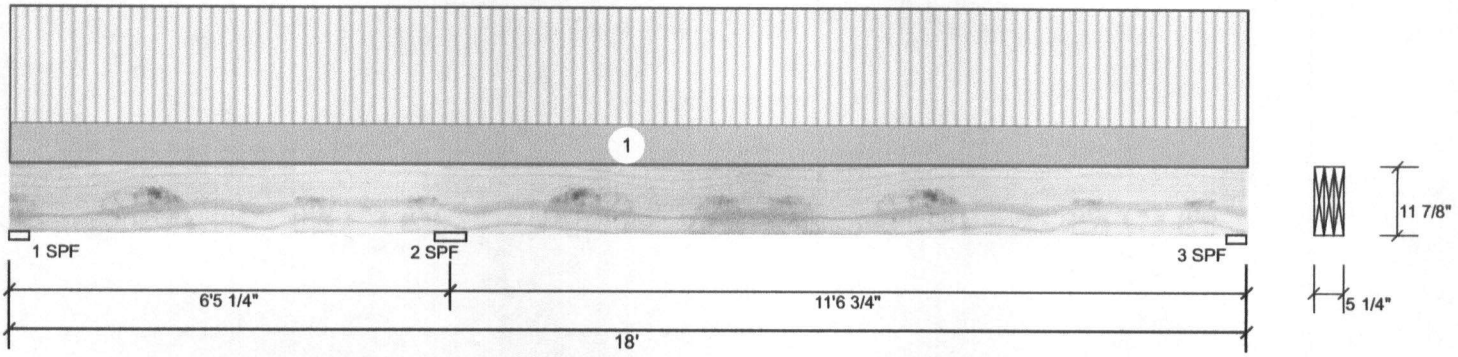
isDesign™

Client: Watermark Homes
Project:
Address:

Date: 9/27/2018
Designer: Anthony Williams
Job Name: Lot 38 South Creek
Project #: J0918-4410

BM1 Kerto-S LVL 1.750" X 11.875" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Roof
Plies:	3	Slope:	0/12
Moisture Condition:	Dry	Design Method:	ASD
Deflection LL:	480	Building Code:	IBC 2012
Deflection TL:	360	Load Sharing:	Yes
Importance:	Normal	Deck:	Not Checked
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	1162	409	0	0	0
2	8927	3140	0	0	0
3	3771	1326	0	0	0

Bearings

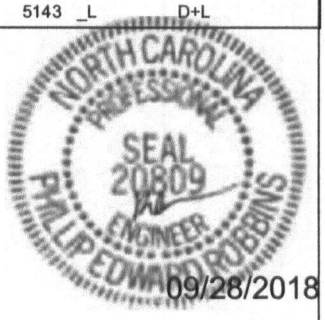
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	35%	376 / 2355	2731 (-734)	L_	D+L
2 - SPF	5.500"	100%	3191 / 9072	12263	LL	D+L
3 - SPF	3.500"	66%	1308 / 3835	5143	_L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Neg Moment	-12572 ft-lb	6'5 1/4"	31060 ft-lb	0.405 (40%)	D+L	LL
Unbraced	-11259 ft-lb	6'5 1/4"	20065 ft-lb	0.561 (56%)	D+L	_L
Pos Moment	11556 ft-lb	13' 11/16"	31060 ft-lb	0.372 (37%)	D+L	_L
Unbraced	11556 ft-lb	13' 11/16"	14626 ft-lb	0.790 (79%)	D+L	_L
Shear	5977 lb	7'5 1/8"	13300 lb	0.449 (45%)	D+L	LL
LL Defl inch	0.148 (L/920)	12'5 1/2"	0.283 (L/480)	0.520 (52%)	L	_L
TL Defl inch	0.196 (L/695)	12'5 13/16"	0.378 (L/360)	0.520 (52%)	D+L	_L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Tie-down connection required at bearing 1 for uplift 734 lb (Combination D+L, Load Case _L).
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	257 PLF	770 PLF	0 PLF	0 PLF	0 PLF	F04
	Self Weight				14 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

Job# PER181912
P. E. Robbins, P.E. - #309-240-6424
1777 State Rt 167 Victoria IL 61485
This design is valid until 7/10/2021

Manufacturer Info

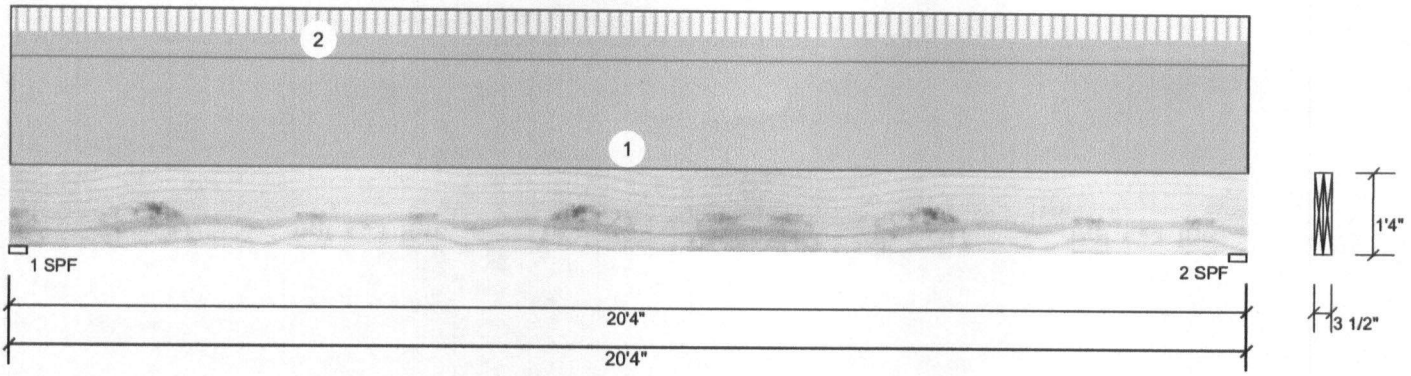
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

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

COMTECH

BM3 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Roof
Plies:	2	Slope:	0/12
Moisture Condition:	Dry	Design Method:	ASD
Deflection LL:	480	Building Code:	IBC 2012
Deflection TL:	360	Load Sharing:	No
Importance:	Normal	Deck:	Not Checked
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	407	2312	0	0	0
2	407	2312	0	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	52%	2312 / 407	2719	L	D+L
2 - SPF	3.500"	52%	2312 / 407	2719	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13233 ft-lb	10'2"	34565 ft-lb	0.383 (38%)	D+L	L
Unbraced	13233 ft-lb	10'2"	13250 ft-lb	0.999 (100%)	D+L	L
Shear	2304 lb	1'6 5/8"	11947 lb	0.193 (19%)	D+L	L
LL Defl inch	0.063 (L/3784)	10'2 1/16"	0.497 (L/480)	0.130 (13%)	L	L
TL Defl inch	0.422 (L/566)	10'2 1/16"	0.663 (L/360)	0.640 (64%)	D+L	L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top must be laterally braced at a maximum of 8'11 1/4" o.c.
5 Bottom braced at bearings.
6 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	175 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
2	Uniform			Top	40 PLF	40 PLF	0 PLF	0 PLF	0 PLF	ROOF
	Self Weight				12 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

Job# PER181912
P. E. Robbins, P.E. - #309-240-6424
1777 State Rt 167 Victoria IL 61485
This design is valid until 7/10/2021

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

COMTECH

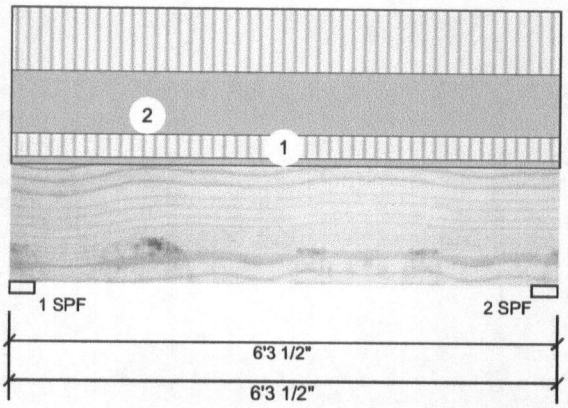
isDesign™

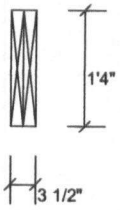
Client: Watermark Homes
Project:
Address:

Date: 9/27/2018
Designer: Anthony Williams
Job Name: Lot 38 South Creek
Project #: J0918-4410

BM4 Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Roof
Plies:	2	Slope:	0/12
Moisture Condition:	Dry	Design Method:	ASD
Deflection LL:	480	Building Code:	IBC 2012
Deflection TL:	360	Load Sharing:	No
Importance:	Normal	Deck:	Not Checked
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	1746	1471	0	0	0
2	1746	1471	0	0	0

Bearings

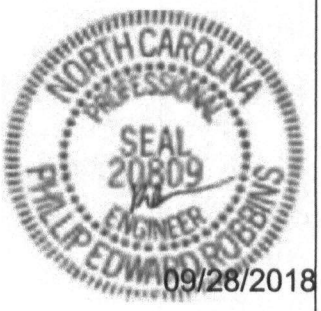
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	3.500"	62%	1471 / 1746	3216	L	D+L
2 - SPF	3.500"	62%	1471 / 1746	3216	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	4380 ft-lb	3'1 3/4"	34565 ft-lb	0.127 (13%)	D+L	L
Unbraced	4380 ft-lb	3'1 3/4"	19579 ft-lb	0.224 (22%)	D+L	L
Shear	1630 lb	1'6 5/8"	11947 lb	0.136 (14%)	D+L	L
LL Defl inch	0.011 (L/6369)	3'1 3/4"	0.146 (L/480)	0.080 (8%)	L	L
TL Defl inch	0.020 (L/3457)	3'1 3/4"	0.195 (L/360)	0.100 (10%)	D+L	L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top braced at bearings.
5 Bottom braced at bearings.
6 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	50 PLF	150 PLF	0 PLF	0 PLF	0 PLF	FLOOR
2	Uniform			Top	405 PLF	405 PLF	0 PLF	0 PLF	0 PLF	J1
	Self Weight				12 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

Job# PER181912
P. E. Robbins, P.E. - #309-240-6424
1777 State Rt 167 Victoria IL 61485
This design is valid until 7/10/2021

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

COMTECH

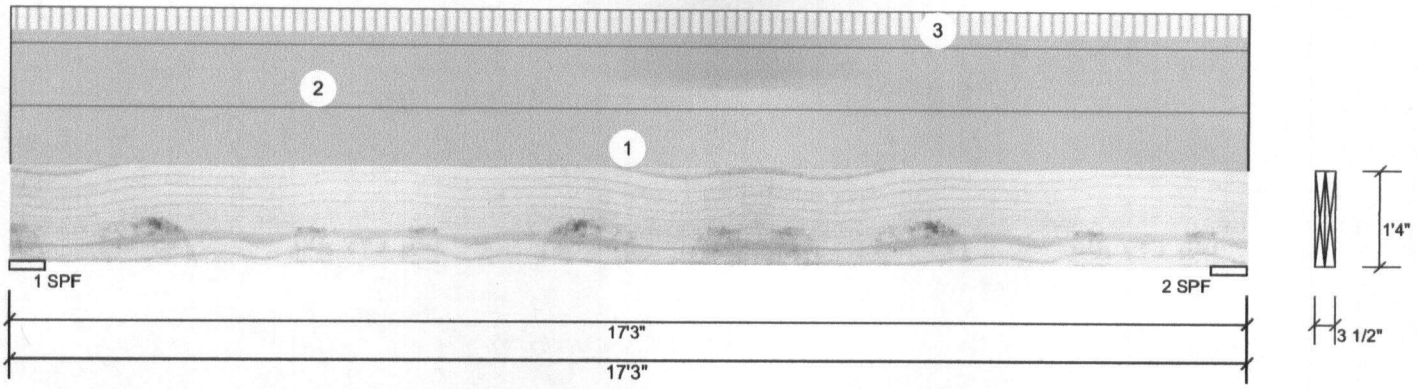
isDesign™

Client: Watermark Homes
Project:
Address:

Date: 9/27/2018
Designer: Anthony Williams
Job Name: Lot 38 South Creek
Project #: J0918-4410

GDH Kerto-S LVL 1.750" X 16.000" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Roof
Plies:	2	Slope:	0/12
Moisture Condition:	Dry	Design Method:	ASD
Deflection LL:	480	Building Code:	IBC 2012
Deflection TL:	600	Load Sharing:	No
Importance:	Normal	Deck:	Not Checked
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	518	3083	0	0	0
2	518	3083	0	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	6.000"	40%	3083 / 518	3600	L	D+L
2 - SPF	6.000"	40%	3083 / 518	3600	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	14027 ft-lb	8'7 1/2"	34565 ft-lb	0.406 (41%)	D+L	L
Unbraced	14027 ft-lb	8'7 1/2"	14045 ft-lb	0.999 (100%)	D+L	L
Shear	2866 lb	1'9 1/8"	11947 lb	0.240 (24%)	D+L	L
LL Defl inch	0.045 (L/4374)	8'7 9/16"	0.410 (L/480)	0.110 (11%)	L	L
TL Defl inch	0.313 (L/629)	8'7 9/16"	0.328 (L/600)	0.950 (95%)	D+L	L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top must be laterally braced at a maximum of 8'4 7/8" o.c.
5 Bottom braced at bearings.
6 Lateral slenderness ratio based on single ply width.

NORTH CAROLINA PROFESSIONAL SEAL 20809 ENGINEER PHILIP EDWARD ROBBINS
09/28/2018

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	150 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
2	Uniform			Top	160 PLF	0 PLF	0 PLF	0 PLF	0 PLF	BRICK
3	Uniform			Top	35 PLF	60 PLF	0 PLF	0 PLF	0 PLF	Roof/Floor
	Self Weight				12 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

Job# PER181912
P. E. Robbins, P.E. - #309-240-6424
1777 State Rt 167 Victoria IL 61485
This design is valid until 7/10/2021

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

COMTECH

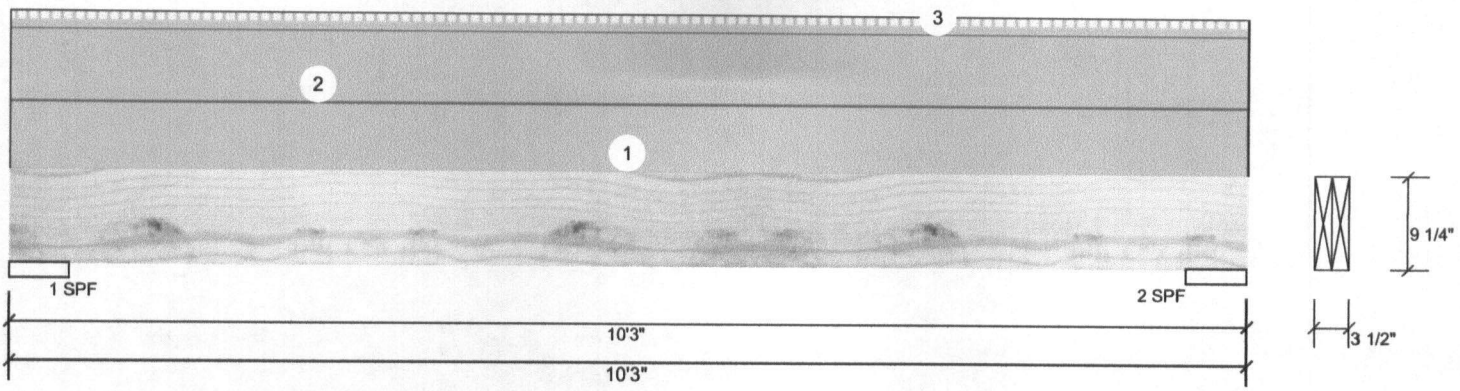
isDesign™

Client: Watermark Homes
Project:
Address:

Date: 9/27/2018
Designer: Anthony Williams
Job Name: Lot 38 South Creek
Project #: J0918-4410

GDH-9 Kerto-S LVL 1.750" X 9.250" 2-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Roof
Plies:	2	Slope:	0/12
Moisture Condition:	Dry	Design Method:	ASD
Deflection LL:	480	Building Code:	IBC 2012
Deflection TL:	600	Load Sharing:	No
Importance:	Normal	Deck:	Not Checked
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	103	1728	0	0	0
2	103	1728	0	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF	6.000"	21%	1728 / 103	1831	L	D+L
2 - SPF	6.000"	21%	1728 / 103	1831	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	3705 ft-lb	5'1 1/2"	11288 ft-lb	0.328 (33%)	D	Uniform
Unbraced	3924 ft-lb	5'1 1/2"	7663 ft-lb	0.512 (51%)	D+L	L
Shear	1321 lb	9' 1/2"	6216 lb	0.212 (21%)	D	Uniform
LL Defl inch	0.008 (L/13536)	5'1 1/2"	0.234 (L/480)	0.040 (4%)	L	L
TL Defl inch	0.148 (L/758)	5'1 1/2"	0.188 (L/600)	0.790 (79%)	D+L	L

Design Notes

1 Girders are designed to be supported on the bottom edge only.
2 Multiple plies must be fastened together as per manufacturer's details.
3 Top loads must be supported equally by all plies.
4 Top braced at bearings.
5 Bottom braced at bearings.
6 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	150 PLF	0 PLF	0 PLF	0 PLF	0 PLF	WALL
2	Uniform			Top	160 PLF	0 PLF	0 PLF	0 PLF	0 PLF	BRICK
3	Uniform			Top	20 PLF	20 PLF	0 PLF	0 PLF	0 PLF	Roof
	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

Job# PER181912
P. E. Robbins, P.E. - #309-240-6424
1777 State Rt 167 Victoria IL 61485
This design is valid until 7/10/2021

Manufacturer Info

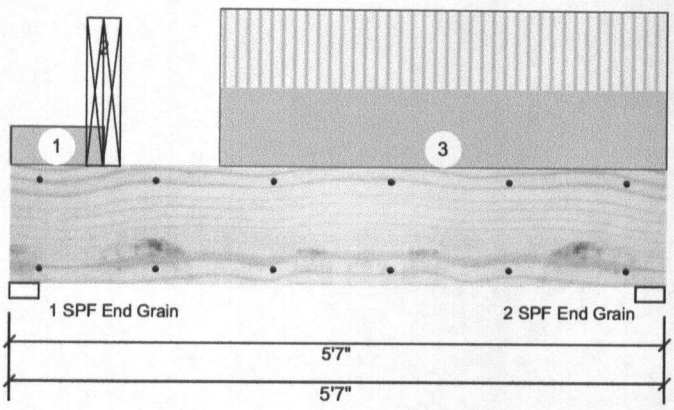
Metsä Wood
301 Merritt 7 Building, 2nd Floor
Norwalk, CT 06851
(800) 622-5850
www.metsawood.com/us
ICC-ES: ESR-3633

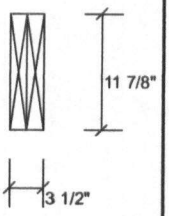
Comtech, Inc.
1001 S. Reilly Road, Suite #639
Fayetteville, NC
USA
28314
910-864-TRUS

COMTECH

Sliding Door Header Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level





Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC 2012
Deflection LL:	360	Load Sharing:	No
Deflection TL:	240	Deck:	Not Checked
Importance:	Normal		
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	684	2489	0	0	0
2	709	960	0	0	0

Bearings

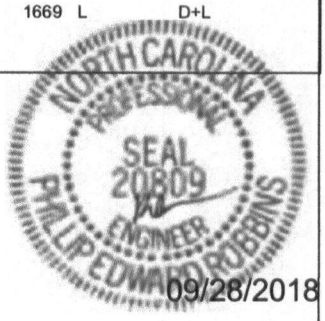
Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.000"	35%	2489 / 684	3173	L	D+L
2 - SPF End Grain	3.000"	18%	960 / 709	1669	L	D+L

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	2327 ft-lb	2'5 3/16"	19911 ft-lb	0.117 (12%)	D+L	L
Unbraced	2327 ft-lb	2'5 3/16"	15061 ft-lb	0.155 (15%)	D+L	L
Shear	2004 lb	1'2 1/8"	8867 lb	0.226 (23%)	D+L	L
LL Defl inch	0.007 (L/9597)	2'9 7/8"	0.174 (L/360)	0.040 (4%)	L	L
TL Defl inch	0.018 (L/3391)	2'7 1/2"	0.260 (L/240)	0.070 (7%)	D+L	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	Part. Uniform	0-0-0 to 0-9-8		Top	125 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall Load
2	Point	0-9-8		Top	2312 lb	407 lb	0 lb	0 lb	0 lb	BM3 Brg 1
3	Part. Uniform	1-9-8 to 5-7-0		Top	260 PLF	260 PLF	0 PLF	0 PLF	0 PLF	C2
	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

Job# PER181912
P. E. Robbins, P.E. - #309-240-6424
1777 State Rt 167 Victoria IL 61485
This design is valid until 7/10/2021

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

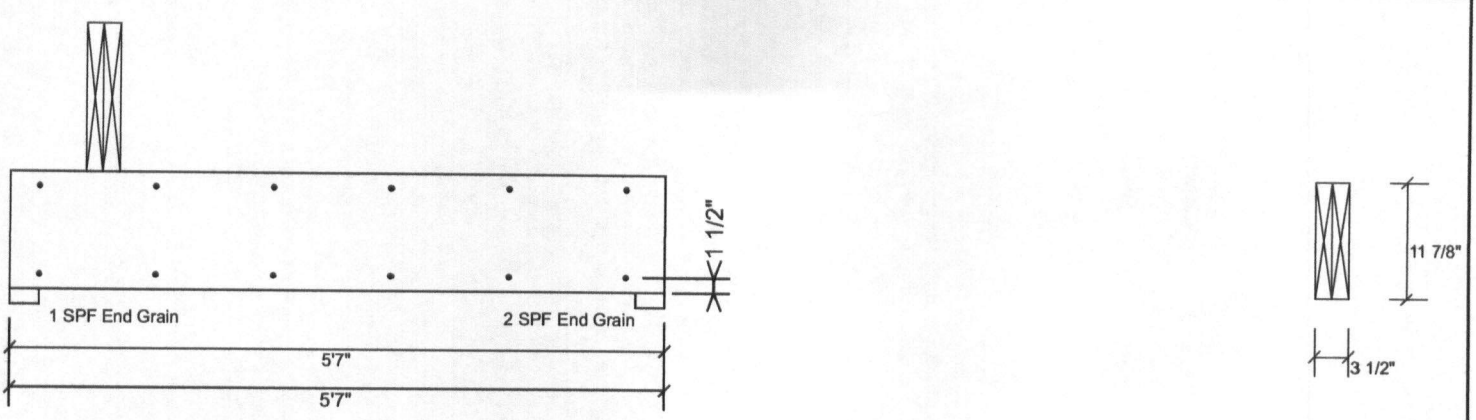
isDesign™

Client: Watermark Homes
Project:
Address:

Date: 9/27/2018
Designer: Anthony Williams
Job Name: Lot 38 South Creek
Project #: J0918-4410

Sliding Door Header Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

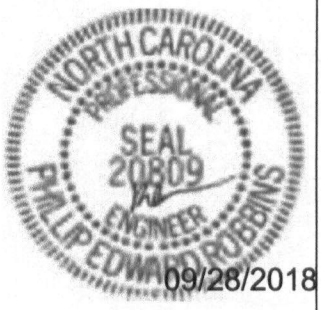
Level: Level



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



09/28/2018

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

Job# PER181912
P. E. Robbins, P.E. - #309-240-6424
1777 State Rt 167 Victoria IL 61485
This design is valid until 7/10/2021

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

COMTECH

ENGINEERING BY
TRENCO
A MiTek Affiliate

RE: J0918-4409
Lot 38 South Creek / Harnett County

Trenco
818 Soundside Rd
Edenton, NC 27932

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

Design Code: IRC2009/TPI2007
Design Program: MiTek 20/20 8.1
Wind Code: ASCE 7-05 Wind Speed: 100 mph
Design Method: MWFRS(low-rise)/C-C hybrid Wind ASCE 7-05
Roof Load: 40.0 psf
Floor Load: N/A psf

This package includes 32 individual, dated Truss Design Drawings and 0 Additional Drawings.

No.	Seal#	Truss Name	Date
1	E11391720	a1	1/25/18
2	E11391721	a1-ge	1/25/18
3	E11391722	a2	1/25/18
4	E11391723	b1	1/25/18
5	E11391724	b1-ge	1/25/18
6	E11391725	b2	1/25/18
7	E11391726	b2-ge	1/25/18
8	E11391727	c1	1/25/18
9	E11391728	c1-ge	1/25/18
10	E11391729	c2	1/25/18
11	E11391730	d1	1/25/18
12	E11391731	d1-ge	1/25/18
13	E11391732	d2	1/25/18
14	E11391733	d3-ge	1/25/18
15	E11391734	e1	1/25/18
16	E11391735	e1-ge	1/25/18
17	E11391736	e2	1/25/18
18	E11391737	g1	1/25/18
19	E11391738	g1-ge	1/25/18
20	E11391739	h1-ge	1/25/18
21	E11391740	h2	1/25/18
22	E11391741	j1	1/25/18
23	E11391742	j2	1/25/18
24	E11391743	j3	1/25/18
25	E11391744	k1-ge	1/25/18
26	E11391745	ve-1	1/25/18
27	E11391746	vh-1	1/25/18
28	E11391747	vh-2	1/25/18
29	E11391748	vh-3	1/25/18
30	E11391749	vh-4	1/25/18
31	E11391750	vh-5	1/25/18
32	E11391751	vh-6	1/25/18

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, 2018.
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.

January 25,2018

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391720
J0918-4409	A1	Roof Special	7	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:26 2018 Page 1
ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-717Hvt867BjTQrS6xMaAEt?lDpCloMFl9tUpKuzs71R

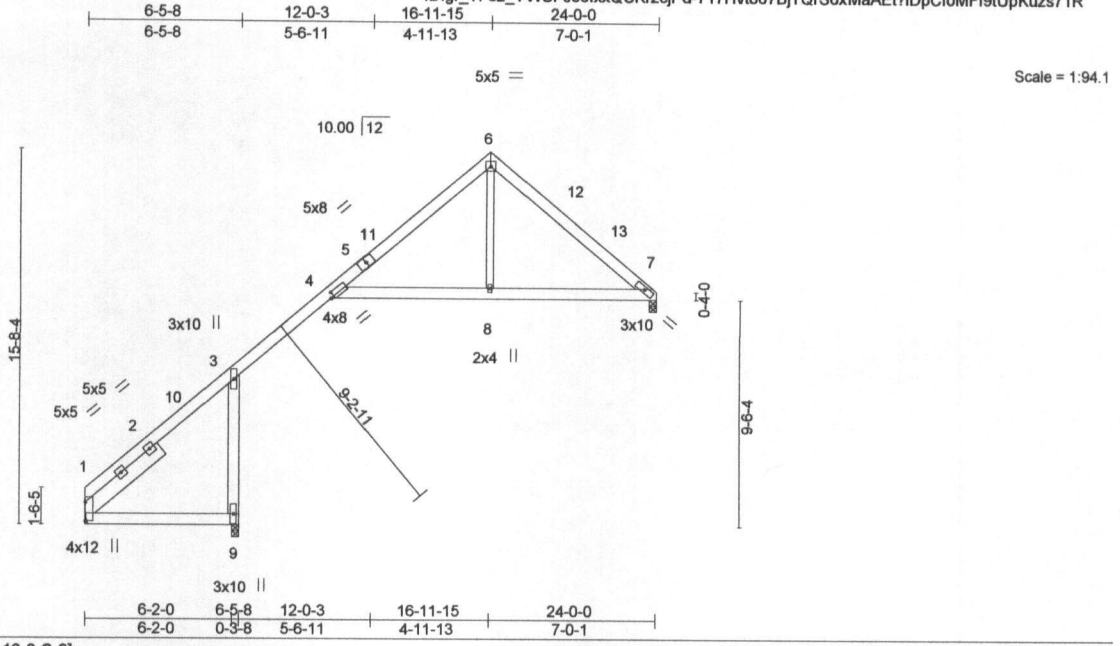


Plate Offsets (X,Y)-- [1:Edge,0-0-0], [4:0-1-13,0-2-8]

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	0.58	Vert(LL)	-0.25	4-8	>845	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.50	Vert(TL)	-0.59	4-8	>360	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(TL)	0.46	7	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.24	4-8	>864	240	Weight: 155 lb	FT = 20%

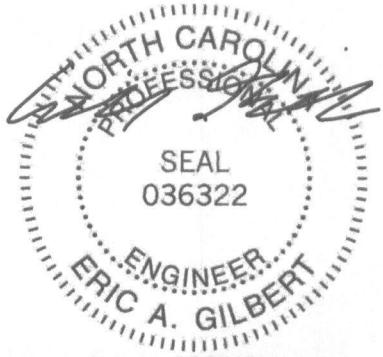
LUMBER-
TOP CHORD 2x6 SP No.1 *Except*
1-5: 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3
SLIDER Left 2x8 SP No.1 4-2-8

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.

REACTIONS. (lb/size) 7=622/0-3-8, 1=41/Mechanical, 9=1164/0-3-8
Max Horz 1=409(LC 6)
Max Uplift 7=-22(LC 7), 1=-163(LC 5), 9=-451(LC 7)
Max Grav 7=622(LC 1), 1=372(LC 6), 9=1164(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-518/327, 3-4=-447/83, 4-6=-694/166, 6-7=-776/188
BOT CHORD 3-9=-1128/568, 4-8=-10/512, 7-8=-10/512
WEBS 6-8=0/398

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 16-11-15, Exterior(2) 16-11-15 to 21-4-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=163, 9=451.



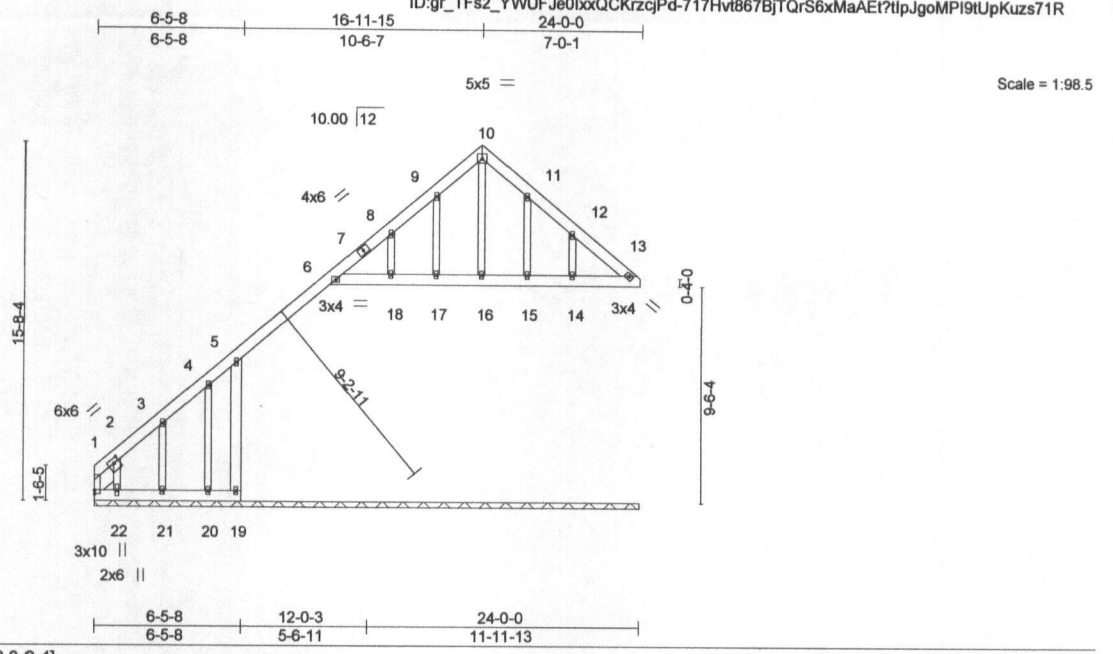
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	A1-GE	GABLE	1	1	Job Reference (optional)	E11391721

Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:26 2018 Page 1
ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-717Hvt867BjTQrS6xMaAEt?tlpJgoMPI9tUpKuzs71R



Scale = 1:98.5

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.14	Horz(TL)	-0.01	13	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 176 lb	FT = 20%

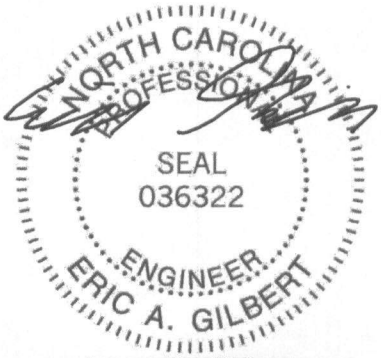
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.3
SLIDER Left 2x8 SP No.1 1-4-15

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.

REACTIONS. All bearings 24-0-0.
(lb) - Max Horz 1=519(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 20, 15 except 1=-399(LC 5), 19=-207(LC 7), 6=-178(LC 7), 17=-104(LC 7), 18=-103(LC 7), 21=-140(LC 7), 22=-536(LC 7), 14=-160(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 13, 19, 16, 17, 18, 20, 21, 15, 14 except 1=845(LC 7), 6=281(LC 1), 22=257(LC 5)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-921/446, 2-3=-555/307, 3-4=-465/286, 4-5=-428/286, 5-6=-338/279
WEBS 2-22=-201/474

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 20, 15 except (jt=lb) 1=399, 19=207, 6=178, 17=104, 18=103, 21=140, 22=536, 14=160.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 13, 6, 16, 17, 18, 15, 14.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	A2	ROOF SPECIAL	1	2	Job Reference (optional)	E11391722

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:27 2018 Page 1

ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-bEgf6D8ktUrJ1?1IU36Pn5YvZDXlXpVSNXEMsKzs71Q

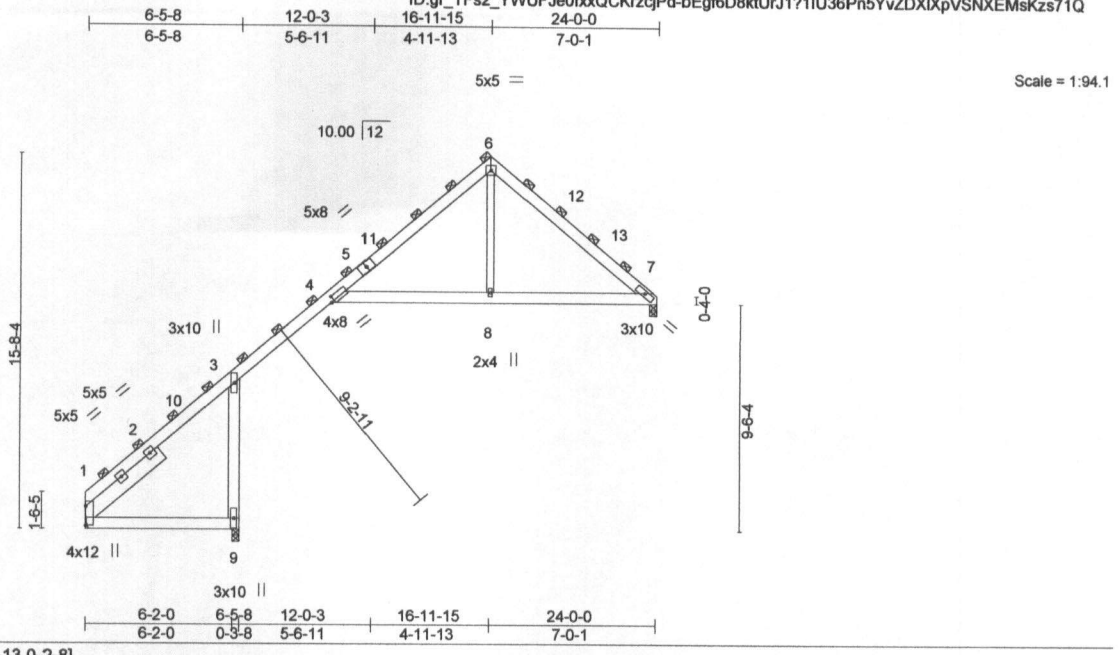


Plate Offsets (X,Y)-- [1:Edge,0-0-0], [4:0-1-13,0-2-8]

LOADING (psf)		SPACING-	4-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.67	Vert(LL)	-0.25	4-8	>845	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(TL)	-0.59	4-8	>360	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.15	Horz(TL)	0.46	7	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.24	4-8	>864	240	Weight: 309 lb	FT = 20%

LUMBER-

TOP CHORD 2x6 SP No.1 *Except* 1-5: 2x6 SP 2400F 2.0E
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3
SLIDER Left 2x8 SP No.1 4-2-8

BRACING-

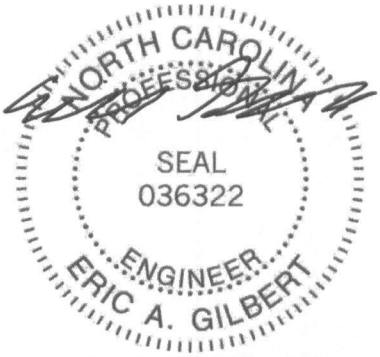
TOP CHORD 2-0-0 oc purlins (6-0-0 max.) (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. (lb/size) 7=1244/0-3-8, 1=81/Mechanical, 9=2328/0-3-8
Max Horz 1=819(LC 6)
Max Uplift 7=-45(LC 7), 1=-326(LC 5), 9=-903(LC 7)
Max Grav 7=1244(LC 1), 1=744(LC 6), 9=2328(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1035/655, 3-4=-894/167, 4-6=-1388/332, 6-7=-1552/376
BOT CHORD 3-9=-2255/1136, 4-8=-20/1023, 7-8=-20/1023
WEBS 6-8=0/795

NOTES-

1) 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: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 16-11-15, Exterior(2) 16-11-15 to 21-4-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
7) Refer to girder(s) for truss to truss connections.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 7 except (jt=lb) 1=326, 9=903.
9) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391723
J0918-4409	B1	COMMON	4	1	Job Reference (optional)	

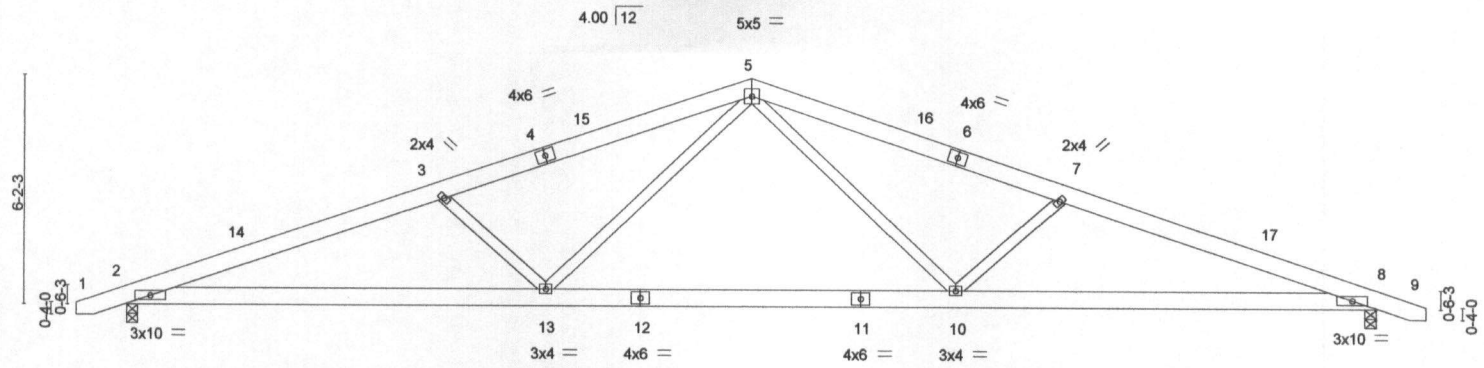
Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:29 2018 Page 1

ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-XcoPXvA_P661HJBhcU8tsWdLi1DH?gTkmjTxDzs71O

-1-4-8 | 8-7-8 | 17-0-0 | 25-4-8 | 34-0-0 | 35-4-8

1-4-8 | 8-7-8 | 8-4-8 | 8-4-8 | 8-7-8 | 1-4-8

Scale = 1:60.8



11-5-0 | 22-7-0 | 34-0-0

11-5-0 | 11-1-15 | 11-5-0

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	0.31	Vert(LL)	-0.15	10-13	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(TL)	-0.41	10-13	>993	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(TL)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.10	10-13	>999	240	Weight: 204 lb	FT = 20%

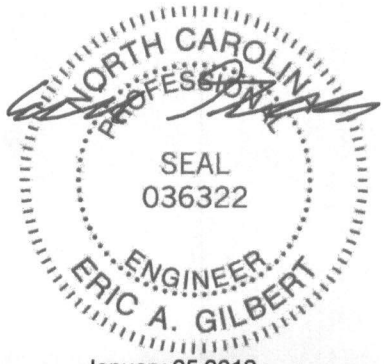
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1426/0-3-8, 8=1426/0-3-8
Max Horz 2=80(LC 7)
Max Uplift 2=-150(LC 5), 8=-150(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3258/675, 3-5=-2849/571, 5-7=-2849/571, 7-8=-3258/675
BOT CHORD 2-13=-554/3031, 10-13=-289/1998, 8-10=-565/3031
WEBS 5-10=-89/911, 7-10=-592/295, 5-13=-89/911, 3-13=-592/295

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-1-13 to 3-3-0, Interior(1) 3-3-0 to 17-0-0, Exterior(2) 17-0-0 to 21-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=150, 8=150.



January 25,2018

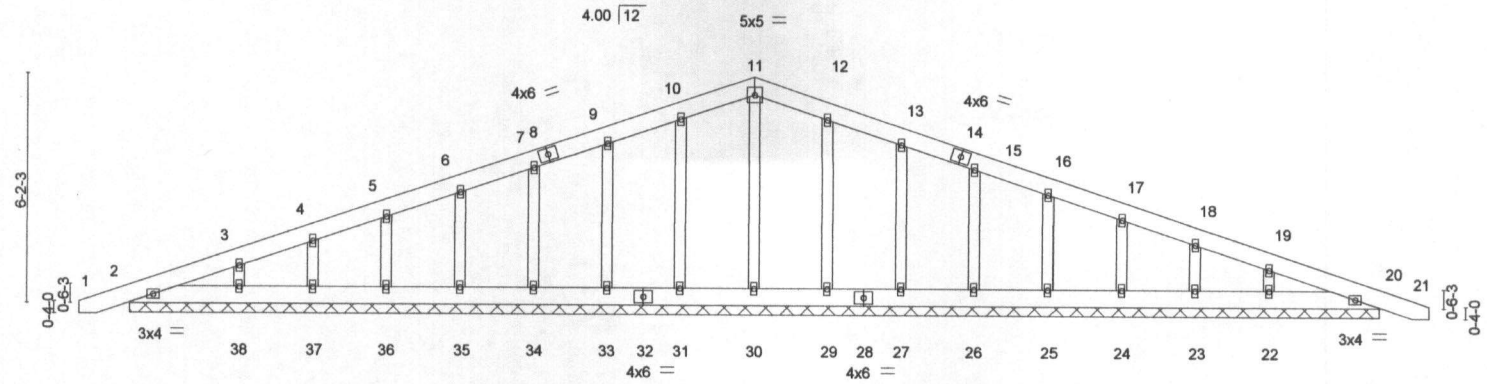
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	B1-GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	E11391724

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:30 2018 Page 1
ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-?pMnkEBcAPEuuTltACf6PjAauQhnkCdu3VS0Tfzs71N

-1-4-8 | 17-0-0 | 34-0-0 | 35-4-8
1-4-8 | 17-0-0 | 17-0-0 | 1-4-8

Scale = 1:60.8



34-0-0
34-0-0

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.03	Vert(LL)	-0.00	20	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	0.00	20	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.00	20	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 233 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 34-0-0.
(lb) - Max Horz 2=97(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 2, 31, 33, 34, 35, 36, 37, 38, 29, 27, 26, 25, 24, 23, 22, 20
Max Grav All reactions 250 lb or less at joint(s) 2, 30, 31, 33, 34, 35, 36, 37, 38, 29, 27, 26, 25, 24, 23, 22, 20

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 31, 33, 34, 35, 36, 37, 38, 29, 27, 26, 25, 24, 23, 22, 20.

January 25,2018

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

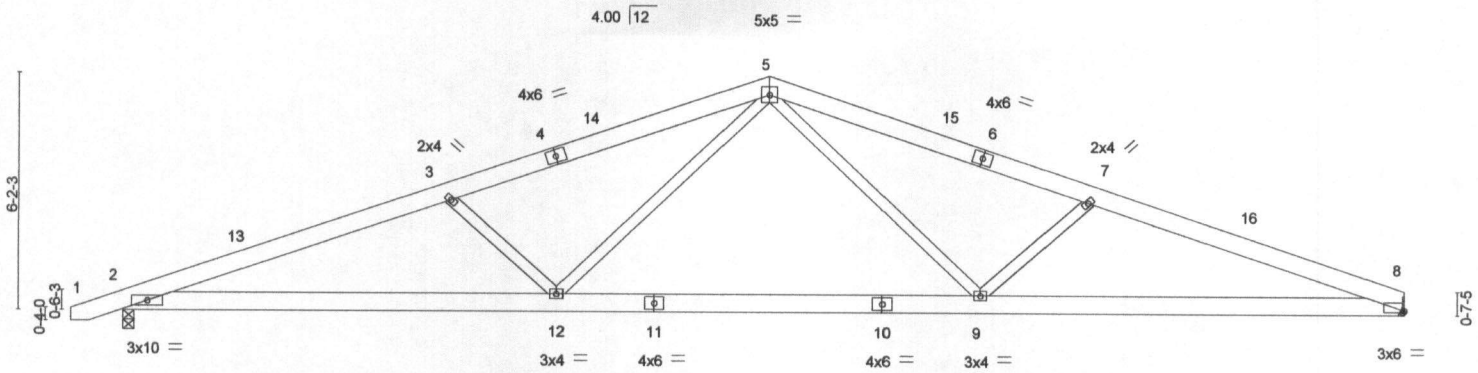
Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	B2	COMMON	5	1	Job Reference (optional)	E11391725

Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:31 2018 Page 1
ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-T?w9yaBExjMlWdK4jvALxxjgwqvoTaz1l9CZ?6zs71M

-1-4-8 | 8-7-8 | 17-0-0 | 25-4-8 | 33-8-8
1-4-8 | 8-7-8 | 8-4-8 | 8-4-8 | 8-4-0

Scale = 1:58.8



11-5-0 | 22-7-0 | 33-8-8
11-5-0 | 11-1-15 | 11-1-8

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.33	Vert(LL)	-0.14	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.55	Vert(TL)	-0.40	9-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.38	Horz(TL)	0.10	8	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.10	9-12	>999	240	Weight: 200 lb	FT = 20%

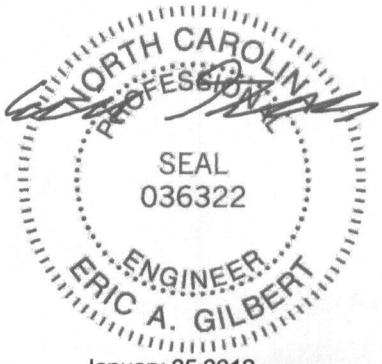
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-0-1 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 2=1418/0-3-8, 8=1338/Mechanical
Max Horz 2=85(LC 7)
Max Uplift 2=-150(LC 5), 8=-97(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3235/683, 3-5=-2825/579, 5-7=-2800/594, 7-8=-3193/693
BOT CHORD 2-12=-582/3009, 9-12=-306/1975, 8-9=-575/2963
WEBS 5-9=-87/883, 7-9=-565/292, 5-12=-89/911, 3-12=-592/296

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-1-13 to 3-3-0, Interior(1) 3-3-0 to 17-0-0, Exterior(2) 17-0-0 to 21-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Refer to girder(s) for truss to truss connections.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 2=150.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County
J0918-4409	B2-GE	COMMON SUPPORTED GAB	1	1	E11391726

Comtech, Inc., Fayetteville, NC 28309

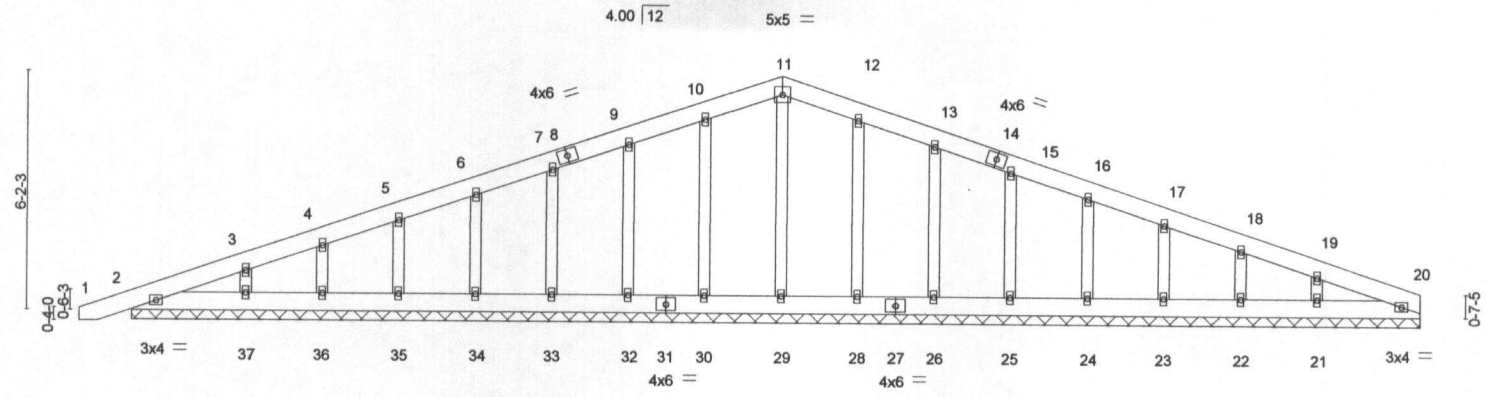
8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:32 2018 Page 1

ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-yBUY9wCti1Uc8mvGHchaU8FwNEMFC66BXpx7XYzs71L

Job Reference (optional)

-1-4-8 / 1-4-8 | 17-0-0 / 17-0-0 | 33-8-8 / 16-8-8

Scale = 1:58.5



33-8-8

33-8-8

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	0.03	Vert(LL)	-0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.00	20	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 228 lb	FT = 20%

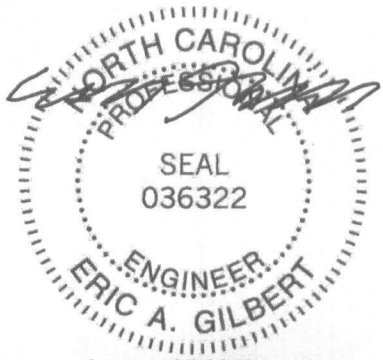
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.3

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

REACTIONS. All bearings 33-8-8.
(lb) - Max Horz 2=106(LC 5)
Max Uplift All uplift 100 lb or less at joint(s) 2, 30, 32, 33, 34, 35, 36, 37, 28, 26, 25, 24, 23, 22, 21
Max Grav All reactions 250 lb or less at joint(s) 2, 29, 30, 32, 33, 34, 35, 36, 37, 28, 26, 25, 24, 23, 22, 21, 20

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 30, 32, 33, 34, 35, 36, 37, 28, 26, 25, 24, 23, 22, 21.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	C1	COMMON	1	1		E11391727
Comtech, Inc., Fayetteville, NC 28309					Job Reference (optional)	

8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:33 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-QO2wNGDVTKcTlwUSrKCp0Mo3refuxWXKmShg4_zs71K

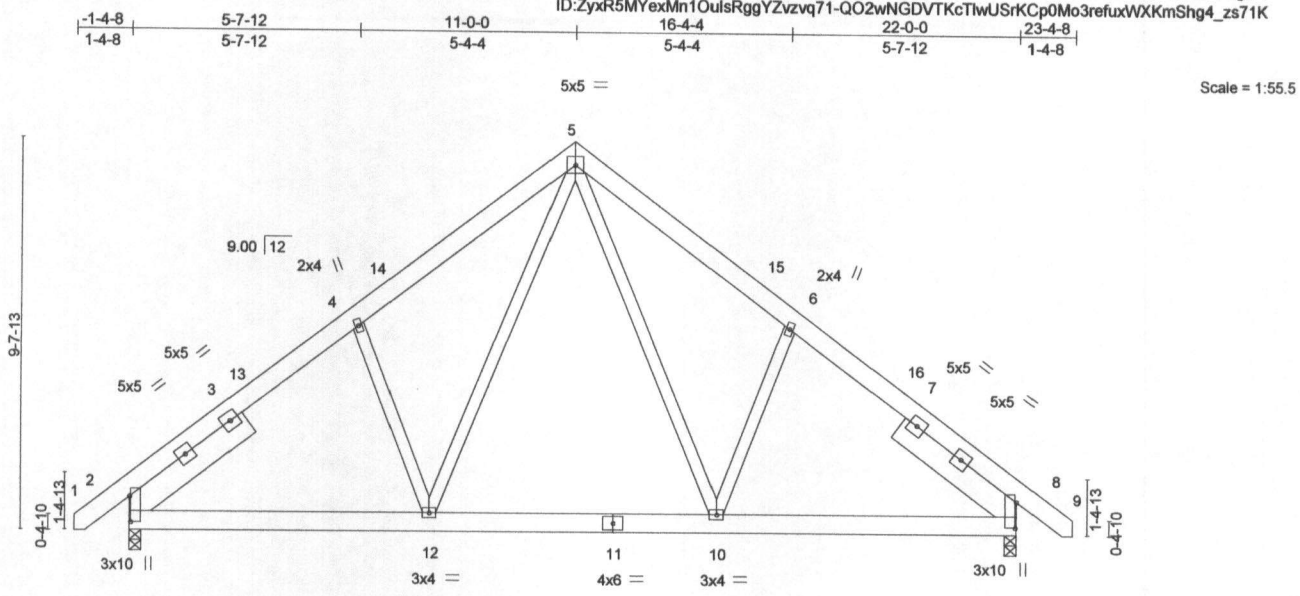


Plate Offsets (X,Y)-- [2:0-7-11,0-0-5], [8:0-7-11,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.06	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(TL)	-0.10	10-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.24	Horz(TL)	0.02	8	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.01	12	>999	240	Weight: 190 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3
SLIDER Left 2x8 SP No.1 3-8-2, Right 2x8 SP No.1 3-8-2

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. (lb/size) 2=1098/0-3-8, 8=1098/0-3-8
Max Horz 2=254(LC 6)
Max Uplift 2=-84(LC 7), 8=-84(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-1307/241, 4-5=-1109/341, 5-6=-1109/341, 6-8=-1307/241
BOT CHORD 2-12=-89/885, 10-12=0/660, 8-10=-57/885
WEBS 5-10=-137/504, 5-12=-137/504

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-3-0 to 3-1-13, Interior(1) 3-1-13 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 8.

January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	C1-GE	GABLE	1	1	Job Reference (optional)	E11391728

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:34 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-uaclacE7EekKN43eP1k2ZZLGP22Wg_dT_6REcQzs71J

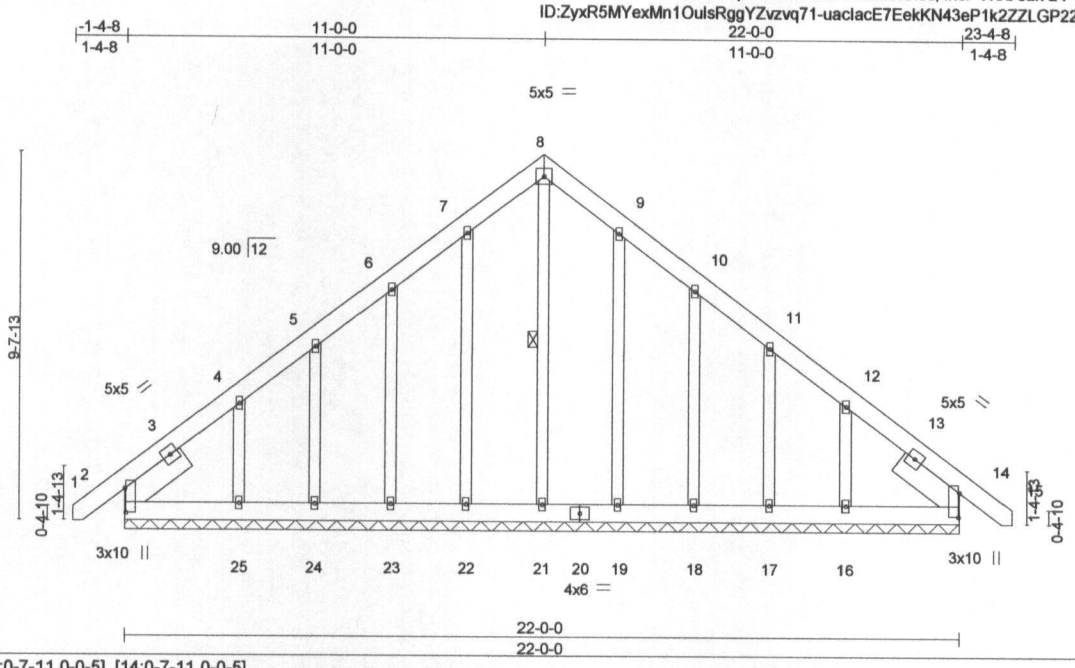


Plate Offsets (X,Y)-- [2:0-7-11,0-0-5], [14:0-7-11,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.06	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	-0.00	14	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.13	Horz(TL)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 209 lb	FT = 20%

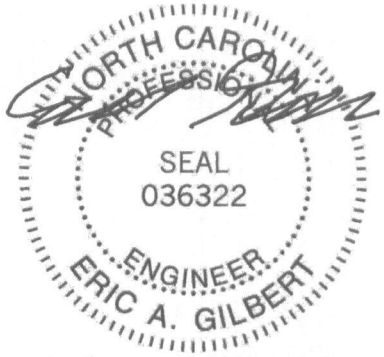
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.3
SLIDER Left 2x8 SP No.1 2-0-1, Right 2x8 SP No.1 2-0-1

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-21

REACTIONS. All bearings 22-0-0.
(lb) - Max Horz 2=318(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 14, 22, 24, 19, 17 except 2=-116(LC 5), 23=-113(LC 7), 25=-208(LC 7), 18=-114(LC 8), 16=-197(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 2, 14, 21, 22, 23, 24, 25, 19, 18, 17, 16

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-286/196, 7-8=-88/251, 8-9=-88/251

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 22, 24, 19, 17 except (jt=lb) 2=116, 23=113, 25=208, 18=114, 16=197.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	C2	COMMON	3	1	Job Reference (optional)	E11391729

Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:35 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-Mm9goyFI?ysB?EerylFH6ntPKRLNPPzdDmAn8tzs71I

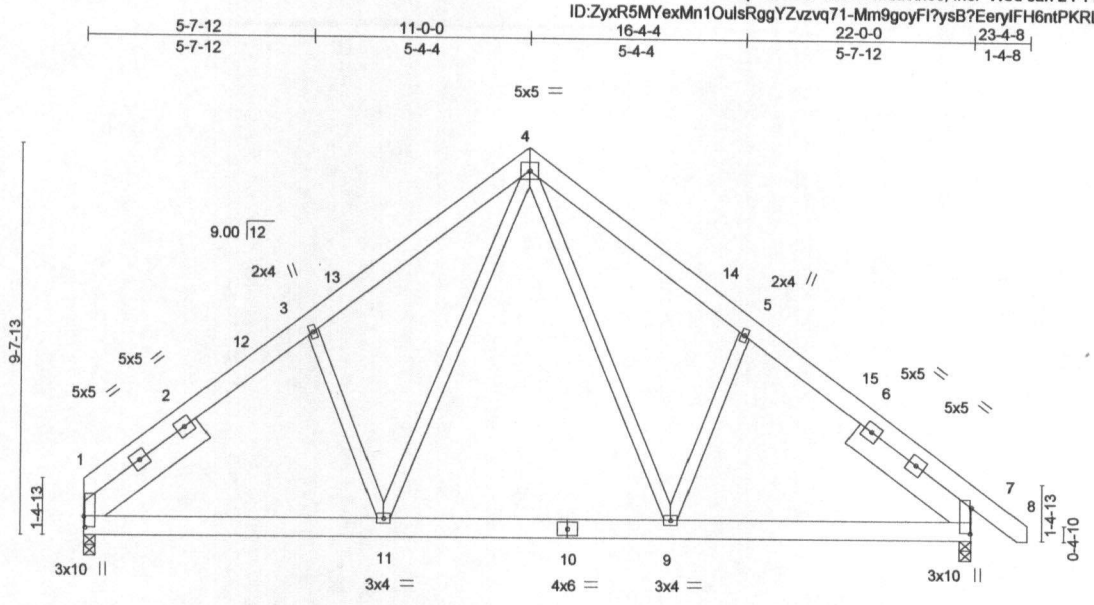


Plate Offsets (X,Y)-- [1:0-3-4,0-0-5], [7:0-7-11,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.18	Vert(LL)	-0.06	9-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(TL)	-0.09	9-11	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.25	Horz(TL)	0.02	7	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.01	11	>999	240	Weight: 186 lb	FT = 20%

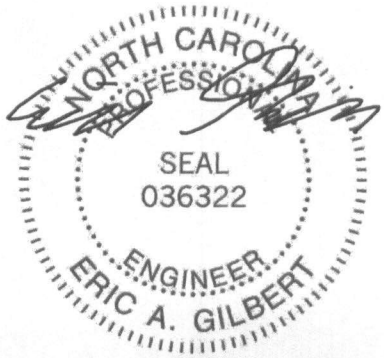
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3
SLIDER Left 2x8 SP No.1 3-8-2, Right 2x8 SP No.1 3-8-2

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. (lb/size) 1=1021/0-3-8, 7=1100/0-3-8
Max Horz 1=-255(LC 5)
Max Uplift 1=-35(LC 7), 7=-84(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-3=-1315/252, 3-4=-1117/357, 4-5=-1112/342, 5-7=-1310/241
BOT CHORD 1-11=-90/893, 9-11=0/663, 7-9=-62/887
WEBS 4-9=-136/503, 4-11=-139/512

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-0-0 to 4-4-13, Interior(1) 4-4-13 to 11-0-0, Exterior(2) 11-0-0 to 15-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 7.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391730
J0918-4409	D1	ROOF TRUSS	2	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:35 2018 Page 1

ID:ZyxR5MYexMn1OulsRggYZvzvq71-Mm9goyFI?ysB?EeryIFH6ntLGREcPHGdDmAn8tzs71I

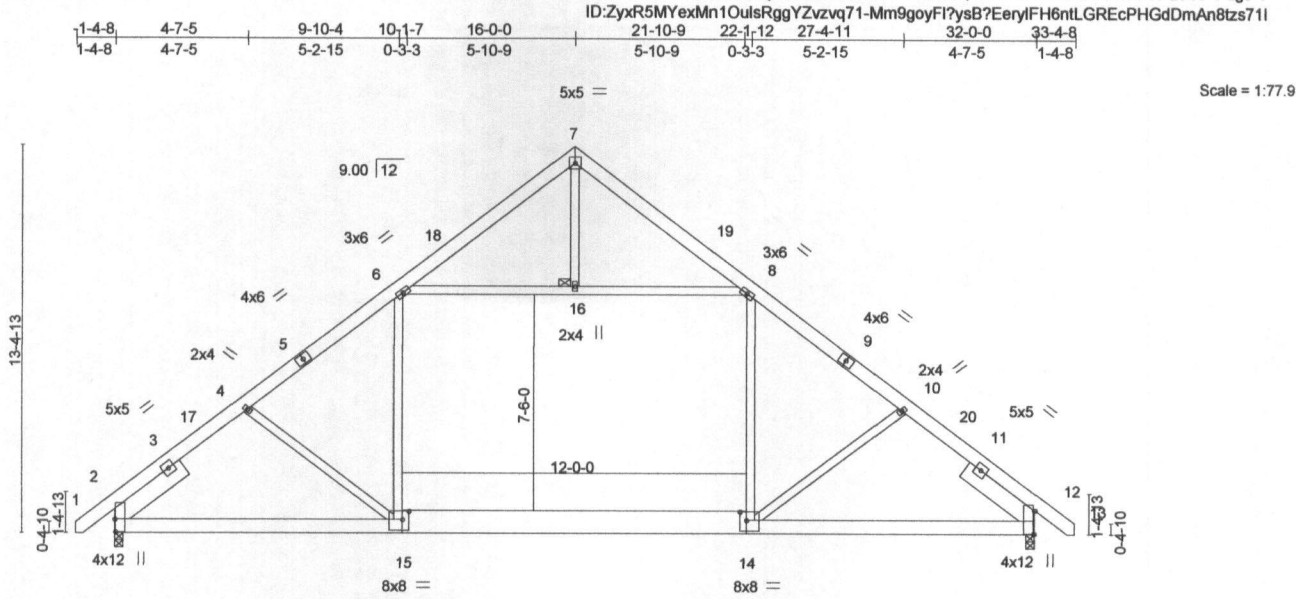


Plate Offsets (X,Y)-- [2:0-5-4,0-0-5], [12:0-9-11,0-0-5], [14:0-2-12,0-3-8], [15:0-2-12,0-3-8]

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	0.44	Vert(LL)	0.29	2-15	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(TL)	-0.34	14-15	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.74	Horz(TL)	0.05	12	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.34	2-15	>999	240	Weight: 282 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1 *Except* 14-15: 2x10 SP No.1
WEBS	2x4 SP No.1 *Except* 4-15,10-14,7-16: 2x4 SP No.3
SLIDER	Left 2x8 SP No.1 3-0-5, Right 2x8 SP No.1 3-0-5

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-7-5 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 16

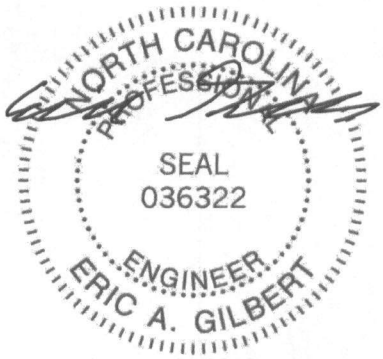
REACTIONS. (lb/size) 2=1715/0-3-8, 12=1715/0-3-8
Max Horz 2=358(LC 6)
Max Uplift 2=-101(LC 7), 12=-101(LC 8)

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

TOP CHORD	2-4=-2164/350, 4-6=-1998/348, 6-7=-428/169, 7-8=-428/169, 8-10=-1998/348, 10-12=-2163/350
BOT CHORD	2-15=-172/1506, 14-15=-20/1576, 12-14=-137/1506
WEBS	6-16=-1333/317, 8-16=-1333/317, 6-15=0/593, 8-14=0/593, 4-15=-147/259, 10-14=-149/261

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-3-0 to 3-1-13, Interior(1) 3-1-13 to 16-0-0, Exterior(2) 16-0-0 to 20-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=101, 12=101.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391731
J0918-4409	D1-GE	QUEENPOST	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:36 2018 Page 1

ID:ZyxR5MYexMn1OuIsRggYZvzvq71-qyj2?IFNmF_2cOD1WSmWe_QZWrgX8somSQwKgJzs71H

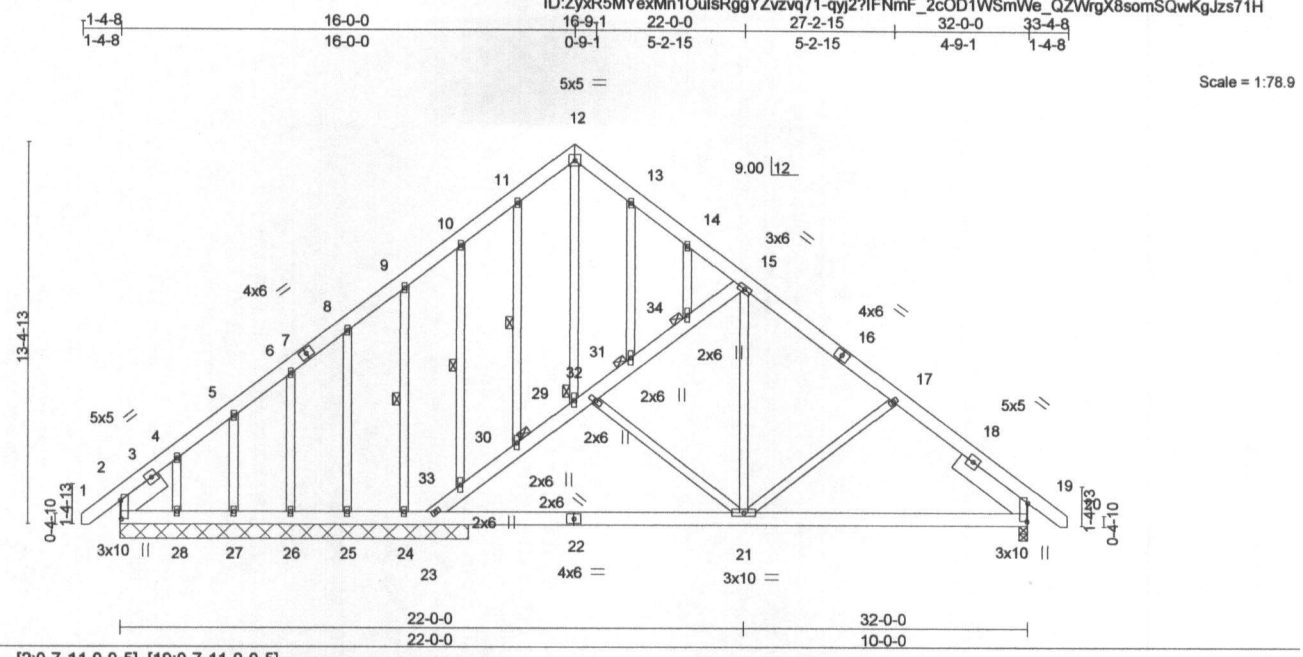


Plate Offsets (X,Y)-- [2:0-7-11,0-0-5], [19:0-7-11,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.15	Vert(LL)	-0.05	21-23	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.32	Vert(TL)	-0.13	21-23	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.21	Horz(TL)	-0.02	2	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.01	21	>999	240	Weight: 343 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.3 *Except* 15-23: 2x6 SP No.1
SLIDER	Left 2x8 SP No.1 1-10-6, Right 2x8 SP No.1 3-1-6

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS	1 Row at midpt 11-30, 10-33, 9-24
JOINTS	1 Brace at Jt(s): 29, 30, 31, 34

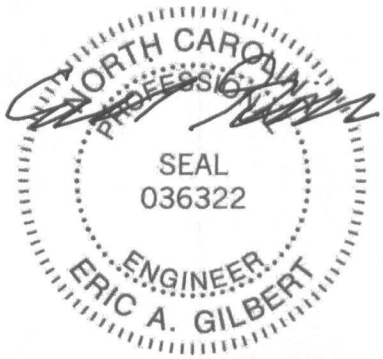
REACTIONS. All bearings 12-3-8 except (jt=length) 19=0-3-8.
(lb) - Max Horz 19=448(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 2, 25, 27 except 24=-473(LC 2), 26=-102(LC 7), 28=-260(LC 7), 19=-216(LC 8)
Max Grav All reactions 250 lb or less at joint(s) 25, 26, 27, 28 except 2=376(LC 1), 23=1093(LC 2), 19=985(LC 1)

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

TOP CHORD	14-15=-315/185, 15-17=-870/231, 17-19=-1104/247, 2-4=-459/90, 4-5=-273/64, 9-10=-277/134, 10-11=-255/200
BOT CHORD	2-28=-58/364, 27-28=-58/364, 26-27=-58/364, 25-26=-58/364, 24-25=-58/364, 23-24=-58/364, 21-23=-226/709, 19-21=-329/740
WEBS	23-33=-722/329, 30-33=-664/295, 29-30=-642/277, 29-32=-663/342, 31-32=-643/342, 31-34=-589/300, 15-34=-591/293, 15-21=-10/436, 4-28=-67/261

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) All plates are 2x4 MT20 unless otherwise indicated.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 25, 27 except (jt=lb) 24=473, 26=102, 28=260, 19=216.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391732
J0918-4409	D2	ROOF TRUSS	8	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:37 2018 Page 1

ID:ZyxR5MYexMn1OulsRggYZvzvq71-I9HRCeG?XZ6vEYoD4AHIBCzg0FsNtC_wg4fuDlzs71G

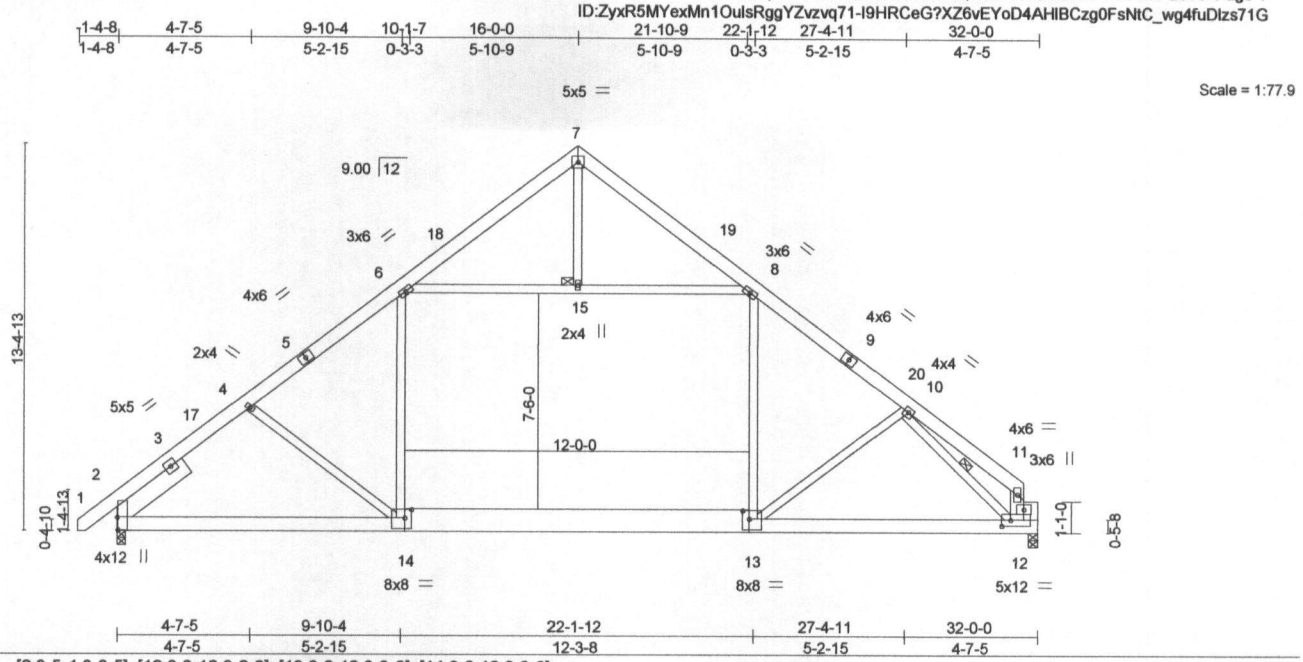


Plate Offsets (X,Y)-- [2:0-5-4,0-0-5], [12:0-3-12,0-2-8], [13:0-2-12,0-3-8], [14:0-2-12,0-3-8]

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	0.42	Vert(LL)	-0.32	14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(TL)	-0.42	2-14	>901	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.66	Horz(TL)	0.04	12	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.35	2-14	>999	240	Weight: 279 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1 *Except* 13-14: 2x10 SP No.1
WEBS	2x4 SP No.3 *Except* 6-8,6-14,8-13: 2x4 SP No.1
OTHERS	2x6 SP No.1
SLIDER	Left 2x8 SP No.1 3-0-5

BRACING-

TOP CHORD	Structural wood sheathing directly applied or 4-8-11 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 2-2-0 oc bracing.
WEBS	1 Row at midpt 10-12
JOINTS	1 Brace at Jt(s): 15

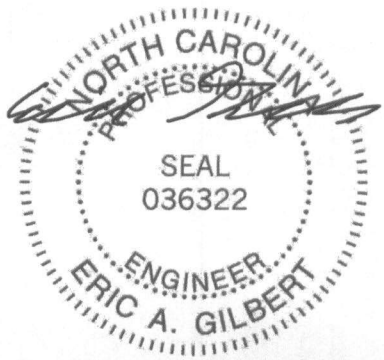
REACTIONS. (lb/size) 2=1681/0-3-8, 12=1619/0-3-8
Max Horz 2=358(LC 6)
Max Uplift 2=-100(LC 7), 12=-49(LC 8)

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

TOP CHORD	2-4=-2120/342, 4-6=-1927/338, 6-7=-423/168, 7-8=-438/170, 8-10=-1919/345, 10-11=-276/86
BOT CHORD	2-14=-187/1470, 13-14=-68/1508, 12-13=-177/1321
WEBS	6-15=-1260/313, 8-15=-1260/313, 6-14=0/581, 8-13=0/558, 4-14=-150/252, 10-13=-126/350, 10-12=-1802/263

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-3-0 to 3-1-13, Interior(1) 3-1-13 to 16-0-0, Exterior(2) 16-0-0 to 20-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12 except (jt=lb) 2=100.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391733
J0918-4409	D3-GE	MONOPITCH SUPPORTED	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:37 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-I9HRCeG?XZ6vEYoD4AHIBCzITF4PtLfwg4fuDIzs71G

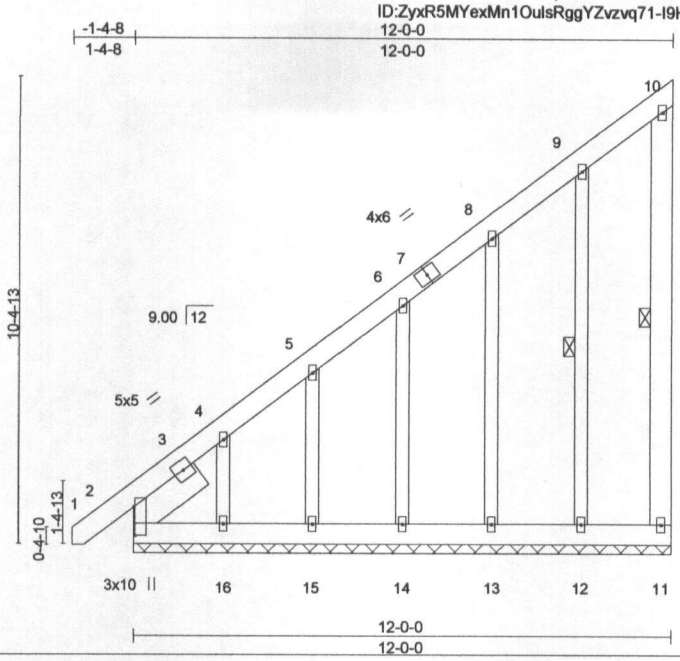


Plate Offsets (X,Y)-- [2:0-7-11,0-0-5]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.07	Vert(LL)	0.00	1	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	-0.00	1	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.11	Horz(TL)	-0.00	11	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 132 lb	FT = 20%

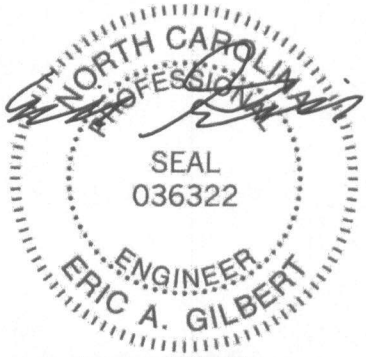
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1
OTHERS 2x4 SP No.3
SLIDER Left 2x8 SP No.1 1-10-6

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, 9-12

REACTIONS. All bearings 12-0-0.
(lb) - Max Horz 2=452(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 11, 2, 12, 14, 15 except 13=-102(LC 7), 16=-306(LC 7)
Max Grav All reactions 250 lb or less at joint(s) 11, 12, 13, 14, 15, 16 except 2=383(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-598/59, 4-5=-379/38, 5-6=-299/35
WEBS 4-16=-103/310

NOTES-
1) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
3) All plates are 2x4 MT20 unless otherwise indicated.
4) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 2-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 11, 2, 12, 14, 15 except (jt=lb) 13=102, 16=306.



January 25,2018

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

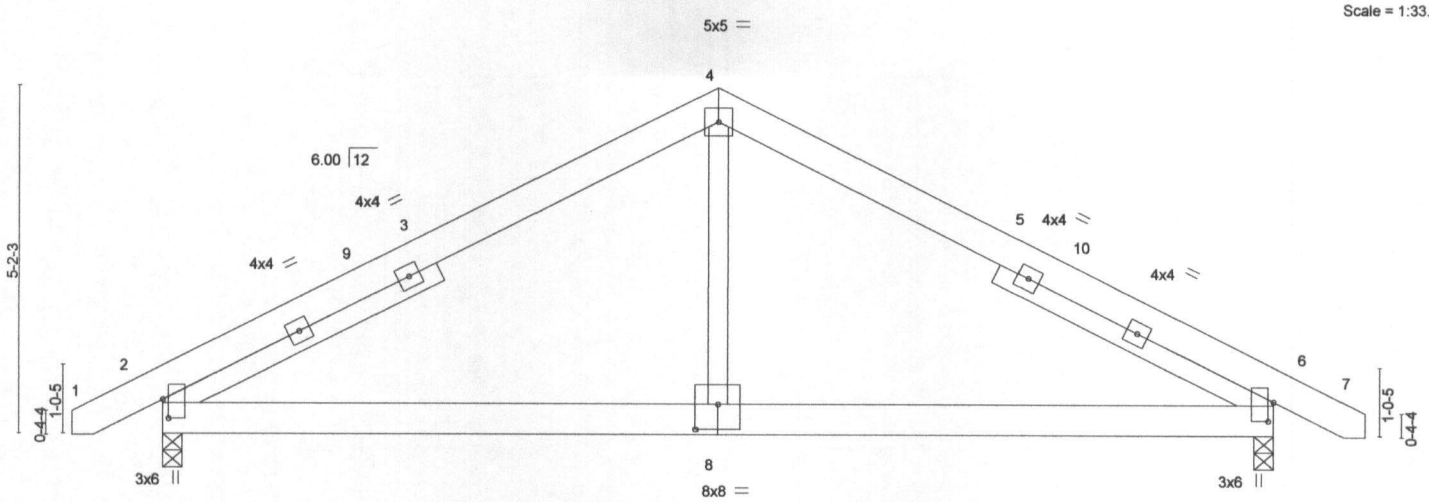
Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391734
J0918-4409	E1	COMMON	4	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:38 2018 Page 1

ID:ZyxR5MYexMn1OulsRggYZvzvq71-mLrpQ_HeltEmsiNQeto_jPVtAfM9cnI3vkPRICzs71F

-1-4-8 / 1-4-8 | 8-3-12 / 8-3-12 | 16-7-8 / 8-3-12 | 18-0-0 / 1-4-8

Scale = 1:33.5



8-3-12 / 8-3-12 | 16-7-8 / 8-3-12

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.27	Vert(LL)	-0.02	2-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	-0.07	2-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.15	Horz(TL)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.01	2-8	>999	240	Weight: 110 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 4-7-1, Right 2x4 SP No.3 4-7-1

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.

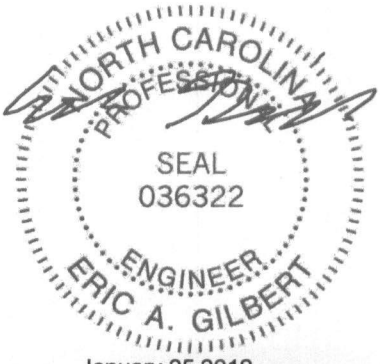
REACTIONS. (lb/size) 2=738/0-3-8, 6=738/0-3-8
Max Horz 2=-59(LC 5)
Max Uplift 2=-84(LC 7), 6=-84(LC 8)

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

TOP CHORD	2-4=-880/225, 4-6=-880/225
BOT CHORD	2-8=-53/655, 6-8=-53/655
WEBS	4-8=0/384

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-2-10 to 3-2-3, Interior(1) 3-2-3 to 8-3-12, Exterior(2) 8-3-12 to 12-8-9 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391735
J0918-4409	E1-GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:39 2018 Page 1

ID:ZyxR5MYexMn1OulsRggYZvzvq71-EXPBdJIG3AMcTrycBbJDGd26b3l?LGFD8O8?Hezs71E

-1-4-8 / 1-4-8 | 8-3-12 / 8-3-12 | 16-7-8 / 8-3-12 | 18-0-0 / 1-4-8

Scale = 1:34.7

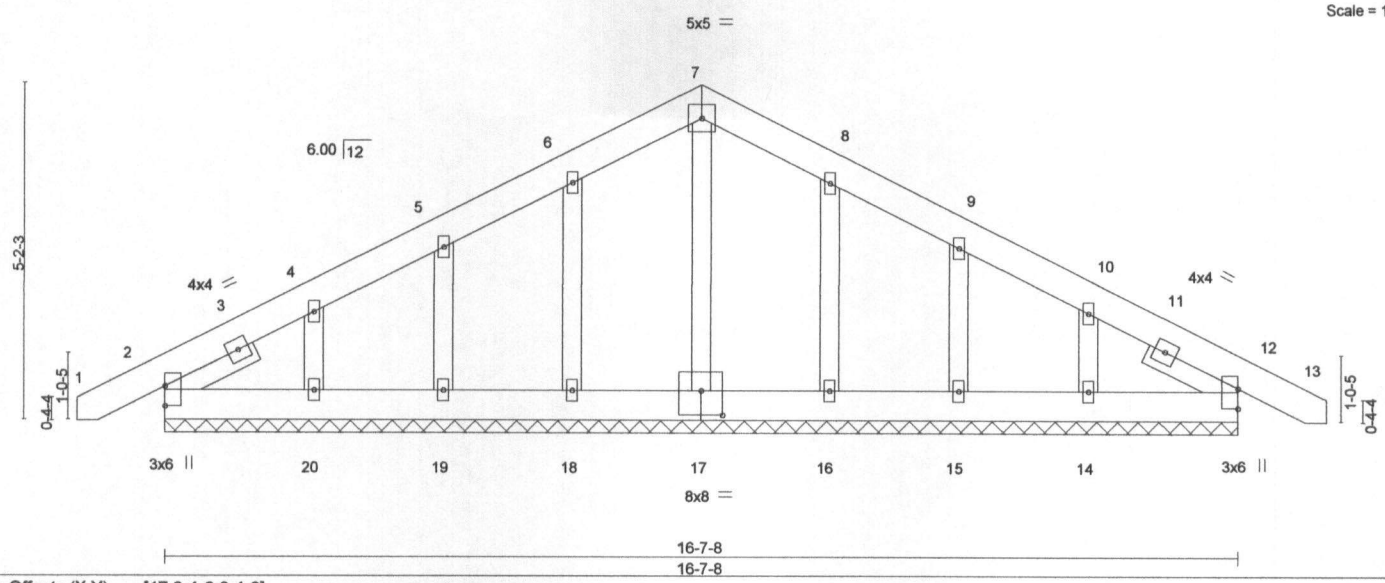


Plate Offsets (X,Y)-- [17:0-4-0,0-4-8]

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	0.03	Vert(LL)	-0.00	12	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	-0.00	13	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	12	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 121 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 1-6-8, Right 2x4 SP No.3 1-6-8

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 16-7-8.

(lb) - Max Horz 2=-69(LC 8)

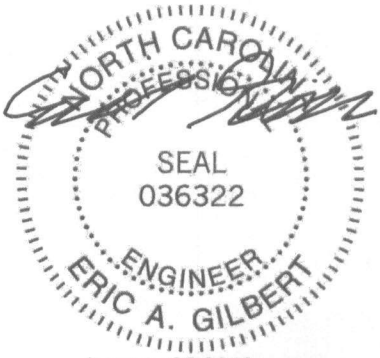
Max Uplift All uplift 100 lb or less at joint(s) 12, 18, 19, 20, 16, 15, 14, 2

Max Grav All reactions 250 lb or less at joint(s) 12, 17, 18, 19, 20, 16, 15, 14, 2

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 12, 18, 19, 20, 16, 15, 14, 2.



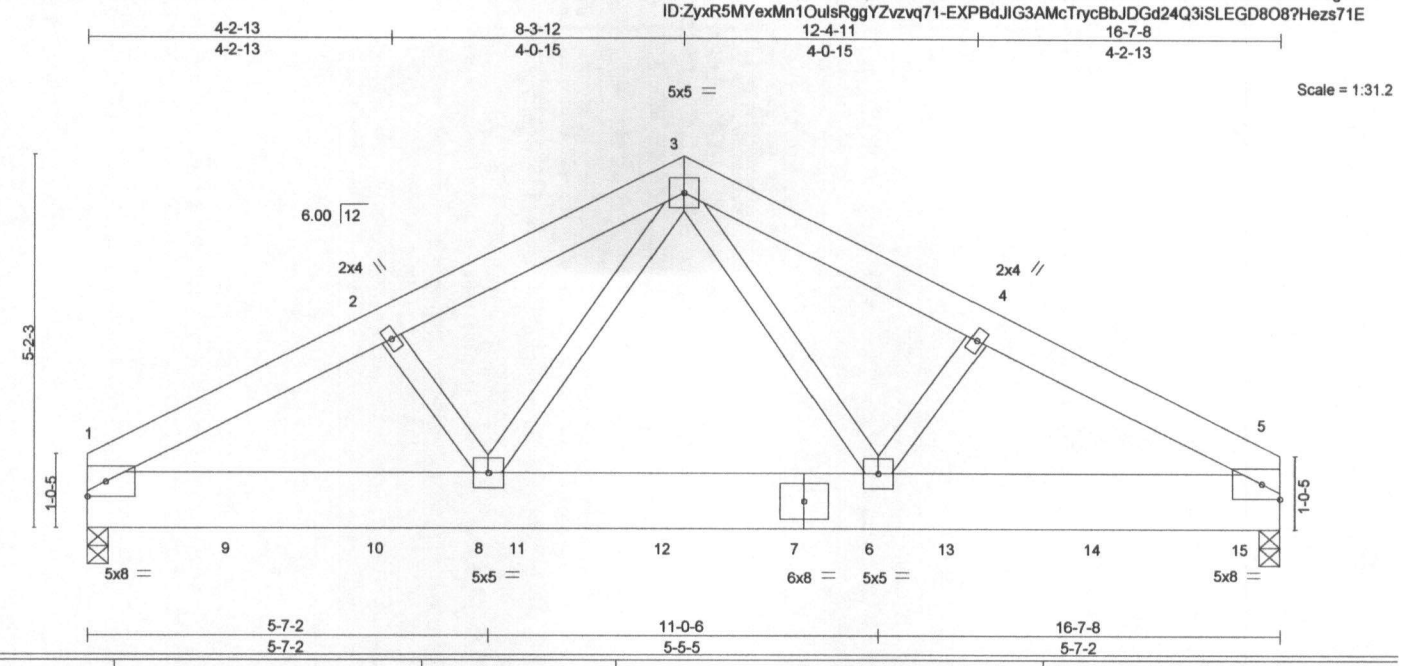
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391736
J0918-4409	E2	COMMON GIRDER	1	2	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:39 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-EXPBdJIG3AMcTrycBbJDGd24Q3iSLEGD8O8?Hezs71E



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	0.17	Vert(LL)	-0.01	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.24	Vert(TL)	-0.02	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.16	Horz(TL)	0.01	5	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	-0.03	6-8	>999	240	Weight: 262 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x10 SP No.1
WEBS 2x4 SP No.3

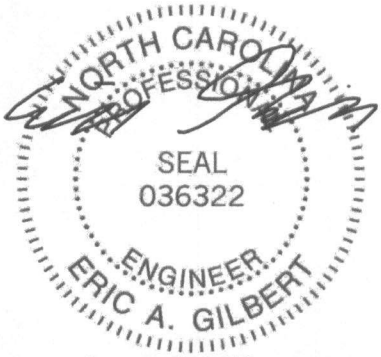
BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=794/0-3-8, 5=874/0-3-8
Max Horz 1=-58(LC 11)
Max Uplift 1=-675(LC 5), 5=-962(LC 6)
Max Grav 1=1392(LC 11), 5=2010(LC 12)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-2057/1023, 2-3=-2044/1045, 3-4=-2071/1057, 4-5=-2086/1035
BOT CHORD 1-8=-877/1810, 6-8=-603/1378, 5-6=-834/1776
WEBS 3-6=-534/1102, 4-6=-150/313, 3-8=-514/1058, 2-8=-150/315

NOTES-
1) 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 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=675, 5=962.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 360 lb down and 175 lb up at 2-0-12, 360 lb down and 175 lb up at 4-0-12, 360 lb down and 175 lb up at 6-0-12, 360 lb down and 175 lb up at 8-0-12, 360 lb down and 175 lb up at 10-0-12, 360 lb down and 175 lb up at 12-0-12, and 360 lb down and 175 lb up at 14-0-12, and 730 lb down and 340 lb up at 16-1-8 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=-38(F) 9=-38(F) 10=-38(F) 11=-38(F) 12=-38(F) 13=-38(F) 14=-38(F) 15=-93(F)



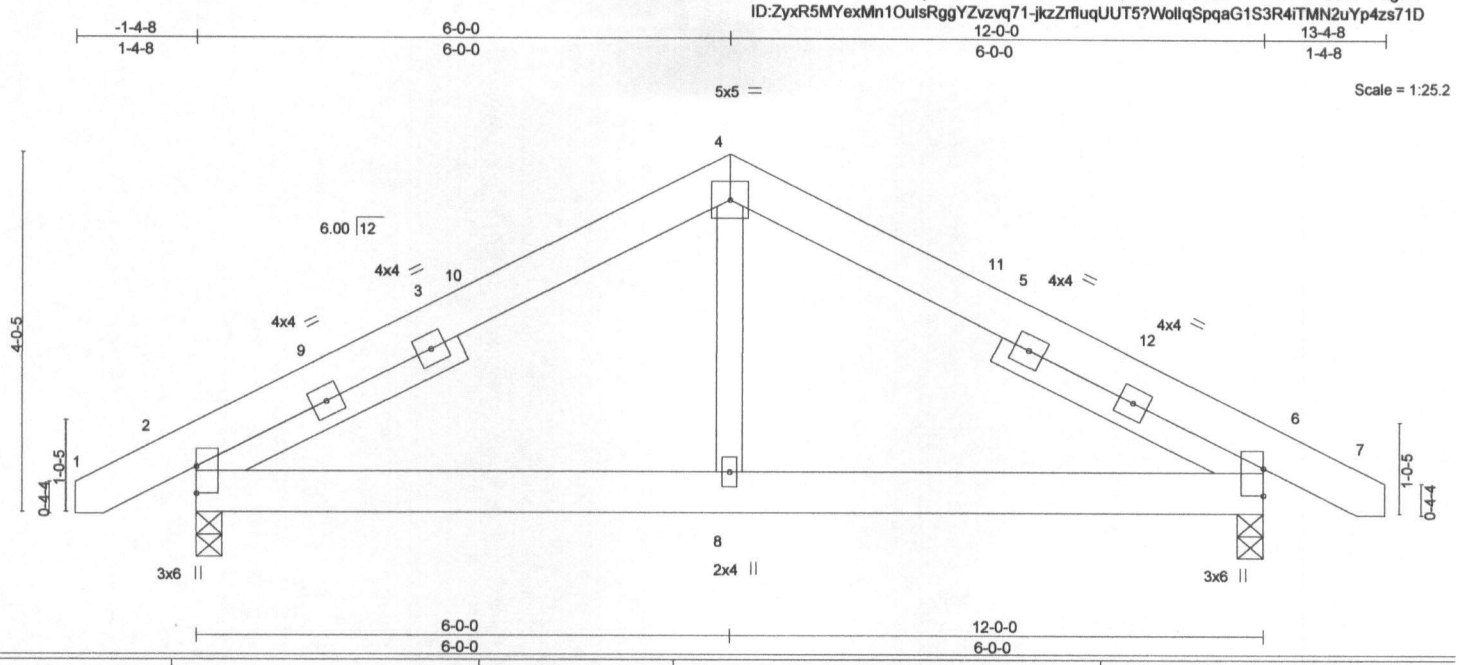
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391737
J0918-4409	G1	COMMON	5	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:40 2018 Page 1

ID:ZyxR5MYexMn1OulsRggYZvzvq71-jkzZrfluqUUT5?WollqSpqaG1S3R4iTMN2uYp4zs71D



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.11	Vert(LL)	-0.01	6-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.13	Vert(TL)	-0.02	6-8	>999	240		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(TL)	0.01	6	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.00	2-8	>999	240	Weight: 82 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
WEBS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 3-3-9, Right 2x4 SP No.3 3-3-9

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. (lb/size) 2=553/0-3-8, 6=553/0-3-8
Max Horz 2=45(LC 6)
Max Uplift 2=-74(LC 7), 6=-74(LC 8)

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

TOP CHORD	2-4=-609/203, 4-6=-609/203
BOT CHORD	2-8=-48/439, 6-8=-48/439
WEBS	4-8=0/271

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) -1-2-10 to 3-2-3, Interior(1) 3-2-3 to 6-0-0, Exterior(2) 6-0-0 to 10-4-13 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 6.

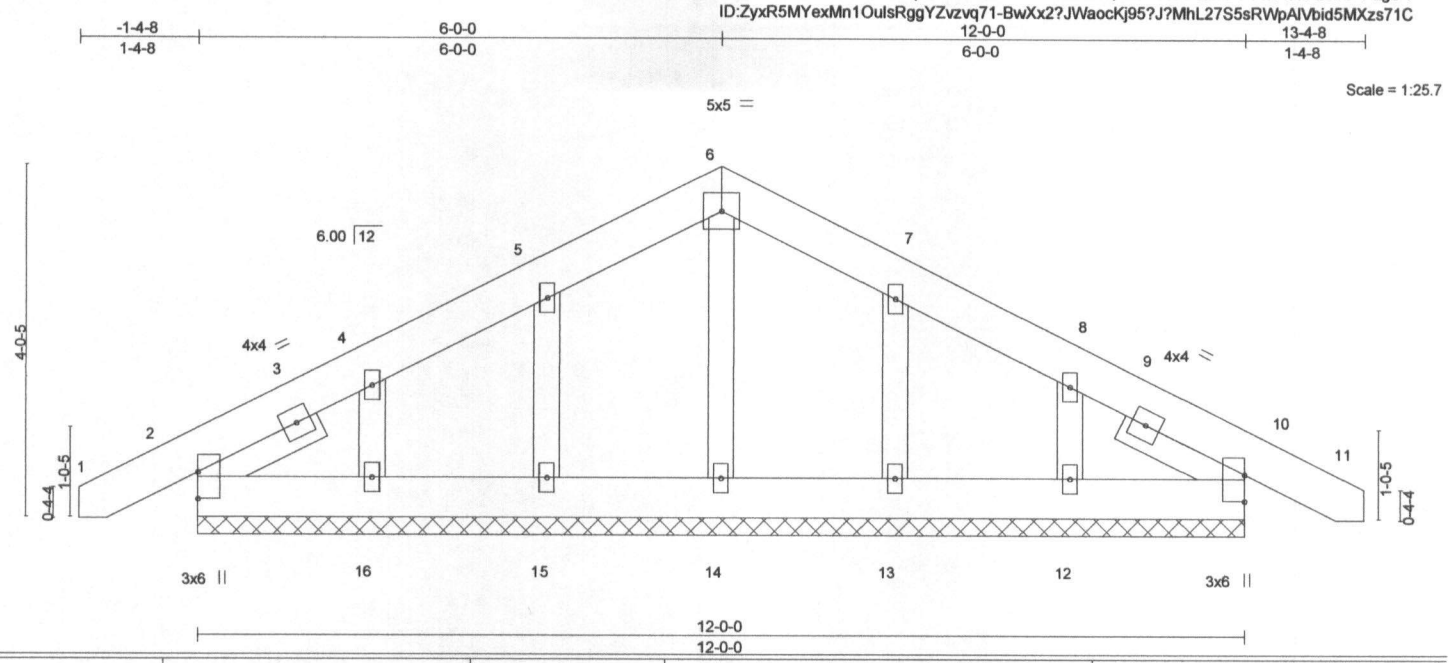
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391738
J0918-4409	G1-GE	GABLE	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:41 2018 Page 1

ID:ZyxR5MYexMn1OulsRggYZvzvq71-BwXx2?JWaocKj95?J?MhL27S5sRWpAlVbid5MXzs71C



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)	-0.00	10	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.01	Vert(TL)	-0.00	11	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 86 lb	FT = 20%

LUMBER-

TOP CHORD	2x6 SP No.1
BOT CHORD	2x6 SP No.1
OTHERS	2x4 SP No.3
SLIDER	Left 2x4 SP No.3 1-6-8, Right 2x4 SP No.3 1-6-8

BRACING-

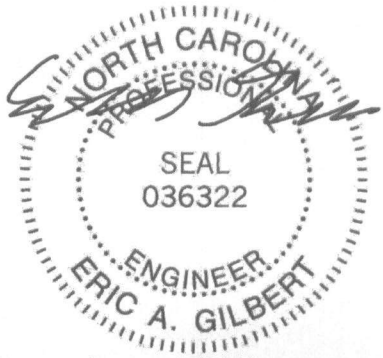
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. All bearings 12-0-0.
(lb) - Max Horz 2=52(LC 7)
Max Uplift All uplift 100 lb or less at joint(s) 2, 10, 15, 16, 13, 12
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 14, 15, 16, 13, 12

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 10, 15, 16, 13, 12.



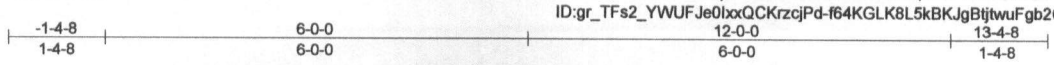
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391739
J0918-4409	H1-GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	

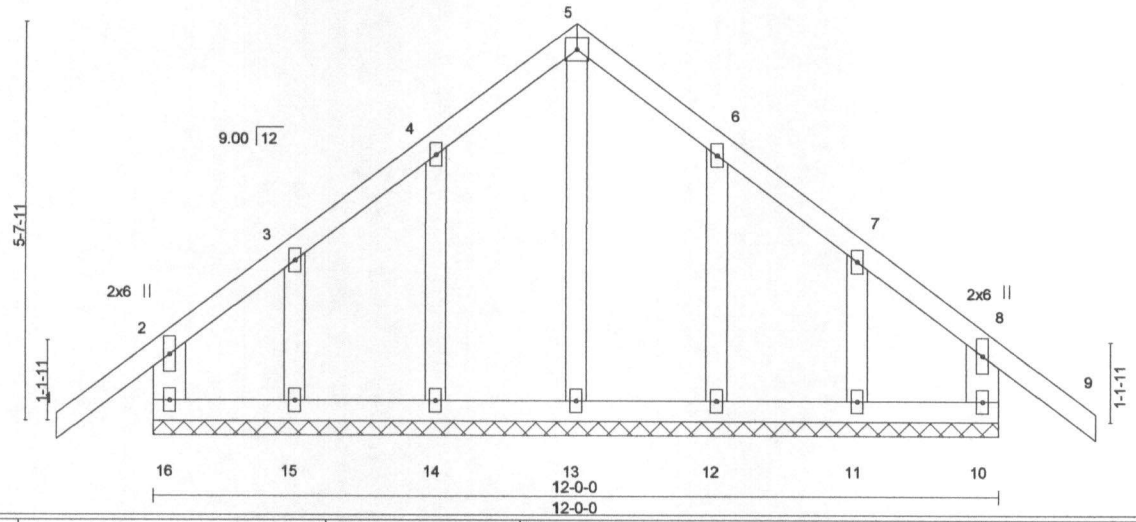
Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:42 2018 Page 1

ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-f64KGLK8L5kBKJgBtjtwuFgb2Gn2YcHfqMNfuzzs71B



4x4 =

Scale: 3/8"=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	0.15	Vert(LL)	-0.01	9	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	-0.02	9	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.08	Horz(TL)	0.00	10	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-R							Weight: 74 lb	FT = 20%

LUMBER-

TOP CHORD	2x4 SP No.1
BOT CHORD	2x4 SP No.1
WEBS	2x6 SP No.1
OTHERS	2x4 SP No.3

BRACING-

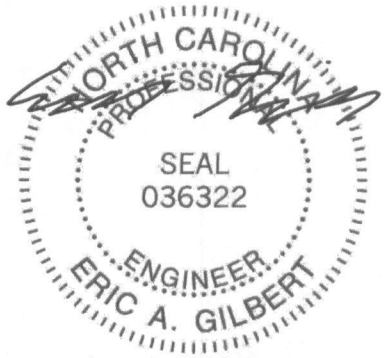
TOP CHORD	Structural wood sheathing directly applied or 10-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS. All bearings 12-0-0.
(lb) - Max Horz 16=157(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 16, 10, 14, 12 except 15=-118(LC 6), 11=-110(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 16, 10, 13, 14, 15, 12, 11

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

NOTES-

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 16, 10, 14, 12 except (jt=lb) 15=118, 11=110.



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391740
J0918-4409	H2	Common Girder	1	2	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:42 2018 Page 1

ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-f64KGLK8L5kBKJgBtjtwuFgWyGdMYOSfqMNfuzzs71B

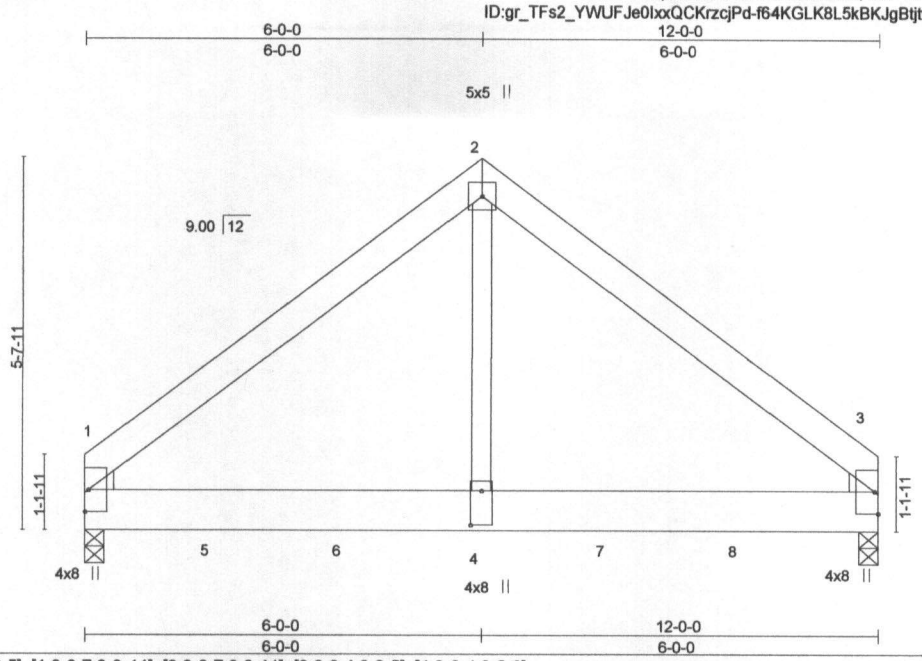


Plate Offsets (X,Y)-- [1:0-0-4,0-0-5], [1:0-0-7,0-3-11], [3:0-0-7,0-3-11], [3:0-0-4,0-0-5], [4:0-6-4,0-2-0]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.47	Vert(LL)	-0.04	3-4	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.68	Vert(TL)	-0.10	3-4	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.97	Horz(TL)	0.02	3	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.03	3-4	>999	240	Weight: 163 lb	FT = 20%

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

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

REACTIONS. (lb/size) 1=3791/0-3-8, 3=3734/0-3-8
Max Horz 1=140(LC 4)
Max Uplift 1=-293(LC 5), 3=-289(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-3994/351, 2-3=-3994/351
BOT CHORD 1-4=-218/2984, 3-4=-218/2984
WEBS 2-4=-314/4677

NOTES-
1) 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 0-7-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise); Lumber DOL=1.60 plate grip DOL=1.60
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=293, 3=289.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1318 lb down and 109 lb up at 1-11-4, 1318 lb down and 109 lb up at 3-11-4, 1318 lb down and 109 lb up at 5-11-4, and 1318 lb down and 109 lb up at 7-11-4, and 1318 lb down and 109 lb up at 9-11-4 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: 1-2=-60, 2-3=-60, 1-3=-20

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

January 25,2018

Continued on page 2

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

LOAD CASE(S) Standard

Concentrated Loads (lb)

Vert: 4=-1318(B) 5=-1318(B) 6=-1318(B) 7=-1318(B) 8=-1318(B)

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391741
J0918-4409	J1	ROOF SPECIAL	3	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:43 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-7JeiThLm6Ps2yTFNQQO9QTCh8g?KHy7o306CQPzs71A

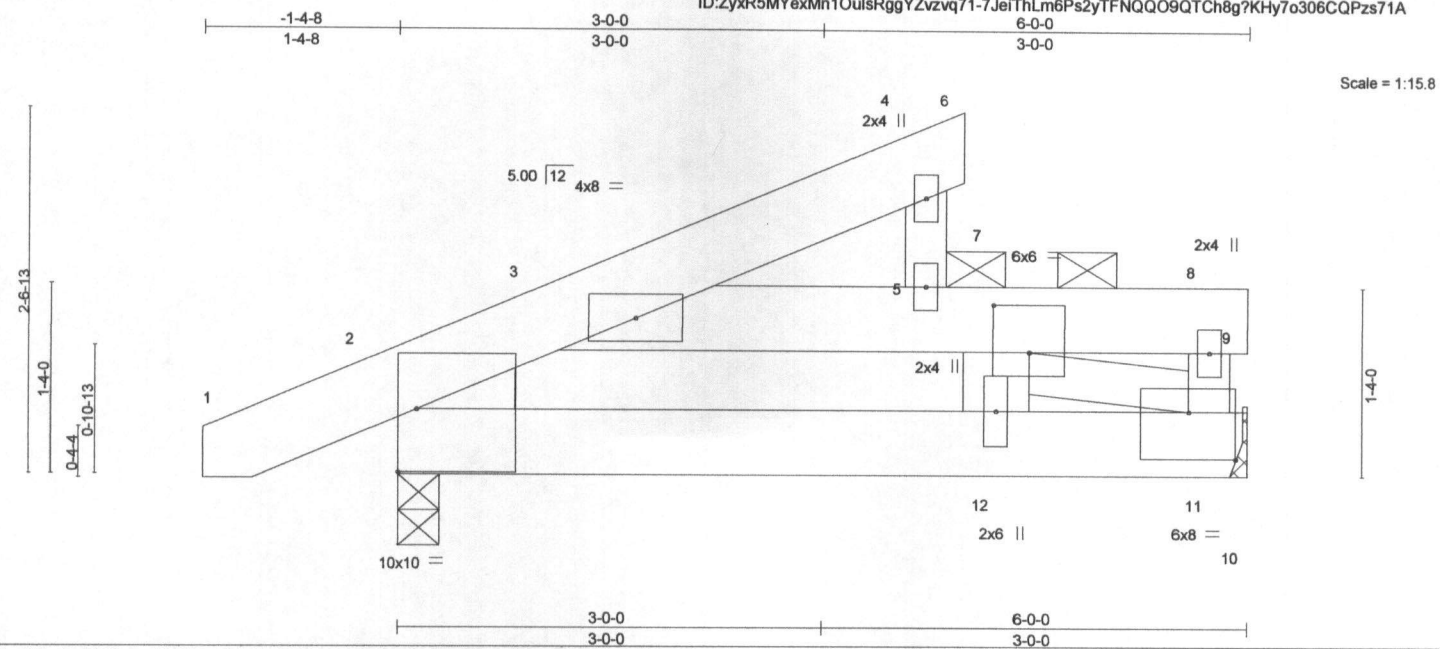


Plate Offsets (X,Y)-- [2:Edge,0-5-5], [2:0-7-2,0-0-10], [2:0-0-12,0-0-5], [7:0-3-0,0-4-0], [11:0-4-0,0-4-0]

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	0.51	Vert(LL)	-0.02	2-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(TL)	-0.06	2-12	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.56	Horz(TL)	0.01	11	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.05	2-12	>999	240	Weight: 45 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
7-12: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 7-12, 3-9.
BOT CHORD Rigid ceiling directly applied or 5-10-4 oc bracing.
JOINTS 1 Brace at Jt(s): 5

REACTIONS. (lb/size) 2=826/0-3-8, 11=1618/Mechanical
Max Horz 2=70(LC 7)
Max Uplift 2=-122(LC 7), 11=-170(LC 7)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1420/1293, 7-12=-382/475, 3-5=-1429/1434, 5-7=-1429/1434
BOT CHORD 2-12=-1434/1429, 11-12=-1617/1643
WEBS 8-11=-376/361, 7-11=-1902/1872

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Corner(3) -1-2-7 to 4-0-0, Exterior(2) 3-8-12 to 6-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Refer to girder(s) for truss to truss connections.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=122, 11=170.
8) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1900 lb down and 1869 lb up at 4-4-0 on top 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, 3-4=-60, 4-6=-20, 2-10=-20, 5-7=-60, 7-8=-60, 8-9=-20
Concentrated Loads (lb)
Vert: 7=-1900

January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391742
J0918-4409	J2	ROOF SPECIAL	1	2	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:43 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-7JeiThLm6Ps2yTFNQQO9QTCf?g?KHyvo306CQPzs71A

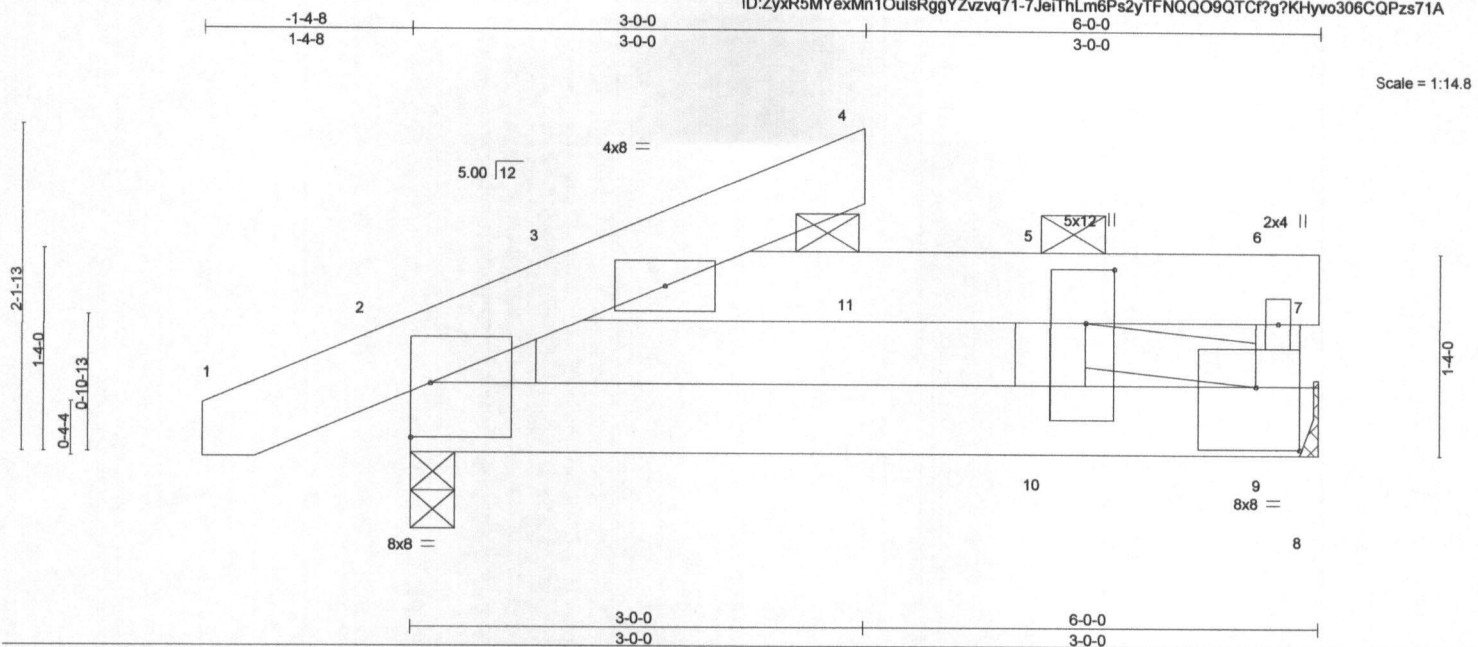


Plate Offsets (X,Y)-- [2:Edge,0-4-5], [2:0-7-2,0-0-10], [2:0-0-12,0-0-5], [5:0-4-4,0-2-4], [9:0-3-8,0-5-0], [10:0-0-0,0-2-12]

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)	-0.02	2-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.56	Vert(TL)	-0.06	2-10	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.57	Horz(TL)	-0.01	9	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.06	2-10	>999	240	Weight: 82 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.3 *Except*
5-10: 2x6 SP No.1
WEDGE
Left: 2x4 SP No.3

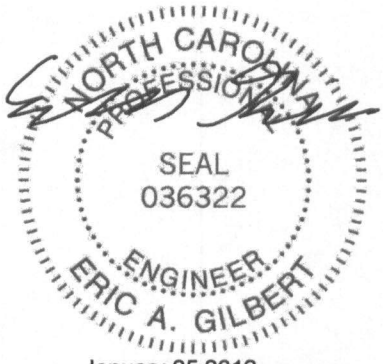
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 5-10, 3-7.
BOT CHORD Rigid ceiling directly applied or 8-11-2 oc bracing.

REACTIONS. (lb/size) 2=1357/0-3-8, 9=3011/Mechanical
Max Horz 2=56(LC 6)
Max Uplift 2=-172(LC 7), 9=-333(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2397/2651, 5-10=-827/1004, 3-5=-2433/2837
BOT CHORD 2-10=-2837/2433, 9-10=-3316/3024
WEBS 6-9=-713/753, 5-9=-3501/3839

NOTES-
1) 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: 2x6 - 2 rows staggered at 0-9-0 oc.
Webs connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Corner(3) -1-2-7 to 3-0-0, Exterior(2) 1-1-9 to 6-0-0 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
8) Refer to girder(s) for truss to truss connections.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=172, 9=333.
10) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
11) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 3792 lb down and 4081 lb up at 4-3-0 on top chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard



January 25,2018

Continued on page 2

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County
J0918-4409	J2	ROOF SPECIAL	1	2	E11391742
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:43 2018 Page 2
ID:ZyxR5MYexMn1OulsRggYZvzvq71-7JeiThLm6Ps2yTFNQQO9QTCf?g?KHyvo306CQPzs71A

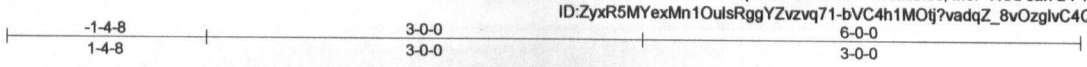
LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.15
   Uniform Loads (plf)
   Vert: 1-3=-60, 3-4=-60, 2-8=-20, 3-11=-20, 5-11=-60, 5-6=-60, 6-7=-20
   Concentrated Loads (lb)
   Vert: 5=-3792

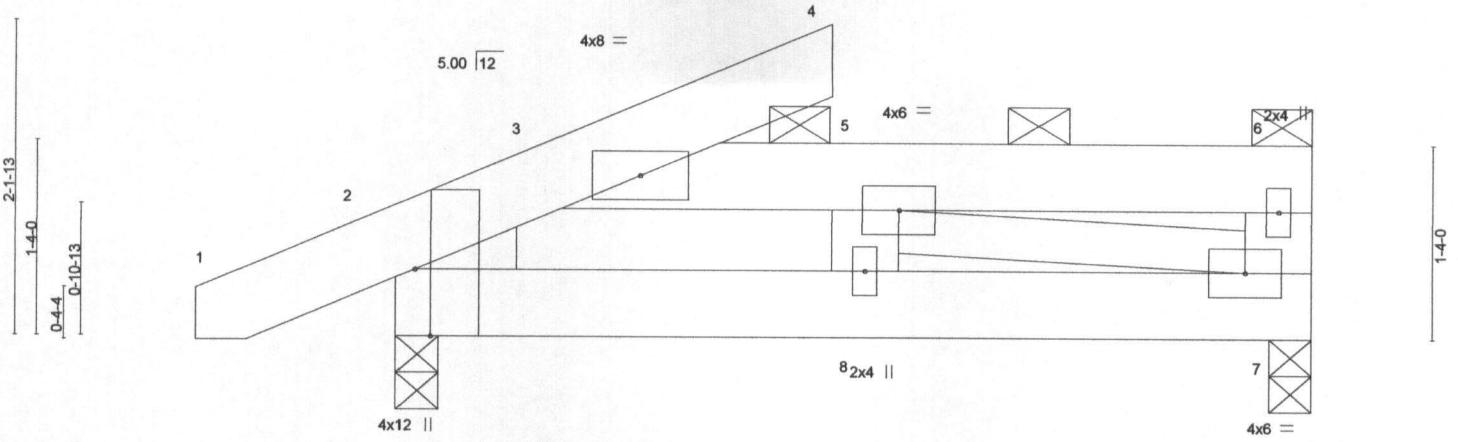
ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	J3	ROOF SPECIAL	6	1	Job Reference (optional)	E11391743

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:44 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-bVC4h1MOtj?vadqZ_8vOzglvC4QS0SMyHgsmyrzs719



Scale = 1:15.4



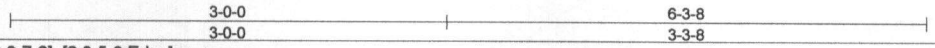


Plate Offsets (X,Y)-- [2:0-0-5,0-0-12], [2:0-0-10,0-7-2], [2:0-5-8,Edge]

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.29	Vert(LL)	-0.01	8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.25	Vert(TL)	-0.03	8	>999	240		
BCLL	0.0 *	Rep Stress Incr	NO	WB	0.37	Horz(TL)	-0.01	7	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S		Wind(LL)	0.03	8	>999	240	Weight: 45 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x6 SP No.1 *Except*
5-7: 2x4 SP No.3
WEDGE
Left: 2x4 SP No.3

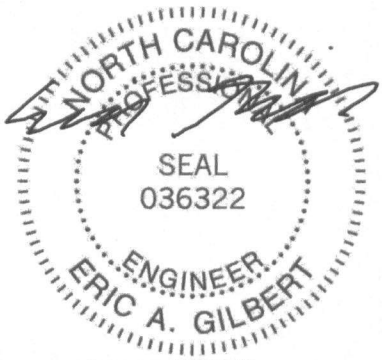
BRACING-
TOP CHORD Structural wood sheathing directly applied or 3-0-0 oc purlins, except end verticals, and 2-0-0 oc purlins: 5-8, 3-6.
BOT CHORD Rigid ceiling directly applied or 6-11-9 oc bracing.

REACTIONS. (lb/size) 2=632/0-3-8, 7=595/0-3-8
Max Horz 2=56(LC 6)
Max Uplift 2=-97(LC 7), 7=-87(LC 6)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-839/1132, 3-5=-749/1224
BOT CHORD 2-8=-1224/749, 7-8=-1175/913
WEBS 6-7=-229/287, 5-7=-956/1230

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Corner(3) -1-2-7 to 3-0-0, Exterior(2) 1-1-9 to 6-0-12 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 7.
7) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
8) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 250 lb down and 269 lb up at 3-4-0 on top 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, 3-4=-60, 2-7=-20, 3-5=-100, 5-6=-140
Concentrated Loads (lb)
Vert: 5=-250



January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	K1-GE	COMMON SUPPORTED GAB	1	1	Job Reference (optional)	E11391744

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:45 2018 Page 1
ID:ZyxR5MYexMn1OuIsRggYZvzvq71-3hmSuNM1e07mBmPmYrQdWul8_ToElzh5WKbJVlzs718

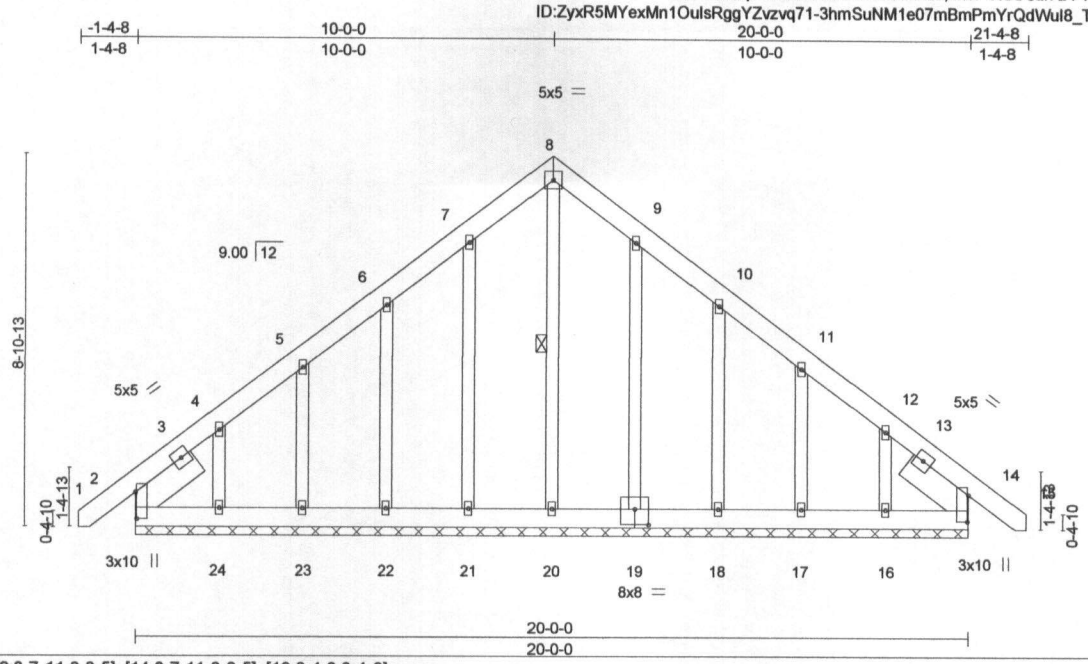


Plate Offsets (X,Y)-- [2:0-7-11,0-0-5], [14:0-7-11,0-0-5], [19:0-4-0,0-4-8]

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	0.04	Vert(LL)	-0.00	14	n/r	120	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(TL)	-0.00	15	n/r	120		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.10	Horz(TL)	0.00	14	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 188 lb	FT = 20%

LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
OTHERS 2x4 SP No.3
SLIDER Left 2x8 SP No.1 1-10-6, Right 2x8 SP No.1 1-10-6

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 1 Row at midpt 8-20

REACTIONS. All bearings 20-0-0.
(lb) - Max Horz 2=292(LC 6)
Max Uplift All uplift 100 lb or less at joint(s) 14, 21, 23, 19, 17 except 22=-108(LC 7), 24=-185(LC 7), 18=-110(LC 8), 16=-171(LC 8), 2=-130(LC 5)
Max Grav All reactions 250 lb or less at joint(s) 14, 20, 21, 22, 23, 24, 19, 18, 17, 16, 2

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-4=-303/183

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members, with BCDL = 10.0psf.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 14, 21, 23, 19, 17 except (jt=lb) 22=108, 24=185, 18=110, 16=171, 2=130.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 14.

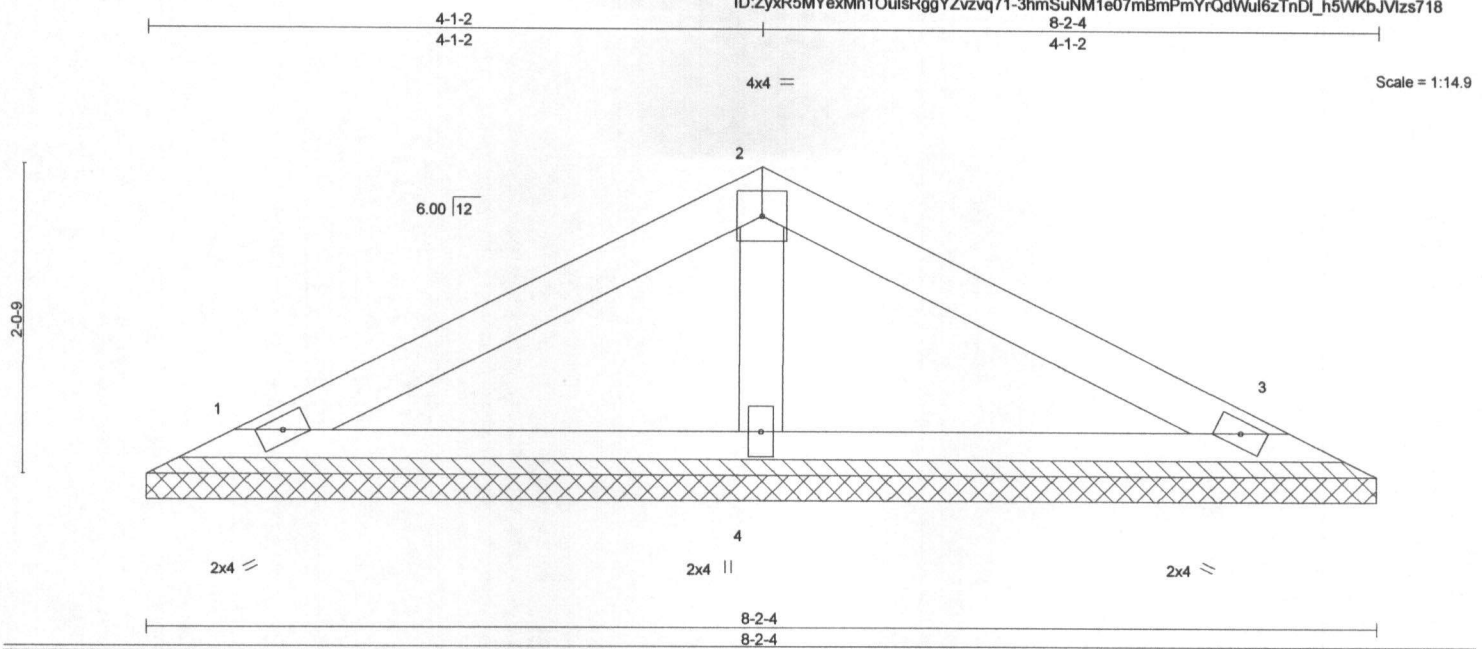
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	VE-1	VALLEY	1	1	Job Reference (optional)	E11391745

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:45 2018 Page 1

ID:ZyxR5MYexMn1OulsRggYZvzvq71-3hmSuNM1e07mBmPmYrQdWul6zTnDl_h5WKbJVlzs718



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	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-P							Weight: 26 lb	FT = 20%

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

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

REACTIONS. (lb/size) 1=142/8-2-4, 3=142/8-2-4, 4=272/8-2-4
Max Horz 1=-22(LC 5)
Max Uplift 1=-22(LC 7), 3=-26(LC 8)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
6) Non Standard bearing condition. Review required.

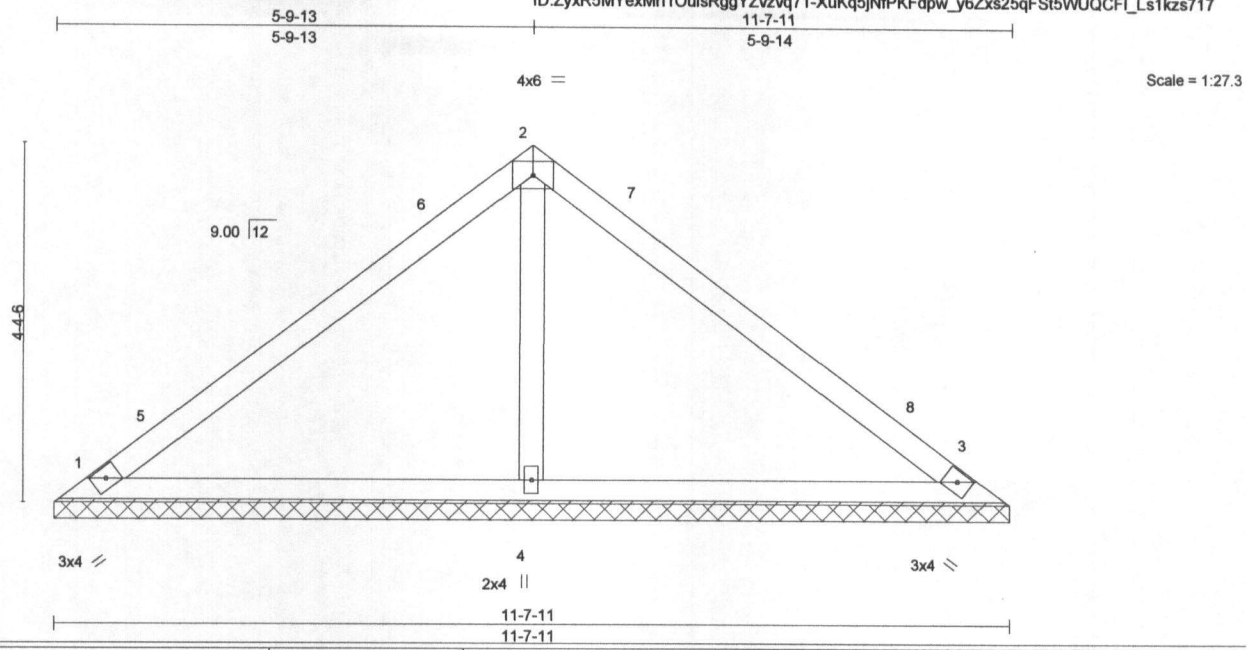
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	VH-1	GABLE	1	1	Job Reference (optional)	E11391746

Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:46 2018 Page 1
ID:ZyxR5MYexMn1OuIsRggYZvzvq71-XuKq5jNfPKFdpw_y6Zxs25qFSt5WUQCFI_Ls1kzs717



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	0.31	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.09	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 43 lb	FT = 20%

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

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

REACTIONS. (lb/size) 1=224/11-7-11, 3=224/11-7-11, 4=412/11-7-11
Max Horz 1=-112(LC 5)
Max Uplift 1=-25(LC 7), 3=-34(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=-253/106

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) and C-C Exterior(2) 0-5-4 to 4-10-1, Interior(1) 4-10-1 to 5-9-13, Exterior(2) 5-9-13 to 10-2-10 zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

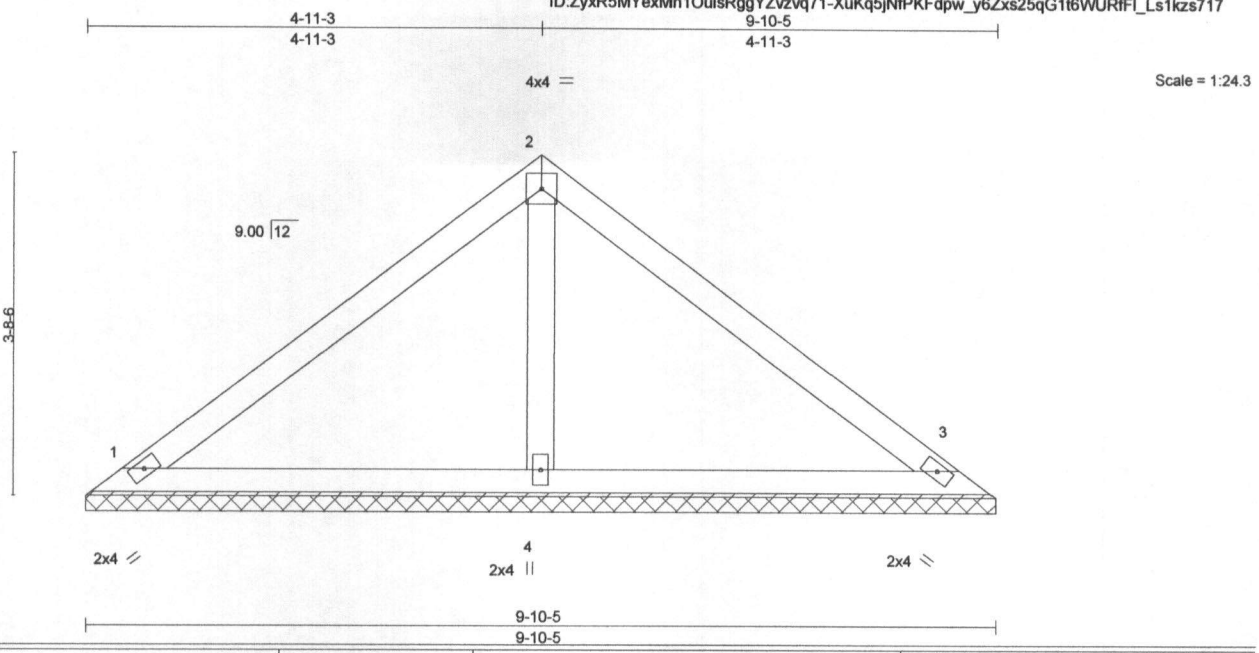
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391747
J0918-4409	VH-2	Valley	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309

8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:46 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-XuKq5jNfPKFdpw_y6Zxs25qG1t6WURfFl_Ls1kzs717



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.21	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.06	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-S							Weight: 36 lb	FT = 20%

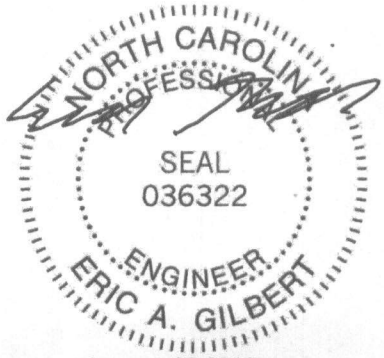
LUMBER-
TOP CHORD 2x4 SP No.1
BOT CHORD 2x4 SP No.1
OTHERS 2x4 SP No.3

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

REACTIONS. (lb/size) 1=187/9-10-5, 3=187/9-10-5, 4=344/9-10-5
Max Horz 1=-94(LC 5)
Max Uplift 1=-21(LC 7), 3=-29(LC 8)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

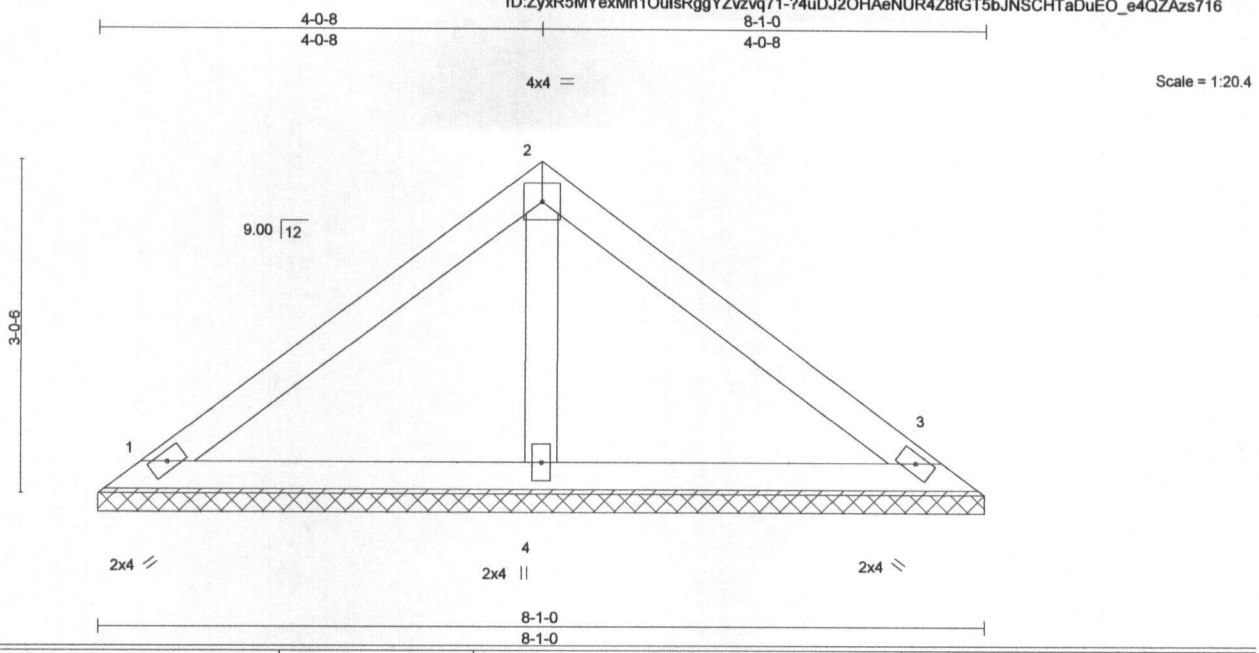


January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	
J0918-4409	VH-3	Valley	1	1	Job Reference (optional)	E11391748

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:47 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-?4uDJ2OHAeNUR4Z8fGT5bJNSCHTaDuEO_e4QZAzs716



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	0.18	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.04	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-P							Weight: 29 lb	FT = 20%

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

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

REACTIONS. (lb/size) 1=163/8-1-0, 3=163/8-1-0, 4=250/8-1-0
Max Horz 1=-75(LC 5)
Max Uplift 1=-24(LC 7), 3=-30(LC 8)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

January 25,2018

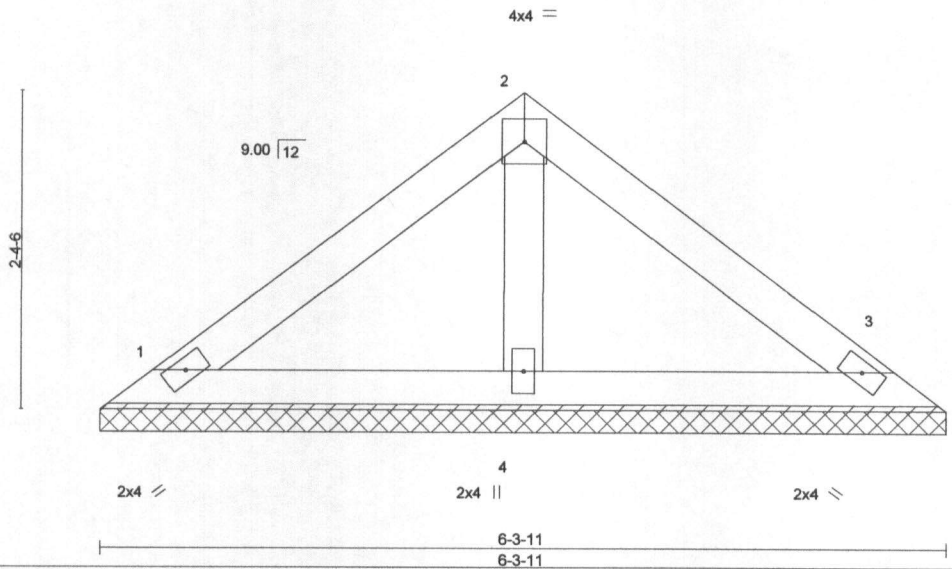
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County
J0918-4409	VH-4	Valley	1	1	E11391749
					Job Reference (optional)

Comtech, Inc., Fayetteville, NC 28305 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:47 2018 Page 1
ID:ZyxR5MYexMn1OulsRggYZvzvq71-?4uDJ2OHAeNUR4Z8fGT5bJNTWHUDDuQO_e4QZAzs716

3-1-13 6-3-11
3-1-13 3-1-13

Scale = 1:16.7



LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.03	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-P							Weight: 22 lb	FT = 20%

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

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

REACTIONS. (lb/size) 1=123/6-3-11, 3=123/6-3-11, 4=188/6-3-11
Max Horz 1=57(LC 6)
Max Uplift 1=-18(LC 7), 3=-23(LC 8)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

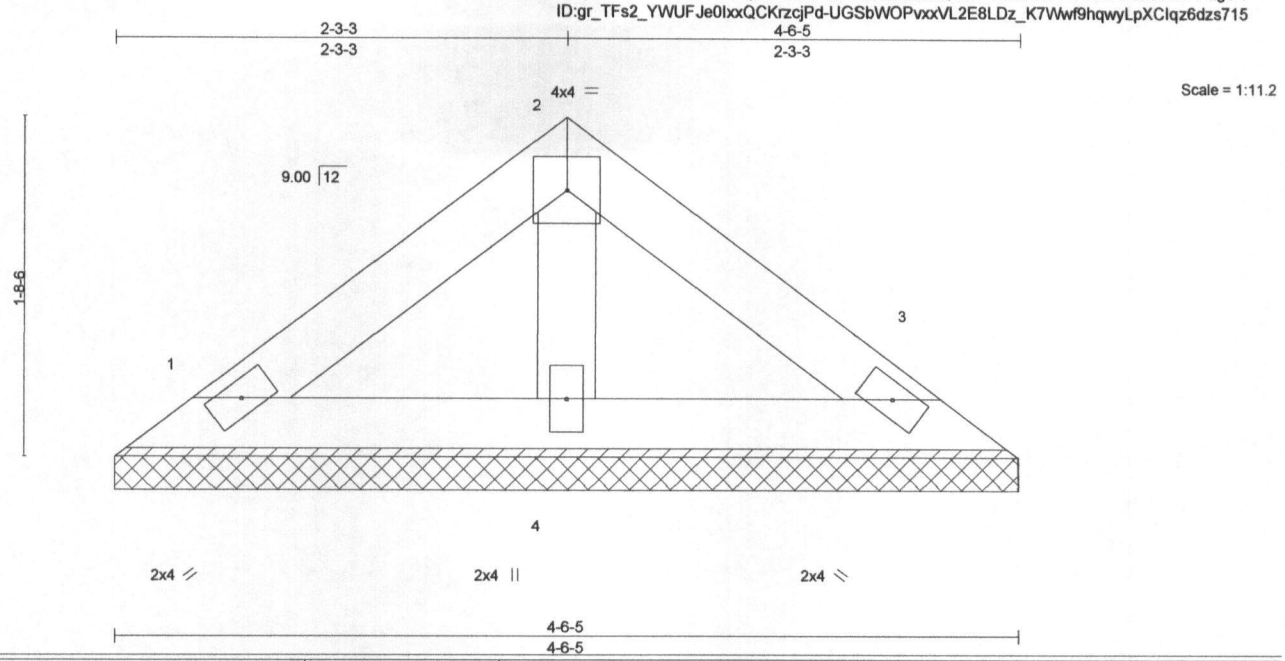
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391750
J0918-4409	VH-5	Valley	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 — 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:48 2018 Page 1

ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-UGSbWOPvxxVL2E8LDz_K7Wwf9hqwyLpXCIqz6dzs715



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	0.04	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.02	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-P							Weight: 15 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-6-5 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=83/4-6-5, 3=83/4-6-5, 4=127/4-6-5
Max Horz 1=38(LC 6)
Max Uplift 1=-12(LC 7), 3=-15(LC 8)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

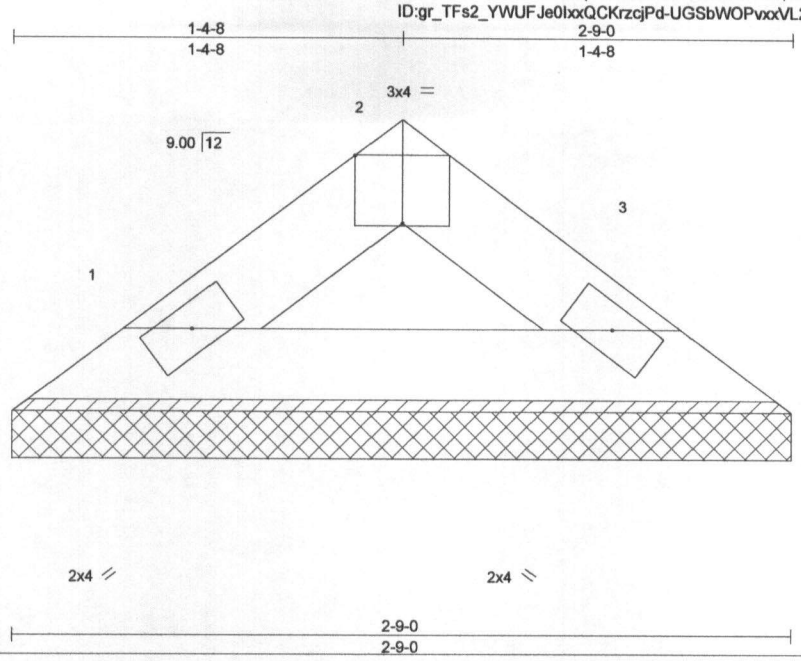
January 25,2018

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

Job	Truss	Truss Type	Qty	Ply	Lot 38 South Creek / Harnett County	E11391751
J0918-4409	VH-6	Valley	1	1	Job Reference (optional)	

Comtech, Inc., Fayetteville, NC 28309 8.130 s Sep 15 2017 MiTek Industries, Inc. Wed Jan 24 14:14:48 2018 Page 1

ID:gr_TFs2_YWUFJe0lxxQCKrzcjPd-UGSbWOPvxxVL2E8LDz_K7WwfdhqtyL3XCIqz6dzs715



Scale = 1:7.9

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

LOADING (psf)		SPACING-	2-0-0	CSI.		DEFL.	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	20.0	Plate Grip DOL	1.15	TC	0.01	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0 *	Rep Stress Incr	YES	WB	0.00	Horz(TL)	0.00	3	n/a	n/a		
BCDL	10.0	Code IRC2009/TPI2007		Matrix-P							Weight: 8 lb	FT = 20%

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

BRACING-
TOP CHORD Structural wood sheathing directly applied or 2-9-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS. (lb/size) 1=75/2-9-0, 3=75/2-9-0
Max Horz 1=-20(LC 5)
Max Uplift 1=-3(LC 7), 3=-3(LC 8)

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

NOTES-
1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-05; 100mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; enclosed; MWFRS (low-rise) 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
3) Gable requires continuous bottom chord bearing.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas with a clearance greater than 6-0-0 between the bottom chord and any other members.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.

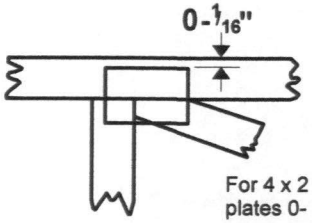
January 25,2018

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

Symbols

PLATE LOCATION AND ORIENTATION

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



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

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

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

PLATE SIZE

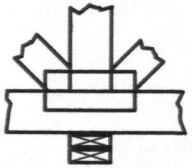
4 x 4

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

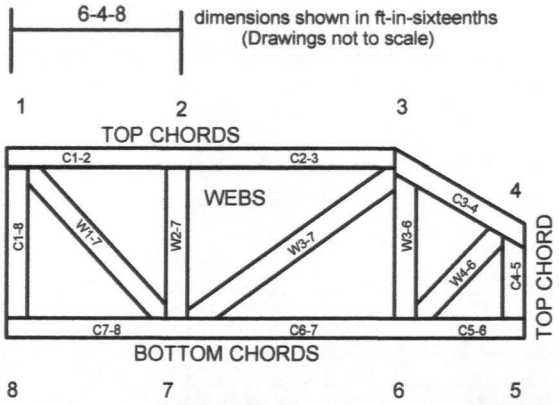


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-89: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

PRODUCT CODE APPROVALS

ICC-ES Reports:

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

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

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

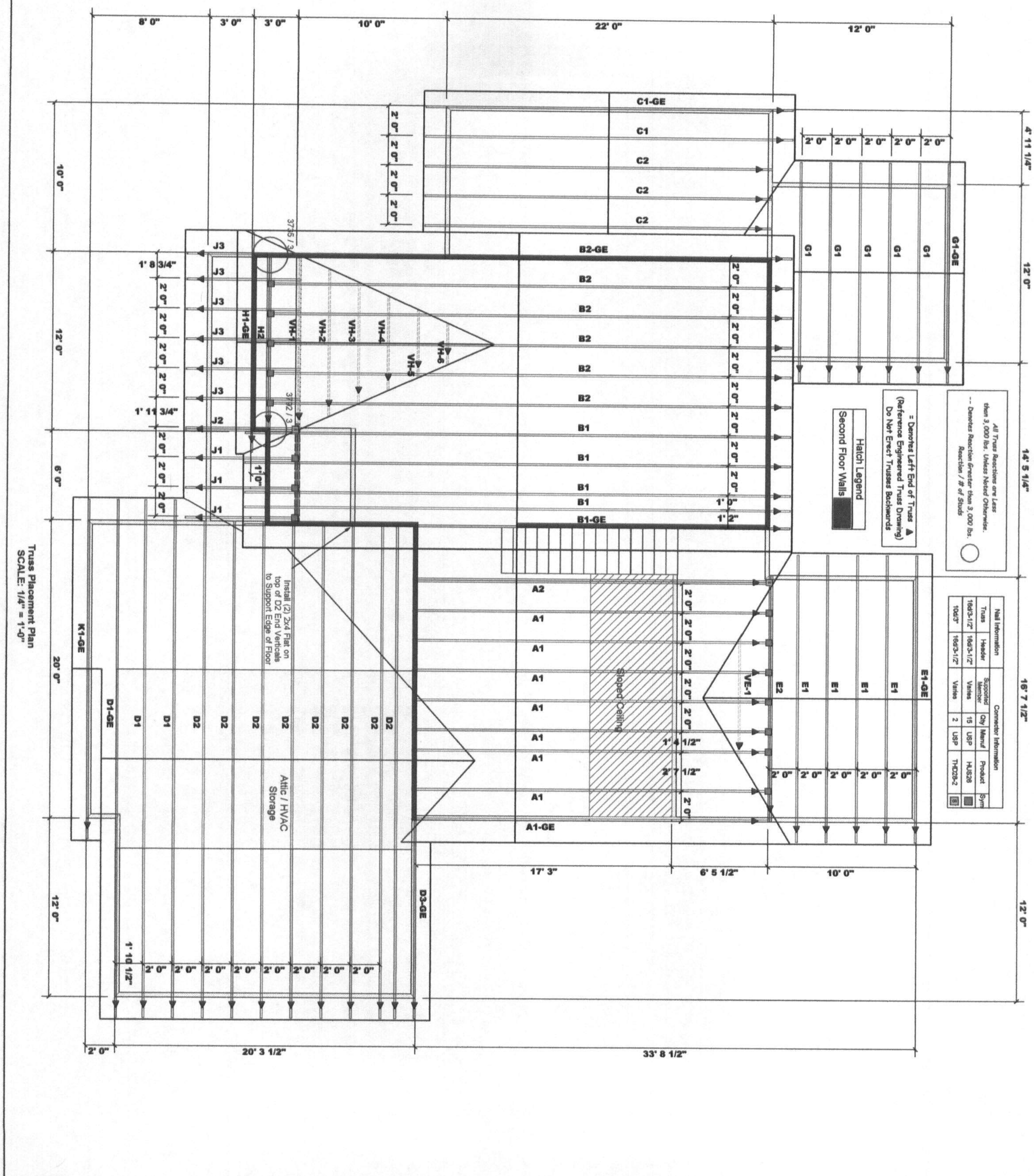
MiTek®

ENGINEERING BY TRENCO
A MiTek Affiliate

⚠ General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

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



BUILDER	Watermark Homes	COUNTY	Harnett
JOB NAME	Lot 38 South Creek	ADDRESS	Lot 38 South Creek
PLAN	The Ginko	MODEL	Roof
SEAL DATE	09/21/2018	DATE REV.	09/27/2018
QUOTE #		DRAWN BY	Anthony Williams
JOB #	J0918-4409	SALESMAN	Anthony Williams

LOAD CHART FOR JACK STUDS

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

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

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

Signature Anthony Williams

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#.

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