKW3	Floor Supported Gable	1	1	I73598625
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:16 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8 0-1-8

Scale = 1:33.2



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.06	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	18	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 83 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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 19-11-8.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 31, 30, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19

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

NOTES-
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2660	FKW4	Floor Supported Gable	1	1	I73598626
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:13:16 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

0-1-8

Scale = 1:19.1

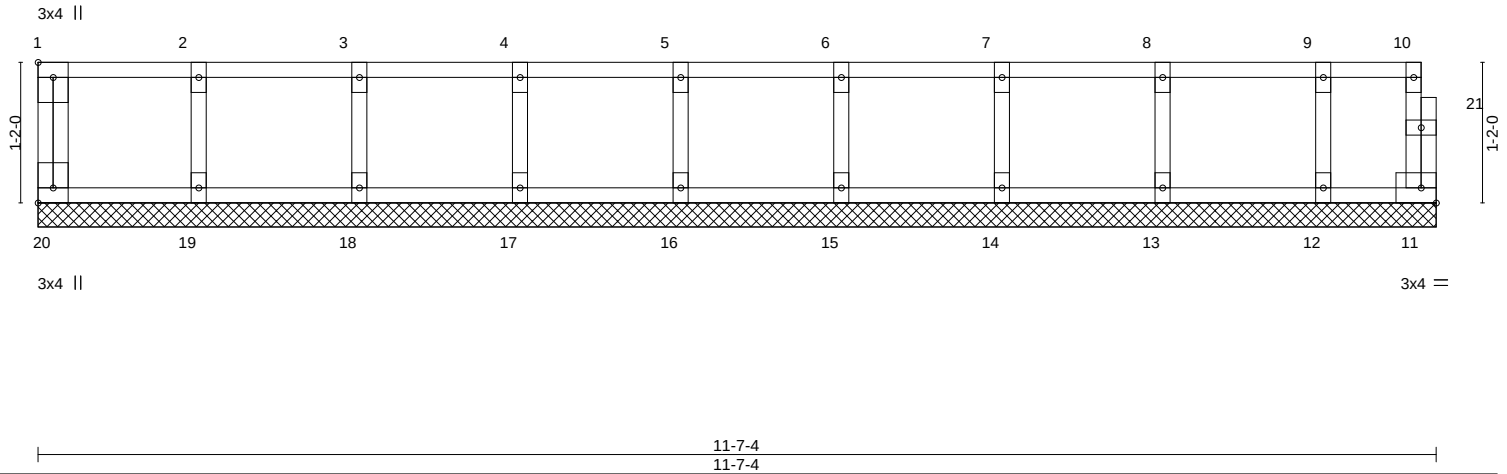


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [20:Edge,0-1-8]

LOADING (psf)		SPACING-	1-7-3	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-R							Weight: 50 lb	FT = 20%F, 11%E

LUMBER-

TOP CHORD	2x4 SP No.1(flat)
BOT CHORD	2x4 SP No.1(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

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 11-7-4.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 20, 11, 19, 18, 17, 16, 15, 14, 13, 12

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

NOTES-

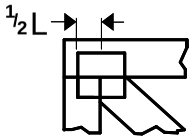
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Plates checked for a plus or minus 1 degree rotation about its center.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

May 20,2025

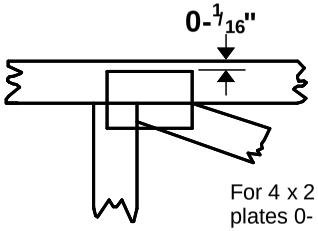
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



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

This symbol indicates the required direction of slots in connector plates.

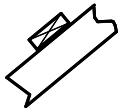
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

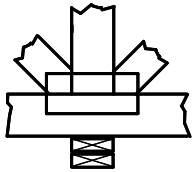
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

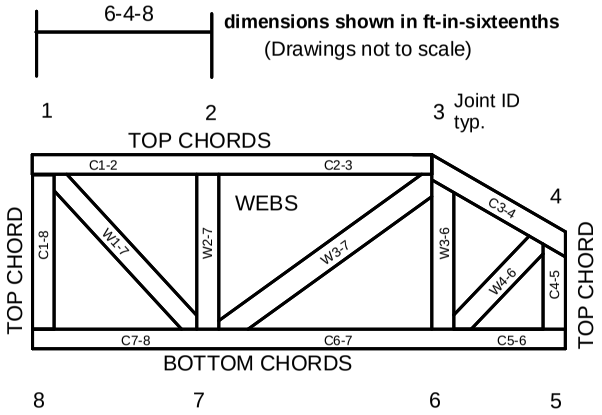


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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.

MiTek®

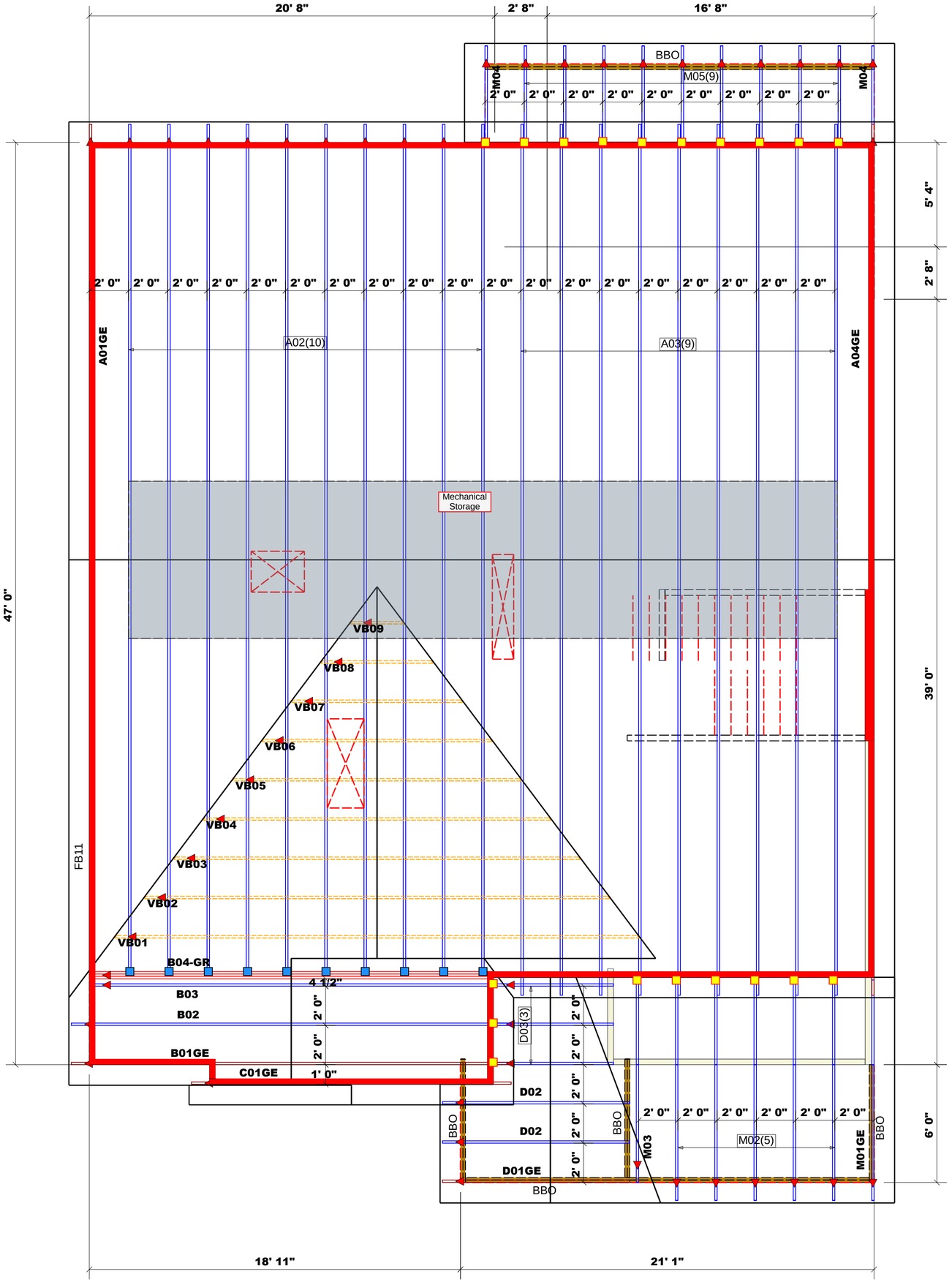
ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

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.
21. The design does not take into account any dynamic or other loads other than those expressly stated.



Truss Placement Plan
SCALE: NTS

Dimension Notes
1. All exterior wall to wall dimensions are to face of stud unless noted otherwise 2. All interior wall dimensions are to face of stud unless noted otherwise 3. All exterior wall to truss dimensions are to face of stud unless noted otherwise

Roof Area	= 2658.25 sq.ft.
Ridge Line	= 79.98 ft.
Hip Line	= 0 ft.
Horiz. OH	= 195.56 ft.
Raked OH	= 217.66 ft.
Decking	= 91 sheets

All Walls Shown Are Considered Load Bearing

▲ = Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do Not Erect Trusses Backwards

WALL SCHEDULE

- 1st Floor Walls
- 2nd Floor Walls
- Non-Bearing Walls
- Garage Walls Dropped

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS26	USP	10	NA	16d/3-1/2"	16d/3-1/2"
	JUS24	USP	19	NA	10d/3"	10d/3"

▲ = Indicates Left End of Truss
(Reference Engineered Truss Drawing)
Do NOT Erect Trusses Backwards

COMTECH
ROOF & FLOOR TRUSSES & BEAMS
Reilly Road Industrial Park
Fayetteville, N.C. 28309
Phone: (910) 864-8787
Fax: (910) 864-4444

Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables (derived from the prescriptive Code requirements) to determine the minimum foundation size and number of wood studs required to support reactions greater than 3000# but not greater than 15000#. A registered design professional shall be retained to design the support system for any reaction that exceeds those specified in the attached Tables. A registered design professional shall be retained to design the support system for all reactions that exceed 15000#.

Signature Johnnie Baggett

Johnnie Baggett

LOAD CHART FOR JACK STUDS

(BASED ON TABLES R502.5(1) & (b))
NUMBER OF JACK STUDS REQUIRED @ EA END OF HEADER/GIRDER

END REACTION (UP TO)	REQ'D STUDS FOR (2) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (3) PLY HEADER	END REACTION (UP TO)	REQ'D STUDS FOR (4) PLY HEADER
1700	1	2550	1	3400	1
3400	2	5100	2	6800	2
5100	3	7650	3	10200	3
6800	4	10200	4	13600	4
8500	5	12750	5	17000	5
10200	6	15300	6		
11900	7				
13600	8				
15300	9				

BUILDER	New Home Inc
JOB NAME	Lot 42 Duncan's Creek
PLAN	The Garner - Craftsman - Face
SEAL DATE	Seal Date
QUOTE #	B0325-1176
JOB #	J0525-2659
CITY / CO.	Lillington / Harnett
ADDRESS	757 Beacon Hill Road
MODEL	Roof
DATE REV.	5/19/25
DRAWN BY	Johnnie Baggett
SALES REP.	Johnnie Baggett

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY.
These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult BCSI-B1 and BCSI-B3 provided with the truss delivery package or online @ sbcindustry.com

ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0525-2659
Lot 42 Duncan's Creek

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Comtech, Inc - Fayetteville.

Pages or sheets covered by this seal: I73598510 thru I73598535

My license renewal date for the state of North Carolina is December 31, 2025.

North Carolina COA: C-0844

May 20,2025

Gilbert, Eric

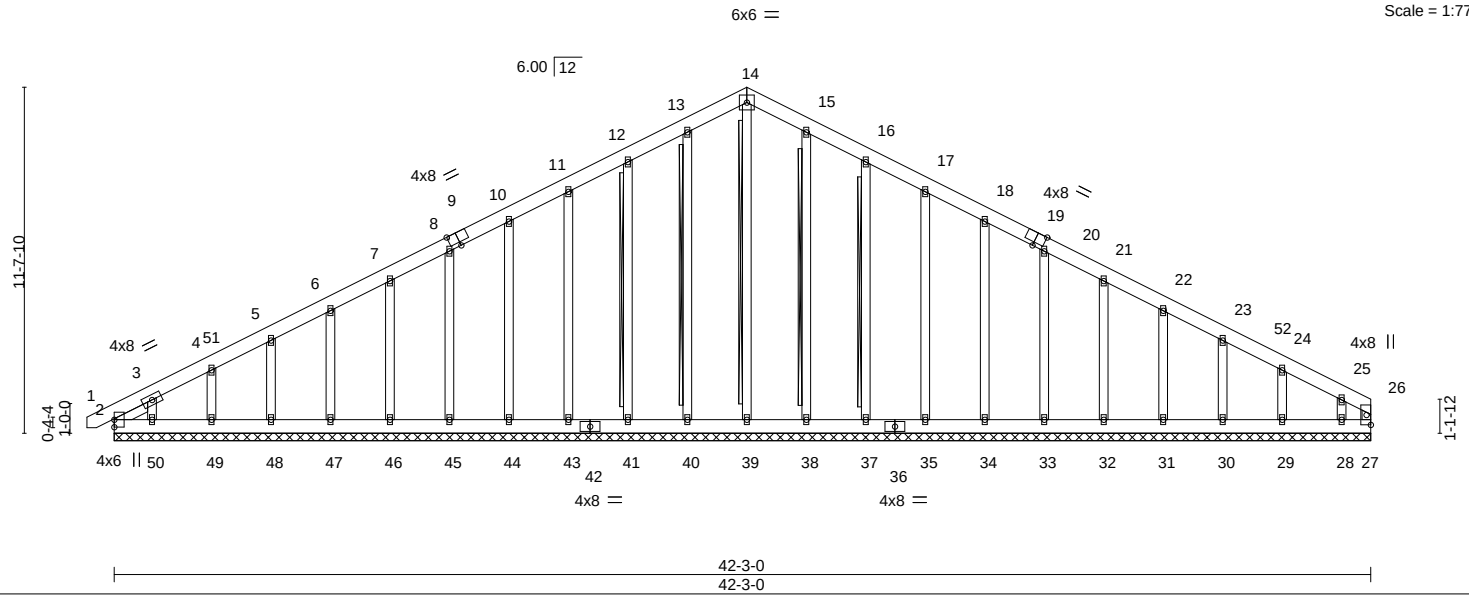
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	A01GE	COMMON SUPPORTED GAB	1	1	I73598510
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:13 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-11-0 21-3-4 42-3-0
0-11-0 21-3-4 20-11-12

Scale = 1:77.5



42-3-0
42-3-0

Plate Offsets (X,Y)-- [9:0-3-14,Edge], [19:0-3-15,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	0.10	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.05	Vert(CT)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.16	Horz(CT)	0.01	27	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 386 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 1-3-4

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.

WEBS T-Brace: 2x4 SPF No.2 - 14-39, 13-40, 12-41, 15-38 , 16-37
Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 42-3-0.
(lb) - Max Horz 2=240(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 27, 2, 40, 41, 43, 44, 45, 46, 47, 48, 49, 38, 37, 35, 34, 33, 32, 31, 30, 29 except 50=-164(LC 12), 28=-215(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 27, 2, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 50, 38, 37, 35, 34, 33, 32, 31, 30, 29, 28

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-363/124, 3-4=-254/119, 10-11=-97/267, 11-12=-118/325, 12-13=-140/389, 13-14=-151/423, 14-15=-151/423, 15-16=-140/389, 16-17=-118/325, 17-18=-97/267

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-2 to 3-7-11, Exterior(2N) 3-7-11 to 21-3-4, Corner(3R) 21-3-4 to 25-8-1 , Exterior(2N) 25-8-1 to 42-1-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 2, 40, 41, 43, 44, 45, 46, 47, 48, 49, 38, 37, 35, 34, 33, 32, 31, 30, 29 except (jt=lb) 50=164, 28=215.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2.
11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	A02	FINK	10	1	I73598511
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:13 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

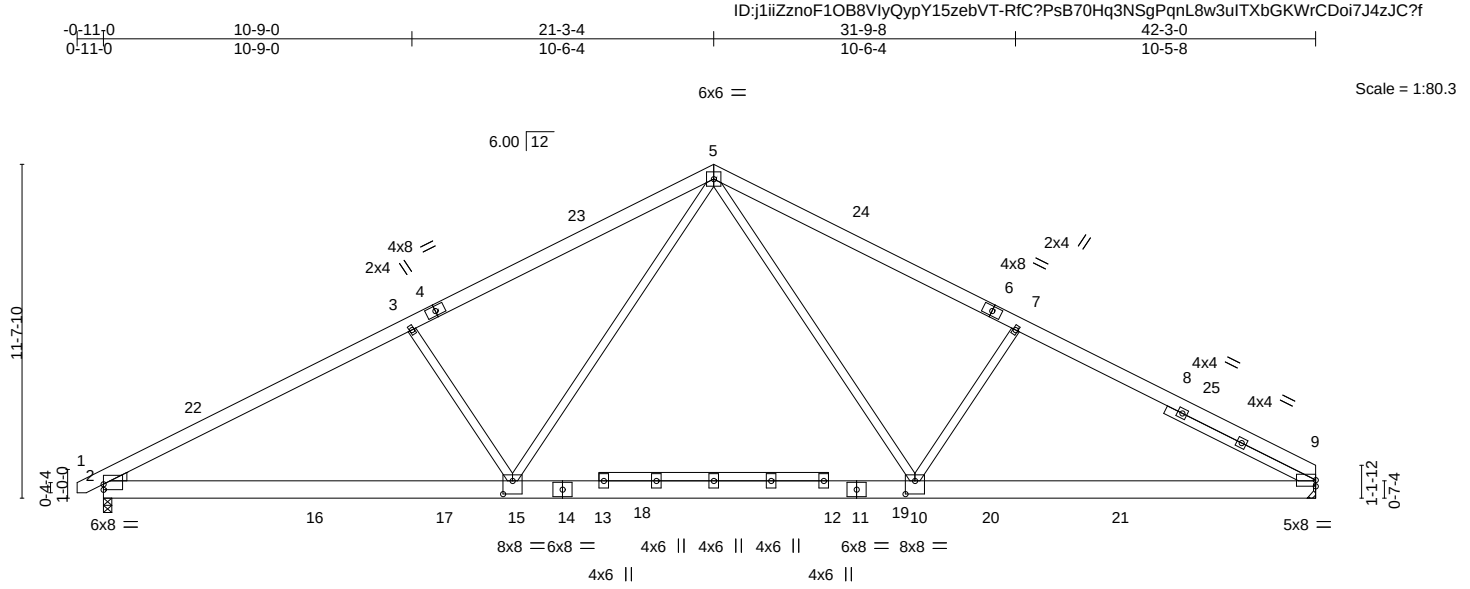


Plate Offsets (X,Y)-- [2:0-0-0,0-2-5], [9:0-0-0,0-2-10], [10:0-4-0,0-5-8], [15:0-4-0,0-5-8]

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	0.75	Vert(LL)	-0.23	2-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.73	Vert(CT)	-0.41	2-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.47	Horz(CT)	0.07	9	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S		Wind(LL)	0.08	2-15	>999	240	Weight: 322 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1 *Except*
12-13: 2x4 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3
SLIDER Right 2x4 SP No.2 5-9-7

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-1-9 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 2=0-3-8, 9=Mechanical
Max Horz 2=-146(LC 8)
Max Uplift 2=-113(LC 12), 9=-100(LC 13)
Max Grav 2=2105(LC 2), 9=2060(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3453/603, 3-5=-3193/633, 5-7=-3127/629, 7-9=-3395/605
BOT CHORD 2-15=-406/3014, 10-15=-132/2029, 9-10=-382/2891
WEBS 3-15=-566/355, 5-15=-157/1392, 5-10=-142/1302, 7-10=-544/352

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 21-3-4, Exterior(2R) 21-3-4 to 25-8-1, Interior(1) 25-8-1 to 42-3-0 zone;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 30.0psf 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) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9 except (jt=lb) 2=113.

May 20,2025

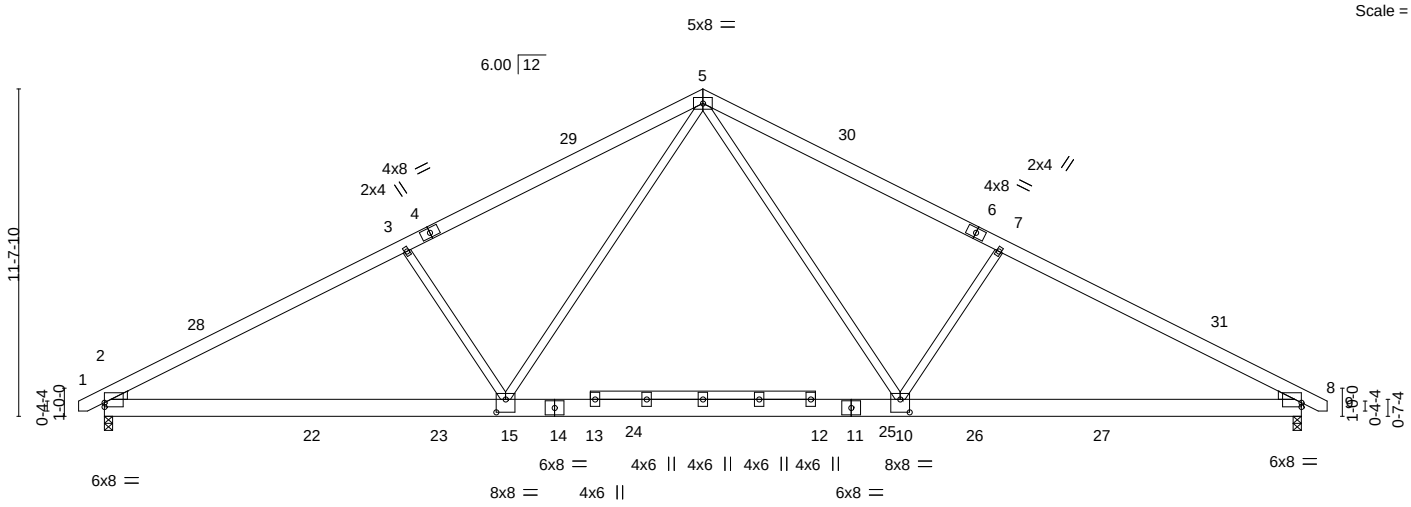
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	A03	FINK	9	1	I73598512
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:14 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-11-0 10-9-0 21-3-4 31-9-8 42-6-8 43-5-8
0-11-0 10-9-0 10-6-4 10-6-4 10-9-0 0-11-0

Scale = 1:81.9



14-3-2 28-3-6 42-6-8
14-3-2 14-0-5 14-3-2

Plate Offsets (X,Y)-- [2:0-0-0,0-1-13], [8:0-0-0,0-1-13], [10:0-4-0,0-5-8], [15:0-4-0,0-5-8]

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	0.36	Vert(LL)	-0.25	10-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.59	Vert(CT)	-0.38	10-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.46	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.08	10-15	>999	240	Weight: 318 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP No.1 *Except*
12-13: 2x4 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 2=0-3-8, 8=0-3-8
Max Horz 2=143(LC 11)
Max Uplift 2=-112(LC 12), 8=-112(LC 13)
Max Grav 2=2117(LC 2), 8=2117(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3480/610, 3-5=-3201/634, 5-7=-3201/634, 7-8=-3480/610
BOT CHORD 2-15=-399/3061, 10-15=-136/2064, 8-10=-396/3006
WEBS 3-15=-602/350, 5-15=-143/1360, 5-10=-143/1360, 7-10=-602/350

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 21-3-4, Exterior(2R) 21-3-4 to 25-8-1, Interior(1) 25-8-1 to 43-3-10 zone;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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=112, 8=112.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

May 20,2025

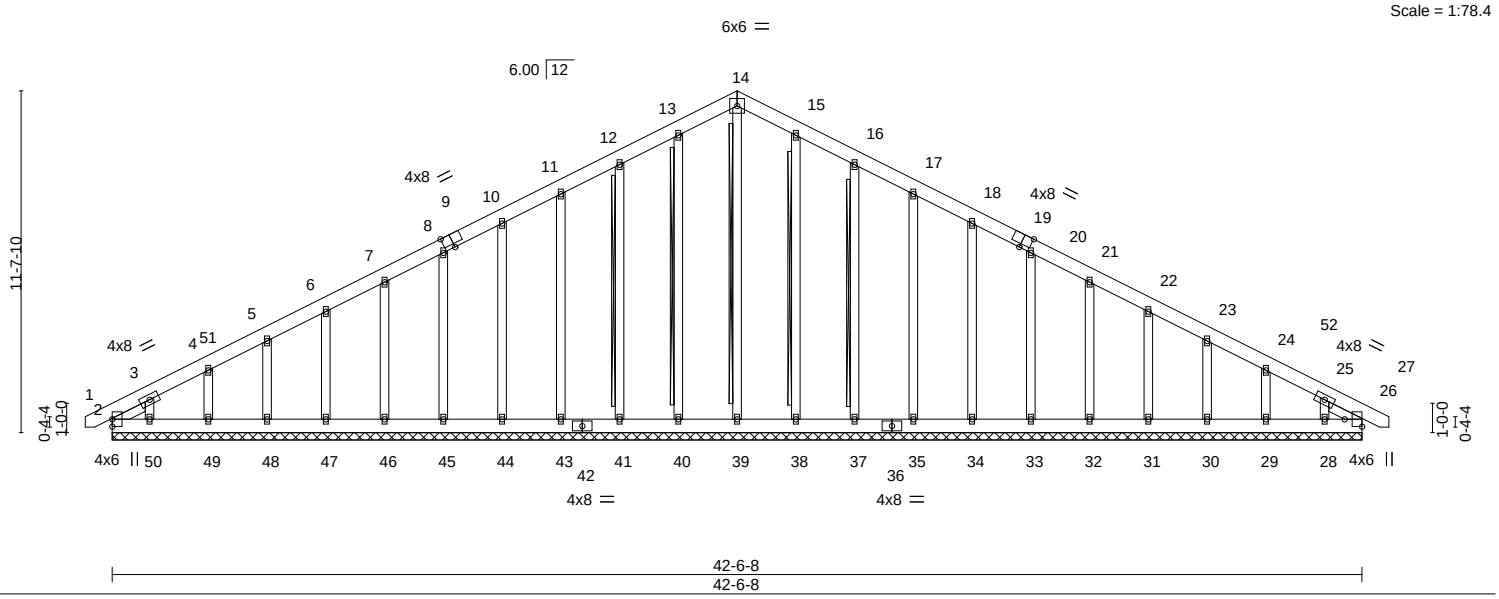
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	A04GE	COMMON SUPPORTED GAB	1	1	I73598513
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:15 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

-0-11-0 21-3-4 42-6-8 43-5-8
0-11-0 21-3-4 21-3-4 0-11-0

Scale = 1:78.4



42-6-8
42-6-8

Plate Offsets (X,Y)-- [9:0-3-14,Edge], [19:0-3-14,Edge], [26:Edge,0-7-2]

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	0.06	Vert(LL)	-0.00	26	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	-0.00	26	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(CT)	0.01	26	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 391 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.2
SLIDER	Left 2x4 SP No.2 1-3-4, Right 2x4 SP No.2 1-3-4

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.
WEBS	T-Brace: 2x4 SPF No.2 - 14-39, 13-40, 12-41, 15-38 , 16-37
	Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c.,with 3in minimum end distance. Brace must cover 90% of web length.

REACTIONS. All bearings 42-6-8.
(lb) - Max Horz 2=223(LC 16)
Max Uplift All uplift 100 lb or less at joint(s) 2, 40, 41, 43, 44, 45, 46, 47, 48, 49, 38, 37, 35, 34, 33, 32, 31, 30, 29 except 50=-167(LC 12), 28=-137(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 39, 40, 41, 43, 44, 45, 46, 47, 48, 49, 50, 38, 37, 35, 34, 33, 32, 31, 30, 29, 28, 26

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-372/106, 3-4=-262/92, 11-12=-111/289, 12-13=-134/353, 13-14=-145/389, 14-15=-145/389, 15-16=-134/353, 16-17=-111/289, 25-26=-272/83

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-2 to 3-7-11, Exterior(2N) 3-7-11 to 21-3-4, Corner(3R) 21-3-4 to 25-8-1 , Exterior(2N) 25-8-1 to 43-3-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 40, 41, 43, 44, 45, 46, 47, 48, 49, 38, 37, 35, 34, 33, 32, 31, 30, 29 except (jt=lb) 50=167, 28=137.
10) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	B01GE	COMMON STRUCTURAL GA	1	1	I73598514
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:16 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

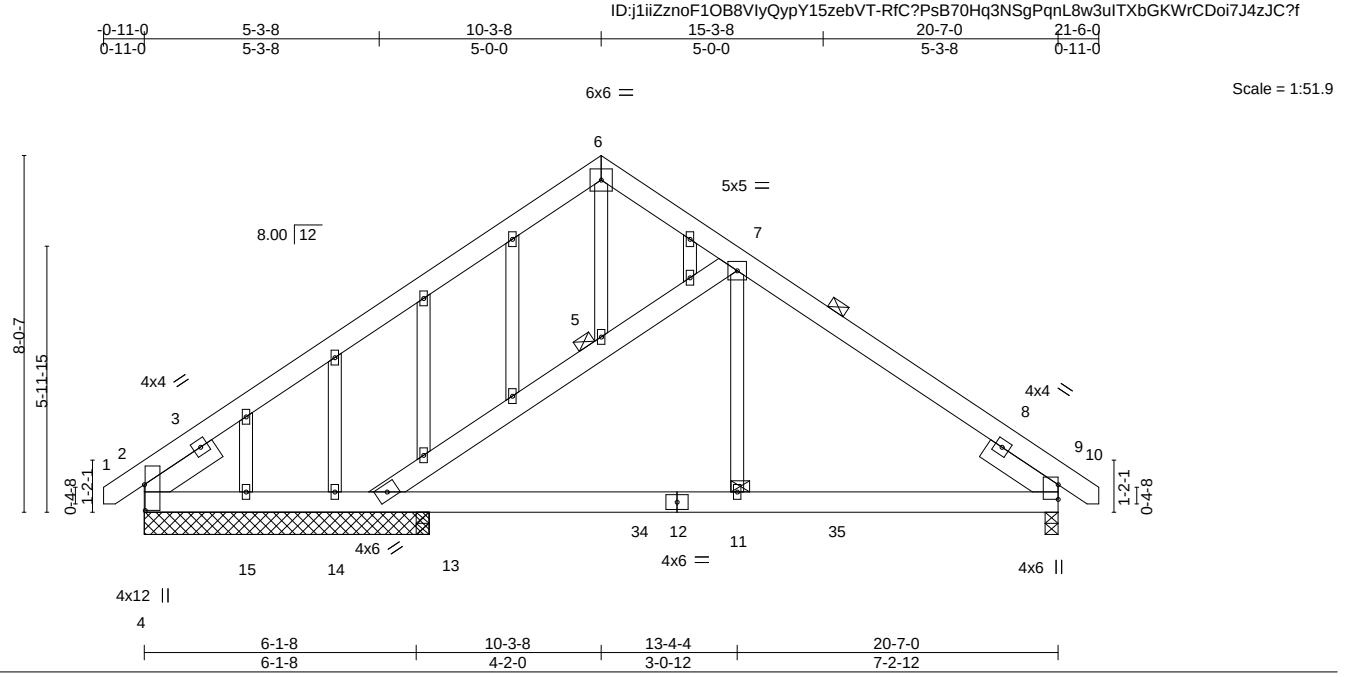


Plate Offsets (X,Y)-- [2:0-7-0,0-0-4]

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	0.50	Vert(LL)	-0.02	11-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.45	Vert(CT)	-0.02	4-32	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.01	15-26	>999	240	Weight: 176 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2
SLIDER	Left 2x6 SP No.1 1-11-0, Right 2x6 SP No.1 1-11-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied. Except:
	1 Row at midpt 6-9
	6-0-0 oc bracing: 4-5
BOT CHORD	Rigid ceiling directly applied. Except:
	1 Row at midpt 28-32
JOINTS	1 Brace at Jt(s): 5

REACTIONS. All bearings 6-5-0 except (jt=length) 9=0-3-8, 13=0-3-8.
(lb) - Max Horz 2=575(LC 12)
Max Uplift All uplift 100 lb or less at joint(s) 2, 4 except 9=-230(LC 12), 15=-494(LC 12), 13=-159(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 14 except 2=613(LC 1), 9=546(LC 19), 15=699(LC 19), 4=316(LC 19), 13=704(LC 19), 2=613(LC 1)

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

TOP CHORD	2-6=-965/893, 6-7=-641/422, 7-9=-718/346, 4-5=-257/300
BOT CHORD	2-15=-596/698, 14-15=-596/698, 4-14=-596/698, 4-13=-266/586, 11-13=-266/586, 9-11=-266/586
WEBS	7-11=-43/284

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-9-7 to 3-7-6, Interior(1) 3-7-6 to 10-3-8, Exterior(2E) 20-7-0 to 21-4-7 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4, 2 except (jt=lb) 9=230, 15=494, 13=159.
9) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	B02	COMMON	1	1	I73598515
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:16 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

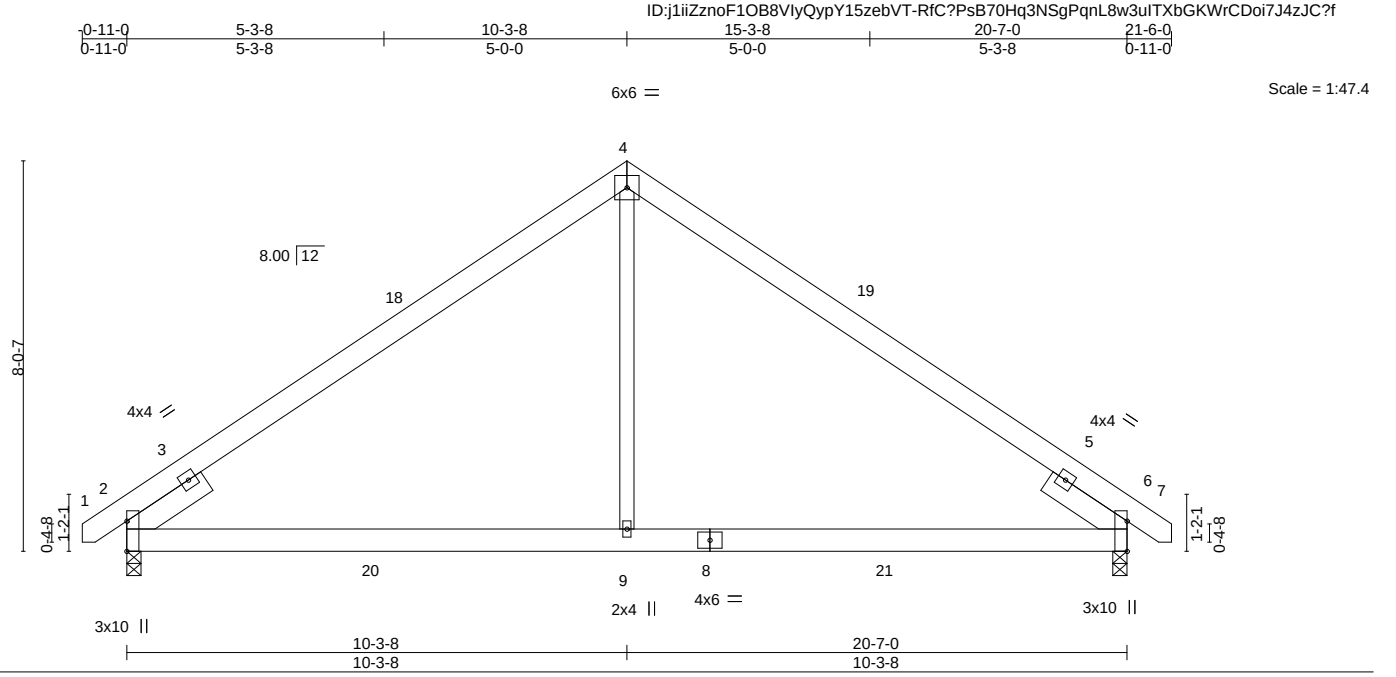


Plate Offsets (X,Y)-- [2:Edge,0-0-0], [6:Edge,0-0-0]

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	0.33	Vert(LL)	-0.10	9-16	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.14	9-16	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.06	9-16	>999	240	Weight: 131 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.1 1-11-0, Right 2x6 SP No.1 1-11-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 6=0-3-8, 2=0-3-8
Max Horz 2=-177(LC 10)
Max Uplift 6=-52(LC 13), 2=-52(LC 12)
Max Grav 6=1119(LC 20), 2=1119(LC 19)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1223/237, 4-6=-1223/237
BOT CHORD 2-9=-11/958, 6-9=-11/958
WEBS 4-9=0/771

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-7 to 3-7-6, Interior(1) 3-7-6 to 10-3-8, Exterior(2R) 10-3-8 to 14-8-5, Interior(1) 14-8-5 to 21-4-7 zone;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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	B03	Common	1	1	I73598516
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:17 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

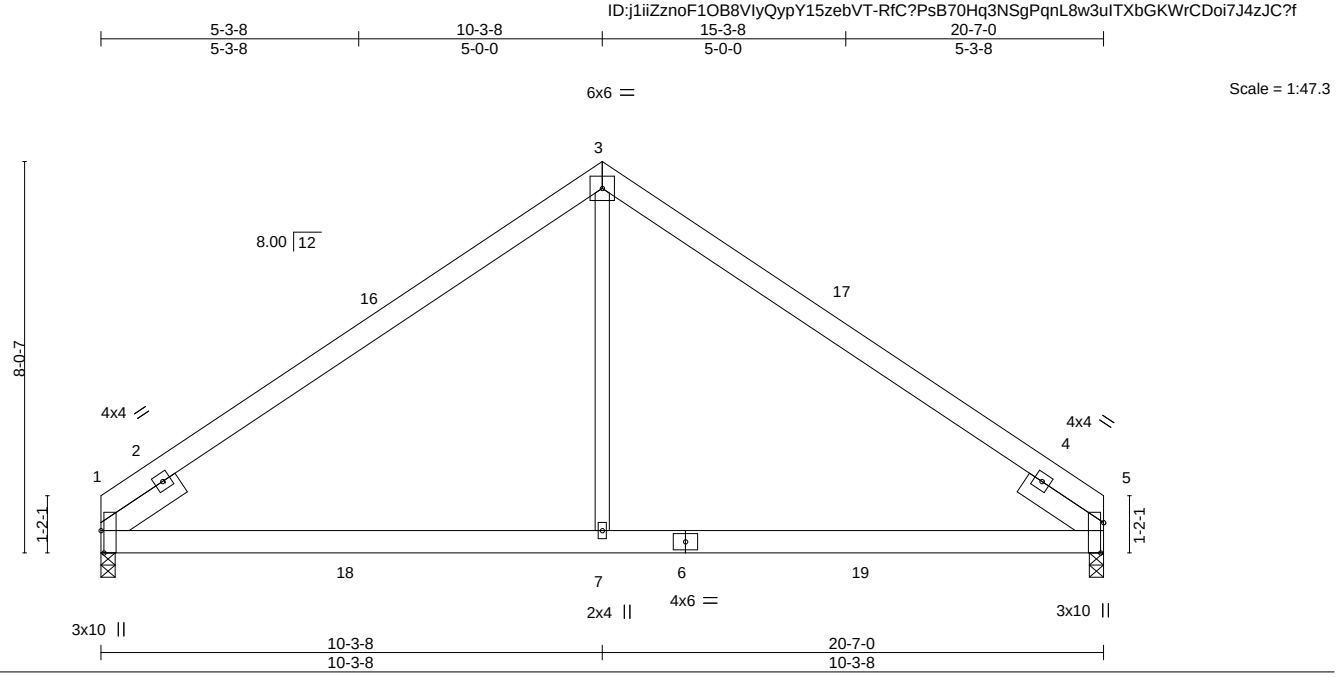


Plate Offsets (X,Y)-- [1:0-5-8,Edge], [5:0-7-8,Edge]

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	0.34	Vert(LL)	-0.10	7-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(CT)	-0.15	7-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.03	1	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS		Wind(LL)	0.06	7-10	>999	240	Weight: 127 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Left 2x6 SP No.1 1-11-0, Right 2x6 SP No.1 1-11-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-8, 5=0-3-8
Max Horz 1=164(LC 9)
Max Uplift 1=-41(LC 12), 5=-41(LC 13)
Max Grav 1=1075(LC 19), 5=1075(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1226/237, 3-5=-1226/237
BOT CHORD 1-7=-42/955, 5-7=-42/955
WEBS 3-7=0/771

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-3-8, Exterior(2R) 10-3-8 to 14-8-5, Interior(1) 14-8-5 to 20-7-0 zone;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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	B04-GR	Common Girder	1	3	I73598517
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:18 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

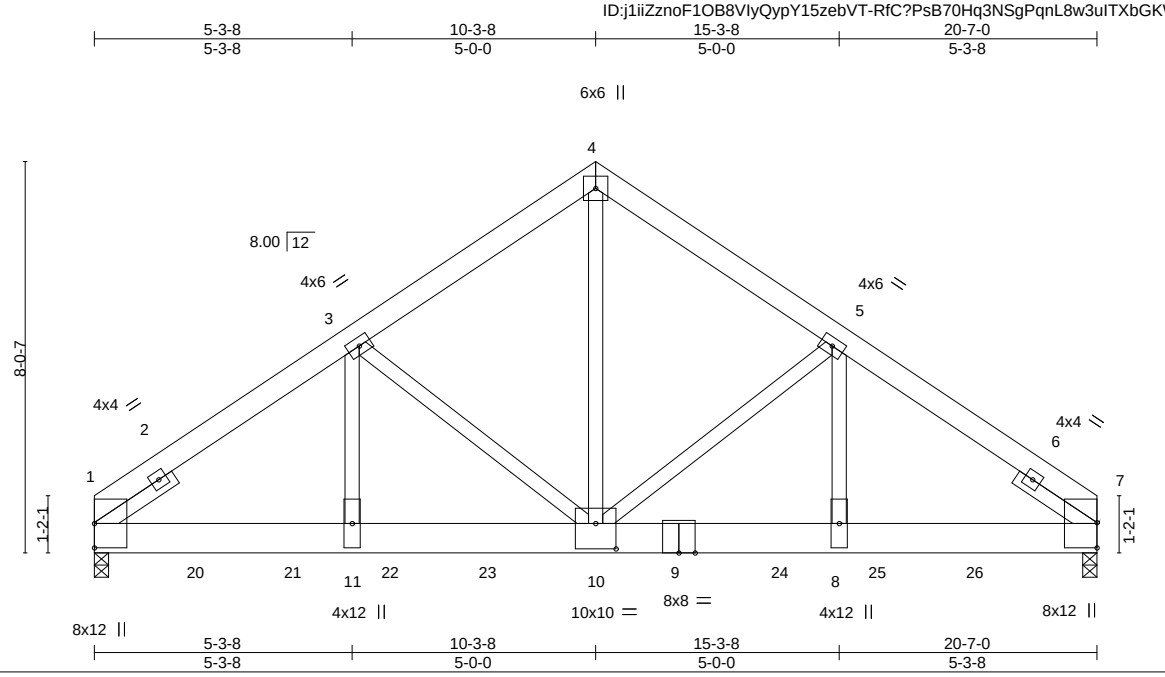


Plate Offsets (X,Y)-- [10:0-5-0,0-6-4]

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	0.48	Vert(LL)	-0.11	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.41	Vert(CT)	-0.18	8-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.83	Horz(CT)	0.05	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-MS		Wind(LL)	0.05	8-10	>999	240	Weight: 501 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x8 SP 2400F 2.0E
WEBS 2x4 SP No.2
SLIDER Left 2x4 SP No.2 1-11-0, Right 2x4 SP No.2 1-11-0

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=0-3-8, 7=0-3-8
Max Horz 1=-164(LC 27)
Max Uplift 1=-558(LC 8), 7=-641(LC 9)
Max Grav 1=10140(LC 2), 7=11711(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-12907/735, 3-4=-9739/613, 4-5=-9741/613, 5-7=-13056/743
BOT CHORD 1-11=-611/10472, 10-11=-611/10472, 8-10=-544/10603, 7-8=-544/10603
WEBS 4-10=-570/10147, 5-10=-3195/291, 5-8=-191/4141, 3-10=-3025/281, 3-11=-179/3963

NOTES-
1) 3-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: 2x8 - 3 rows staggered at 0-5-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) 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.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=558, 7=641.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 2040 lb down and 120 lb up at 2-0-12, 2040 lb down and 120 lb up at 4-0-12, 2040 lb down and 120 lb up at 6-0-12, 2040 lb down and 120 lb up at 8-0-12, 2040 lb down and 120 lb up at 10-0-12, 2040 lb down and 120 lb up at 12-0-12, 2040 lb down and 120 lb up at 14-0-12, 2040 lb down and 120 lb up at 16-0-12, and 2040 lb down and 120 lb up at 18-0-12, and 2045 lb down and 115 lb up at 20-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15

May 20,2025

Continued on page 2

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

LOAD CASE(S) Standard

Uniform Loads (plf)

Vert: 1-4=-60, 4-7=-60, 12-16=-20

Concentrated Loads (lb)

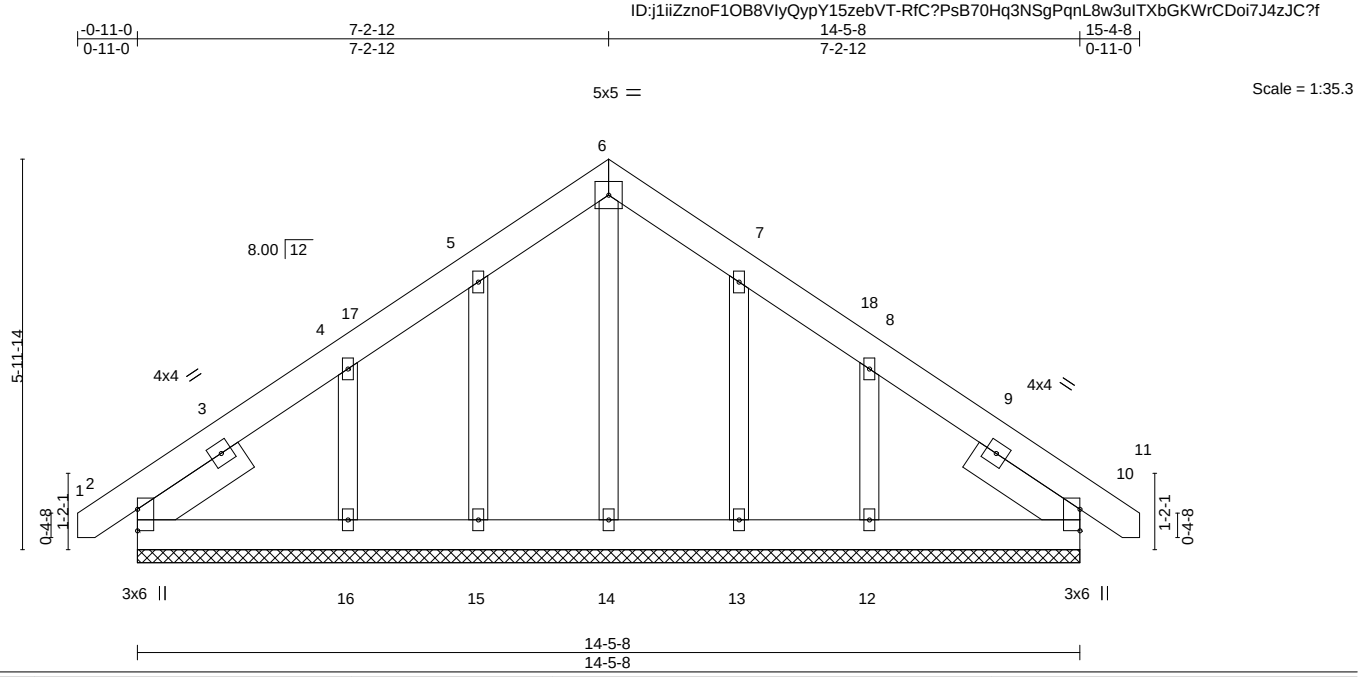
Vert: 9=-1664(B) 10=-1664(B) 18=-1668(B) 20=-1664(B) 21=-1664(B) 22=-1664(B) 23=-1664(B) 24=-1664(B) 25=-1664(B) 26=-1664(B)

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	C01GE	COMMON SUPPORTED GAB	1	1	I73598518
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:18 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.05	Vert(LL)	0.00	10	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	0.00	10	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 115 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.2
SLIDER Left 2x6 SP No.1 1-11-5, Right 2x6 SP No.1 1-11-5

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. All bearings 14-5-8.
(lb) - Max Horz 2=-163(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 13 except 16=-173(LC 12), 12=-166(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 13 except 16=281(LC 19), 12=273(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 4-16=-207/267, 8-12=-201/266

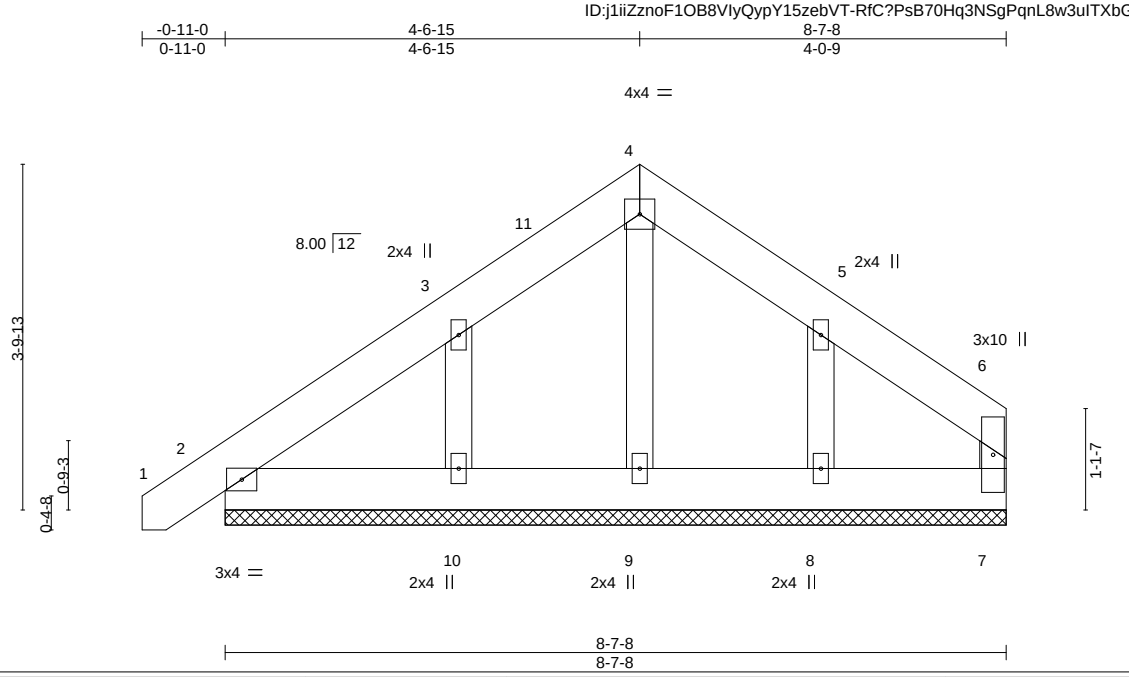
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-7 to 3-7-6, Exterior(2N) 3-7-6 to 7-2-12, Corner(3R) 7-2-12 to 11-7-9, Exterior(2N) 11-7-9 to 15-2-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 30.0psf 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.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 13 except (jt=lb) 16=173, 12=166.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 10.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	D01GE	COMMON SUPPORTED GAB	1	1	I73598519
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:19 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.05	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00		n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 57 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.2

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 8-7-8.
(lb) - Max Horz 2=102(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 7, 2, 8 except 10=-128(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 7, 2, 9, 10, 8

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-10=-203/292, 5-8=-163/255

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Corner(3E) -0-9-7 to 3-7-6, Exterior(2N) 3-7-6 to 4-6-15, Corner(3E) 4-6-15 to 8-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) 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.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 30.0psf 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7, 2, 8 except (jt=lb) 10=128.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	D02	COMMON	2	1	I73598520
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:19 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

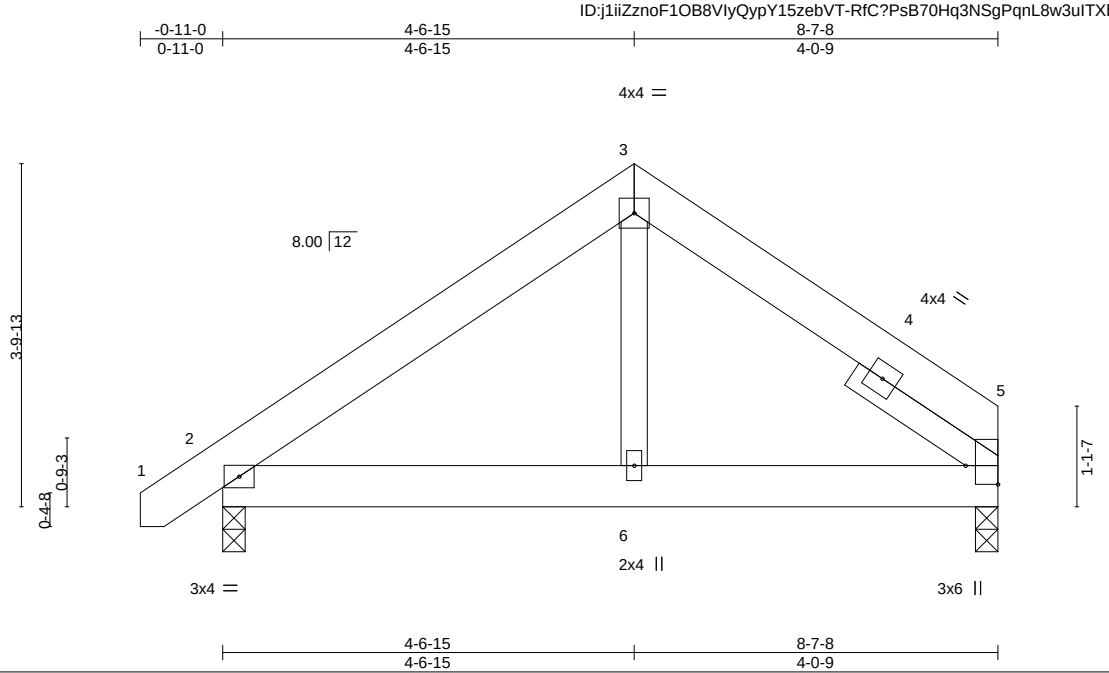


Plate Offsets (X,Y)-- [5:Edge,0-4-5]

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	0.11	Vert(LL)	0.01	6-13	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	-0.01	6-13	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 55 lb	FT = 25%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
SLIDER Right 2x4 SP No.2 1-11-0

BRACING-
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 5=0-3-0, 2=0-3-0
Max Horz 2=81(LC 9)
Max Uplift 5=-47(LC 8), 2=-57(LC 9)
Max Grav 5=343(LC 1), 2=394(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-361/478, 3-5=-283/499
BOT CHORD 2-6=-308/236, 5-6=-308/236
WEBS 3-6=-365/179

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-9-7 to 3-7-6, Interior(1) 3-7-6 to 4-6-15, Exterior(2E) 4-6-15 to 8-7-8 zone; porch 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 30.0psf 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 5, 2.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	D03	Common	3	1	I73598521
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:20 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

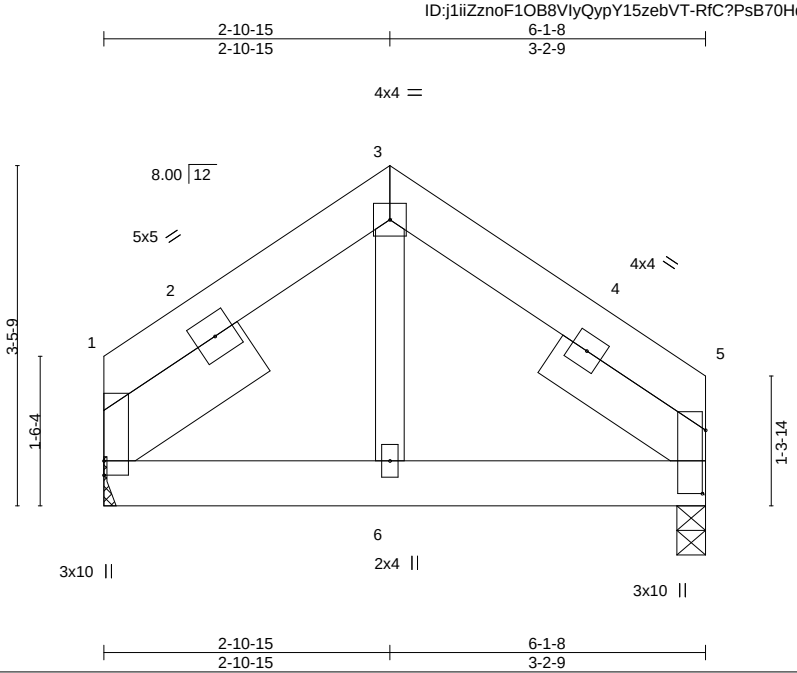


Plate Offsets (X,Y)-- [5:0-7-12,0-0-6]

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	0.06	Vert(LL)	0.00	6	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(CT)	-0.00	6	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	1	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-AS							Weight: 47 lb	FT = 25%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.2
SLIDER	Left 2x8 SP No.1 1-11-0, Right 2x6 SP No.1 1-11-0

BRACING-

TOP CHORD	Structural wood sheathing directly applied.
BOT CHORD	Rigid ceiling directly applied.

REACTIONS. (size) 1=Mechanical, 5=0-3-8
Max Horz 1=-51(LC 8)
Max Uplift 1=-29(LC 9), 5=-32(LC 8)
Max Grav 1=245(LC 1), 5=245(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-156/359, 3-5=-156/343
WEBS 3-6=-262/104

NOTES-

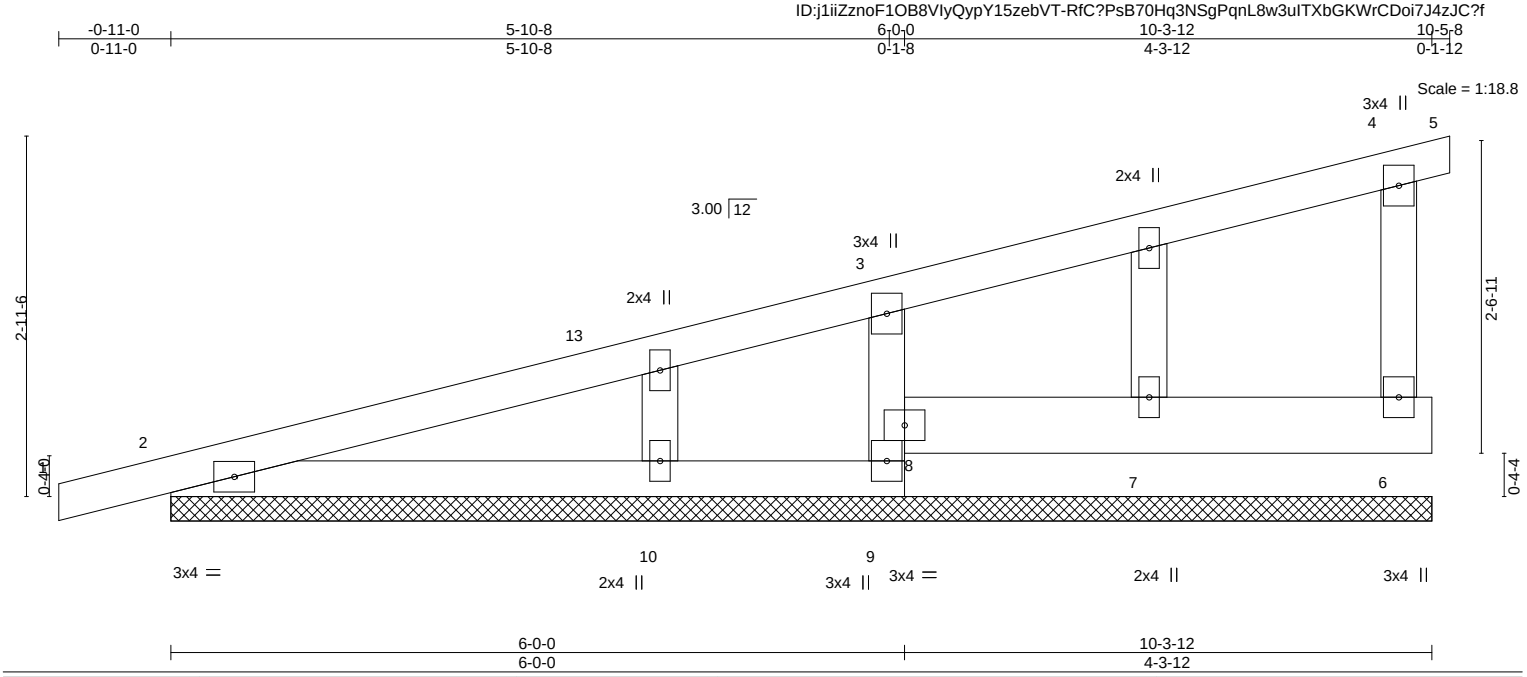
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; porch left and right exposed;C-C for members and forces & MWFRS for 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 30.0psf 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.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5.
7) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	M01GE	GABLE	1	1	I73598522
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:20 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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)	-0.00	4	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(CT)	0.00	4	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-R							Weight: 44 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
6-8: 2x6 SP No.1
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.2

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 10-3-12.
(lb) - Max Horz 2=135(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 6, 2, 9 except 8=-190(LC 12)
Max Grav All reactions 250 lb or less at joint(s) 6, 2, 9, 10, 7 except 8=346(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 3-8=-337/299

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 10-5-8 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf 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.
7) Bearing at joint(s) 8 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 6, 2, 9 except (jt=lb) 8=190.
9) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 6, 7.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	M02	MONOPITCH	5	1	I73598523
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:20 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

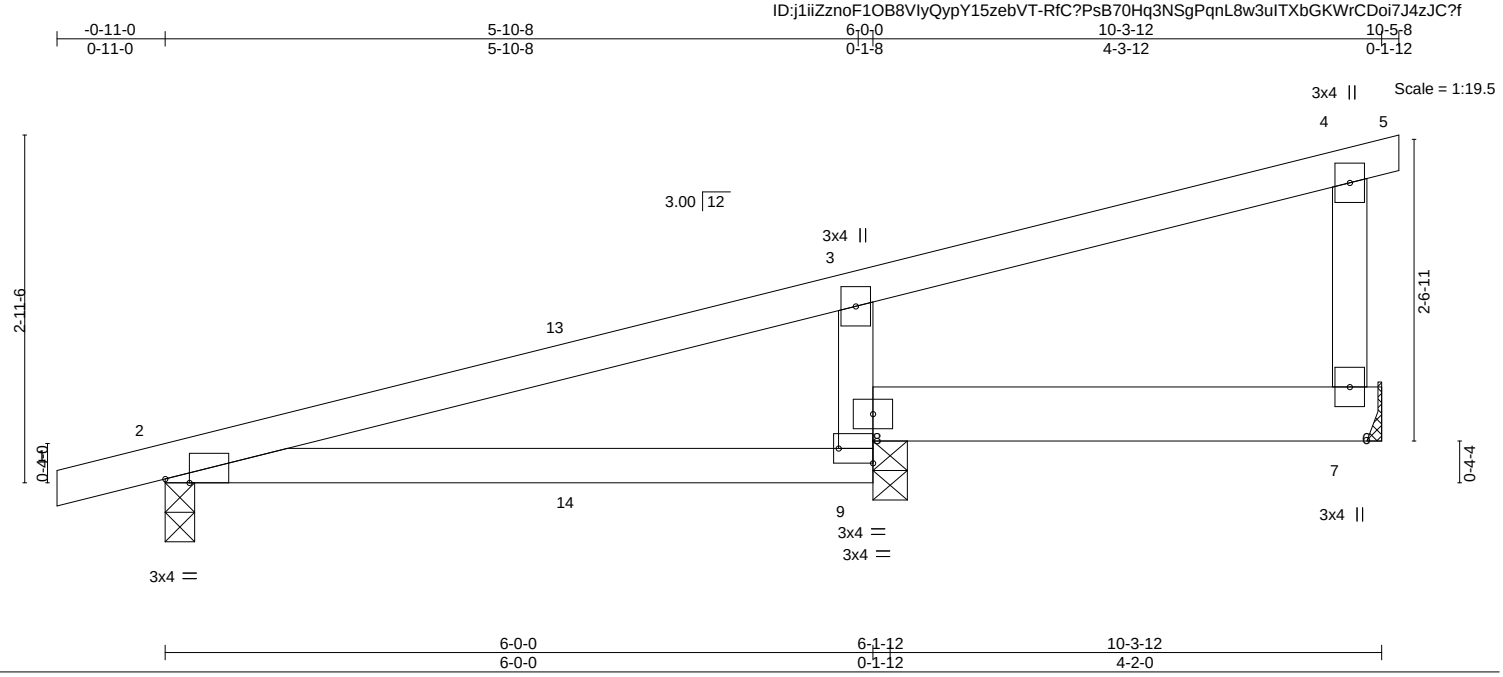


Plate Offsets (X,Y)-- [2:0-2-7,Edge], [9:Edge,0-1-8]

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	0.27	Vert(LL)	0.08	9-12	>872	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.23	Vert(CT)	-0.05	9-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS							Weight: 41 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
6-8: 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 7=Mechanical, 2=0-3-0, 8=0-3-8
Max Horz 2=105(LC 8)
Max Uplift 7=-22(LC 12), 2=-106(LC 8), 8=-125(LC 8)
Max Grav 7=169(LC 1), 2=272(LC 1), 8=448(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 3-8=-323/302

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) -0-11-0 to 3-5-13, Interior(1) 3-5-13 to 10-5-8 zone; porch left 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 30.0psf 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 2=106, 8=125.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	M03	MONOPITCH	1	1	I73598524
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:21 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

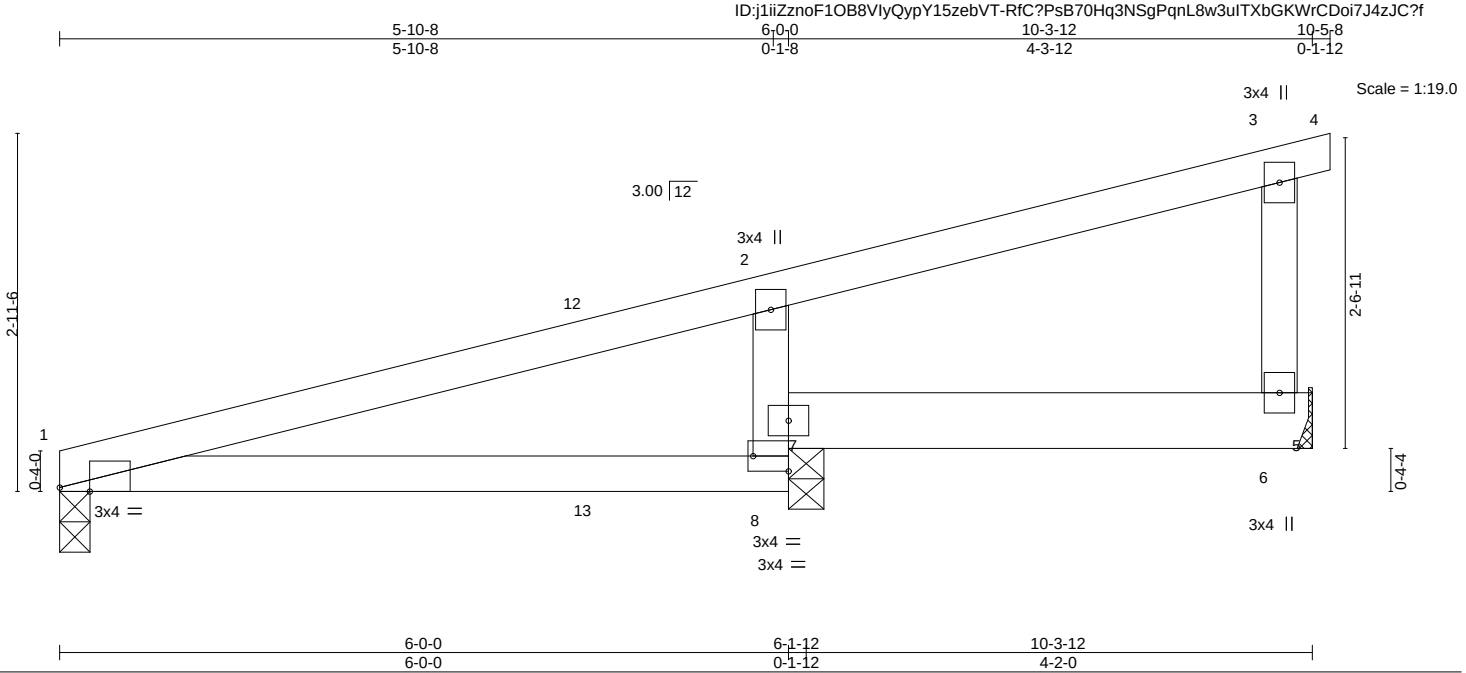


Plate Offsets (X,Y)-- [1:0-2-15,Edge], [8:Edge,0-1-8]

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	0.28	Vert(LL)	0.08	8-11	>835	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(CT)	-0.05	8-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	1	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-AS							Weight: 40 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1 *Except*
5-7: 2x6 SP No.1
WEBS 2x4 SP No.2

BRACING-
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS. (size) 1=0-3-0, 6=Mechanical, 7=0-3-8
Max Horz 1=94(LC 8)
Max Uplift 1=-70(LC 8), 6=-22(LC 12), 7=-129(LC 8)
Max Grav 1=212(LC 1), 6=169(LC 1), 7=453(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
BOT CHORD 2-7=-325/304

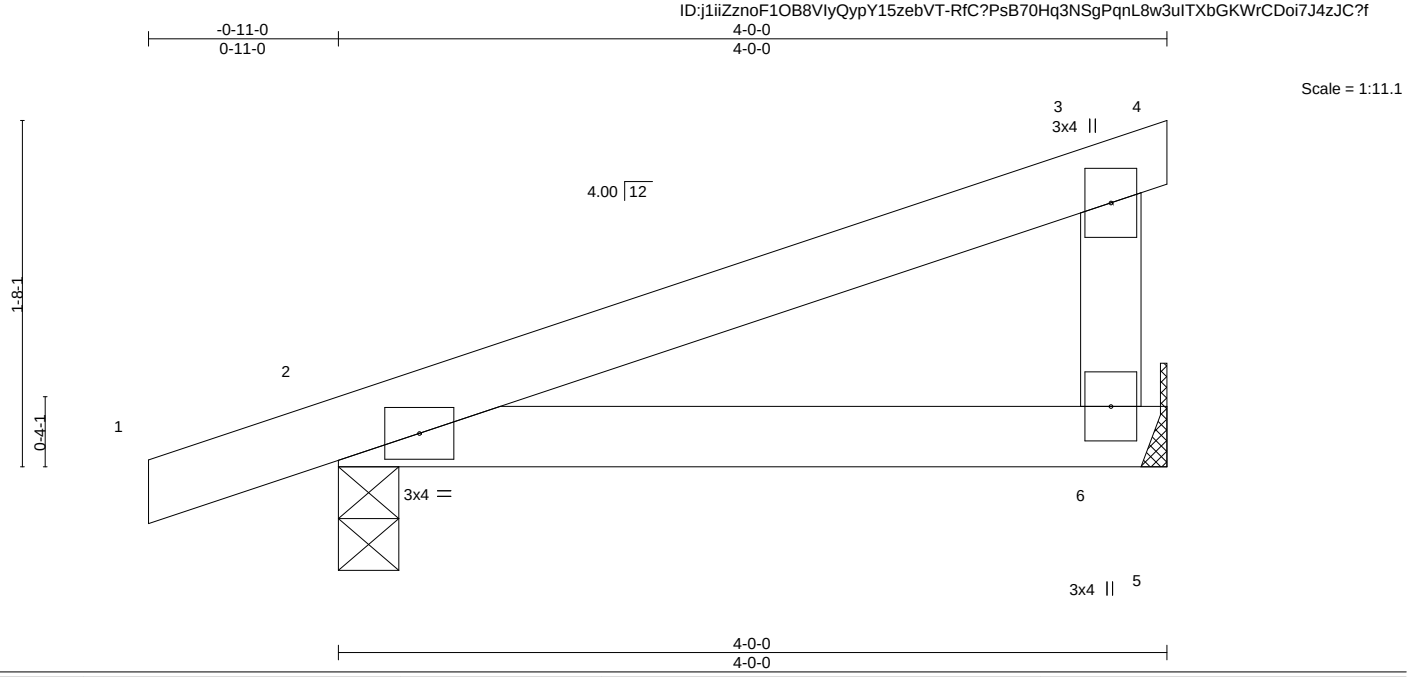
NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 10-5-8 zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 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 30.0psf 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) Refer to girder(s) for truss to truss connections.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 6 except (jt=lb) 7=129.
6) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	M04	GABLE	2	1	I73598525
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:21 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.20	Vert(LL)	0.04	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	-0.02	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 15 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=81(LC 8)
Max Uplift 6=-94(LC 8), 2=-125(LC 8)
Max Grav 6=154(LC 1), 2=211(LC 1)

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

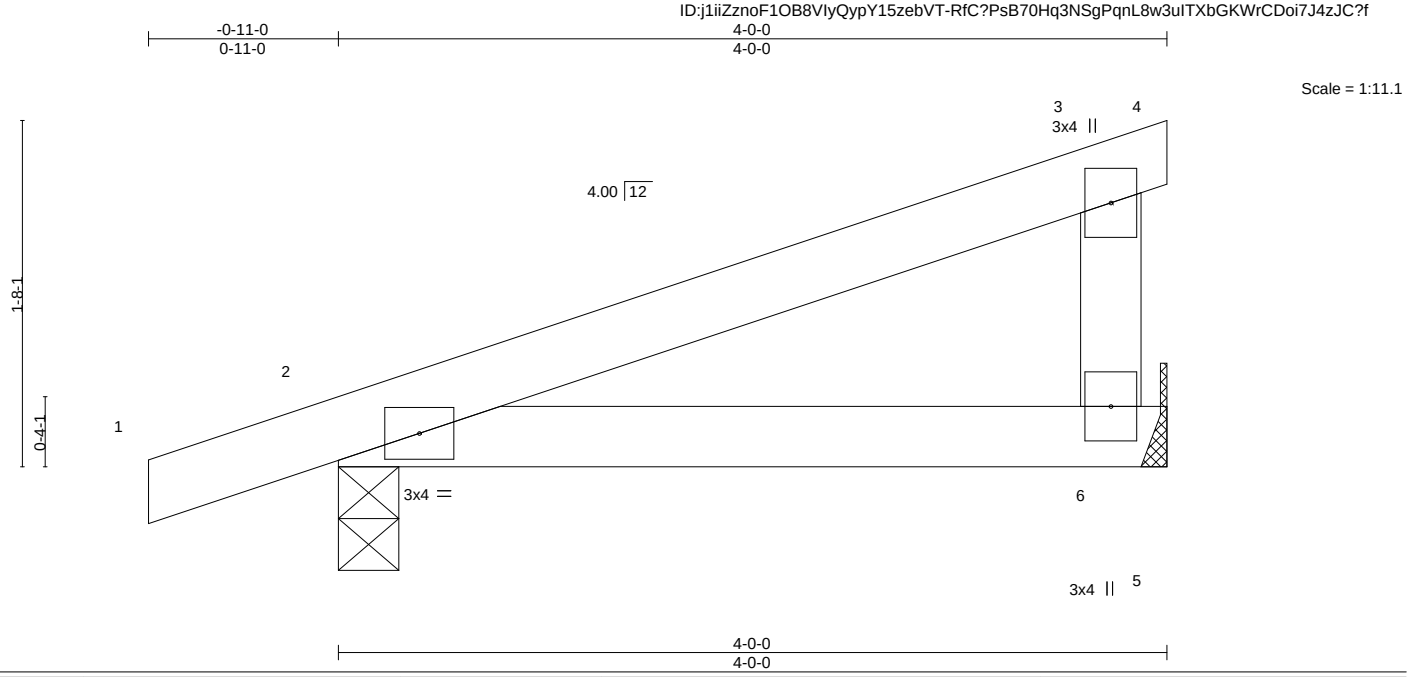
NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable studs spaced at 2-0-0 oc.
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 30.0psf 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.
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) 6 except (jt=lb) 2=125.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	M05	GABLE	9	1	I73598526
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:22 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.16	Vert(LL)	0.03	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	-0.02	6-9	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(CT)	-0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-MP							Weight: 15 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 6=Mechanical, 2=0-3-8
Max Horz 2=58(LC 8)
Max Uplift 6=-62(LC 8), 2=-87(LC 8)
Max Grav 6=154(LC 1), 2=211(LC 1)

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

NOTES-
1) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable studs spaced at 2-0-0 oc.
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 30.0psf 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.
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) 6, 2.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	VB01	GABLE	1	1	I73598527
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:22 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

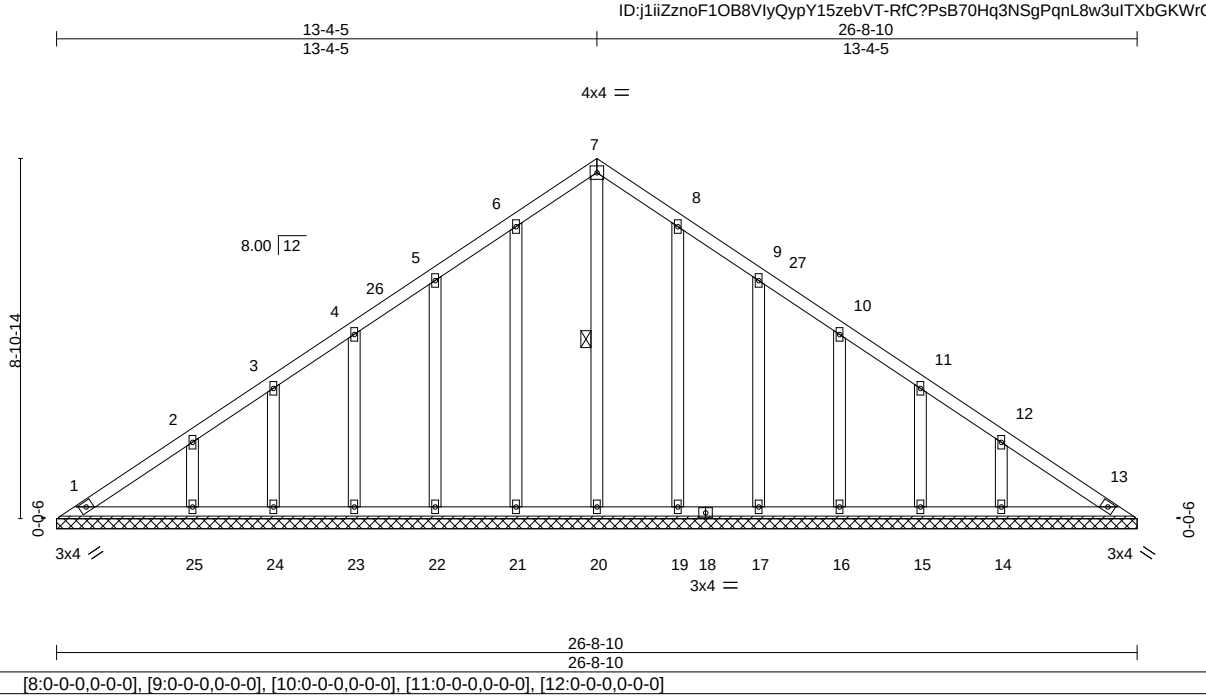


Plate Offsets (X,Y)-- [8:0-0-0,0-0-0], [9:0-0-0,0-0-0], [10:0-0-0,0-0-0], [11:0-0-0,0-0-0], [12:0-0-0,0-0-0]

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)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.01	13	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 163 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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.
WEBS 1 Row at midpt 7-20

REACTIONS. All bearings 26-8-10.
(lb) - Max Horz 1=257(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 21, 22, 23, 24, 19, 17, 16, 15 except 25=-130(LC 12), 14=-129(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 13, 20, 21, 22, 23, 24, 19, 17, 16, 15 except 25=262(LC 19), 14=261(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-251/203

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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 13-4-5, Exterior(2R) 13-4-5 to 17-9-2, Interior(1) 17-9-2 to 26-2-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 21, 22, 23, 24, 19, 17, 16, 15 except (jt=lb) 25=130, 14=129.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	VB02	Valley	1	1	I73598528
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:23 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

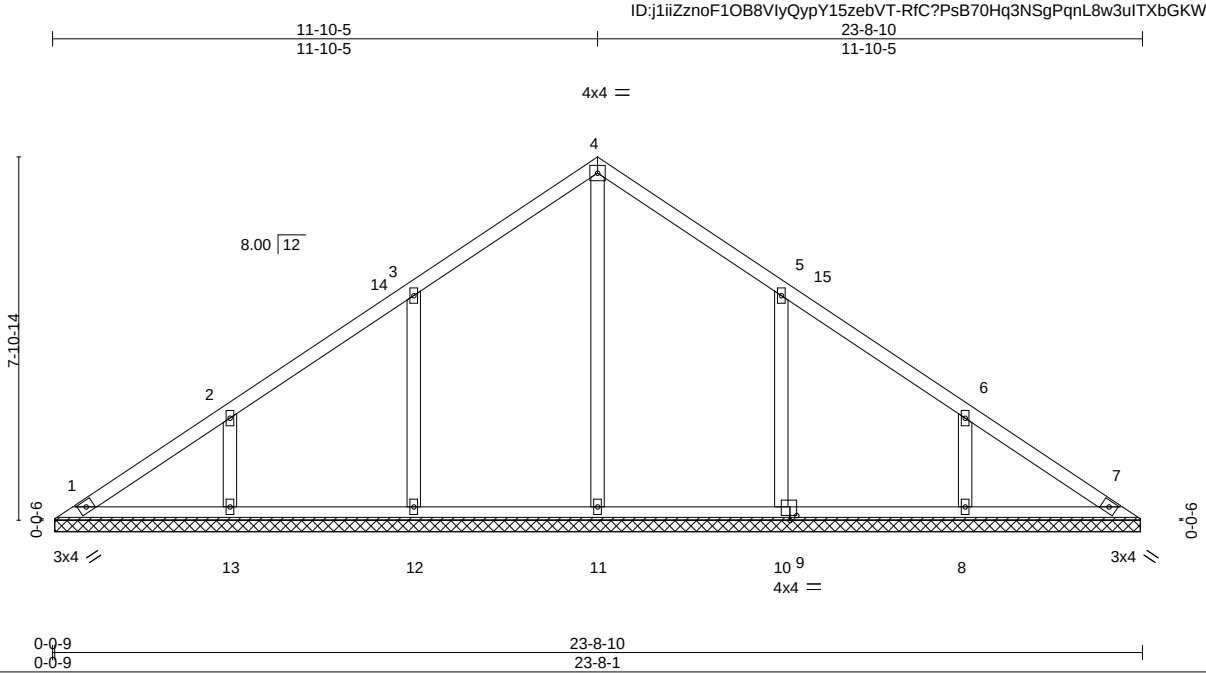


Plate Offsets (X,Y)-- [9:0-1-12,0-1-4]

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	0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code IRC2021/TPI2014		Matrix-S							Weight: 107 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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. All bearings 23-7-8.
(lb) - Max Horz 1=-182(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 13, 8 except 12=-102(LC 12), 10=-102(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=447(LC 22), 12=479(LC 19), 13=402(LC 19), 10=479(LC 20), 8=402(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-283/204, 2-13=-261/161, 5-10=-282/204, 6-8=-261/161

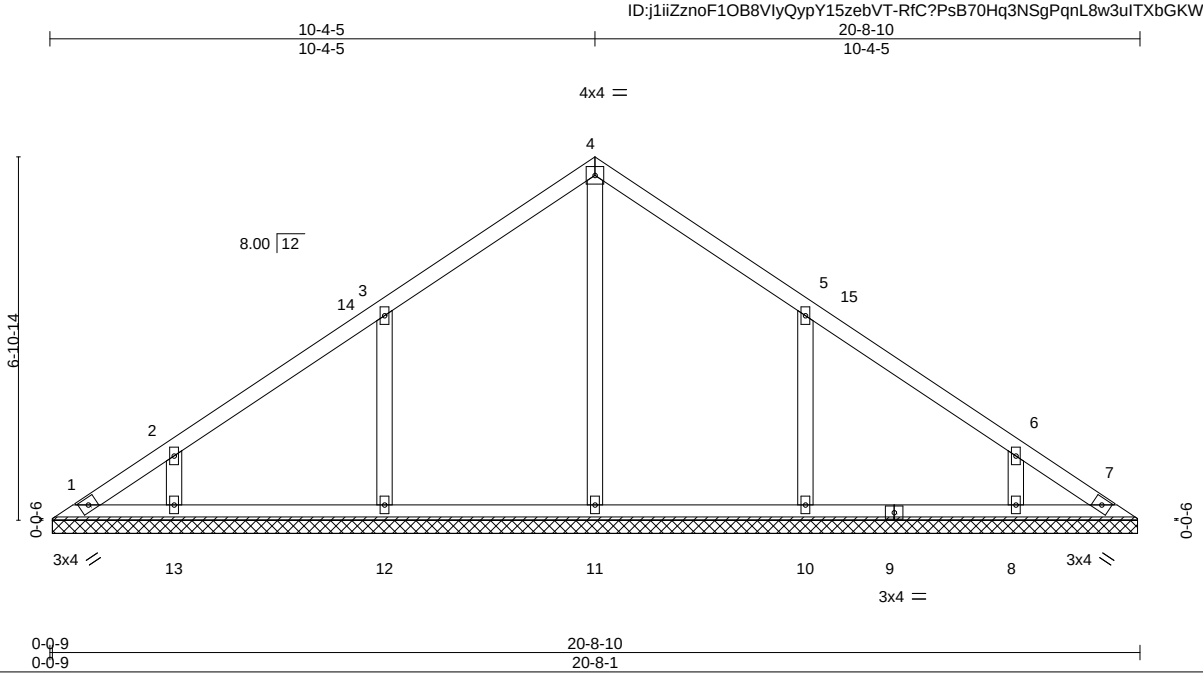
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 11-10-5, Exterior(2R) 11-10-5 to 16-3-2, Interior(1) 16-3-2 to 23-2-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 13, 8 except (jt=lb) 12=102, 10=102.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	VB03	Valley	1	1	I73598529
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:23 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.18	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(CT)	0.00	7	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 89 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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. All bearings 20-7-8.
(lb) - Max Horz 1=-158(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 7, 13, 8 except 12=-105(LC 12), 10=-105(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 7 except 11=436(LC 19), 12=495(LC 19), 13=324(LC 19), 10=495(LC 20), 8=324(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 3-12=-292/209, 5-10=-291/209

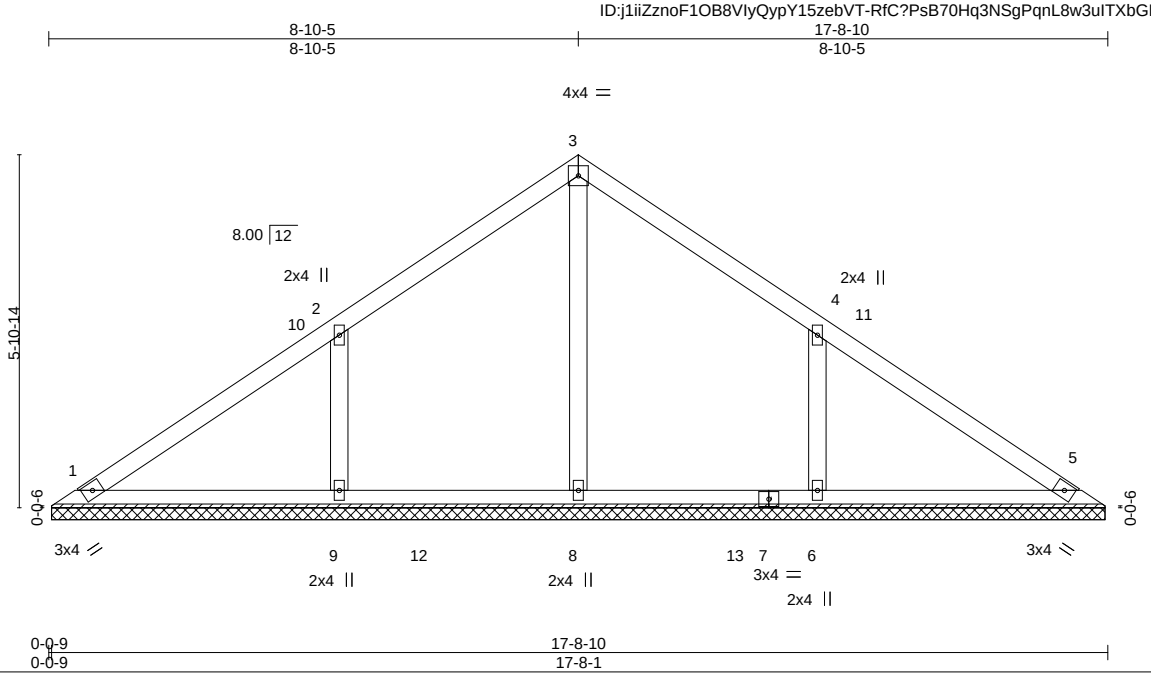
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 10-4-5, Exterior(2R) 10-4-5 to 14-9-2, Interior(1) 14-9-2 to 20-2-11 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 30.0psf 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7, 13, 8 except (jt=lb) 12=105, 10=105.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	VB04	Valley	1	1	I73598530
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:24 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 72 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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. All bearings 17-7-8.
(lb) - Max Horz 1=-134(LC 10)
Max Uplift All uplift 100 lb or less at joint(s) 1 except 9=-120(LC 12), 6=-120(LC 13)
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 8=394(LC 19), 9=525(LC 19), 6=524(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-9=-327/226, 4-6=-327/226

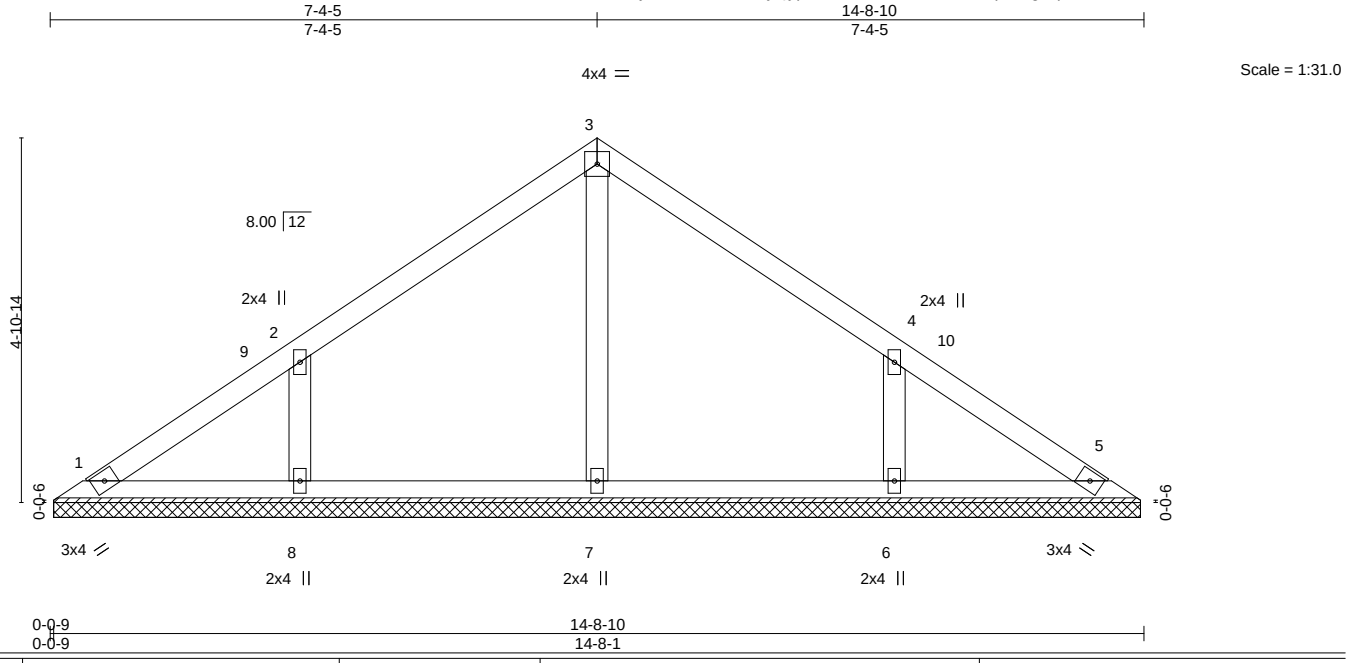
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-15 to 4-10-5, Interior(1) 4-10-5 to 8-10-5, Exterior(2R) 8-10-5 to 13-3-2, Interior(1) 13-3-2 to 17-2-11 zone;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 30.0psf 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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1 except (jt=lb) 9=120, 6=120.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	VB05	Valley	1	1	I73598531
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:24 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 58 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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. All bearings 14-7-8.
(lb) - Max Horz 1=110(LC 9)
Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=257(LC 1), 8=348(LC 19), 6=348(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-269/218, 4-6=-269/218

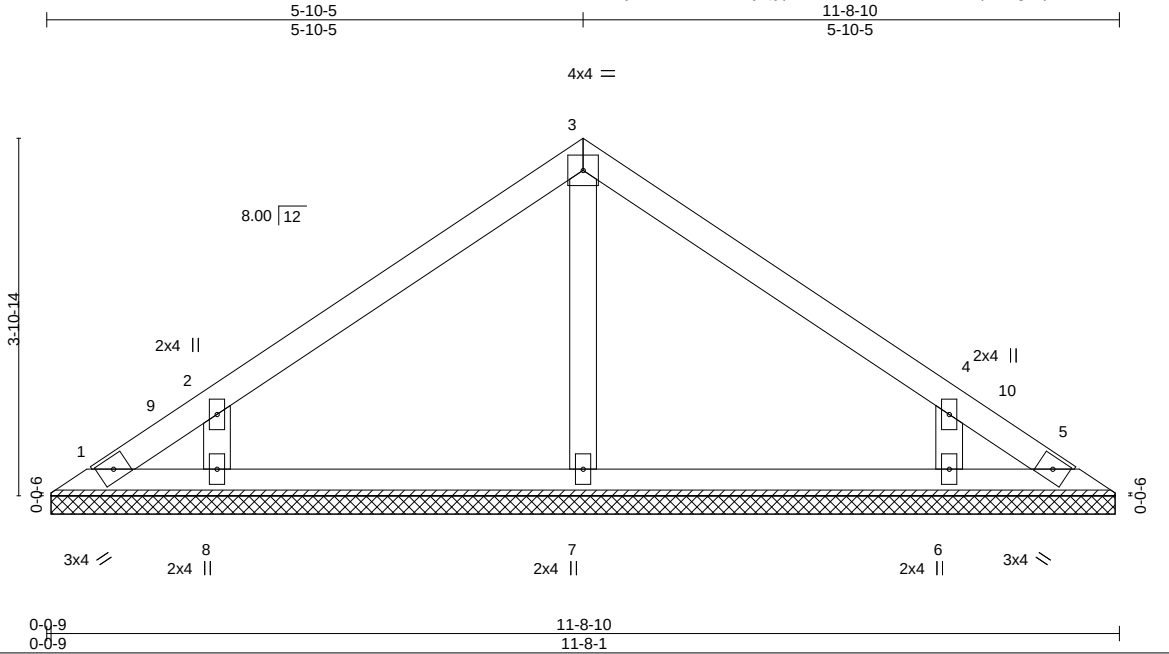
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 7-4-5, Exterior(2R) 7-4-5 to 11-9-2, Interior(1) 11-9-2 to 14-2-11 zone;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 30.0psf 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	VB06	Valley	1	1	I73598532
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:25 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.13	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		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 43 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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. All bearings 11-7-8.
(lb) - Max Horz 1=-86(LC 8)
Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 8, 6
Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=263(LC 1), 8=316(LC 19), 6=316(LC 20)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-8=-257/240, 4-6=-257/240

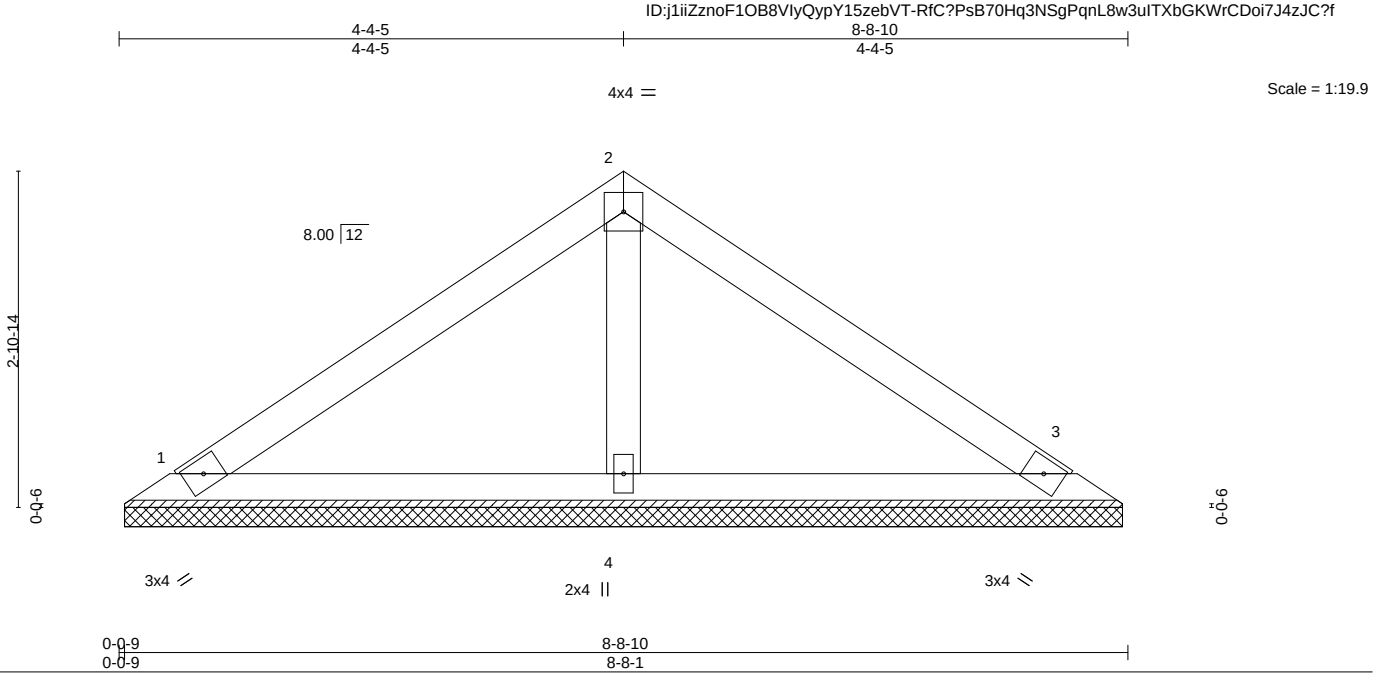
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) 0-5-15 to 4-10-12, Interior(1) 4-10-12 to 5-10-5, Exterior(2R) 5-10-5 to 10-3-2, Interior(1) 10-3-2 to 11-2-11 zone;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 30.0psf 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 8, 6.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	VB07	Valley	1	1	I73598533
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:25 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.11	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 30 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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=8-7-8, 3=8-7-8, 4=8-7-8
Max Horz 1=-62(LC 8)
Max Uplift 1=-27(LC 12), 3=-33(LC 13)
Max Grav 1=168(LC 1), 3=168(LC 1), 4=282(LC 1)

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

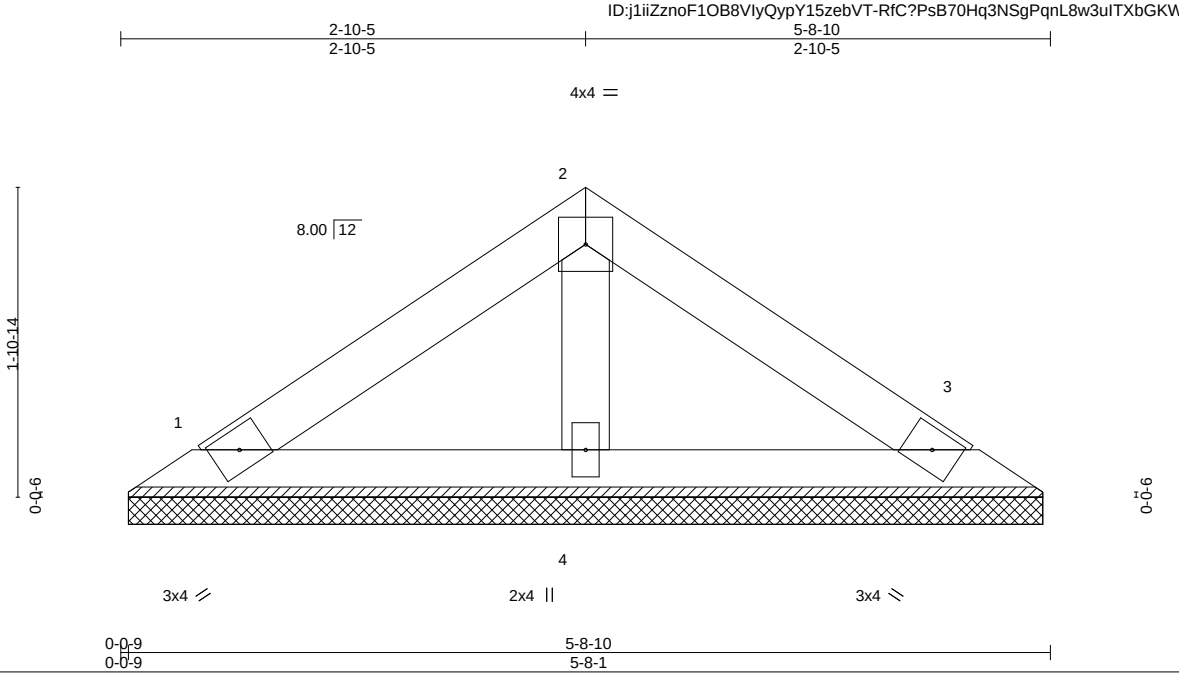
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber 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 30.0psf 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	VB08	Valley	1	1	I73598534
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:25 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL	10.0	Code	IRC2021/TPI2014	Matrix-P							Weight: 19 lb	FT = 25%

LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.2

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

REACTIONS. (size) 1=5-7-8, 3=5-7-8, 4=5-7-8
Max Horz 1=-38(LC 8)
Max Uplift 1=-16(LC 12), 3=-20(LC 13)
Max Grav 1=103(LC 1), 3=103(LC 1), 4=173(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=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;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 30.0psf 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

May 20,2025

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

Job	Truss	Truss Type	Qty	Ply	Lot 42 Duncan's Creek
J0525-2659	VB09	Valley	1	1	I73598535
					Job Reference (optional)

Comtech, Inc, Fayetteville, NC - 28314, 8.630 s Sep 26 2024 MiTek Industries, Inc. Mon May 19 13:12:26 2025 Page 1
ID:j1iiZznoF1OB8VIyQypY15zebVT-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f

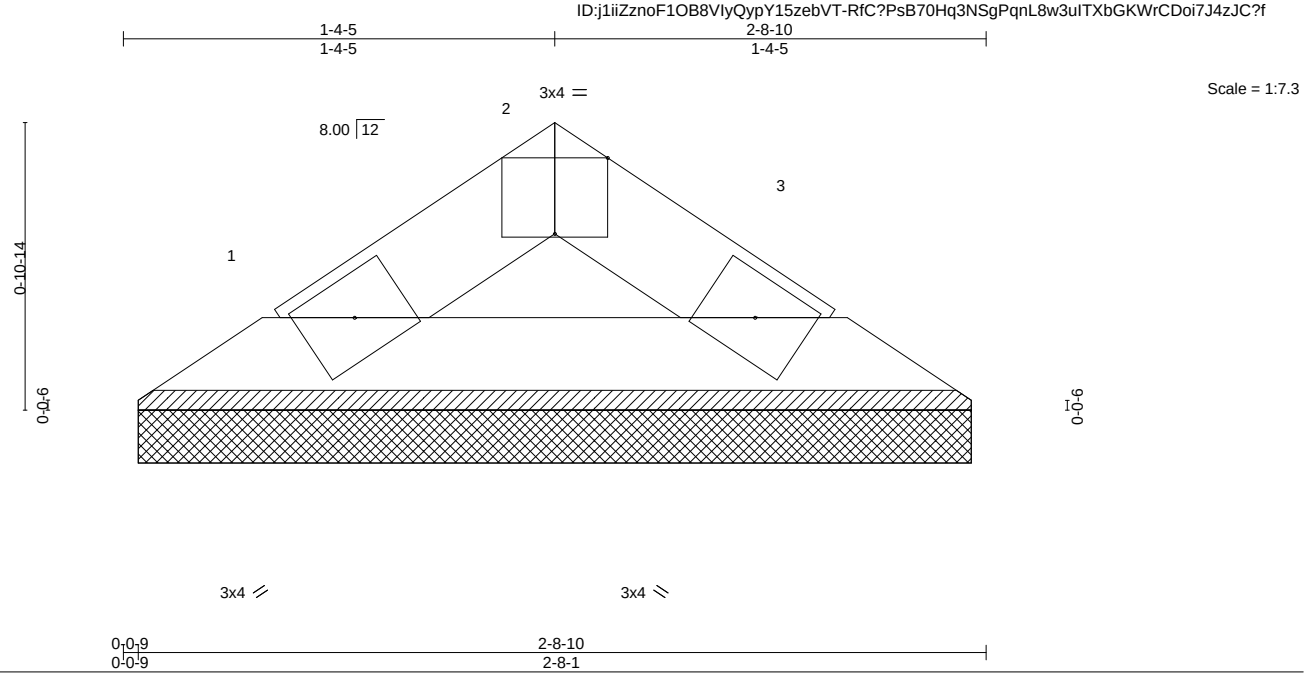


Plate Offsets (X,Y)-- [2:0-2-0,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
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-P							Weight: 7 lb	FT = 25%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-8-10 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (size) 1=2-7-8, 3=2-7-8
Max Horz 1=-14(LC 8)
Max Uplift 1=-4(LC 12), 3=-4(LC 13)
Max Grav 1=69(LC 1), 3=69(LC 1)

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

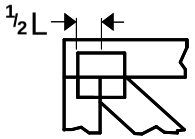
NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-16; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2E) zone;C-C for members and forces & MWFRS for reactions shown; Lumber 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 30.0psf 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

May 20,2025

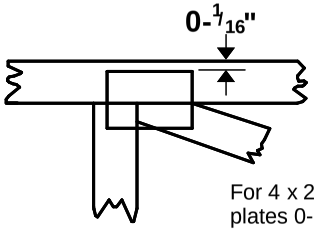
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



Center plate on joint unless x, y offsets are indicated. Dimensions are in ft-in-sixteenths. Apply plates to both sides of truss and fully embed teeth.



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

This symbol indicates the required direction of slots in connector plates.

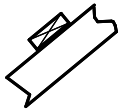
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

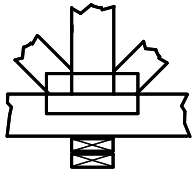
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

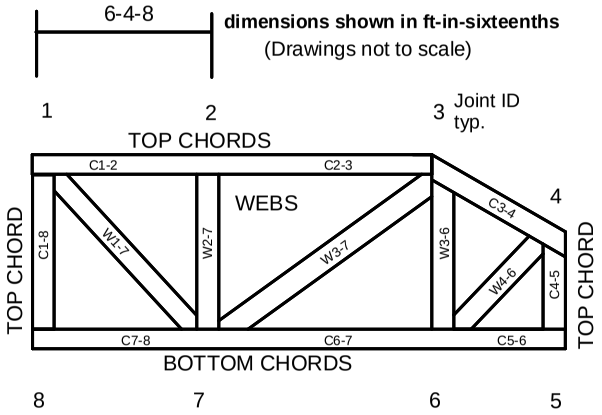


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & 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-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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.

MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

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.
21. The design does not take into account any dynamic or other loads other than those expressly stated.