



# ROOF & FLOOR TRUSSES & BEAMS

Reilly Road Industrial Park  
Fayetteville, N.C. 28309  
Phone: (910) 864-8787  
Fax: (910) 864-4444

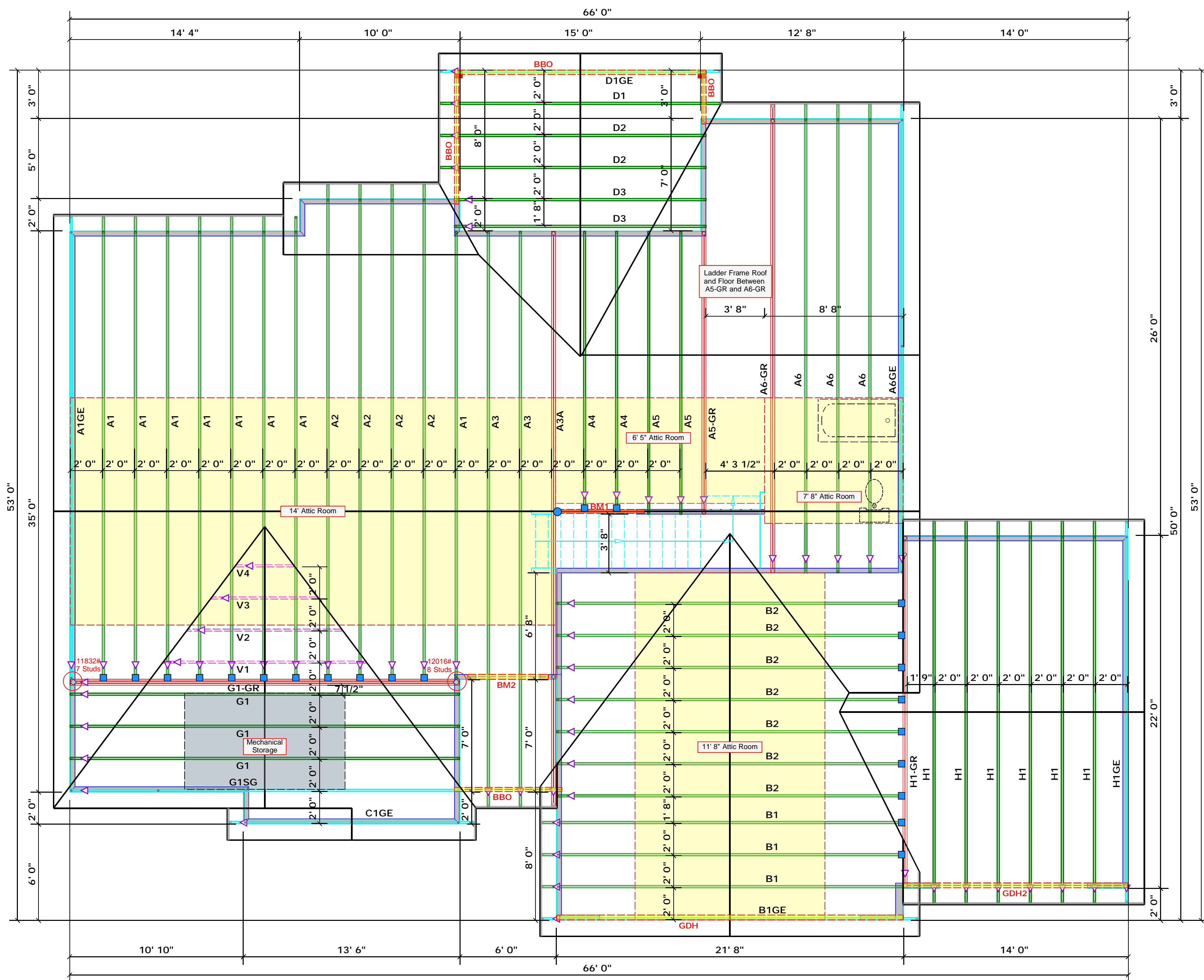
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions 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 **David Landry**

### LOAD CHART FOR JACK STUDS

(BASED ON TABLES MODEL: S-103)  
NUMBER OF JACK STUDS REQUIRED BY EACH END OF HEADERS/BEAMS

REACTION (LBS)	REQ. STUDS FOR 12' HEADERS	REQ. STUDS FOR 12' BEAMS	REQ. STUDS FOR 12' HEADERS
1700	1	2550	1
3400	2	5100	2
5100	3	7650	3
6800	4	10200	4
8500	5	12750	5
10200	6	15300	6
11900	7		
13600	8		
15300	9		



Products				
PlotID	Length	Product	Plies	Net Qty
BM1	6' 0"	2x10 SPF No.2	2	2
BM2	5' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2
GDH2	14' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

All Walls Shown Are Considered Load Bearing

Hatch Legend	
	Padded HVAC
	Drop Beam

### 1 Truss Placement Plan

Scale: 1/4"=1'

- Dimension Notes**
- All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
  - All interior wall dimensions are to face of frame wall unless noted otherwise
  - All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Roof Area = 3572.15 sq.ft.  
Ridge Line = 136.54 ft.  
Hip Line = 0 ft.  
Horiz. OH = 117.43 ft.  
Raked OH = 255.04 ft.  
Decking = 123 sheets

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS26	USP	22	NA	16d/3-1/2"	16d/3-1/2"
	HUS410	USP	1	Varies	16d/3-1/2"	16d/3-1/2"

BUILDER	WEAVER DEVELOPMENT	COUNTY	HARNETT
JOB NAME	Lot 3 Atkins Farm	ADDRESS	Lot 3 Atkins Farm
PLAN	Halifax / 3GRF, 4BR	MODEL	Roof
SEAL DATE	Seal Date	DATE REV.	02/22/21
QUOTE #	Quote #	DRAWN BY	David Landry
JOB #	J0221-1018	SALESMAN	Lenny Norris

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 BCS-51 and BCS-53 provided with the truss delivery package or online @ sbindustry.com



# ROOF & FLOOR TRUSSES & BEAMS

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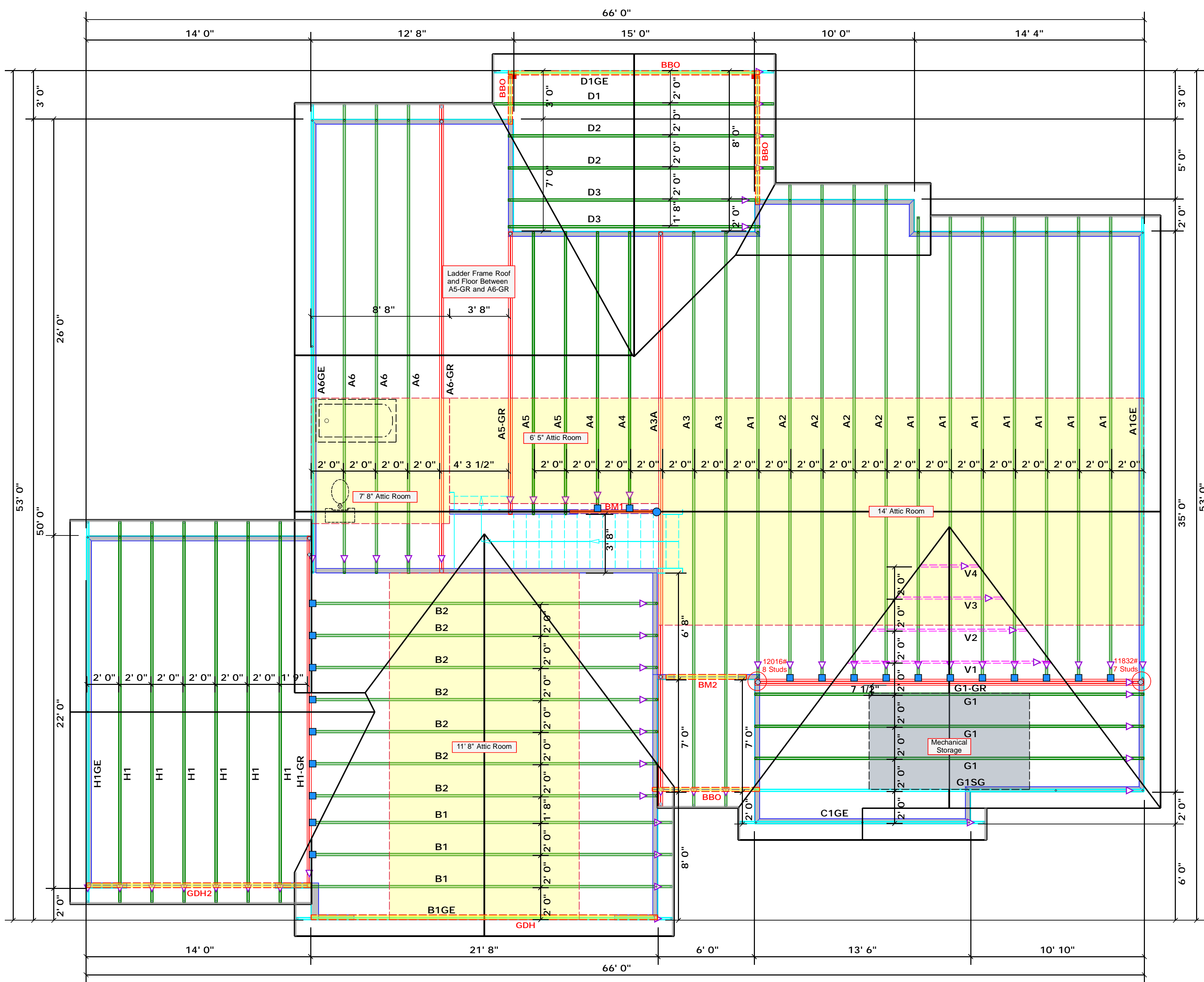
Bearing reactions less than or equal to 3000# are deemed to comply with the prescriptive Code requirements. The contractor shall refer to the attached Tables ( derived from the prescriptive Code requirements ) to determine the minimum foundation size and number of wood studs required to support reactions 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 **David Landry**

### LOAD CHART FOR JACK STUDS

(BASED ON TABLES MODEL: 6/03)

EUBS (L/10)	REQ'D STUDS FOR JACKS	REQ'D STUDS FOR JACKS	
		REQ'D STUDS FOR JACKS	REQ'D STUDS FOR JACKS
1700	1	2550	3400
3400	2	5100	6800
5100	3	7650	10200
6800	4	10200	13600
8500	5	12750	17000
10200	6	15300	
11900	7		
13600	8		
15300	9		



Products				
PlotID	Length	Product	Plies	Net Qty
BM1	6' 0"	2x10 SPF No.2	2	2
BM2	5' 0"	1-3/4"x 9-1/4" LVL Kerto-S	2	2
GDH	22' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2
GDH2	14' 0"	1-3/4"x 11-7/8" LVL Kerto-S	2	2

All Walls Shown Are Considered Load Bearing

Hatch Legend	
	Padded HVAC
	Drop Beam

### 1 Truss Placement Plan

Scale: 1/4"=1'

- Dimension Notes**
- All exterior wall to wall dimensions are to face of sheathing unless noted otherwise
  - All interior wall dimensions are to face of frame wall unless noted otherwise
  - All exterior wall to truss dimensions are to face of frame wall unless noted otherwise

Roof Area = 3572.15 sq.ft.  
Ridge Line = 136.54 ft.  
Hip Line = 0 ft.  
Horiz. OH = 117.43 ft.  
Raked OH = 255.04 ft.  
Decking = 123 sheets

Connector Information					Nail Information	
Sym	Product	Manuf	Qty	Supported Member	Header	Truss
	HUS26	USP	22	NA	16d/3-1/2"	16d/3-1/2"
	HUS410	USP	1	Varies	16d/3-1/2"	16d/3-1/2"

BUILDER	WEAVER DEVELOPMENT	COUNTY	HARNETT
JOB NAME	Lot 3 Atkins Farm	ADDRESS	Lot 3 Atkins Farm
PLAN	Halifax / 3GRF, 4BR	MODEL	Roof
SEAL DATE	Seal Date	DATE REV.	02/22/21
QUOTE #		DRAWN BY	David Landry
JOB #	J0221-1018	SALESMAN	Lenny Norris

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 BCS-81 and BCS-83 provided with the truss delivery package or online @ sbindustry.com



Client: Weaver Development

Project:

Address:

Date: 2/22/2021

Input by: David Landry

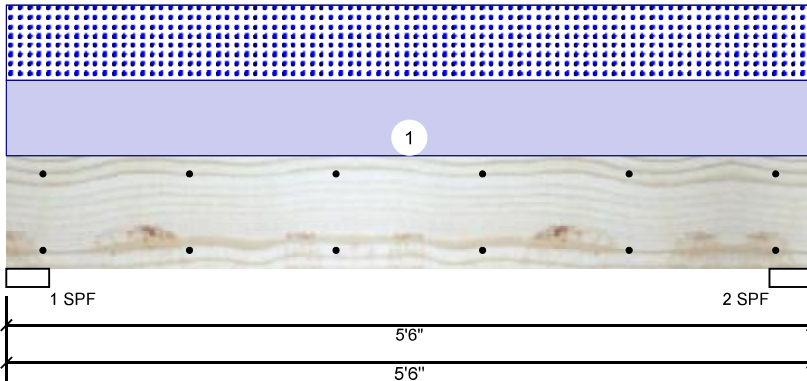
Job Name: Lot 3 Atkins Farm

Project #: J0221-1018

Page 1 of 8

**BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	919	919	0	0
2	0	919	919	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	41%	919 / 919	1837	L	D+S
2 - SPF	3.500"	41%	919 / 919	1837	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2122 ft-lb	2'9"	3946 ft-lb	0.538 (54%)	D+S	L
Unbraced	2122 ft-lb	2'9"	3654 ft-lb	0.581 (58%)	D+S	L
Shear	1169 lb	1'	2872 lb	0.407 (41%)	D+S	L
LL Defl inch	0.018 (L/3452)	2'9"	0.126 (L/480)	0.140 (14%)	S	L
TL Defl inch	0.035 (L/1726)	2'9"	0.168 (L/360)	0.210 (21%)	D+S	L

**Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	334 PLF	0 PLF	334 PLF	0 PLF	0 PLF	A4

**Manufacturer Info**

Comtech, Inc.  
1001 S. Reilly Road, Suite #639  
Fayetteville, NC  
USA  
28314  
910-864-TRUS



This design is valid until 2/26/2023



Client: Weaver Development

Project:

Address:

Date: 2/22/2021

Input by: David Landry

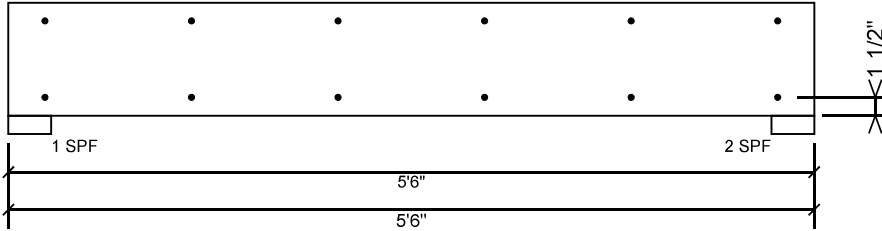
Job Name: Lot 3 Atkins Farm

Project #: J0221-1018

Page 2 of 8

**BM1 S-P-F #2 2.000" X 10.000" 2-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	157.4 PLF
Yield Limit per Fastener	78.7 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

<b>Manufacturer Info</b>	Comtech, Inc. 1001 S. Reilly Road, Suite #639 Fayetteville, NC USA 28314 910-864-TRUS
	

This design is valid until 2/26/2023



Client: Weaver Development

Project:

Address:

Date: 2/22/2021

Input by: David Landry

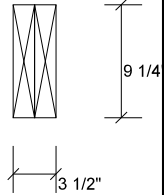
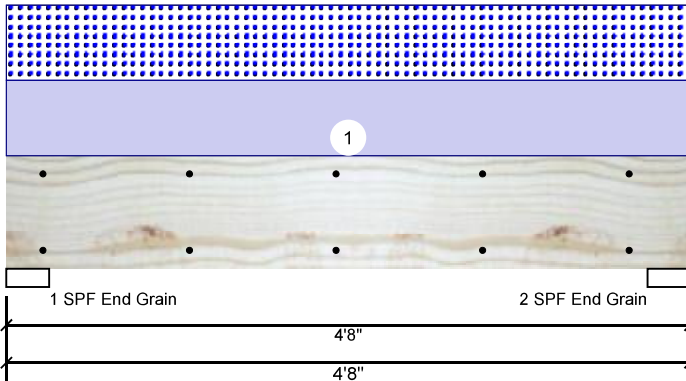
Job Name: Lot 3 Atkins Farm

Project #: J0221-1018

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**BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	1526	1510	0	0
2	0	1526	1510	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	28%	1526 / 1510	3036	L	D+S
2 - SPF End Grain	3.500"	28%	1526 / 1510	3036	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2881 ft-lb	2'4"	14423 ft-lb	0.200 (20%)	D+S	L
Unbraced	2881 ft-lb	2'4"	12555 ft-lb	0.229 (23%)	D+S	L
Shear	1735 lb	1'	7943 lb	0.218 (22%)	D+S	L
LL Defl inch	0.015 (L/3370)	2'4 1/16"	0.105 (L/480)	0.140 (14%)	S	L
TL Defl inch	0.030 (L/1676)	2'4 1/16"	0.140 (L/360)	0.210 (21%)	D+S	L

**Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	647 PLF	0 PLF	647 PLF	0 PLF	0 PLF	A3
	Self Weight				7 PLF					

**Notes**  
 Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**  
 1. Dry service conditions, unless noted otherwise  
 2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**  
 1. LVL beams must not be cut or drilled  
 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals  
 3. Damaged Beams must not be used  
 4. Design assumes top edge is laterally restrained  
 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

**Manufacturer Info**  
 Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS



Client: Weaver Development

Project:

Address:

Date: 2/22/2021

Input by: David Landry

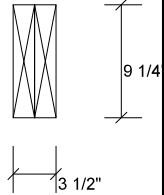
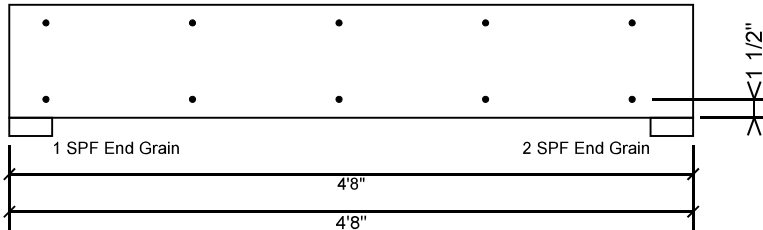
Job Name: Lot 3 Atkins Farm

Project #: J0221-1018

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**BM2 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED**

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

### Notes

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

### Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

### Manufacturer Info

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
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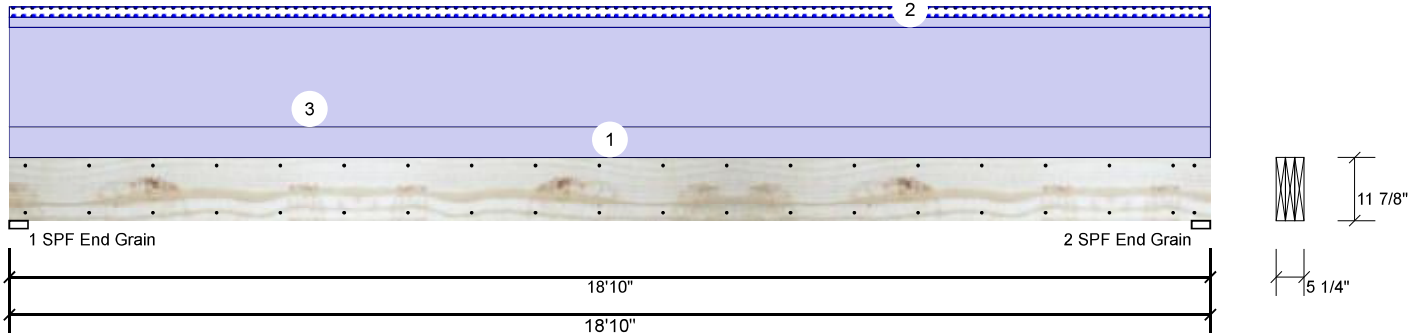


Client: Weaver Development  
 Project:  
 Address:

Date: 2/22/2021  
 Input by: David Landry  
 Job Name: Lot 3 Atkins Farm  
 Project #: J0221-1018

**GDH Kerto-S LVL 1.750" X 11.875" 3-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	3
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	Yes
Deck:	Not Checked

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	2720	188	0	0
2	0	2720	188	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	18%	2720 / 188	2908	L	D+S
2 - SPF End Grain	3.500"	18%	2720 / 188	2908	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	12191 ft-lb	9'5"	27954 ft-lb	0.436 (44%)	D	Uniform
Unbraced	13035 ft-lb	9'5"	13056 ft-lb	0.998 (100%)	D+S	L
Shear	2368 lb	1'2 5/8"	11970 lb	0.198 (20%)	D	Uniform
LL Defl inch	0.037 (L/6029)	9'5 1/16"	0.459 (L/480)	0.080 (8%)	S	L
TL Defl inch	0.565 (L/390)	9'5 1/16"	0.612 (L/360)	0.920 (92%)	D+S	L

**Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 10'11 5/8" o.c.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Tie-In	0-0-0 to 18-10-0	1-0-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof
3	Uniform			Top	195 PLF	0 PLF	0 PLF	0 PLF	0 PLF	B1GE
	Self Weight				14 PLF					

**Notes**  
 Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.  
**Lumber**  
 1. Dry service conditions, unless noted otherwise  
 2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**  
 1. LVL beams must not be cut or drilled  
 2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals  
 3. Damaged Beams must not be used  
 4. Design assumes top edge is laterally restrained  
 5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding  
 This design is valid until 2/26/2023

**Manufacturer Info**  
 Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
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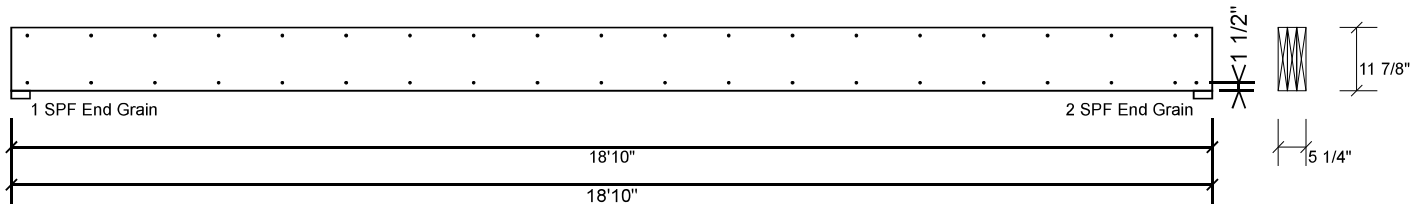
Input by: David Landry

Job Name: Lot 3 Atkins Farm

Project #: J0221-1018

**GDH Kerto-S LVL 1.750" X 11.875" 3-Ply - PASSED**

Level: Level



**Multi-Ply Analysis**

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

**Notes**

Calculated Structural Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

**chemicals**

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
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6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

**Manufacturer Info**

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Client: Weaver Development

Project:

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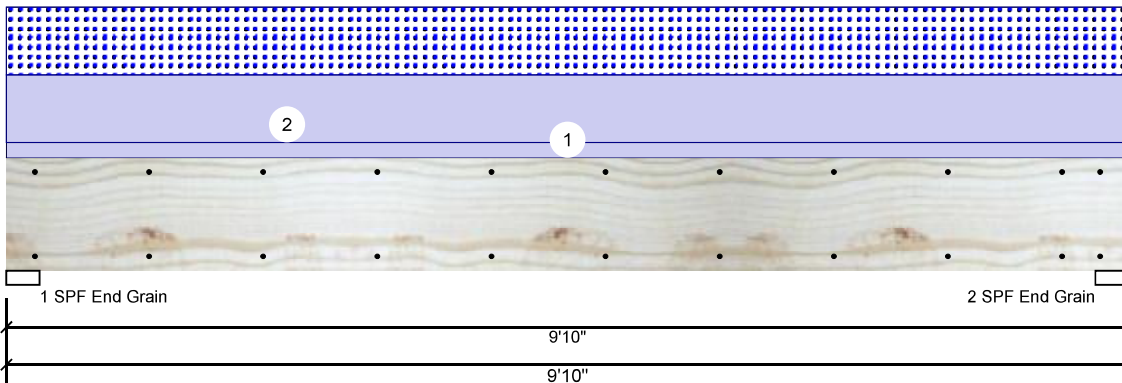
Job Name: Lot 3 Atkins Farm

Project #: J0221-1018

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**GDH2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED**

Level: Level



**Member Information**

Type:	Girder
Plies:	2
Moisture Condition:	Dry
Deflection LL:	480
Deflection TL:	360
Importance:	Normal
Temperature:	Temp <= 100°F

Application:	Floor
Design Method:	ASD
Building Code:	IBC/IRC 2015
Load Sharing:	No
Deck:	Not Checked

**Reactions UNPATTERNED lb (Uplift)**

Brg	Live	Dead	Snow	Wind	Const
1	0	1653	1313	0	0
2	0	1653	1313	0	0

**Bearings**

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	28%	1653 / 1313	2966	L	D+S
2 - SPF End Grain	3.500"	28%	1653 / 1313	2966	L	D+S

**Analysis Results**

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6627 ft-lb	4'11"	22897 ft-lb	0.289 (29%)	D+S	L
Unbraced	6627 ft-lb	4'11"	9857 ft-lb	0.672 (67%)	D+S	L
Shear	2231 lb	8'7 3/8"	10197 lb	0.219 (22%)	D+S	L
LL Defl inch	0.056 (L/2022)	4'11"	0.234 (L/480)	0.240 (24%)	S	L
TL Defl inch	0.126 (L/895)	4'11"	0.312 (L/360)	0.400 (40%)	D+S	L

**Design Notes**

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top braced at bearings.
- 6 Bottom braced at bearings.
- 7 Lateral slenderness ratio based on single ply width.

ID	Load Type	Location	Trib Width	Side	Dead 0.9	Live 1	Snow 1.15	Wind 1.6	Const. 1.25	Comments
1	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Above
2	Uniform			Top	267 PLF	0 PLF	267 PLF	0 PLF	0 PLF	G1
	Self Weight				9 PLF					

**Notes**

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

**Lumber**

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive chemicals

**Handling & Installation**

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

**Manufacturer Info**

Metsä Wood  
301 Merritt 7 Building, 2nd Floor  
Norwalk, CT 06851  
(800) 622-5850  
www.metsawood.com/us  
ICC-ES: ESR-3633

Comtech, Inc.  
1001 S. Reilly Road, Suite #639  
Fayetteville, NC  
USA  
28314  
910-864-TRUS





Client: Weaver Development

Project:

Address:

Date: 2/22/2021

Input by: David Landry

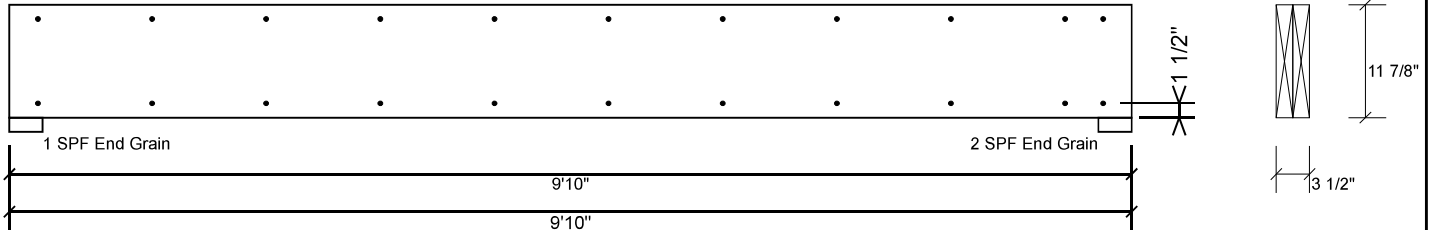
Job Name: Lot 3 Atkins Farm

Project #: J0221-1018

Page 8 of 8

**GDH2 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED**

Level: Level



### Multi-Ply Analysis

Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c.. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	163.7 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

### Notes

Calculated Structured Designs is responsible only of the structural adequacy of this component based on the design criteria and loadings shown. It is the responsibility of the customer and/or the contractor to ensure the component suitability of the intended application, and to verify the dimensions and loads.

### Lumber

1. Dry service conditions, unless noted otherwise
2. LVL not to be treated with fire retardant or corrosive

### chemicals

### Handling & Installation

1. LVL beams must not be cut or drilled
2. Refer to manufacturer's product information regarding installation requirements, multi-ply fastening details, beam strength values, and code approvals
3. Damaged Beams must not be used
4. Design assumes top edge is laterally restrained
5. Provide lateral support at bearing points to avoid lateral displacement and rotation

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

### Manufacturer Info

Metsä Wood  
 301 Merritt 7 Building, 2nd Floor  
 Norwalk, CT 06851  
 (800) 622-5850  
[www.metsawood.com/us](http://www.metsawood.com/us)  
 ICC-ES: ESR-3633

Comtech, Inc.  
 1001 S. Reilly Road, Suite #639  
 Fayetteville, NC  
 USA  
 28314  
 910-864-TRUS





RE: J0221-1018  
Lot 3 Atkins Farm

Trenco  
818 Soundside Rd  
Edenton, NC 27932

**Site Information:**

Customer: Project Name: J0221-1018  
Lot/Block: Model:  
Address: Subdivision:  
City: State:

**General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):**

Design Code: IRC2015/TPI2014 Design Program: MiTek 20/20 8.3  
Wind Code: ASCE 7-10 Wind Speed: 130 mph  
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 29 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	E15058952	A1	2/22/2021	21	E15058972	G1-GR	2/22/2021
2	E15058953	A1GE	2/22/2021	22	E15058973	G1SG	2/22/2021
3	E15058954	A2	2/22/2021	23	E15058974	H1	2/22/2021
4	E15058955	A3	2/22/2021	24	E15058975	H1-GR	2/22/2021
5	E15058956	A3A	2/22/2021	25	E15058976	H1GE	2/22/2021
6	E15058957	A4	2/22/2021	26	E15058977	V1	2/22/2021
7	E15058958	A5	2/22/2021	27	E15058978	V2	2/22/2021
8	E15058959	A5-GR	2/22/2021	28	E15058979	V3	2/22/2021
9	E15058960	A6	2/22/2021	29	E15058980	V4	2/22/2021
10	E15058961	A6-GR	2/22/2021				
11	E15058962	A6GE	2/22/2021				
12	E15058963	B1	2/22/2021				
13	E15058964	B1GE	2/22/2021				
14	E15058965	B2	2/22/2021				
15	E15058966	C1GE	2/22/2021				
16	E15058967	D1	2/22/2021				
17	E15058968	D1GE	2/22/2021				
18	E15058969	D2	2/22/2021				
19	E15058970	D3	2/22/2021				
20	E15058971	G1	2/22/2021				

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

Truss Design Engineer's Name: Gilbert, Eric

My license renewal date for the state of North Carolina is December 31, 2021.

North Carolina COA: C-0844

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 TRENCO. Any project specific information included is for TRENCO customers file reference purpose only, and was not taken into account in the preparation of these designs. 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.



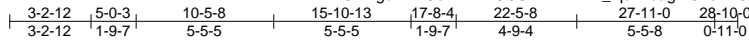
February 22, 2021

Job J0221-1018	Truss A1	Truss Type ATTIC	Qty 8	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058952
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:22 2020 Page 1

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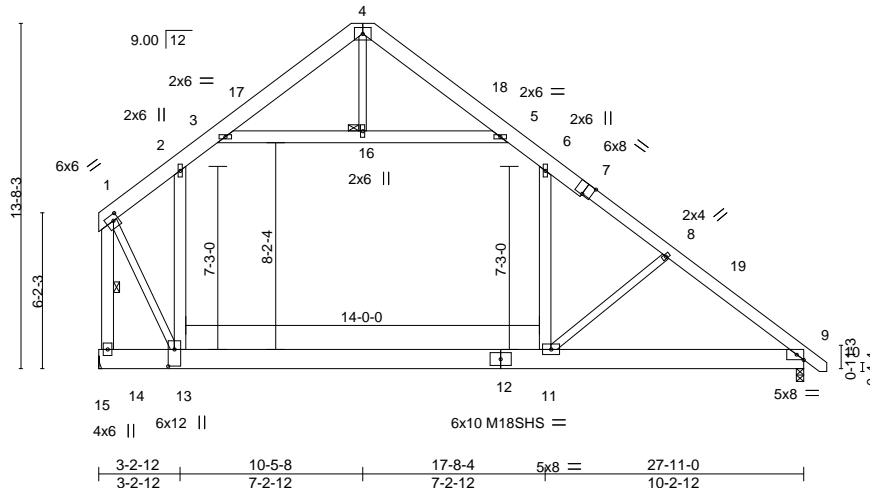


Plate Offsets (X,Y)-- [1:0-2-8,0-2-12], [7:0-4-0,Edge], [9:0-3-5,Edge], [13:0-8-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.59	Vert(LL) -0.30	11-13	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.69	Vert(CT) -0.61	11-13	>537	240	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr YES	WB 0.72	Horz(CT) 0.02	9	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.21	9-11	>999	240		
							Weight: 308 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x8 SP No.1 \*Except\*  
7-10: 2x6 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E \*Except\*  
9-12: 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
8-11,4-16,1-13: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-5-2 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-11-10 oc bracing.  
WEBS 1 Row at midpt 1-14  
JOINTS 1 Brace at Jt(s): 16

**REACTIONS.**

(size) 14=Mechanical, 9=0-3-8  
Max Horz 14=-317(LC 8)  
Max Grav 14=2033(LC 21), 9=1665(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1626/0, 2-3=-1477/112, 3-4=-555/107, 4-5=-410/104, 5-6=-1313/102, 6-8=-1903/0, 8-9=-2117/0, 1-14=-3613/0  
BOT CHORD 13-14=-267/321, 11-13=0/1398, 9-11=0/1642  
WEBS 2-13=-361/304, 6-11=0/783, 8-11=-522/203, 3-16=-1124/82, 5-16=-1124/82, 1-13=0/3078

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-6-6, Interior(1) 4-6-6 to 10-5-8, Exterior(2) 10-5-8 to 14-10-5, Interior(1) 14-10-5 to 28-8-4 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-16, 5-16; Wall dead load (5.0psf) on member(s).2-13, 6-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- Refer to girder(s) for truss to truss connections.
- Attic room checked for L/360 deflection.



November 4,2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

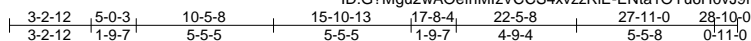


818 Soundside Road  
Edenton, NC 27932

Job J0221-1018	Truss A1GE	Truss Type GABLE	Qty 1	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058953
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:24 2020 Page 1



6x8 =

Scale = 1:85.9

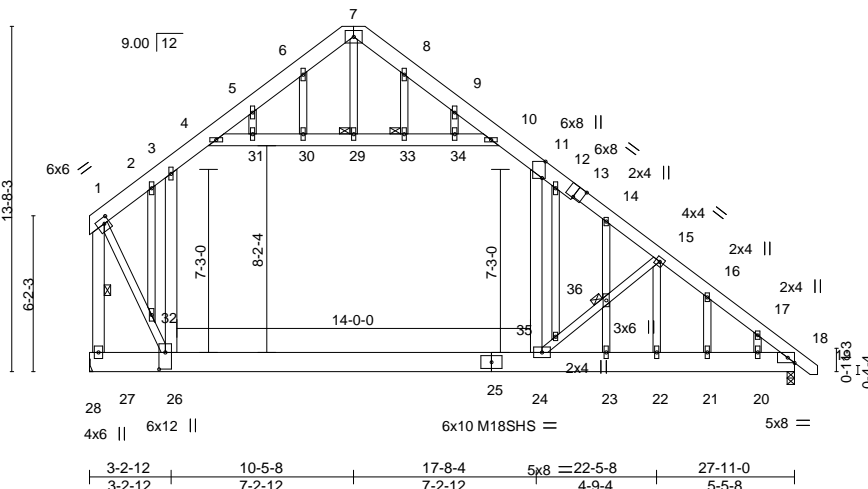


Plate Offsets (X,Y)-- [1:0-2-8,0-2-12], [11:0-7-14,Edge], [13:0-4-0,Edge], [18:0-3-5,Edge], [26:0-8-0,0-3-0]

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 0.58	Vert(LL)	-0.28 24-26	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.67	Vert(CT)	-0.57 24-26	>578	240	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.78	Horz(CT)	0.02 18	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.26 24	>999	240		
								Weight: 353 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x8 SP No.1 \*Except\*  
13-19: 2x6 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E \*Except\*  
18-25: 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
15-24,7-29,1-26,15-22: 2x4 SP No.2  
OTHERS 2x4 SP No.2

**BRACING-**  
TOP CHORD Structural wood sheathing directly applied or 5-0-7 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing. Except:  
6-2-6 oc bracing: 26-27  
6-6-8 oc bracing: 24-26.  
WEBS 1 Row at midpt 1-27  
JOINTS 1 Brace at Jt(s): 29, 33, 36

**REACTIONS.** (size) 27=Mechanical, 18=0-3-8  
Max Horz 27=-432(LC 13)  
Max Uplift 18=-35(LC 13)  
Max Grav 27=2032(LC 21), 18=1669(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1613/0, 2-3=-1516/0, 3-4=-1471/166, 4-5=-655/111, 5-6=-453/132, 6-7=-432/188,  
7-8=-344/181, 8-9=-398/132, 9-10=-400/114, 10-11=-1295/156, 11-12=-1927/44,  
12-14=-1885/9, 14-15=-1742/0, 15-16=-2233/131, 16-17=-2288/79, 17-18=-2455/0,  
1-27=-3566/0  
BOT CHORD 26-27=-326/435, 24-26=0/1410, 23-24=0/1781, 22-23=0/1781, 21-22=0/1752,  
20-21=0/1752, 18-20=0/1752  
WEBS 3-26=407/223, 11-24=0/1078, 24-35=-997/480, 35-36=-811/423, 15-36=-811/415,  
4-31=-1088/103, 30-31=-1078/104, 29-30=-1079/104, 29-33=-1079/104, 33-34=-1079/104,  
10-34=-1074/102, 1-32=-11/3047, 26-32=-19/3105, 5-31=-9/358, 12-35=-265/82,  
14-36=-405/35, 23-36=-405/25, 15-22=-248/666

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are MT20 plates unless otherwise indicated.
  - All plates are 2x6 MT20 unless otherwise indicated.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Ceiling dead load (10.0 psf) on member(s). 3-4, 10-11, 4-31, 30-31, 29-30, 29-33, 33-34, 10-34; Wall dead load (5.0psf) on member(s). 3-26, 11-24
  - Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 24-26



November 4, 2020

Consulting page 2 design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058953
J0221-1018	A1GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:24 2020 Page 2  
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**NOTES-**

- 11) Refer to girder(s) for truss to truss connections.
- 12) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 18.
- 13) Attic room checked for L/360 deflection.

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



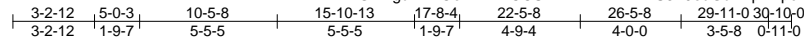
818 Soundside Road  
 Edenton, NC 27932

Job J0221-1018	Truss A2	Truss Type ATTIC	Qty 4	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058954
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:26 2020 Page 1

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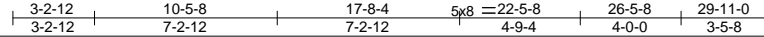
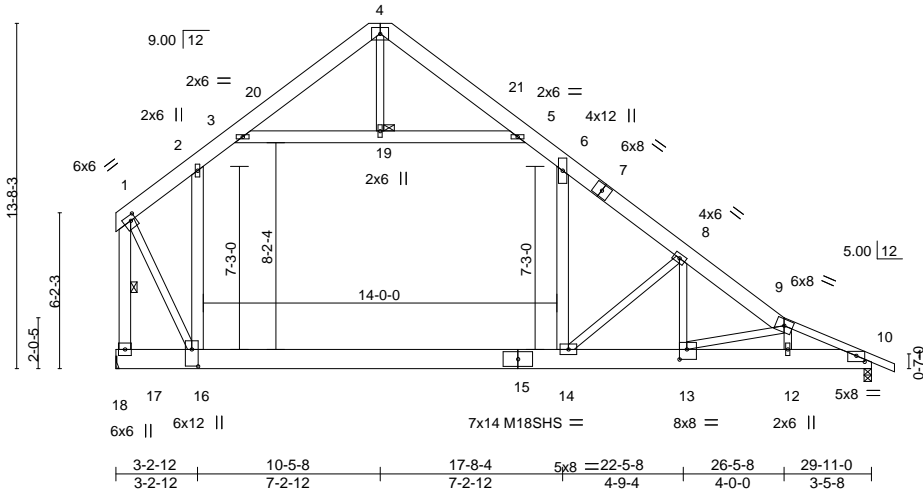


Plate Offsets (X,Y)-- [1:0-2-8,0-2-8], [10:0-4-0,0-2-14], [13:0-3-8,0-4-12], [16:0-8-0,0-3-0]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.42	Vert(LL) -0.36	14-16	>978	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.74	Vert(CT) -0.74	14-16	>479	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.99	Horz(CT) 0.02	10	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.22	14	>999		
							Weight: 335 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x8 SP 2400F 2.0E \*Except\*  
9-11: 2x4 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
2-16,6-14,3-5,1-17: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 3-6-9 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 5-6-5 oc bracing.  
WEBS 1 Row at midpt 1-17  
JOINTS 1 Brace at Jt(s): 19

**REACTIONS.**

(size) 17=Mechanical, 10=0-3-8  
Max Horz 17=-320(LC 8)  
Max Grav 17=2144(LC 21), 10=1640(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 1-2=-1710/0, 2-3=-1583/108, 3-4=-573/106, 4-5=-392/105, 5-6=-1377/102, 6-8=-2121/0, 8-9=-3066/14, 9-10=-2967/3, 1-17=-3817/0  
BOT CHORD 16-17=-219/323, 14-16=0/1512, 13-14=0/2530, 12-13=0/2793, 10-12=0/2680  
WEBS 2-16=-372/266, 6-14=0/1019, 8-14=-1601/216, 9-12=-533/69, 3-19=-1220/78, 5-19=-1220/78, 1-16=0/3299, 8-13=-80/1003, 9-13=-314/97

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-6-6, Interior(1) 4-6-6 to 10-5-8, Exterior(2) 10-5-8 to 14-10-5, Interior(1) 14-10-5 to 30-10-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-19, 5-19; Wall dead load (5.0psf) on member(s). 2-16, 6-14
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 14-16
- Refer to girder(s) for truss to truss connections.
- Attic room checked for L/360 deflection.



November 4, 2020

**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**

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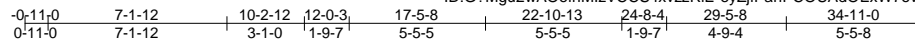
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058955
J0221-1018	A3	ATTIC	2	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314.

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:27 2020 Page 1

ID:G?Mgu2wAOefhMizVCCS4xvzzRIE-eyZjPpanPCOUAAdOEXW7ovHPLIU58mfzMMvd1pyMX0w



6x8 =

Scale = 1:86.5

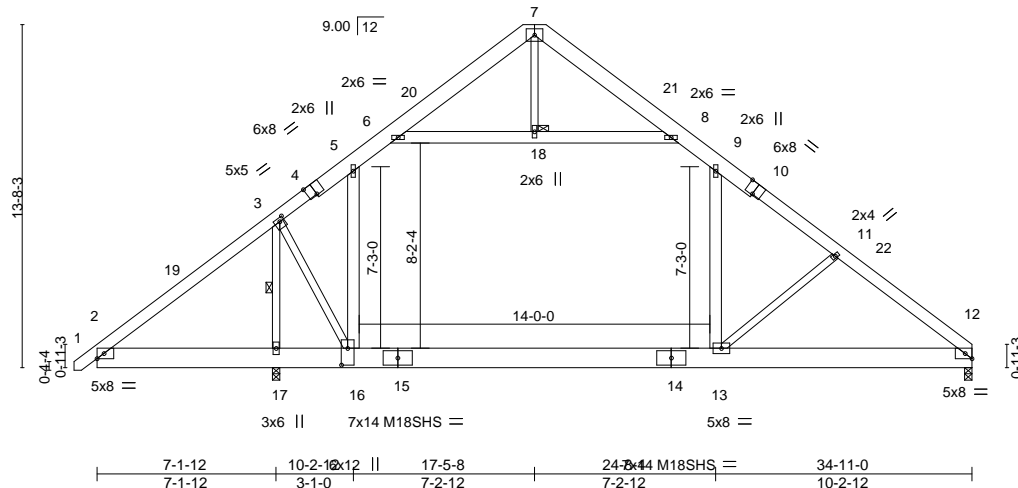


Plate Offsets (X,Y)-- [3:0-2-4,0-1-12], [4:0-4-0,Edge], [10:0-4-0,Edge], [12:0-3-5,Edge], [16:0-8-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.71	Vert(LL) -0.33 13-16 >999 360	M18SHS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.73	Vert(CT) -0.67 13-16 >494 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 12 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.21 13 >999 240	Weight: 350 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x8 SP No.1 \*Except\*  
1-4,10-12: 2x6 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
5-16,9-13,6-8: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-6-4 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 5-7-0 oc bracing.  
WEBS 1 Row at midpt 3-17  
JOINTS 1 Brace at Jt(s): 18

**REACTIONS.**

(size) 17=0-3-8, 12=0-3-8  
Max Horz 17=323(LC 9)  
Max Grav 17=2585(LC 2), 12=1558(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-360/523, 3-5=-1443/0, 5-6=-1383/35, 6-7=-582/127, 7-8=-419/108, 8-9=-1217/43,  
9-11=-1770/0, 11-12=-1986/0  
BOT CHORD 2-17=-367/407, 16-17=-457/389, 13-16=0/1282, 12-13=0/1537  
WEBS 3-17=-3832/192, 3-16=0/3171, 5-16=-532/223, 9-13=0/747, 11-13=-529/237,  
6-18=-1008/0, 8-18=-1008/0

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-4 to 3-7-9, Interior(1) 3-7-9 to 17-5-8, Exterior(2) 17-5-8 to 21-10-5, Interior(1) 21-10-5 to 34-9-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 5-6, 8-9, 6-18, 8-18; Wall dead load (5.0psf) on member(s).5-16, 9-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-16
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Attic room checked for L/360 deflection.



November 4,2020

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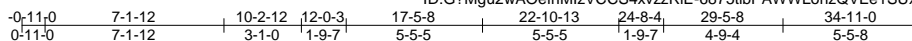


Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058956
J0221-1018	A3A	ATTIC	1	2	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314.

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:28 2020 Page 1

ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-6875tIbPAWWLonzQVEe1SUxZ6uNOaCm7b0eAZFyMX0v



6x8 =

Scale = 1:86.5

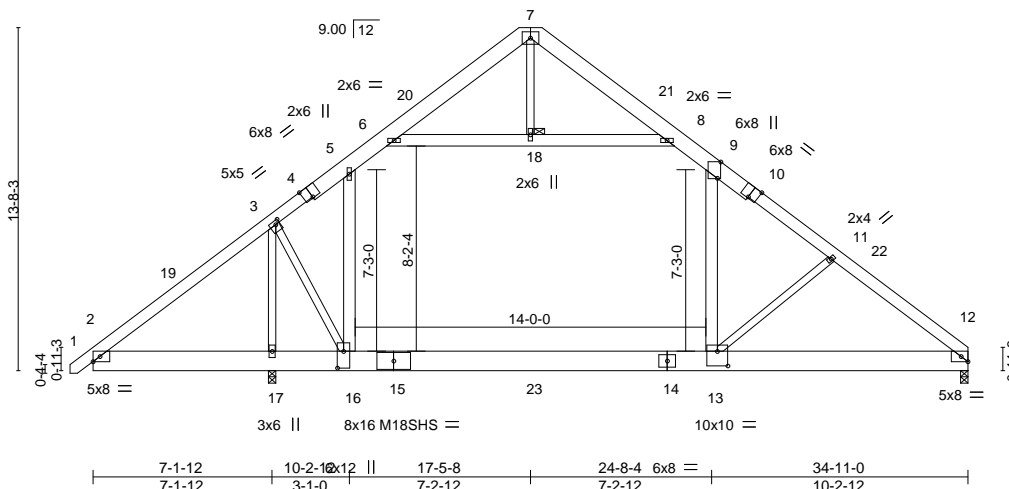


Plate Offsets (X,Y)-- [3:0-2-0,0-1-12], [4:0-4-0,Edge], [9:0-7-14,Edge], [10:0-4-0,Edge], [12:0-3-5,Edge], [13:0-5-0,0-7-0], [16:0-8-0,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.44	Vert(LL) -0.44	13-16	>746	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.96	Vert(CT) -0.71	13-16	>468	240	M18SHS	244/190
BCLL 0.0 *	Rep Stress Incr NO	WB 0.86	Horz(CT) 0.01	12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.20	13-16	>999	240		
							Weight: 700 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x8 SP 2400F 2.0E \*Except\*  
1-4,10-12: 2x6 SP 2400F 2.0E  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x4 SP No.2 \*Except\*  
5-16,9-13,6-8: 2x6 SP No.1

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 18

**REACTIONS.**

(size) 17=0-3-8, 12=0-3-8  
Max Horz 17=323(LC 9)  
Max Grav 17=4603(LC 21), 12=2767(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-360/515, 3-5=-3512/152, 5-6=-2754/232, 6-7=-541/115, 7-8=-302/100,  
8-9=-2472/221, 9-11=-4020/206, 11-12=-4279/227  
BOT CHORD 2-17=-358/405, 16-17=-441/387, 13-16=0/2921, 12-13=-78/3320  
WEBS 3-17=-8050/802, 3-16=-481/6544, 5-16=-88/1209, 9-13=-84/2254, 11-13=-731/263,  
6-18=-2798/253, 8-18=-2799/253

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-3-0 oc.  
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc, 2x6 - 2 rows staggered at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-4 to 3-7-9, Interior(1) 3-7-9 to 17-5-8, Exterior(2) 17-5-8 to 21-10-5, Interior(1) 21-10-5 to 34-9-4 zone; cantilever left exposed ;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 5-6, 8-9, 6-18, 8-18; Wall dead load (5.0psf) on member(s).5-16, 9-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 13-16
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3237 lb down and 464 lb up at 17-5-8 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
- Attic room checked for L/360 deflection.



November 4,2020

Continued on page 2

**LOAD CASE(S), Standard**

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818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058956
J0221-1018	A3A	ATTIC	1	<b>2</b>	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:28 2020 Page 2  
 ID:G?Mgu2wAOefhMizVCCS4xvzzRiE-6875tlbPAWWLonzQVEe1SUxZ6uNOaCm7b0eAZFyMX0v

**LOAD CASE(S)** Standard

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

Uniform Loads (plf)

Vert: 1-5=-60, 5-6=-80, 6-7=-60, 7-8=-60, 8-9=-80, 9-12=-60, 2-16=-20, 13-16=-40, 12-13=-20, 6-8=-20

Drag: 5-16=-10, 9-13=-10

Concentrated Loads (lb)

Vert: 23=-1837(F)

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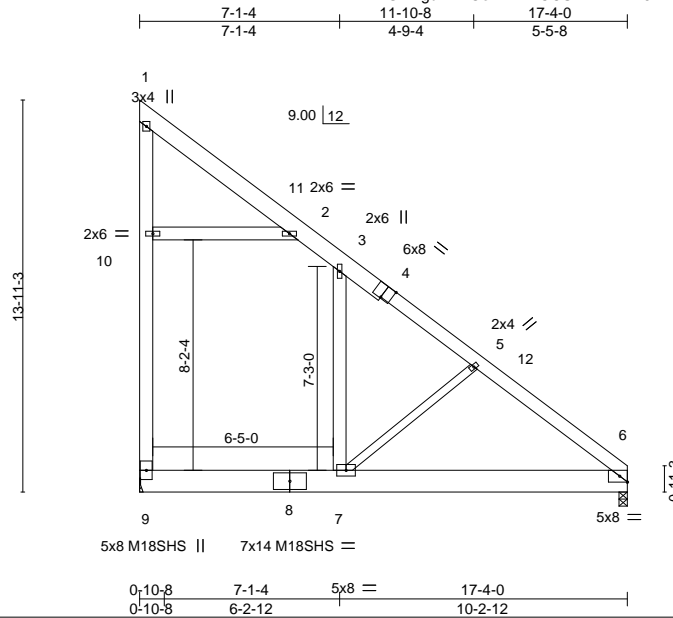


818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058957
J0221-1018	A4	ROOF TRUSS	2	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:30 2020 Page 1  
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Scale = 1:77.1

Plate Offsets (X,Y)-- [4:0-4-0,Edge], [6:0-3-5,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.64	Vert(LL)	-0.21	6-7	>957	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(CT)	-0.48	6-7	>425	M18SHS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.37	Horz(CT)	0.00	6	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.20	6-7	>994		
	Code IRC2015/TPI2014						Weight: 194 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1 \*Except\*  
 1-4: 2x8 SP No.1  
 BOT CHORD 2x10 SP 2400F 2.0E  
 WEBS 2x6 SP No.1 \*Except\*  
 5-7: 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.**

(size) 9=Mechanical, 6=0-3-8  
 Max Horz 9=424(LC 13)  
 Max Uplift 9=57(LC 13)  
 Max Grav 9=1336(LC 21), 6=803(LC 21)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 9-10=529/90, 1-10=472/123, 1-2=114/422, 3-5=473/83, 5-6=698/91  
 BOT CHORD 7-9=75/413, 6-7=0/545  
 WEBS 5-7=564/221, 2-10=539/271

**NOTES-**

- Wind: ASCE 7-10: 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(2) 0-2-12 to 4-7-9, Interior(1) 4-7-9 to 17-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- All plates are MT20 plates unless otherwise indicated.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 2-10; Wall dead load (5.0psf) on member(s).3-7
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 7-9
- Refer to girder(s) for truss to truss connections.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 9.
- Attic room checked for L/360 deflection.



November 4, 2020

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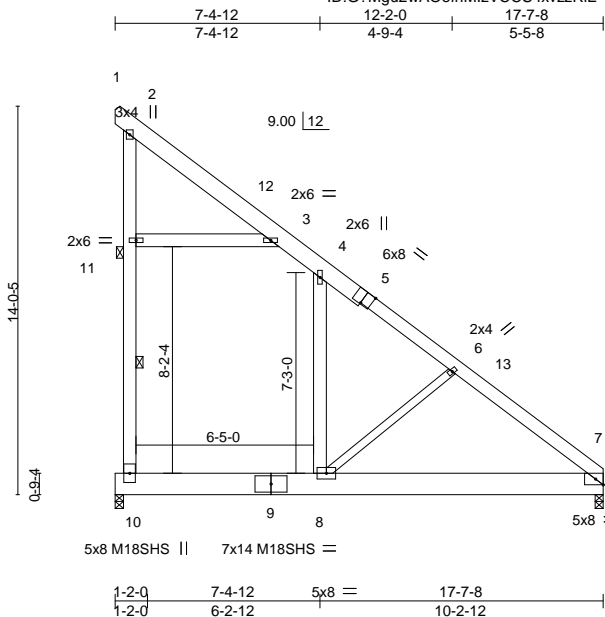
818 Soundside Road  
 Edenton, NC 27932

Job J0221-1018	Truss A5	Truss Type ROOF TRUSS	Qty 2	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058958
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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:32 2020 Page 1

ID:G?Mgu2wAOefhMlzVCCS4xvzzRiE-?wMqj7ewEk0nGOGCK3jzck6A8VuZW7SjWecOioyMX0r



Scale = 1:78.3

Plate Offsets (X,Y)-- [5:0-4-0,Edge], [7:0-3-5,Edge]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.76	Vert(LL)	-0.21	7-8	>958	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.37	Vert(CT)	-0.48	7-8	>426	M18SHS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.37	Horz(CT)	0.00	7	n/a		n/a
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.20	7-8	>995		240
	Code IRC2015/TPI2014						Weight: 196 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1 \*Except\*  
1-5: 2x8 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x6 SP No.1 \*Except\*  
6-8: 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.  
WEBS 1 Row at midpt 10-11  
JOINTS 1 Brace at Jt(s): 11

**REACTIONS.** (size) 10=0-3-8, 7=0-3-8  
Max Horz 10=-432(LC 13)  
Max Uplift 10=-70(LC 13)  
Max Grav 10=1362(LC 21), 7=801(LC 21)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 10-11=-555/102, 2-11=-499/136, 2-3=-123/425, 4-6=-481/55, 6-7=-706/63  
BOT CHORD 8-10=-78/421, 7-8=0/550  
WEBS 3-11=-537/268, 6-8=-565/223

- NOTES-**
- 1) Wind: ASCE 7-10; 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(2) 0-1-0 to 4-5-13, Interior(1) 4-5-13 to 17-5-12 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - 2) All plates are MT20 plates unless otherwise indicated.
  - 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) Ceiling dead load (10.0 psf) on member(s). 3-4, 3-11; Wall dead load (5.0psf) on member(s).4-8
  - 6) Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 8-10
  - 7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 10.
  - 8) Attic room checked for L/360 deflection.



November 4, 2020

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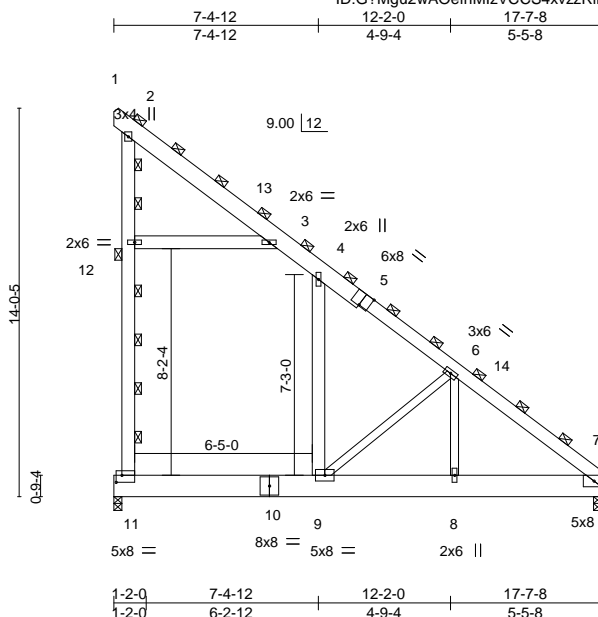
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058959
J0221-1018	A5-GR	ROOF TRUSS	1	2	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:33 2020 Page 1

ID:G?Mgu2wAOefhMlzVCCS4xvzzRIE-T6w\_wTFY?29euYrOInEC9YePcvEQFccskIMxESyMX0q



Scale = 1:78.3

Plate Offsets (X,Y)-- [5:0-4-0,Edge], [7:0-3-5,Edge], [11:0-2-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.46	Vert(LL) -0.13	9	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.33	Vert(CT) -0.29	9	>707	240		
BCLL 0.0 *	Rep Stress Incr NO	WB 0.25	Horz(CT) 0.00	7	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.12	9	>999	240	Weight: 403 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1 \*Except\*  
1-5: 2x8 SP No.1  
BOT CHORD 2x10 SP 2400F 2.0E  
WEBS 2x6 SP No.1 \*Except\*  
6-9,6-8: 2x4 SP No.2

**BRACING-**

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals  
(Switched from sheeted: Spacing > 2-8-0).  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 2, 12

**REACTIONS.**

(size) 11=0-3-8, 7=0-3-8  
Max Horz 11=-648(LC 13)  
Max Uplift 11=-105(LC 13)  
Max Grav 11=2043(LC 21), 7=1202(LC 21)

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

TOP CHORD 11-12=-755/151, 2-12=-670/201, 2-3=-182/548, 3-4=-356/158, 4-6=-640/91,  
6-7=-1827/37  
BOT CHORD 9-11=-149/634, 8-9=0/1321, 7-8=0/1321  
WEBS 3-12=-730/408, 6-9=-1730/329, 6-8=-49/1325

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.  
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.  
Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Wind: ASCE 7-10: 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(2) 0-1-0 to 4-5-13, Interior(1) 4-5-13 to 17-5-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 3-12; Wall dead load (5.0psf) on member(s).4-9
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 11=105.
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.



November 4,2020

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Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSIP/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



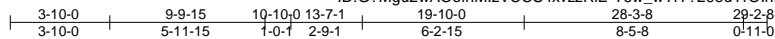
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058960
J0221-1018	A6	ROOF TRUSS	3	1	Job Reference (optional)	

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ID:G?Mgu2wAOefhMizVCCS4xvzzRiE-T6w\_wTFY?29euYrOlnEC9YeLlv46FRWskIMxESyMX0q



5x8 =

Scale = 1:83.7

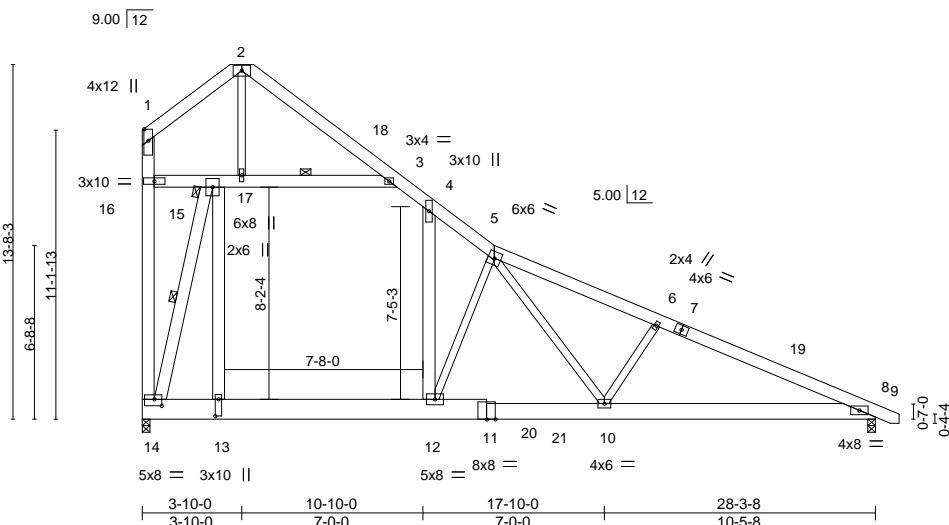


Plate Offsets (X,Y)-- [13:0-7-12,0-1-8], [14:0-3-8,0-3-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.73	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.99	Vert(LL) -0.24 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.96	Vert(CT) -0.51 10-12 >662 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.03 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.16 10-12 >999 240	Weight: 311 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 8-11: 2x8 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 2-17,5-12,5-10,6-10: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-4-1 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 2-2-0 oc bracing.  
 WEBS 1 Row at midpt 3-15, 14-15  
 JOINTS 1 Brace at Jt(s): 15

**REACTIONS.**

(size) 14=0-3-8, 8=0-3-8  
 Max Horz 14=-389(LC 13)  
 Max Grav 14=1900(LC 21), 8=1330(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-46/833, 2-3=-87/813, 3-4=-882/0, 4-5=-1713/0, 5-6=-2490/0, 6-8=-2699/0,  
 14-16=-68/923, 1-16=-16/518  
 BOT CHORD 13-14=0/1158, 12-13=0/1204, 10-12=0/1715, 8-10=0/2409  
 WEBS 13-15=0/1811, 4-12=0/1152, 15-16=-675/86, 15-17=-1955/138, 3-17=-1727/100,  
 14-15=-3772/86, 2-17=-1253/250, 5-12=-1433/132, 5-10=-176/986, 6-10=-417/250

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 8-2-13, Interior(1) 8-2-13 to 29-0-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 4-5, 15-16, 15-17, 3-17; Wall dead load (5.0psf) on member(s).13-15, 4-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
- Attic room checked for L/360 deflection.



November 4, 2020

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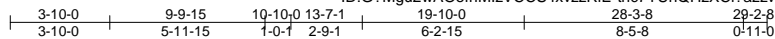
818 Soundside Road  
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058961
J0221-1018	A6-GR	ROOF TRUSS	1	2	Job Reference (optional)	

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5x8 =

Scale = 1:83.7

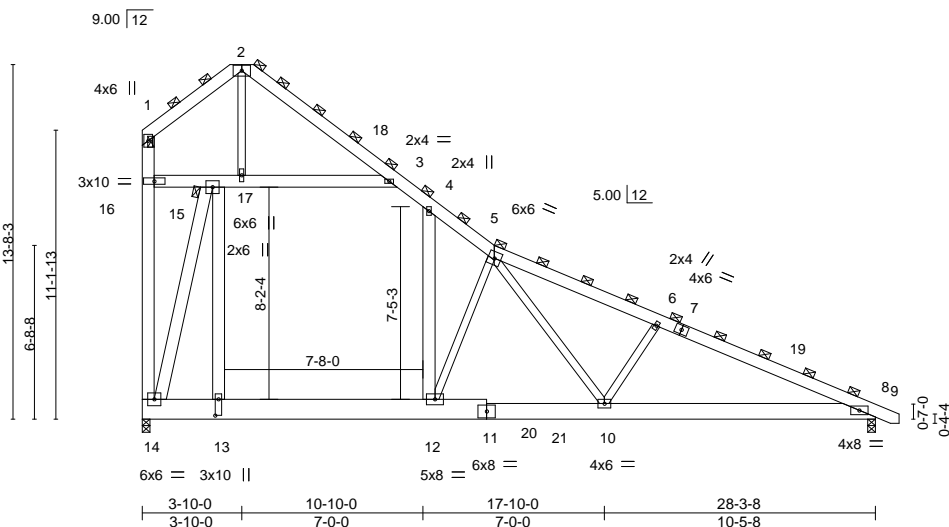


Plate Offsets (X,Y)-- [13:0-7-8,0-1-8]

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	3-0-0	TC 0.61	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) -0.18 10-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.89	Vert(CT) -0.38 10-12 >882 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.02 8 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.12 10-12 >999 240	Weight: 622 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1 \*Except\*  
 8-11: 2x8 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 2-17,5-12,5-10,6-10: 2x4 SP No.2

**BRACING-**

TOP CHORD 2-0-0 oc purlins (6-0-0 max.), except end verticals  
 (Switched from sheeted: Spacing > 2-8-0).  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s): 1, 2, 5, 15

**REACTIONS.**

(size) 14=0-3-8, 8=0-3-8  
 Max Horz 14=-584(LC 13)  
 Max Grav 14=2851(LC 21), 8=1996(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-70/1249, 2-3=-131/1220, 3-4=-1323/0, 4-5=-2570/0, 5-6=-3735/0, 6-8=-4049/0,  
 14-16=-102/1385, 1-16=-24/777  
 BOT CHORD 13-14=0/1737, 12-13=0/1805, 10-12=0/2573, 8-10=0/3614  
 WEBS 13-15=0/2716, 4-12=0/1727, 15-16=-1012/128, 15-17=-2933/207, 3-17=-2591/150,  
 14-15=-5658/128, 2-17=-1879/375, 5-12=-2149/199, 5-10=-263/1479, 6-10=-625/375

**NOTES-**

- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc, 2x8 - 2 rows staggered at 0-9-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 8-2-13, Interior(1) 8-2-13 to 29-0-7 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 4-5, 15-16, 15-17, 3-17; Wall dead load (5.0psf) on member(s).13-15, 4-12
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 12-13
- Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
- Attic room checked for L/360 deflection.



November 4, 2020

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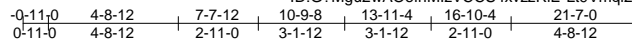




Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058963
J0221-1018	B1	ATTIC	3	1	Job Reference (optional)	

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Scale = 1:79.0

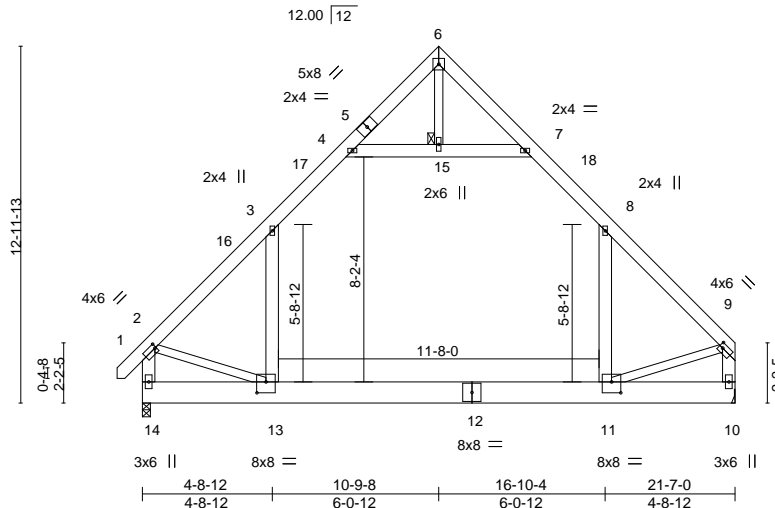


Plate Offsets (X,Y)-- [2:0-0-8,0-2-0], [9:0-1-8,0-2-0], [11:0-4-0,0-4-12], [13:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.79	Vert(LL)	-0.23 11-13	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(CT)	-0.38 11-13	>659	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.20	Horz(CT)	0.01 10	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.06 11-13	>999	240	Weight: 226 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 6-15,2-13,9-11: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-2-15 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-7-6 oc bracing.  
 JOINTS 1 Brace at Jt(s): 15

**REACTIONS.**

(size) 14=0-3-8, 10=Mechanical  
 Max Horz 14=329(LC 9)  
 Max Grav 14=1486(LC 21), 10=1445(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1617/0, 3-4=-981/145, 7-8=-984/149, 8-9=-1597/0, 2-14=-1643/8, 9-10=-1598/0  
 BOT CHORD 13-14=-312/478, 11-13=0/995  
 WEBS 8-11=-8/675, 3-13=-2/708, 4-15=-1030/189, 7-15=-1030/189, 2-13=0/854, 9-11=0/917

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-6 to 3-7-7, Interior(1) 3-7-7 to 10-9-8, Exterior(2) 10-9-8 to 15-2-5, Interior(1) 15-2-5 to 21-4-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 3-4, 7-8, 4-15, 7-15; Wall dead load (5.0psf) on member(s).8-11, 3-13
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 11-13
- Refer to girder(s) for truss to truss connections.
- Attic room checked for L/360 deflection.



November 4, 2020

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818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058964
J0221-1018	B1GE	GABLE	1	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:38 2020 Page 1

ID:G7Mgu2wAOefhMizVCCS4xvzzRiE-q3jtzAjgpanw\_JkL4KqNsbMCXwrZwIVbua3iwgyMX0I

-0-11-0 4-8-12 7-7-12 10-9-8 13-11-4 16-10-4 21-7-0 22-6-0  
0-11-0 4-8-12 2-11-0 3-1-12 3-1-12 2-11-0 4-8-12 0-11-0

5x5 =

Scale = 1:84.2

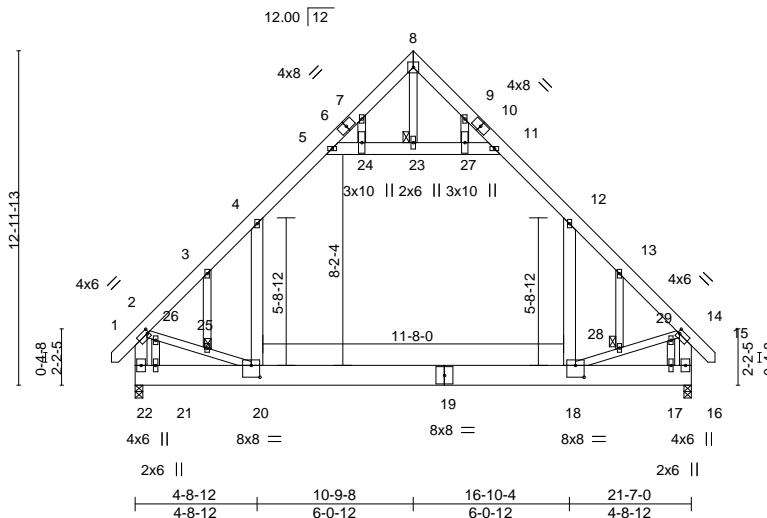


Plate Offsets (X,Y)-- [2:0-1-0,0-2-0], [14:0-1-0,0-2-0], [18:0-4-0,0-5-8], [20:0-4-0,0-5-8]

<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.70	Vert(LL) -0.21 18-20	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.72	Vert(CT) -0.35 18-20	>726	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.72	Horz(CT) 0.01 16	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL) 0.08 18-20	>999	240	Weight: 244 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
BOT CHORD 2x10 SP No.1  
WEBS 2x6 SP No.1 \*Except\*  
8-23,2-20,14-18: 2x4 SP No.2  
OTHERS 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-9-4 oc purlins, except end verticals.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
JOINTS 1 Brace at Jt(s): 23, 25, 28

**REACTIONS.**

(size) 22=0-3-8, 16=0-3-8  
Max Horz 22=422(LC 11)  
Max Grav 22=1480(LC 21), 16=1480(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=-1601/0, 3-4=-1592/42, 4-5=-995/179, 7-8=-26/326, 8-9=-26/326, 11-12=-995/179,  
12-13=-1591/42, 13-14=-1600/0, 2-22=-1231/0, 14-16=-1232/0  
BOT CHORD 21-22=-379/571, 20-21=-379/571, 18-20=0/1047, 17-18=-83/286, 16-17=-83/286  
WEBS 12-18=0/790, 4-20=0/790, 5-24=-1075/235, 23-24=-1070/236, 23-27=-1070/236,  
11-27=-1075/235, 8-23=-438/0, 2-26=-22/762, 25-26=-3/913, 20-25=-19/874,  
18-28=-26/879, 28-29=-10/918, 14-29=-29/767, 7-24=-10/475, 21-26=-476/69,  
9-27=-10/474, 17-29=-477/69

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 4-5, 11-12, 5-24, 23-24, 23-27, 11-27; Wall dead load (5.0psf) on member(s).12-18, 4-20
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 18-20
- Attic room checked for L/360 deflection.



November 4, 2020

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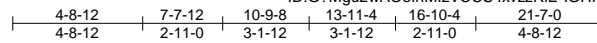


818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058965
J0221-1018	B2	ATTIC	7	1	Job Reference (optional)	

Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:39 2020 Page 1



5x5 =

Scale = 1:79.0

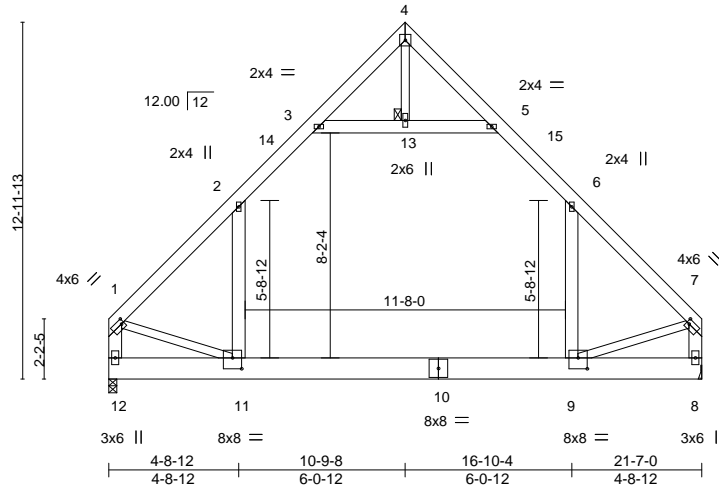


Plate Offsets (X,Y)-- [1:0-1-4,0-2-0], [7:0-1-4,0-2-0], [9:0-4-0,0-4-12], [11:0-4-0,0-4-12]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.78	Vert(LL) -0.23	9-11	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.75	Vert(CT) -0.39	9-11	>653	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.20	Horz(CT) 0.01	8	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.07	9-11	>999	240	Weight: 223 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x10 SP No.1  
 WEBS 2x6 SP No.1 \*Except\*  
 4-13,1-11,7-9: 2x4 SP No.2

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-2-11 oc purlins, except end verticals.  
 BOT CHORD Rigid ceiling directly applied or 9-6-8 oc bracing.  
 JOINTS 1 Brace at Jt(s): 13

**REACTIONS.**

(size) 12=0-3-8, 8=Mechanical  
 Max Horz 12=313(LC 11)  
 Max Grav 12=1446(LC 21), 8=1446(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-1600/0, 2-3=-984/147, 5-6=-984/147, 6-7=-1600/0, 1-12=-1600/0, 7-8=-1601/0  
 BOT CHORD 11-12=-303/406, 9-11=0/997  
 WEBS 6-9=-6/678, 2-11=-7/678, 3-13=-1036/187, 5-13=-1036/187, 1-11=0/915, 7-9=0/919

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-8-12, Interior(1) 4-8-12 to 10-9-8, Exterior(2) 10-9-8 to 15-2-5, Interior(1) 15-2-5 to 21-4-4 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Ceiling dead load (10.0 psf) on member(s). 2-3, 5-6, 3-13, 5-13; Wall dead load (5.0psf) on member(s).6-9, 2-11
- Bottom chord live load (40.0 psf) and additional bottom chord dead load (10.0 psf) applied only to room. 9-11
- Refer to girder(s) for truss to truss connections.
- Attic room checked for L/360 deflection.



November 4, 2020

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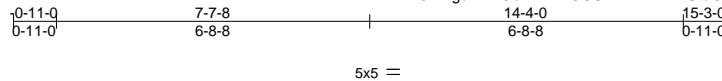


818 Soundside Road  
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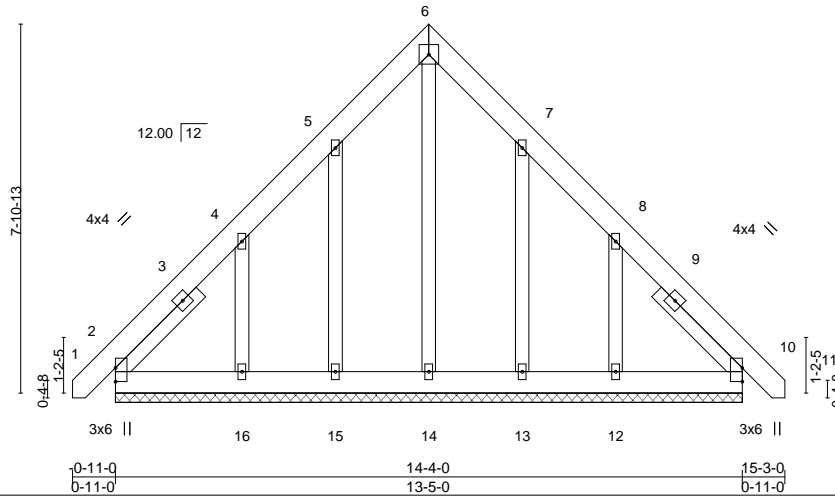
Job J0221-1018	Truss C1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058966
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:40 2020 Page 1  
ID:G?Mgu2wAOefhMlzVCCS4xvzzRIE-mSrdOskxLC1eEdukClrsx0RiljigOo7uLuYp\_YmX0j



Scale = 1:46.4



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.04	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.04	Vert(LL) 0.00 10 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) 0.00 10 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 124 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 - 2-6-0, Right 2x4 SP No.2 - x 2-6-0

**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.**

All bearings 13-5-0.  
 (lb) - Max Horz 2=-224(LC 10)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 13 except 16=-256(LC 12), 12=-251(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 13 except 16=270(LC 19), 12=265(LC 20)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 4-16=-280/263, 8-12=-280/260

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- 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=256, 12=251.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



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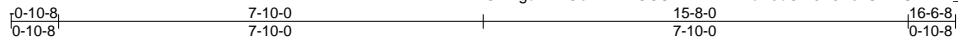
818 Soundside Road  
 Edenton, NC 27932

Job J0221-1018	Truss D1	Truss Type COMMON	Qty 1	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058967
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Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:41 2020 Page 1

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5x5 =

Scale = 1:40.0

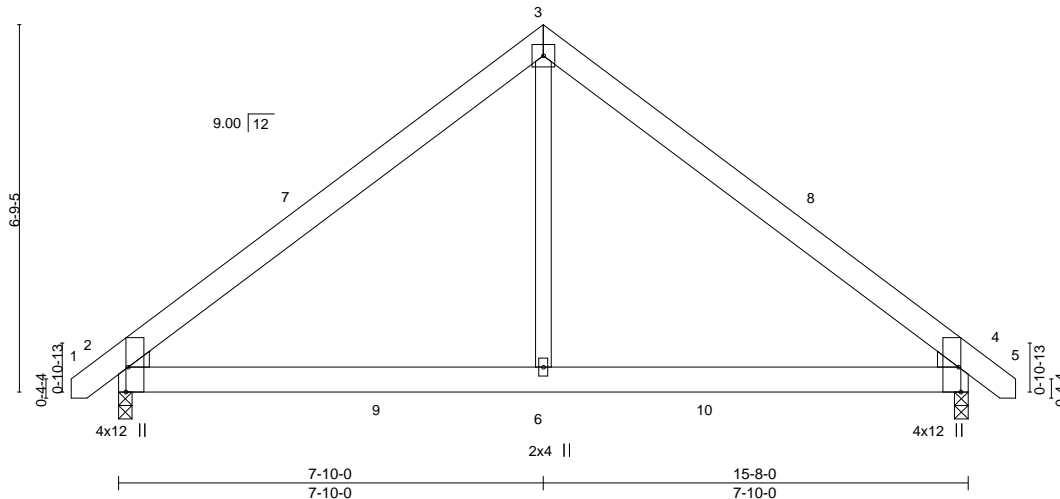


Plate Offsets (X,Y)-- [2:0-0-13,0-1-1], [2:0-1-9,0-5-4], [2:0-5-8,Edge], [4:0-0-13,0-1-1], [4:0-1-9,0-5-4], [4:0-5-8,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.28	Vert(LL) -0.03	4-6	>999	360		MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(CT) -0.05	4-6	>999	240			
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Horz(CT) 0.01	4	n/a	n/a			
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.06	4-6	>999	240			
	Code IRC2015/TPI2014							Weight: 98 lb	FT = 20%

**LUMBER-**

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

**WEDGE**

Left: 2x4 SP No.2, Right: 2x4 SP No.2

**REACTIONS.**

(size) 2=0-3-0, 4=0-3-0  
Max Horz 2=154(LC 10)  
Max Uplift 2=90(LC 9), 4=90(LC 8)  
Max Grav 2=717(LC 2), 4=717(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
TOP CHORD 2-3=810/620, 3-4=810/618  
BOT CHORD 2-6=323/544, 4-6=323/544  
WEBS 3-6=488/523

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 16-4-12 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



November 4, 2020

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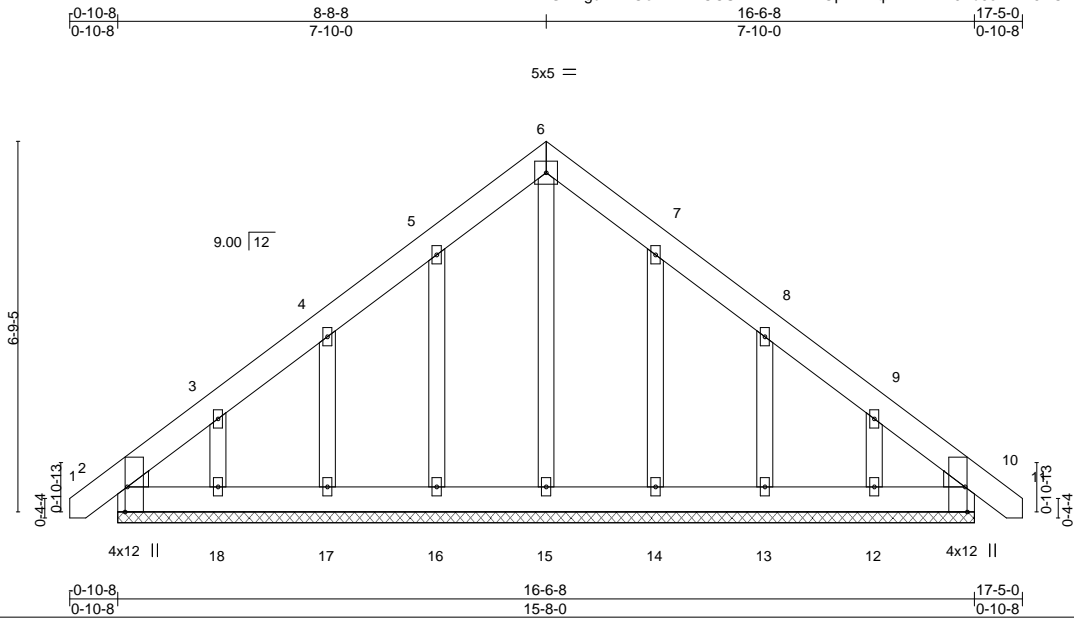


818 Soundside Road  
Edenton, NC 27932

Job J0221-1018	Truss D1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058968
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Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:42 2020 Page 1  
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Scale = 1:39.6

Plate Offsets (X,Y)-- [2:0-0-13,0-1-1], [2:0-1-9,0-5-4], [2:0-5-8,Edge], [10:0-0-13,0-1-1], [10:0-1-9,0-5-4], [10:0-5-8,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) 0.00 10 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.07	Vert(CT) 0.00 10 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 10 n/a n/a		
	Code IRC2015/TPI2014			Weight: 124 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SP No.1  
BOT CHORD 2x6 SP No.1  
OTHERS 2x4 SP No.2  
WEDGE  
Left: 2x4 SP No.2 , Right: 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 15-8-0.  
(lb) - Max Horz 2=192(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 16, 14 except 17=104(LC 12), 18=135(LC 12), 13=106(LC 13), 12=129(LC 13)  
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) 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
  - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
  - All plates are 2x4 MT20 unless otherwise indicated.
  - Gable requires continuous bottom chord bearing.
  - Gable studs spaced at 2-0-0 oc.
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 16, 14 except (jt=lb) 17=104, 18=135, 13=106, 12=129.
  - See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



November 4,2020

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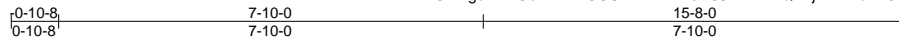
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058969
J0221-1018	D2	COMMON	2	1	Job Reference (optional)	

Comtech, Inc, Fayetteville, NC - 28314,

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ID:G?Mgu2wA0efhMlzVCCS4xvzRiE-eD58EDnRPQX4jEBVRbwn5scKOK?VKaOUGVW17KyMX0f



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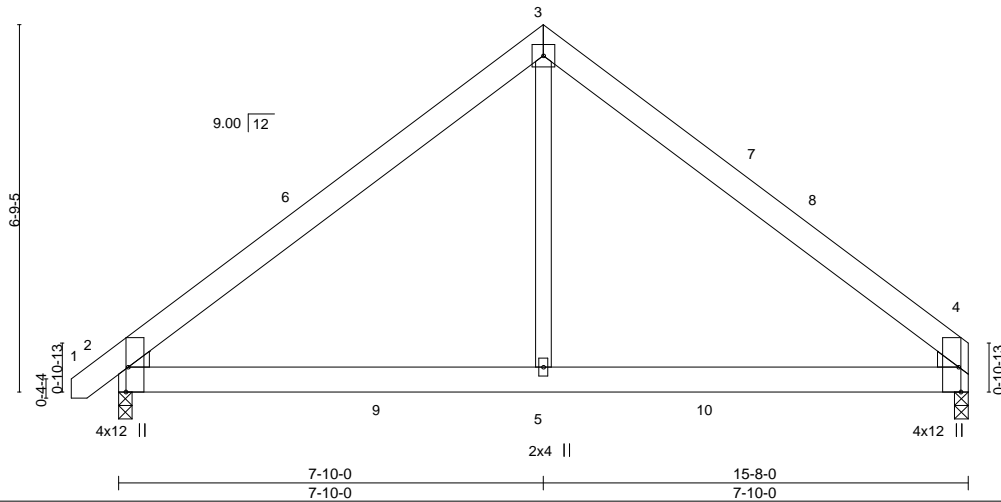


Plate Offsets (X,Y)-- [2:0-0-13,0-1-1], [2:0-1-9,0-5-4], [2:0-5-8,Edge], [4:0-0-13,0-1-1], [4:0-1-9,0-5-4], [4:0-5-8,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in	(loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.30	Vert(LL) -0.03	2-5	>999	360		MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.30	Vert(CT) -0.05	2-5	>999	240			
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Horz(CT) 0.01	4	n/a	n/a			
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.06	2-5	>999	240		Weight: 96 lb	FT = 20%
	Code IRC2015/TPI2014								

**LUMBER-**

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

**WEDGE**

Left: 2x4 SP No.2 , Right: 2x4 SP No.2

**REACTIONS.**

(size) 2=0-3-0, 4=0-3-0  
 Max Horz 2=153(LC 11)  
 Max Uplift 2=-90(LC 9), 4=-86(LC 8)  
 Max Grav 2=718(LC 2), 4=673(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-811/620, 3-4=-809/620  
 BOT CHORD 2-5=-333/542, 4-5=-333/542  
 WEBS 3-5=-486/524

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-8-12 to 3-8-1, Interior(1) 3-8-1 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 15-6-8 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
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.
- See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.



November 4,2020

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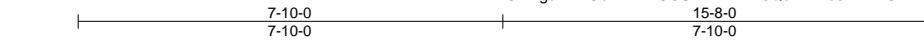
818 Soundside Road  
 Edenton, NC 27932

Job J0221-1018	Truss D3	Truss Type COMMON	Qty 2	Ply 1	Lot 3 Atkins Farm E15058970
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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:45 2020 Page 1

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5x5 =

Scale = 1:40.0

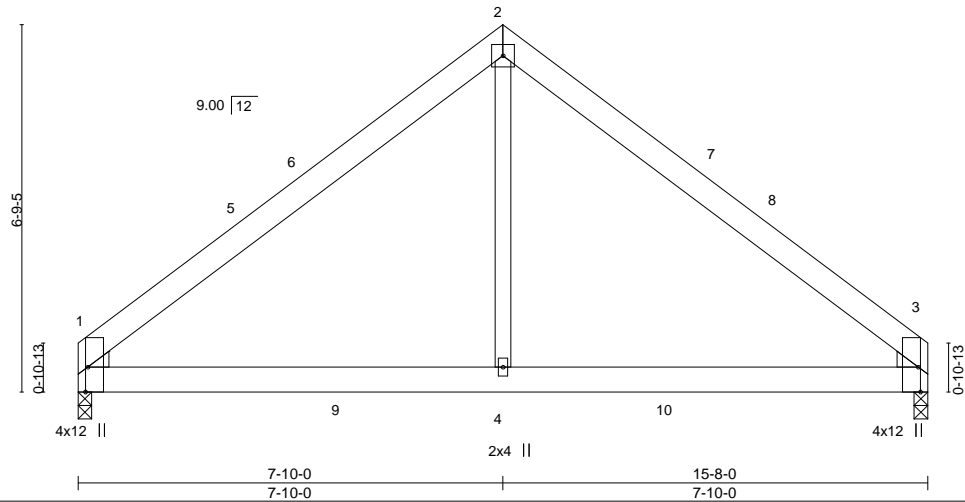


Plate Offsets (X,Y)-- [1:0-0-13,0-1-1], [1:0-1-9,0-5-4], [1:0-5-8,Edge], [3:0-0-13,0-1-1], [3:0-1-9,0-5-4], [3:0-5-8,Edge]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.30	Vert(LL) -0.02	3-4	>999	360	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.29	Vert(CT) -0.05	3-4	>999	240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.31	Horz(CT) 0.01	3	n/a	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.06	1-4	>999	240	Weight: 94 lb	FT = 20%
	Code IRC2015/TPI2014							

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 WEDGE  
 Left: 2x4 SP No.2, Right: 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=0-3-0, 3=0-3-0  
 Max Horz 1=150(LC 10)  
 Max Uplift 1=86(LC 9), 3=86(LC 8)  
 Max Grav 1=674(LC 2), 3=674(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-810/622, 2-3=-810/622  
 BOT CHORD 1-4=-335/543, 3-4=-335/543  
 WEBS 2-4=-483/524

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-1-8 to 4-6-5, Interior(1) 4-6-5 to 7-10-0, Exterior(2) 7-10-0 to 12-2-13, Interior(1) 12-2-13 to 15-6-8 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
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.



November 4, 2020

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



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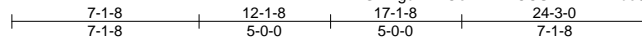


Job J0221-1018	Truss G1	Truss Type Common	Qty 3	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058971
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Comtech, Inc. Fayetteville, NC - 28314,

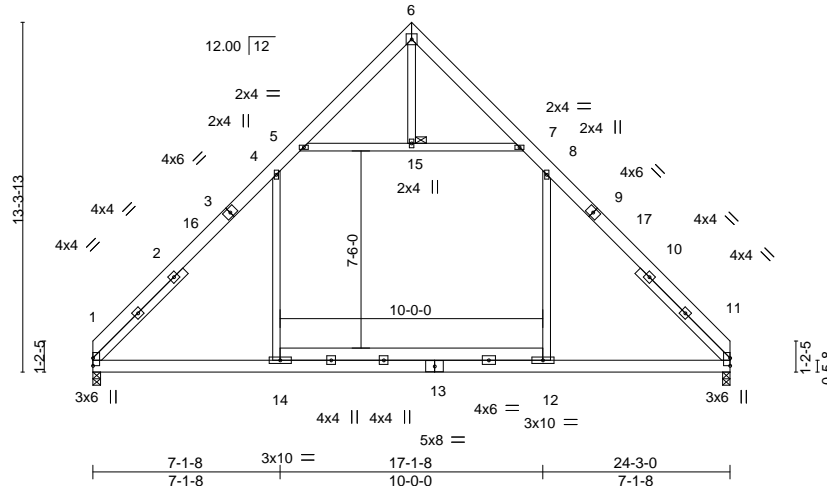
8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:46 2020 Page 1

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5x5 =

Scale = 1:82.5



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.26	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.51	Vert(LL) -0.14 11-12 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.13	Vert(CT) -0.16 11-12 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 11 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.19 1-14 >999 240	Weight: 217 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -x 4-10-11, Right 2x4 SP No.2 -x 4-10-11

**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.  
 JOINTS 1 Brace at Jt(s): 15

**REACTIONS.**

(size) 1=0-3-8, 11=0-3-8  
 Max Horz 1=-306(LC 8)  
 Max Uplift 1=-35(LC 13), 11=-35(LC 12)  
 Max Grav 1=1110(LC 20), 11=1110(LC 19)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-4=-1451/251, 4-5=-805/321, 7-8=-805/320, 8-11=-1453/251  
 BOT CHORD 1-14=-7/913, 12-14=-12/914, 11-12=-7/912  
 WEBS 4-14=-25/552, 8-12=-26/554, 5-15=-863/391, 7-15=-863/391

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 12-1-8, Exterior(2) 12-1-8 to 16-6-7, Interior(1) 16-6-7 to 24-3-0 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 11.



November 4, 2020

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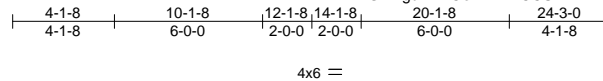
818 Soundside Road  
 Edenton, NC 27932

Job J0221-1018	Truss G1-GR	Truss Type COMMON GIRDER	Qty 1	Ply 3	Lot 3 Atkins Farm Job Reference (optional)	E15058972
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Comtech, Inc, Fayetteville, NC - 28314,

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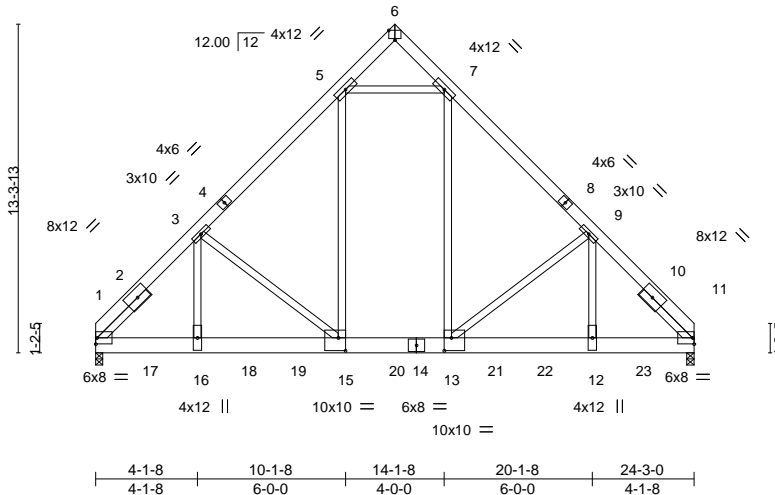


Plate Offsets (X,Y)-- [6:0-3-0,Edge], [13:0-3-8,0-6-4], [15:0-3-8,0-6-4]

<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL 2.0-0 Lumber DOL 1.15	TC 0.97 BC 0.40 WB 0.56 Matrix-S	Vert(LL) -0.09 Vert(CT) -0.18 Horz(CT) 0.04 Wind(LL) -0.02	12-13 12-13 11 15-16	>999 >999 n/a >999	360 240 n/a 240	MT20	244/190
TCDL 10.0	Rep Stress Incr NO Code IRC2015/TPI2014						Weight: 703 lb	FT = 20%
BCLL 0.0 *								
BCDL 10.0								

**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 -x 2-9-4, Right 2x4 SP No.2 -x 2-9-4

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 4-0-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=0-3-8, 11=0-3-8  
 Max Horz 1=304(LC 4)  
 Max Grav 1=11831(LC 2), 11=12016(LC 2)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-13875/0, 3-5=-10297/0, 7-9=-10310/0, 9-11=-14178/0  
 BOT CHORD 1-16=0/9026, 15-16=0/9042, 13-15=0/7348, 12-13=0/9245, 11-12=0/9228  
 WEBS 7-13=0/6894, 9-13=-2492/0, 9-12=0/4965, 5-15=0/6826, 3-15=-2232/0, 3-16=0/4595,  
 5-7=-7517/0

**NOTES-**

- 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 - 2 rows staggered at 0-4-0 oc.  
 Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
- All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1958 lb down at 2-0-12, 1958 lb down at 4-0-12, 1958 lb down at 6-0-12, 1958 lb down at 8-0-12, 1958 lb down at 10-0-12, 1958 lb down at 12-0-12, 1958 lb down at 14-0-12, 2068 lb down at 16-0-12, 2068 lb down at 18-0-12, and 2068 lb down at 20-0-12, and 2068 lb down at 22-0-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

**LOAD CASE(S)** Standard

- Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-6=-60, 6-11=-60, 1-11=-20



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Continued on page 2

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818 Soundside Road  
 Edenton, NC 27932

Job J0221-1018	Truss G1-GR	Truss Type COMMON GIRDER	Qty 1	Ply <b>3</b>	Lot 3 Atkins Farm Job Reference (optional)	E15058972
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Comtech, Inc, Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:48 2020 Page 2  
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**LOAD CASE(S)** Standard

Concentrated Loads (lb)

Vert: 13--1547(B) 12--1645(B) 15--1547(B) 16--1547(B) 17--1547(B) 18--1547(B) 19--1547(B) 20--1547(B) 21--1645(B) 22--1645(B) 23--1645(B)

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**Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601 **ANSI/TP11 Quality Criteria, DSB-89 and BCSI Building Component**



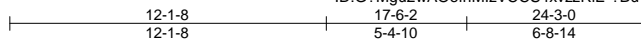
818 Soundside Road  
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058973
J0221-1018	G1SG	GABLE	1	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:49 2020 Page 1

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5x5 =

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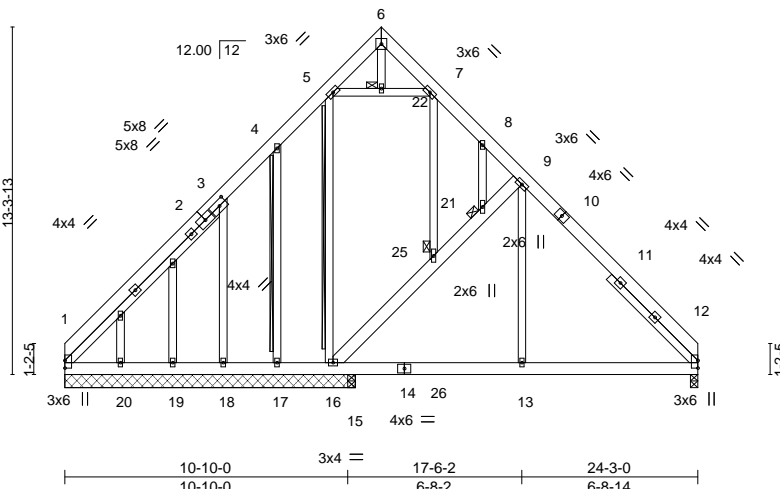


Plate Offsets (X,Y)-- [3:0-3-8,0-2-8]

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 0.20	Vert(LL)	-0.02 13-15	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.14	Vert(CT)	-0.03 12-13	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.37	Horz(CT)	0.01 12	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S	Wind(LL)	0.01 12-13	>999	240	Weight: 259 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2 \*Except\*  
 9-16: 2x6 SP No.1  
 OTHERS 2x4 SP No.2  
 SLIDER Left 2x4 SP No.2 -x 8-5-2, Right 2x4 SP No.2 -x 4-8-11

**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 - 5-16, 4-17  
 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.  
 JOINTS Brace must cover 90% of web length.  
 1 Brace at Jt(s): 21, 22, 25

**REACTIONS.**

All bearings 11-1-8 except (jt=length) 12=0-3-8, 15=0-3-8.  
 (lb) - Max Horz 1=382(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 12, 17, 20 except 16=205(LC 13),  
 18=-446(LC 12)  
 Max Grav All reactions 250 lb or less at joint(s) 17, 19, 20 except 1=385(LC 21),  
 12=663(LC 20), 16=287(LC 1), 18=434(LC 19), 15=352(LC 18)

**FORCES.**

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-3=-503/279, 3-4=-349/173, 4-5=-269/210, 8-9=-311/176, 9-12=-683/95  
 BOT CHORD 1-20=-204/371, 19-20=-204/371, 18-19=-204/371, 17-18=-205/372, 16-17=-205/372,  
 15-16=0/417, 13-15=0/417, 12-13=0/417  
 WEBS 16-25=-528/327, 21-25=-506/310, 9-21=-552/358, 9-13=0/298, 3-18=-507/461

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 12, 17, 20 except (jt=length) 16=205, 18=446.
- Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



November 4, 2020

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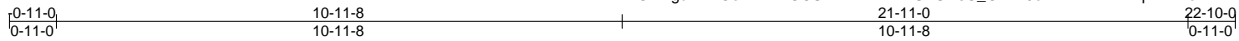
818 Soundside Road  
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Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058974
J0221-1018	H1	COMMON	6	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:50 2020 Page 1

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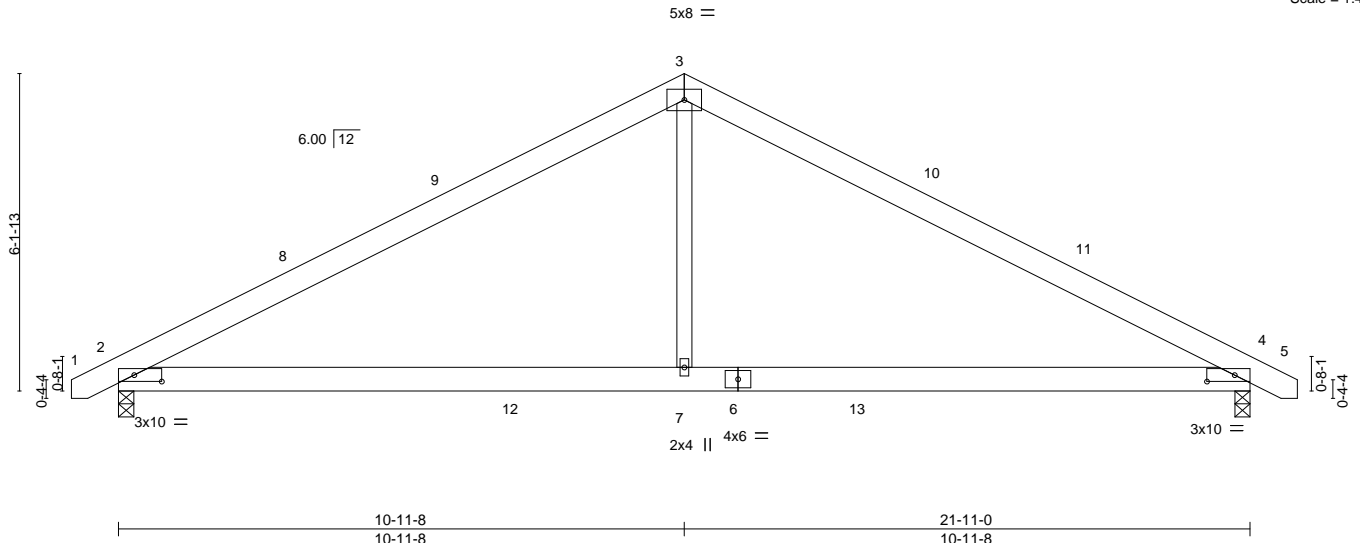


Plate Offsets (X,Y)--	[2:0-6-7,0-1-8], [4:0-6-7,0-1-8]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL 1.15	TC 0.63	Vert(LL) -0.08	4-7	>999	360	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.50	Vert(CT) -0.18	4-7	>999	240		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.15	Horz(CT) 0.02	4	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S	Wind(LL) 0.06	2-7	>999	240	Weight: 122 lb	FT = 20%

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 SP No.1  
 WEBS 2x4 SP No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 2=0-3-8, 4=0-3-8  
 Max Horz 2=76(LC 11)  
 Max Uplift 2=-64(LC 12), 4=-64(LC 13)  
 Max Grav 2=953(LC 2), 4=953(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 2-3=-1379/292, 3-4=-1379/292  
 BOT CHORD 2-7=-93/1123, 4-7=-93/1123  
 WEBS 3-7=0/655

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -0-9-2 to 3-7-11, Interior(1) 3-7-11 to 10-11-8, Exterior(2) 10-11-8 to 15-4-5, Interior(1) 15-4-5 to 22-8-2 zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 4.



November 4, 2020

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818 Soundside Road  
 Edenton, NC 27932

Job J0221-1018	Truss H1-GR	Truss Type COMMON GIRDER	Qty 1	Ply 2	Lot 3 Atkins Farm Job Reference (optional)	E15058975
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Comtech, Inc. Fayetteville, NC - 28314,

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ID:G?Mgu2wAOefhMlzVCCS4xvzzRIE-M8hwKevj2VofvmyQ0h67Vz0\_IMKngOlyZ3xYUlyMX0V



5x8 ||

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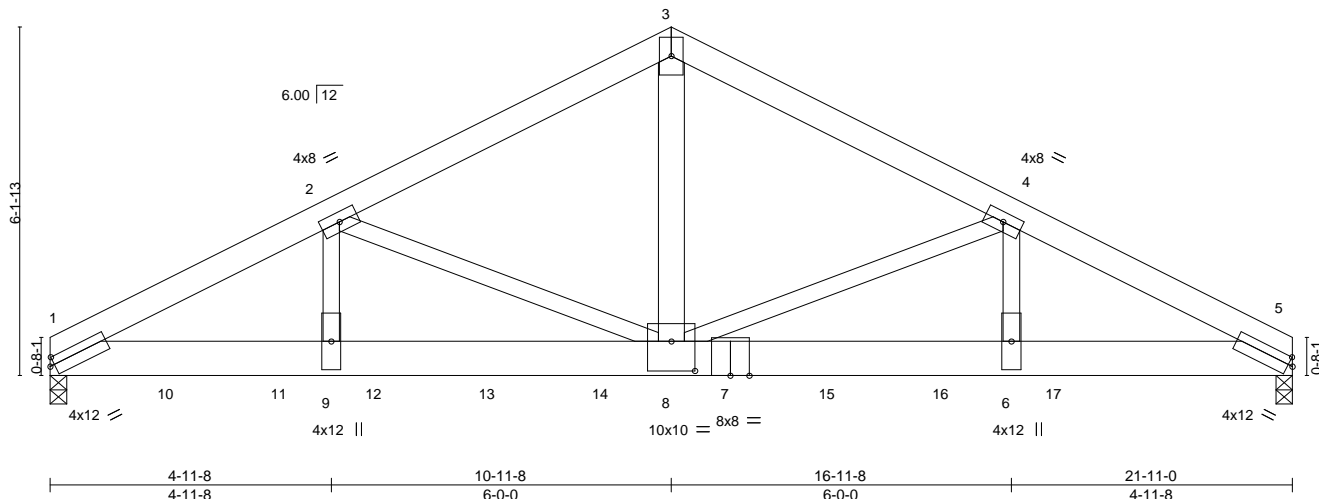


Plate Offsets (X,Y)--	[1:0-1-0,0-1-12], [5:0-1-0,0-1-12], [8:0-5-0,0-6-4]
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LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.46	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.69	Vert(LL) -0.12 6-8 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.64	Vert(CT) -0.25 6-8 >999 240		
BCDL 10.0	Rep Stress Incr NO	Matrix-S	Horz(CT) 0.07 5 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) -0.01 8-9 >999 240	Weight: 323 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 4-2-0 oc purlins.
BOT CHORD 2x8 SP 2400F 2.0E	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2 *Except* 3-8: 2x6 SP No.1	

**REACTIONS.** (size) 1=0-3-8, 5=0-3-8  
 Max Horz 1=73(LC 6)  
 Max Grav 1=7649(LC 2), 5=6352(LC 2)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 TOP CHORD 1-2=-13723/0, 2-3=-9326/0, 3-4=-9326/0, 4-5=-12722/0  
 BOT CHORD 1-9=0/12036, 8-9=0/12036, 6-8=0/11140, 5-6=0/11140  
 WEBS 3-8=0/7882, 4-8=-3094/0, 4-6=0/2919, 2-8=-4070/0, 2-9=0/3753

- NOTES-**
- 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:  
 Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.  
 Bottom chords connected as follows: 2x8 - 2 rows staggered at 0-5-0 oc.  
 Webs connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc, 2x4 - 1 row at 0-9-0 oc.
  - All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
  - Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope); Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1387 lb down at 2-0-12, 1387 lb down at 4-0-12, 1388 lb down at 5-8-12, 1388 lb down at 7-8-12, 1388 lb down at 9-8-12, 1388 lb down at 11-8-12, 1388 lb down at 13-8-12, and 1388 lb down at 15-8-12, and 1388 lb down at 17-8-12 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  
 Uniform Loads (plf)  
 Vert: 1-3=60, 3-5=60, 1-5=20  
 Concentrated Loads (lb)  
 Vert: 7=1130(B) 10=1128(B) 11=1128(B) 12=1130(B) 13=1130(B) 14=1130(B) 15=1130(B) 16=1130(B) 17=1130(B)



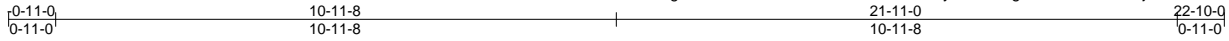
November 4, 2020

Job J0221-1018	Truss H1GE	Truss Type COMMON SUPPORTED GAB	Qty 1	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058976
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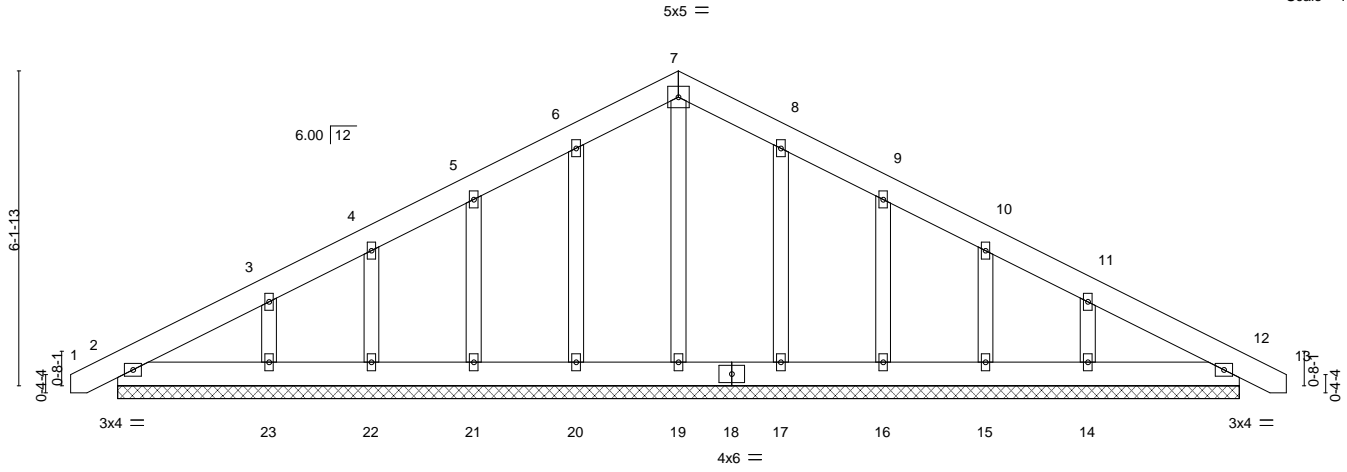
Comtech, Inc. Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:52 2020 Page 1

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Scale = 1:42.4



<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	2-0-0	TC 0.03	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) 0.00 12 n/r 120		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Vert(CT) 0.00 12 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 12 n/a n/a		
	Code IRC2015/TPI2014			Weight: 154 lb	FT = 20%

**LUMBER-**

TOP CHORD 2x6 SP No.1  
 BOT CHORD 2x6 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 21-11-0.  
 (lb) - Max Horz 2=119(LC 12)  
 Max Uplift All uplift 100 lb or less at joint(s) 2, 20, 21, 22, 17, 16, 15, 12 except 23=-109(LC 12), 14=-106(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 2, 19, 20, 21, 22, 23, 17, 16, 15, 14, 12

**FORCES.**

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; end vertical left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- All plates are 2x4 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Gable studs spaced at 2-0-0 oc.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 20, 21, 22, 17, 16, 15, 12 except (jt=lb) 23=109, 14=106.



November 4, 2020

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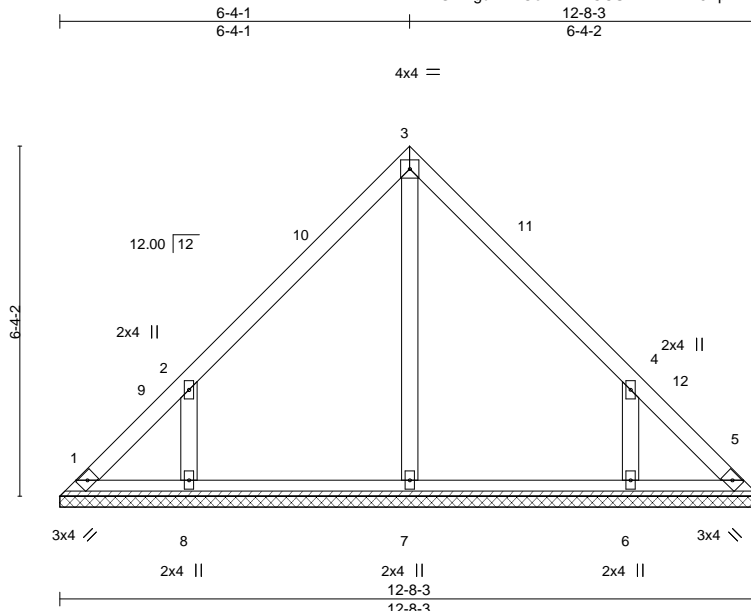


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Job	Truss	Truss Type	Qty	Ply	Lot 3 Atkins Farm	E15058977
J0221-1018	V1	VALLEY	1	1	Job Reference (optional)	

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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:10:59 2020 Page 1  
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Scale = 1:39.3

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

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0 Plate Grip DOL 1.15	TC 0.14	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL 1.15	BC 0.09	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr YES	WB 0.09	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Code IRC2015/TPI2014	Matrix-S					Weight: 58 lb	FT = 20%

**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 12-8-3.  
 (lb) - Max Horz 1=144(LC 8)  
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5 except 8=161(LC 12), 6=161(LC 13)  
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 7 except 8=342(LC 19), 6=342(LC 20)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.  
 WEBS 2-8=-355/291, 4-6=-355/291

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
  - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-4-4 to 4-9-0, Interior(1) 4-9-0 to 6-4-1, Exterior(2) 6-4-1 to 10-8-14, Interior(1) 10-8-14 to 12-3-15 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
  - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
  - \* This truss has been designed for a live load of 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.
  - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5 except (jt=lb) 8=161, 6=161.
  - Non Standard bearing condition. Review required.



November 4,2020

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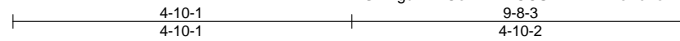


Job J0221-1018	Truss V2	Truss Type VALLEY	Qty 1	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058978
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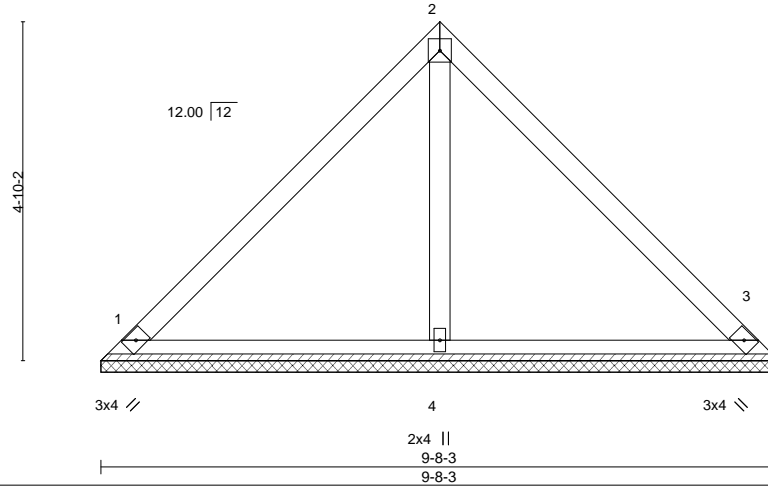
8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:11:01 2020 Page 1

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4x4 =

Scale = 1:31.0



<b>LOADING</b> (psf)	<b>SPACING-</b>	2-0-0	<b>CSI.</b>	<b>DEFL.</b>	in (loc)	l/defl	L/d	<b>PLATES</b>	<b>GRIP</b>
TCLL 20.0	Plate Grip DOL	1.15	TC 0.22	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.15	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.06	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-S					Weight: 40 lb	FT = 20%

**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=9-8-3, 3=9-8-3, 4=9-8-3  
Max Horz 1=108(LC 8)  
Max Uplift 1=27(LC 13), 3=27(LC 13)  
Max Grav 1=204(LC 1), 3=204(LC 1), 4=311(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; 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(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Non Standard bearing condition. Review required.



November 4, 2020

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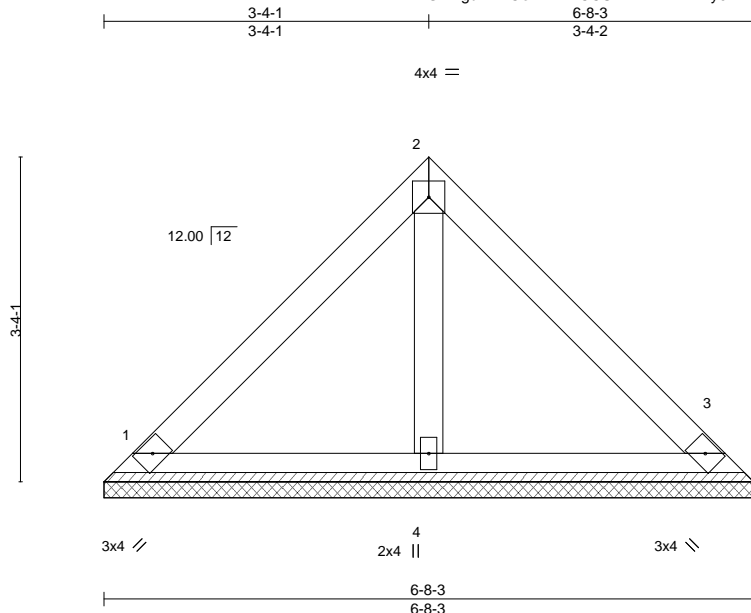
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Job J0221-1018	Truss V3	Truss Type VALLEY	Qty 1	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058979
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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:11:02 2020 Page 1

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Scale = 1:22.3

LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.15	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.07	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.02	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 27 lb	FT = 20%

**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=6-8-3, 3=6-8-3, 4=6-8-3  
 Max Horz 1=72(LC 8)  
 Max Uplift 1=26(LC 13), 3=26(LC 13)  
 Max Grav 1=146(LC 1), 3=146(LC 1), 4=187(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; 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(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Non Standard bearing condition. Review required.



November 4, 2020

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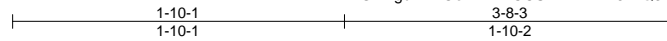


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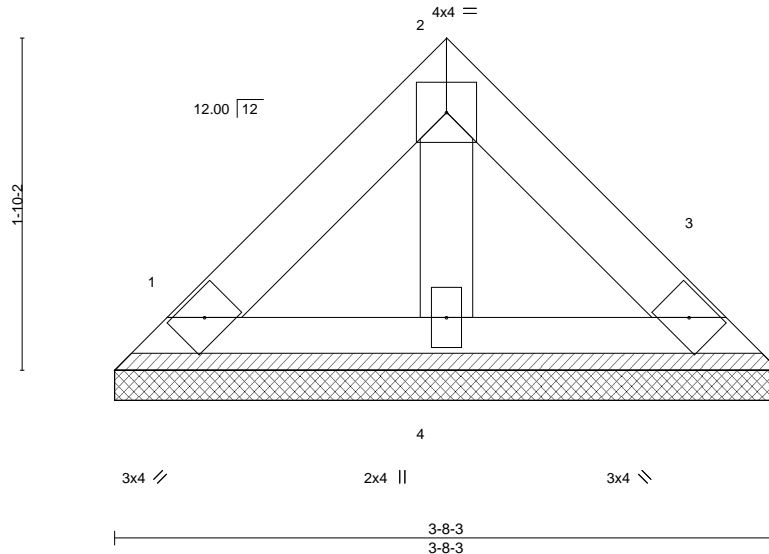
Job J0221-1018	Truss V4	Truss Type VALLEY	Qty 1	Ply 1	Lot 3 Atkins Farm Job Reference (optional)	E15058980
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8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Nov 4 15:11:04 2020 Page 1  
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Scale: 1"=1'



LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1.15	TC 0.03	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 0.01	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						Weight: 14 lb	FT = 20%

**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 3-8-3 oc purlins.  
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 1=3-8-3, 3=3-8-3, 4=3-8-3  
Max Horz 1=36(LC 8)  
Max Uplift 1=13(LC 13), 3=13(LC 13)  
Max Grav 1=72(LC 1), 3=73(LC 1), 4=93(LC 1)

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; 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(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- Non Standard bearing condition. Review required.



November 4, 2020

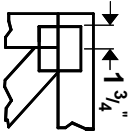
**WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.**  
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601



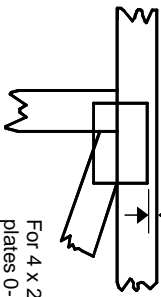
818 Soundside Road  
Edenton, NC 27932

# 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.

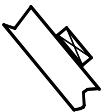
\* Plate location details available in **MITek 20/20** software or upon request.

## PLATE SIZE

4 X 4

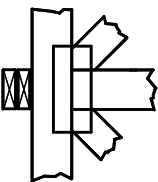
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## LATERAL BRACING LOCATION



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

## BEARING



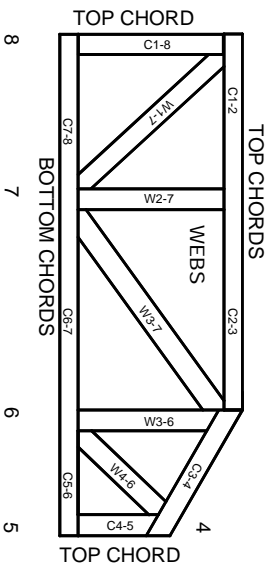
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

ANSI/TP1: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-89: Design Standard for Bracing.  
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

# Numbering System

6-4-8 dimensions shown in ft-in-sixteenths (Drawings not to scale)



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 NUMBER/LETTERS.

## PRODUCT CODE APPROVALS

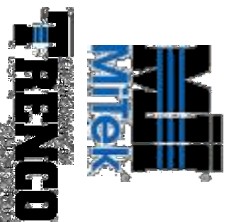
ICC-ES Reports:

ESR-1311, ESR-1352, ESR 1988  
ER-3907, ESR-2362, ESR-1397, ESR-3282

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

Lumber design values are in accordance with ANSI/TP1 section 6.3 These truss designs rely on lumber values established by others.

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MITek Engineering Reference Sheet: Mill-7473 rev. 5/19/2020

# 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/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
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 lead 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/TP1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.