

Reaction Summary of Order



ROOF & FLOOR
TRUSSES & BEAMS

Reilly Road Industrial Park P.O. Box 40408
Fayetteville, N.C. 28309 (910) 864-TRUS

REQ. QUOTE DATE	/ /	ORDER #	J0121-0101
ORDER DATE	01/06/21	QUOTE #	
DELIVERY DATE	/ /	CUSTOMER ACCT #	0000006702
DATE OF INVOICE	/ /	CUSTOMER PO #	
ORDERED BY		INVOICE #	
COUNTY	Harnett	TERMS	
SUPERINTENDANT		SALES REP	Lenny Norris
JOBSITE PHONE #		SALES AREA	David Landry

ROOF F.O.	Godwin & Associates 820 Sandy Rd. Four Oaks, NC 27524 (919) 422-8956	JOB NAME: Glover Residence MODEL: Roof TAG: Glover Residence DELIVERY INSTRUCTIONS:	LOT # 155 SUBDIV: Addie Webb Lane JOB CATEGORY: Residential - Roof
	Godwin & Associates 155 Addie Webb Lane Dunn,	SPECIAL INSTRUCTIONS:	PLAN SEAL DATE:

BUILDING DEPARTMENT	OVERHANG INFO	HEEL HEIGHT	00-06-08	REQ. LAYOUTS	REQ. ENGINEERING	QUOTE	DTL	01/06/21
	END CUT	RETURN				LAYOUT	DTL	01/06/21
			GABLE STUDS	24 IN. OC	JOBSITE	1	CUTTING	DTL

ROOF TRUSSES

LOADING INFORMATION

TCLL-TCDL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY	PITCH		TYPE ID	BASE O/A	LUMBER		OVERHANG		REACTIONS				
		TOP	BOT			TOP	BOT	LEFT	RIGHT					
	28	6.00	0.00	COMMON A1	45-00-00 45-00-00	2 X 6	2 X 6	01-04-08	01-04-08	Joint 2 1905.7 lbs. -126.2 lbs.	Joint 10 1905.7 lbs. -126.2 lbs.			
	2	6.00	0.00	COMMON A1GE	45-00-00 45-00-00	2 X 6	2 X 6	01-04-08	01-04-08	Joint 2 185.3 lbs. -32.1 lbs.	Joint 26 185.3 lbs. 1.9 lbs.	Joint 28 180.7 lbs. -58.7 lbs.	Joint 29 153.9 lbs. -32.3 lbs.	Joint 30 161.3 lbs. -33.4 lbs.
	11	6.00	0.00	COMMON A2	45-00-00 45-00-00	2 X 6	2 X 6		01-04-08	Joint 1 1834.4 lbs. -106.4 lbs.	Joint 9 1906.8 lbs. -126.2 lbs.			
	4	6.00	0.00	COMMON B1	20-00-00 20-00-00	2 X 6	2 X 6	01-04-08	01-04-08	Joint 2 878.9 lbs. -179.3 lbs.	Joint 4 878.9 lbs. -179.3 lbs.			
	1	6.00	0.00	GABLE B1GE	20-00-00 20-00-00	2 X 6	2 X 6	01-04-08	01-04-08	Joint 2 868.0 lbs. -198.2 lbs.	Joint 12 868.0 lbs. -198.2 lbs.			
	11	4.00	0.00	MONOPITCH M1	12-00-00 12-00-00	2 X 6	2 X 6	01-04-08		Joint 2 543.2 lbs. -200.5 lbs.	Joint 7 470.2 lbs. -203.4 lbs.			
	2	4.00	0.00	GABLE M1GE	12-00-00 12-00-00	2 X 6	2 X 6	01-04-08		Joint 2 543.2 lbs. -290.2 lbs.	Joint 11 470.2 lbs. -300.5 lbs.			
	1	6.00	0.00	VALLEY V1	19-08-09 19-08-09	2 X 4	2 X 4			Joint 1 178.4 lbs. -3.6 lbs.	Joint 5 178.4 lbs. -7.0 lbs.	Joint 6 461.0 lbs. -98.9 lbs.	Joint 8 208.1 lbs. 51.4 lbs.	Joint 9 460.9 lbs. -99.0 lbs.
	1	6.00	0.00	VALLEY V2	15-08-09 15-08-09	2 X 4	2 X 4			Joint 1 107.2 lbs. -3.6 lbs.	Joint 5 107.2 lbs. 1.7 lbs.	Joint 6 343.9 lbs. -77.1 lbs.	Joint 7 271.6 lbs. 33.3 lbs.	Joint 8 343.8 lbs. -77.2 lbs.
	1	6.00	0.00	VALLEY V3	11-08-09 11-08-09	2 X 4	2 X 4			Joint 1 194.9 lbs. -25.7 lbs.	Joint 3 194.9 lbs. -31.7 lbs.	Joint 4 456.3 lbs. 0.6 lbs.		

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DELIVERY DATE	/ /	CUSTOMER ACCT #	0000006702
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JOBSITE PHONE #		SALES AREA	David Landry

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	Godwin & Associates 155 Addie Webb Lane Dunn,	SPECIAL INSTRUCTIONS:	PLAN SEAL DATE:

BUILDING DEPARTMENT	OVERHANG INFO	HEEL HEIGHT	00-06-08	REQ. LAYOUTS	REQ. ENGINEERING	QUOTE	DTL	01/06/21
Roof Order	END CUT RETURN					LAYOUT	DTL	01/06/21
		GABLE STUDS	24 IN. OC	JOBSITE	1	CUTTING	DTL	01/06/21

ROOF TRUSSES

LOADING INFORMATION

TCLL-TODL-BCLL-BCDL	STRESS INCR.
20.0,10.0,0.0,10.0	1.15

ROOF TRUSS SPACING: 24.0 IN. O.C. (TYP.)

PROFILE	QTY PLY	PITCH		TYPE ID	BASE O/A	LUMBER		OVERHANG		REACTIONS		
		TOP	BOT			TOP	BOT	LEFT	RIGHT	Joint 1	Joint 3	Joint 4
	1	6.00	0.00	VALLEY V4	07-08-09 07-08-09	2 X 4	2 X 4			Joint 1 133.1 lbs. -21.3 lbs.	Joint 3 133.2 lbs. -25.0 lbs.	Joint 4 256.2 lbs. 11.0 lbs.
	1	6.00	0.00	VALLEY V5	03-08-09 03-08-09	2 X 4	2 X 4			Joint 1 101.3 lbs. -6.1 lbs.	Joint 3 101.3 lbs. -6.1 lbs.	

ITEMS

QTY	ITEM TYPE	SIZE	LENGTH FT-IN-16	PART NUMBER	NOTES
14	Hangers, USP	HUS 26			SIMPSON (HUS26)
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	12-00-00		BM1
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	16-00-00		GDH
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	25-00-00		GDH2
2	LVL Beams (Sized)	LVL, 1-3/4" x 11-7/8" (S)	34-00-00		GDH3
3	LVL Beams (Sized)	LVL, 1-3/4" x 16" (S)	24-00-00		BM2

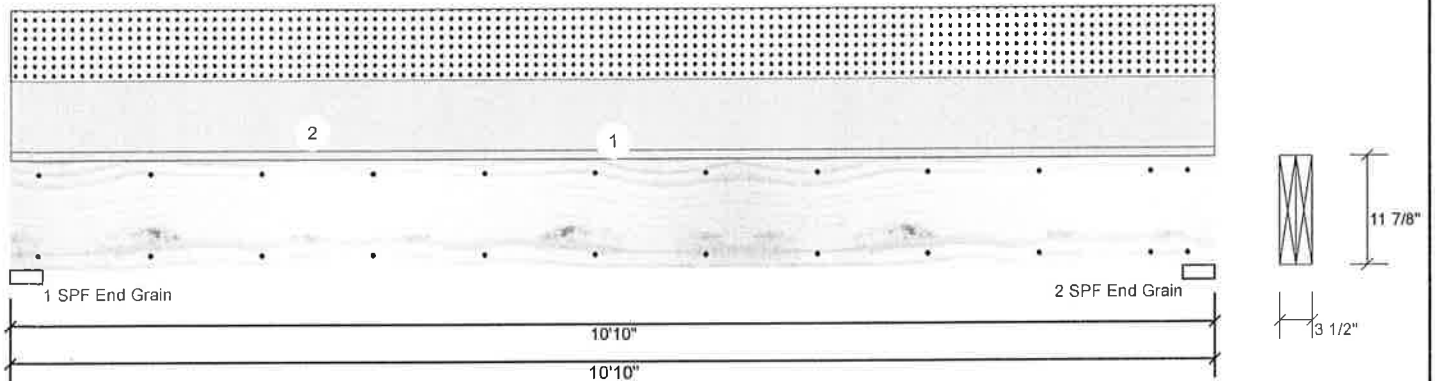


Client: Cash - Lenny
 Project:
 Address:

Date: 1/6/2021
 Input by: David Landry
 Job Name: Glover Residence
 Project #: J0121-0101

BM1 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/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	2959	2584	0	0
2	0	2959	2584	0	0

Bearings

Bearing	Length	Cap. React D/L lb	Total Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	52% 2959 / 2584	5543 L	D+S
2 - SPF End Grain	3.500"	52% 2959 / 2584	5543 L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13768 ft-lb	5'5"	22897 ft-lb	0.601 (60%)	D+S	L
Unbraced	13768 ft-lb	5'5"	13820 ft-lb	0.996 (100%)	D+S	L
Shear	4295 lb	1'2 5/8"	10197 lb	0.421 (42%)	D+S	L
LL Defl inch	0.145 (L/858)	5'5"	0.259 (L/480)	0.560 (56%)	S	L
TL Defl inch	0.311 (L/400)	5'5"	0.346 (L/360)	0.900 (90%)	D+S	L

Design Notes

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 6'1 1/8" o.c.
- 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	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	477 PLF	0 PLF	477 PLF	0 PLF	0 PLF	A2
	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

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



This design is valid until 2/26/2023

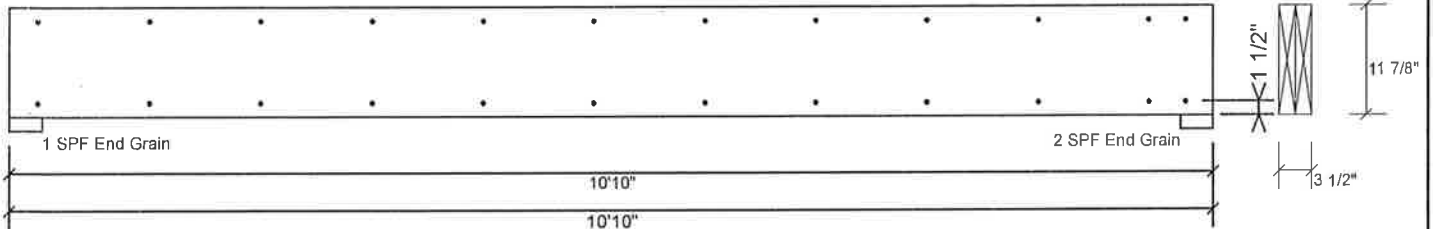


Client: Cash - Lenny
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 Address:

Date: 1/6/2021
 Input by: David Landry
 Job Name: Glover Residence
 Project #: J0121-0101

BM1 Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

Notes

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

Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

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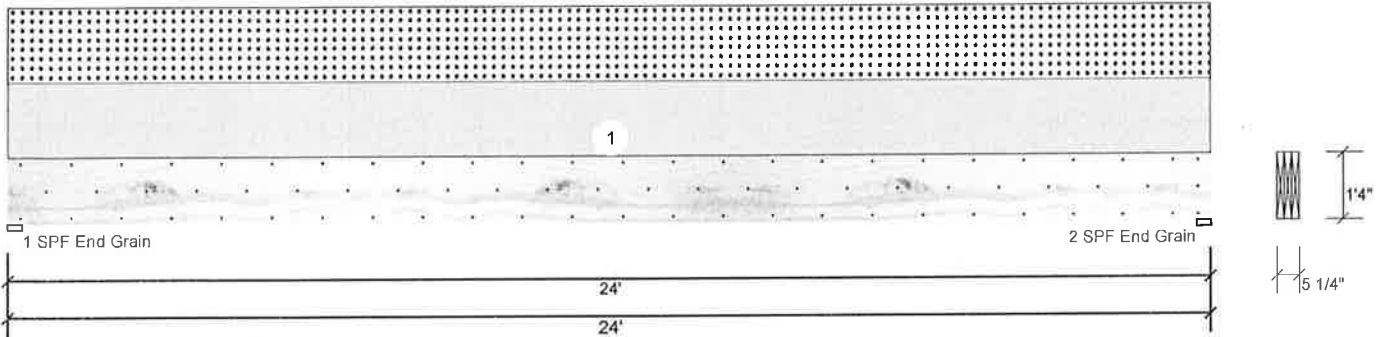


Client: Cash - Lenny
 Project:
 Address:

Date: 1/6/2021
 Input by: David Landry
 Job Name: Glover Residence
 Project #: J0121-0101

BM2 Kerto-S LVL 1.750" X 16.000" 3-Ply - PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	3	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	Yes
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	1856	1632	0	0
2	0	1856	1632	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	22%	1856 / 1632	3488	L	D+S
2 - SPF End Grain	3.500"	22%	1856 / 1632	3488	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	20172 ft-lb	12'	62010 ft-lb	0.325 (33%)	D+S	L
Unbraced	20172 ft-lb	12'	20221 ft-lb	0.998 (100%)	D+S	L
Shear	3037 lb	22'5 3/8"	20608 lb	0.147 (15%)	D+S	L
LL Defl inch	0.276 (L/1024)	12' 1/16"	0.589 (L/480)	0.470 (47%)	S	L
TL Defl inch	0.590 (L/479)	12' 1/16"	0.785 (L/360)	0.750 (75%)	D+S	L

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Const.	Comments
1	Uniform			Top	0.9	136 PLF	136 PLF	0 PLF	1.25	M1
	Self Weight				19 PLF					

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

Lumber

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

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

This design is valid until 2/26/2023

Manufacturer Info

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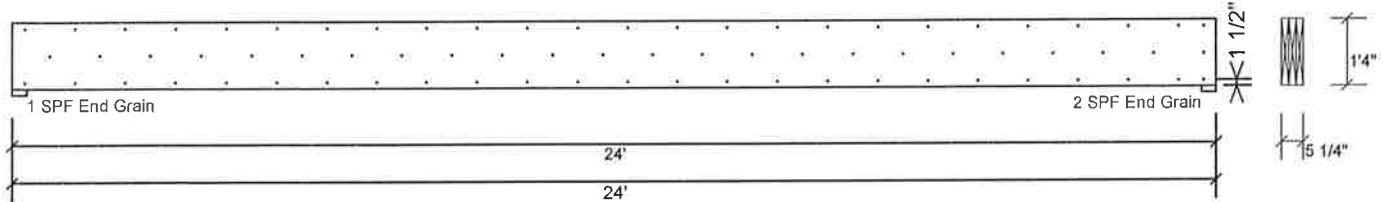


Client: Cash - Lenny
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Date: 1/6/2021
 Input by: David Landry
 Job Name: Glover Residence
 Project #: J0121-0101

BM2 Kerto-S LVL 1.750" X 16.000" 3-Ply - PASSED

Level: Level



Multi-Ply Analysis

Fasten all plies using 3 rows of 10d Box nails (.128x3") at 12" o.c.. Nail from both sides. Maximum end distance not to exceed 6"

Capacity	0.0 %
Load	0.0 PLF
Yield Limit per Foot	245.6 PLF
Yield Limit per Fastener	81.9 lb.
Yield Mode	IV
Edge Distance	1 1/2"
Min. End Distance	3"
Load Combination	
Duration Factor	1.00

Notes

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

Lumber

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

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

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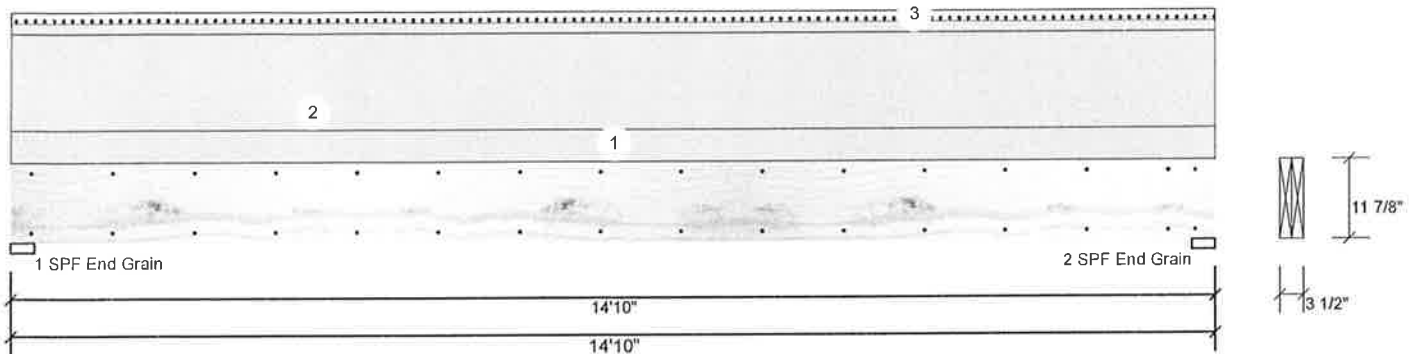


Client: Cash - Lenny
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Date: 1/6/2021
 Input by: David Landry
 Job Name: Glover Residence
 Project #: J0121-0101

GDH Kerto-S LVL 1.750" X 11.875" 2-Ply SM PASSED

Level: Level



Member Information

Type:	Girder	Application:	Floor
Plies:	2	Design Method:	ASD
Moisture Condition:	Dry	Building Code:	IBC/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	1997	148	0	0
2	0	1997	148	0	0

Bearings

Bearing	Length	Cap.	React D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3,500"	20%	1997 / 148	2145	L	D+S
2 - SPF End Grain	3,500"	20%	1997 / 148	2145	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	6954 ft-lb	7'5"	17919 ft-lb	0.388 (39%)	D	Uniform
Unbraced	7471 ft-lb	7'5"	7481 ft-lb	0.999 (100%)	D+S	L
Shear	1669 lb	13'7 3/8"	7980 lb	0.209 (21%)	D	Uniform
LL Defl inch	0.021 (L/8174)	7'5 1/16"	0.359 (L/480)	0.060 (6%)	S	L
TL Defl inch	0.305 (L/565)	7'5 1/16"	0.479 (L/360)	0.640 (64%)	D+S	L

Design Notes

- 1 Fasten all plies using 2 rows of 10d Box nails (.128x3") at 12" o.c. Maximum end distance not to exceed 6".
- 2 Refer to last page of calculations for fasteners required for specified loads.
- 3 Girders are designed to be supported on the bottom edge only.
- 4 Top loads must be supported equally by all plies.
- 5 Top must be laterally braced at a maximum of 13'1 1/2" o.c.
- 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	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	180 PLF	0 PLF	0 PLF	0 PLF	0 PLF	A1GE
3	Tie-In	0-0-0 to 14-10-0	1-0-0	Top	20 PSF	0 PSF	20 PSF	0 PSF	0 PSF	Roof
	Self Weight				9 PLF					

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Lumber
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 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

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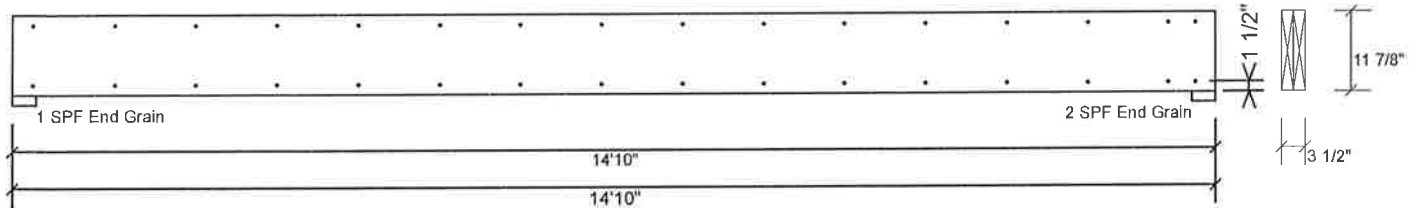


Client: Cash - Lenny
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 Address:

Date: 1/6/2021
 Input by: David Landry
 Job Name: Glover Residence
 Project #: J0121-0101

GDH Kerto-S LVL 1.750" X 11.875" 2-Ply - PASSED

Level: Level



Multi-Ply Analysis

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

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

Notes

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6. For flat roofs provide proper drainage to prevent ponding

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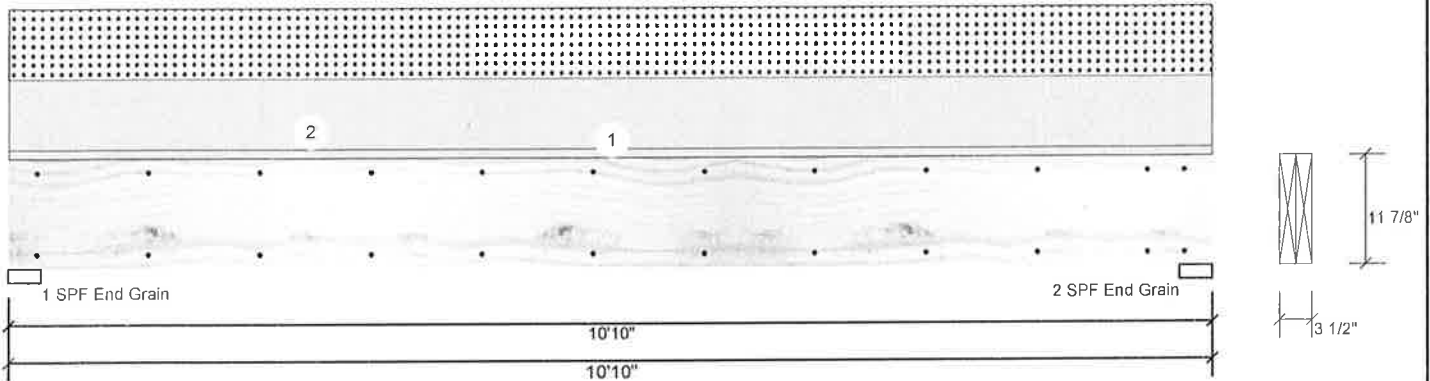


Client: Cash - Lenny
 Project:
 Address:

Date: 1/6/2021
 Input by: David Landry
 Job Name: Glover Residence
 Project #: J0121-0101

GDH2 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/IRC 2015
Deflection LL:	480	Load Sharing:	No
Deflection TL:	360	Deck:	Not Checked
Importance:	Normal	Ceiling:	Gypsum 1/2"
Temperature:	Temp <= 100°F		

Reactions UNPATTERNED lb (Uplift)

Brg	Live	Dead	Snow	Wind	Const
1	0	2959	2584	0	0
2	0	2959	2584	0	0

Bearings

Bearing	Length	Cap. React	D/L lb	Total	Ld. Case	Ld. Comb.
1 - SPF End Grain	3.500"	52%	2959 / 2584	5543	L	D+S
2 - SPF End Grain	3.500"	52%	2959 / 2584	5543	L	D+S

Analysis Results

Analysis	Actual	Location	Allowed	Capacity	Comb.	Case
Moment	13768 ft-lb	5'5"	22897 ft-lb	0.601 (60%)	D+S	L
Unbraced	13768 ft-lb	5'5"	13820 ft-lb	0.996 (100%)	D+S	L
Shear	4295 lb	1'2 5/8"	10197 lb	0.421 (42%)	D+S	L
LL Defl inch	0.145 (L/858)	5'5"	0.259 (L/480)	0.560 (56%)	S	L
TL Defl inch	0.311 (L/400)	5'5"	0.346 (L/360)	0.900 (90%)	D+S	L

Design Notes

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

ID	Load Type	Location	Trib Width	Side	Dead	Live	Snow	Wind	Const.	Comments
1	Uniform			Top	60 PLF	0 PLF	0 PLF	0 PLF	0 PLF	Wall
2	Uniform			Top	477 PLF	0 PLF	477 PLF	0 PLF	0 PLF	A1
	Self Weight				9 PLF					

Notes

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

Lumber

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

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 to 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

Manufacturer Info

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

Comtech, Inc.
 1001 S. Rolly Road, Suite #839
 Fayetteville, NC
 USA
 28314
 910-854-TRUS



This design is valid until 2/26/2023

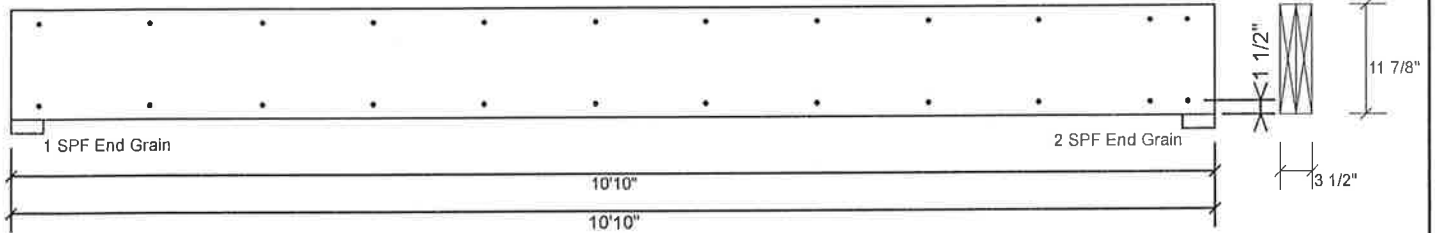


Client: Cash - Lenny
 Project:
 Address:

Date: 1/6/2021
 Input by: David Landry
 Job Name: Glover Residence
 Project #: J0121-0101

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

Level: Level



Multi-Ply Analysis

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

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

Notes

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

Lumber

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

chemicals

Handling & Installation

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

6. For flat roofs provide proper drainage to prevent ponding

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



This design is valid until 2/26/2023

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: J0121-0101
Glover Residence

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

Pages or sheets covered by this seal: E15280075 thru E15280086

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

North Carolina COA: C-0844



January 6, 2021

Gilbert, Eric

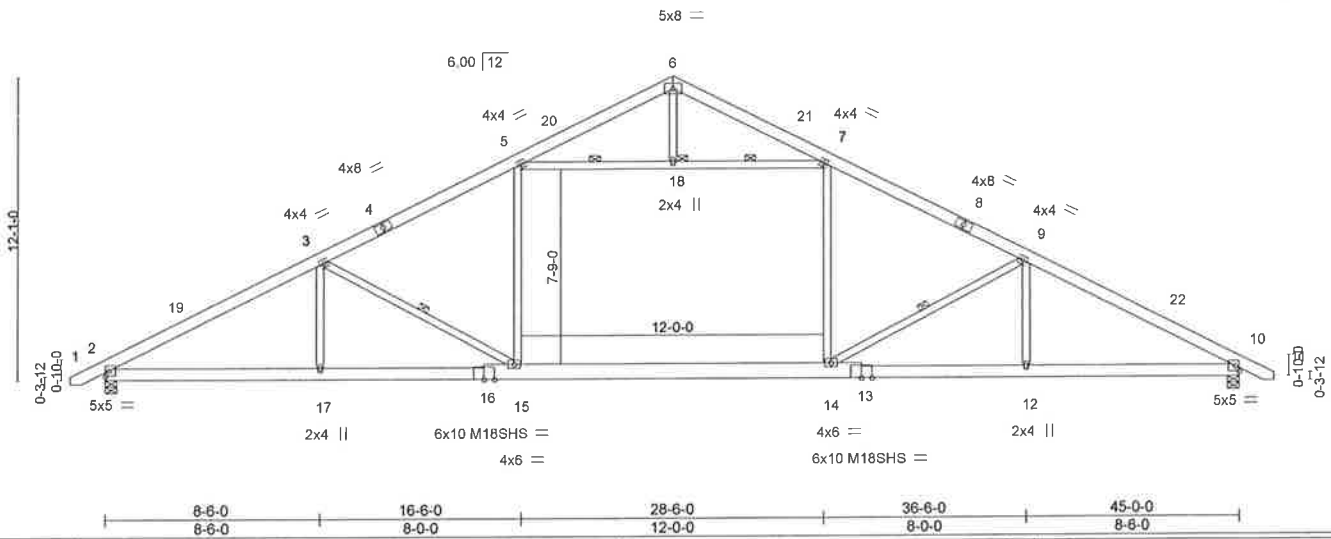
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which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

Job J0121-0101	Truss A1	Truss Type COMMON	Qty 28	Ply 1	Glover Residence	E15280075
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Comtech, Inc. Fayetteville, NC - 28314. 8:330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 6 15:43:43 2021 Page 1
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Scale = 1:86.2



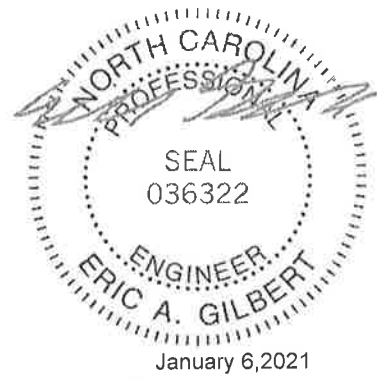
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.63	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.82	Vert(LL) -0.48 15-17 >999 360	M18SHS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.29	Vert(CT) 0.10 10 n/a n/a	Weight: 325 lb	FT = 20%
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Wind(LL) 0.23 15-17 >999 240		
	Code IRC2015/TPI2014				

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-11-15 oc purlins.
BOT CHORD 2x6 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
WEBS 2x4 SP No.2	WEBS 1 Row at midpt 9-14, 3-15, 5-18, 7-18
	JOINTS 1 Brace at Jt(s): 18

REACTIONS. (size) 2=0-5-8, 10=0-5-8
 Max Horz 2=-154(LC 10)
 Max Uplift 2=-126(LC 12), 10=-126(LC 13)
 Max Grav 2=1906(LC 2), 10=1906(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-3318/609, 3-5=-2879/595, 5-6=-623/264, 6-7=-623/264, 7-9=-2879/595, 9-10=-3318/609
 BOT CHORD 2-17=-405/2906, 15-17=-405/2908, 14-15=-229/2491, 12-14=-409/2828, 10-12=-409/2824
 WEBS 7-14=0/755, 9-14=-790/251, 9-12=-29/293, 5-15=0/755, 3-15=-790/249, 3-17=-29/293, 5-18=-2039/424, 7-18=-2039/424

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-2 to 3-3-14, Interior(1) 3-3-14 to 22-6-0, Exterior(2) 22-6-0 to 27-0-0, Interior(1) 27-0-0 to 46-2-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 2=126, 10=126.



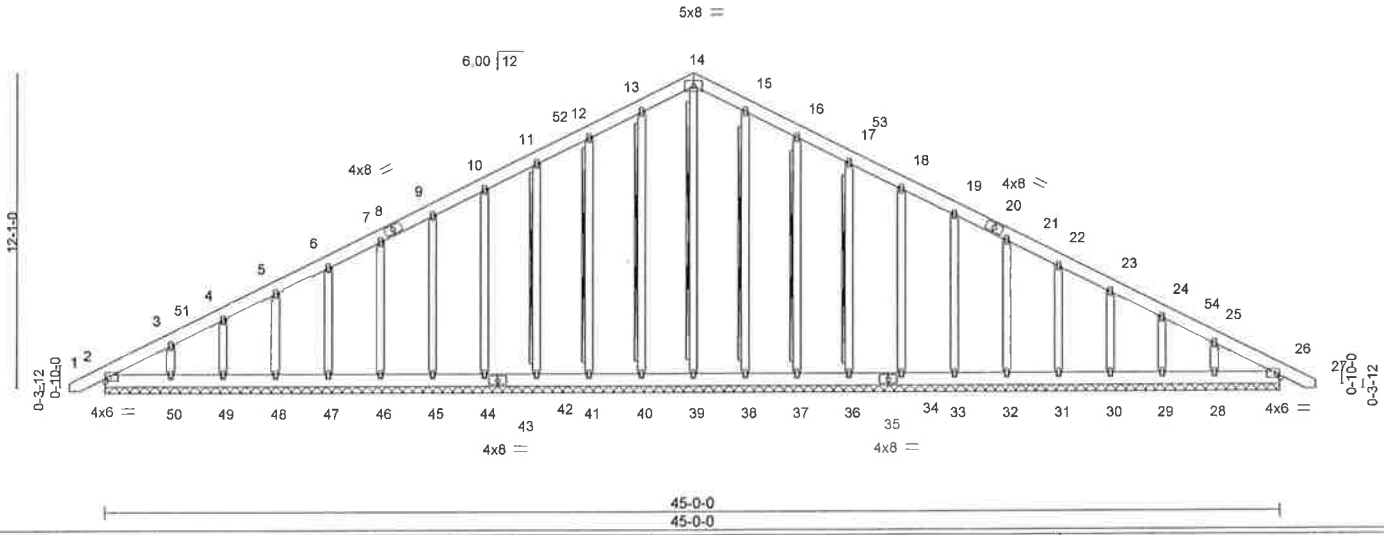
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANS/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601</p>	<p>ENGINEERING BY TRENCO A MiTek Affiliate</p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0121-0101	Truss A1GE	Truss Type COMMON SUPPORTED GAB	Qty 2	Ply 1	Glover Residence	E15280076
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Comtech, Inc., Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 6 15:43:45 2021 Page 1
 ID:pdPzA5by7CWsCzcmYVa69zy2HB-rUsZWzmTvlFceNTZfPNUn40VpCxnzGmd0JKXzy1Pi



Scale = 1:83.2



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.07	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.02	Vert(LL) -0.00 26 n/r 120		
BCLL 0.0	Lumber DOL 1.15	WB 0.15	Vert(CT) -0.00 26 n/r 120		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.01 26 n/a n/a		
	Code IRC2015/TPI2014			Weight: 416 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 10-0-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
 WEBS T-Brace: 2x4 SPF No.2 - 14-39, 13-40, 12-41, 11-42, 15-38, 16-37, 17-36
 Fasten (2X) T and I braces to narrow edge of web with 10d (0.131"x3") nails, 6in o.c., with 3in minimum end distance.
 Brace must cover 90% of web length.

REACTIONS. All bearings 45-0-0.
 (lb) - Max Horz 2=154(LC 10)
 Max Uplift All uplift 100 lb or less at joint(s) 2, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28
 Max Grav All reactions 250 lb or less at joint(s) 2, 39, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28, 26

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 10-11=-98/289, 11-12=-118/348, 12-13=-141/412, 13-14=-151/444, 14-15=-151/445, 15-16=-141/413, 16-17=-118/350, 17-18=-98/291

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Corner(3) -1-2-2 to 3-3-14, Exterior(2) 3-3-14 to 22-6-0, Corner(3) 22-6-0 to 27-0-0, Exterior(2) 27-0-0 to 46-2-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 40, 41, 42, 44, 45, 46, 47, 48, 49, 50, 38, 37, 36, 34, 33, 32, 31, 30, 29, 28.
 - Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



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

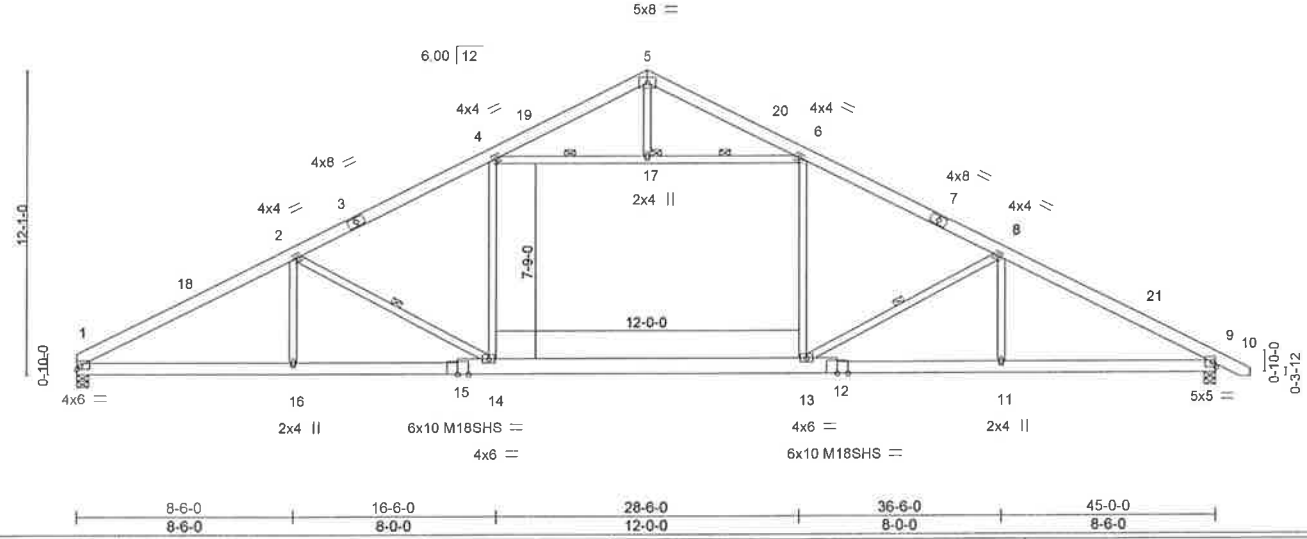
ENGINEERING BY TRENCO
 A MiTek Affiliate
 818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Glover Residence	E15280077
J0121-0101	A2	COMMON	11	1		

Comtech, Inc, Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MITek Industries, Inc. Wed Jan 6 15:43:46 2021 Page 1
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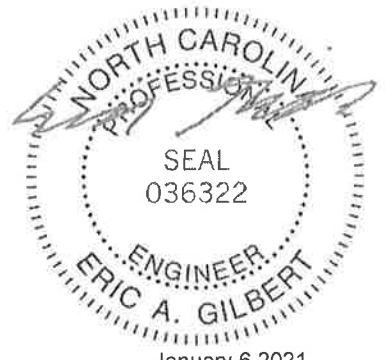
LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.63	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.83	Vert(LL) -0.49 14-16 >999 360	M18SHS	244/190
BCLL 0.0 *	Lumber DOL 1.15	WB 0.30	Vert(CT) -0.58 14-16 >918 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	WB (CT) 0.10 9 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.24 14-16 >999 240	Weight: 322 lb	FT = 20%

LUMBER-	BRACING-
TOP CHORD 2x6 SP No.1	TOP CHORD Structural wood sheathing directly applied or 3-10-12 oc purlins.
BOT CHORD 2x6 SP No.1 *Except*	BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
12-15: 2x8 SP 2400F 2.0E	WEBS 1 Row at midpt 8-13, 2-14, 4-17, 6-17
WEBS 2x4 SP No.2	JOINTS 1 Brace at Jt(s): 17

REACTIONS. (size) 1=0-5-8, 9=0-5-8
 Max Horz 1=-155(LC 10)
 Max Uplift 1=-106(LC 12), 9=-126(LC 13)
 Max Grav 1=1834(LC 2), 9=1907(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-2=-3309/643, 2-4=-2883/610, 4-5=-623/266, 5-6=-624/265, 6-8=-2882/597, 8-9=-3320/609
 BOT CHORD 1-16=-434/2917, 14-16=-434/2919, 13-14=-239/2494, 11-13=-415/2830, 9-11=-415/2825
 WEBS 6-13=0/756, 8-13=-790/251, 8-11=-29/293, 4-14=0/759, 2-14=-803/252, 2-16=-25/297, 4-17=-2041/430, 6-17=-2041/430

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-2-12 to 4-8-12, Interior(1) 4-8-12 to 22-6-0, Exterior(2) 22-6-0 to 27-0-0, Interior(1) 27-0-0 to 46-2-2 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - All plates are MT20 plates unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 1=106, 9=126.



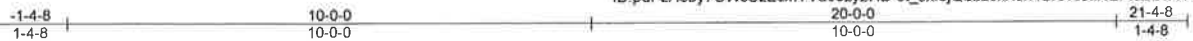
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use,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

ENGINEERING BY
TRENCO
 A Mitek Alliance
 818 Soundside Road
 Edenton, NC 27932

Job J0121-0101	Truss B1	Truss Type COMMON	Qty 4	Ply 1	Glover Residence	E15280078
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Comtech, inc, Fayetteville, NC - 28314,

8,330 s Oct 7 2020 MITEK Industries, Inc. Wed Jan 6 15:43:47 2021 Page 1
ID:pdPzA5by7CWsCzZcmYVa69zy2HB-ot_JxfojQabzxxXsh4SrevsJIINEPfsZDwVPPPzy1Pg



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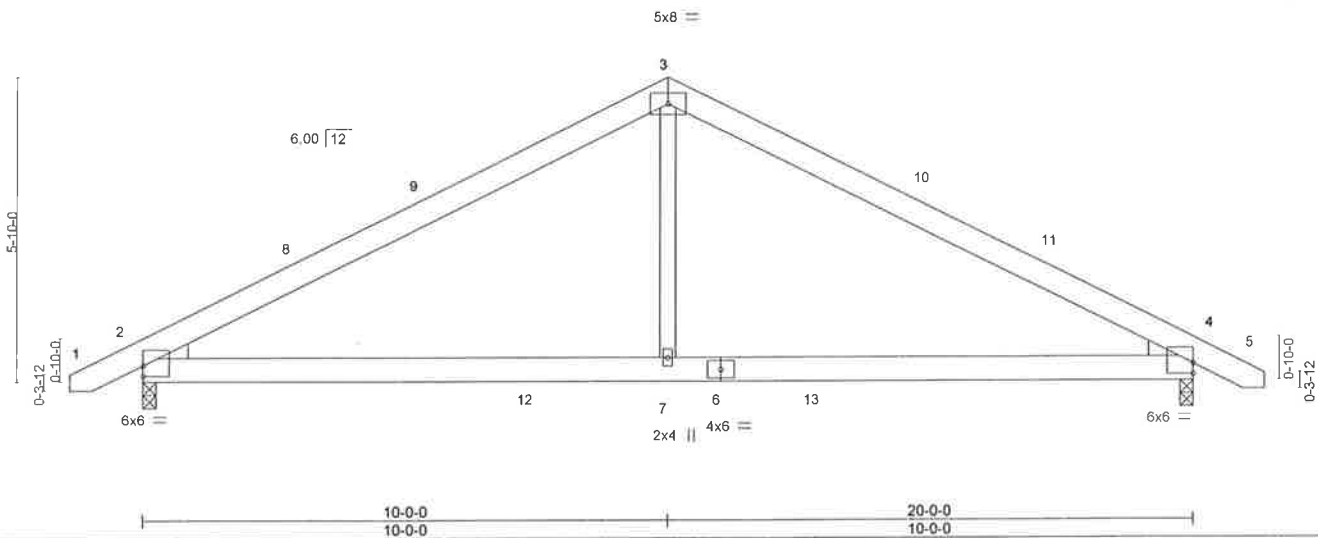


Plate Offsets (X,Y) -- [2:Edge,0-2-7], [4:Edge,0-2-7]

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 0.49	Vert(LL)	0.14	4-7	>999	240	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.50	Vert(CT)	-0.12	4-7	>999	240		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.26	Horz(CT)	0.02	4	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 116 lb	FT = 20%

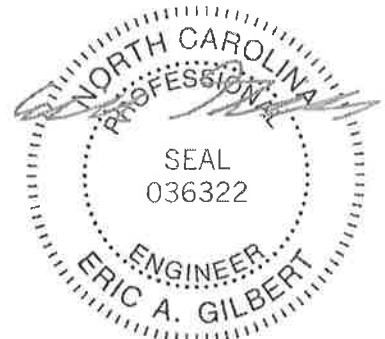
LUMBER-
TOP CHORD 2x6 SP No.1
BOT CHORD 2x6 SP No.1
WEBS 2x4 SP No.2
WEDGE
Left: 2x4 SP No.3 , Right: 2x4 SP No.3

BRACING-
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 8-7-12 oc bracing.

REACTIONS. (size) 4=0-3-0, 2=0-3-0
Max Horz 2=73(LC 11)
Max Uplift 4=-179(LC 8), 2=-179(LC 9)
Max Grav 4=879(LC 2), 2=879(LC 2)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1198/976, 3-4=-1198/976
BOT CHORD 2-7=-704/955, 4-7=-704/955
WEBS 3-7=-557/561

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vu11=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-2-2 to 3-2-11, Interior(1) 3-2-11 to 10-0-0, Exterior(2) 10-0-0 to 14-4-13, Interior(1) 14-4-13 to 21-2-2 zone; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 4=179, 2=179.



January 6, 2021

Job	Truss	Truss Type	Qty	Ply	Glover Residence	E15280079
J0121-0101	B1GE	GABLE	1	1		

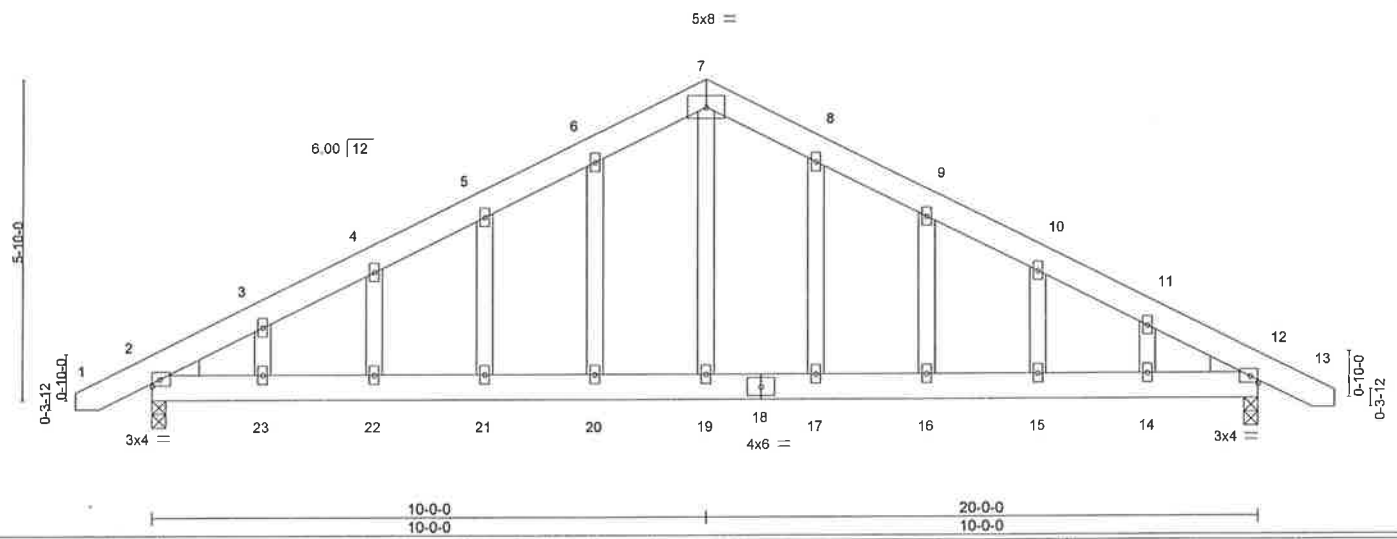
Job Reference (optional)

Comtech, Inc., Fayetteville, NC - 28314,

8.330 s Oct 7 2020 MiTek Industries, Inc Wed Jan 6 15:43:48 2021 Page 1
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Scale = 1:39.3



LOADING (psf)	SPACING-	CSI,	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.21	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(LL) -0.09 15-16 >999 360		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.14 15-16 >999 240		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.02 12 n/a n/a		
	Code IRC2015/TPI2014		Wind(LL) 0.10 21-22 >999 240	Weight: 145 lb	FT = 20%

LUMBER-
 TOP CHORD 2x6 SP No.1
 BOT CHORD 2x6 SP No.1
 WEBS 2x4 SP No.2
 OTHERS 2x4 SP No.2
 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. (size) 12=0-3-0, 2=0-3-0
 Max Horz 2=113(LC 12)
 Max Uplift 12=-198(LC 13), 2=-198(LC 12)
 Max Grav 12=868(LC 1), 2=868(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-1110/300, 3-4=-1007/328, 4-5=-971/368, 5-6=-943/410, 6-7=-920/460,
 7-8=-920/460, 8-9=-943/410, 9-10=-971/368, 10-11=-1007/328, 11-12=-1110/300
 BOT CHORD 2-23=-172/855, 22-23=-172/855, 21-22=-172/855, 20-21=-172/855, 19-20=-172/855,
 17-19=-172/855, 16-17=-172/855, 15-16=-172/855, 14-15=-172/855, 12-14=-172/855
 WEBS 7-19=-221/479

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; VuII=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf, BCDL=6.0psf; h=15ft; Cal. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
 - 4) All plates are 2x4 MT20 unless otherwise indicated.
 - 5) Gable studs spaced at 2'-0-0 oc.
 - 6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 7) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3'-6-0 tall by 2'-0-0 wide will fit between the bottom chord and any other members.
 - 8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 12=198, 2=198.



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

ENGINEERING BY
TRENCO
 A MiTek Affiliate

818 Soundside Road
 Edenton, NC 27932

Job J0121-0101	Truss M1	Truss Type MONOPITCH	Qty 11	Ply 1	Glover Residence	E15280080
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Comtech, Inc. Fayetteville, NC - 28314, 8 330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 6 15:43:48 2021 Page 1
 ID:pdPzA5by7CWsCzZcmYVa69zy2HB-G3Xh9?pMBujqT562Foz4A7PXmikw833iSaFzxszy1Pf

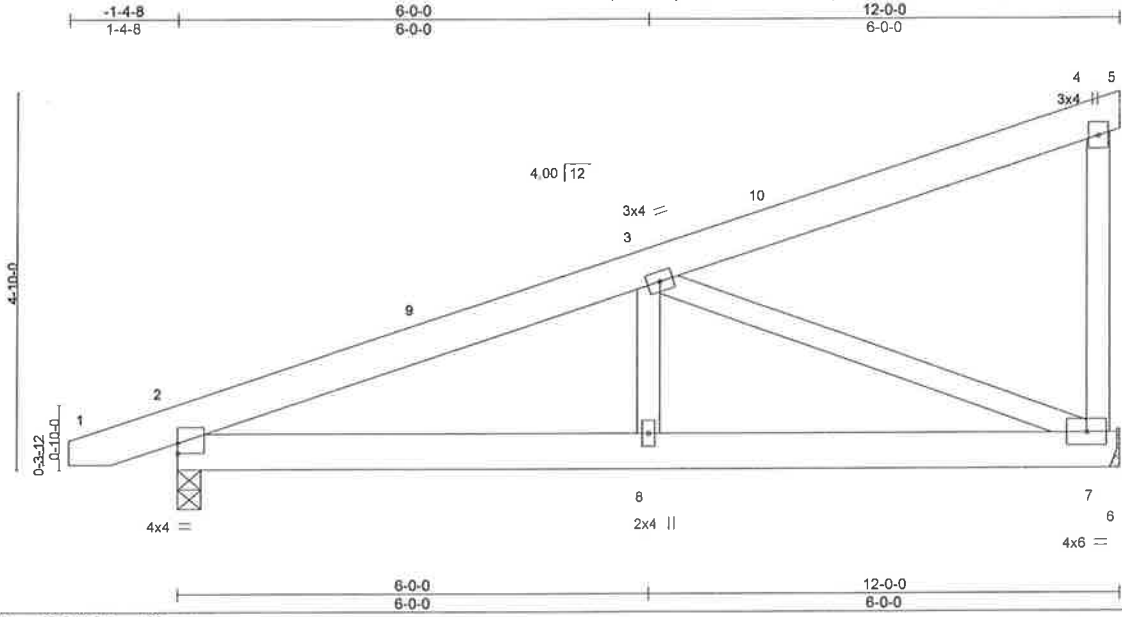


Plate Offsets (X,Y) - [2-0-0,0,0-1-10]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.32	Vert(LL)	0.03	2-8	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.41	Vert(CT)	-0.03	2-8	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.45	Horz(CT)	0.01	7	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TP12014						Weight: 78 lb	FT = 20%

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

BRACING-
 TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 9-0-4 oc bracing.

REACTIONS. (size) 7=Mechanical, 2=0-3-8
 Max Horz 2=142(LC 8)
 Max Uplift 7=203(LC 8), 2=200(LC 8)
 Max Grav 7=470(LC 1), 2=543(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-766/630
 BOT CHORD 2-8=-729/657, 7-8=-729/657
 WEBS 3-8=-330/267, 3-7=-698/773

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) -1-1-7 to 3-3-6, Interior(1) 3-3-6 to 12-0-0 zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 3) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 4) Refer to girder(s) for truss to truss connections.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 7=203, 2=200.



January 6, 2021

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TP1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

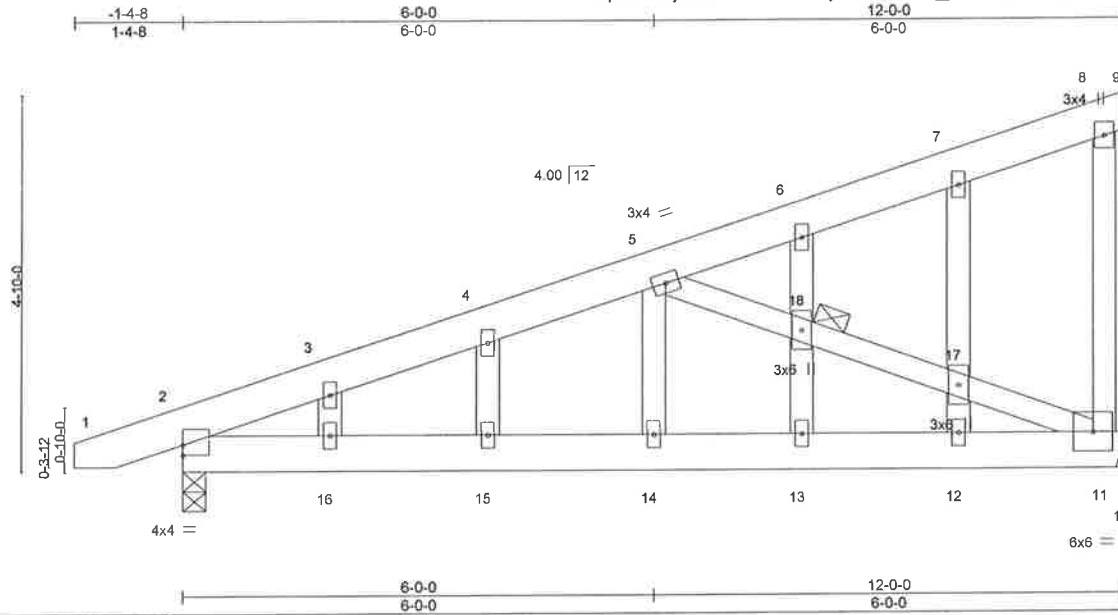


818 Soundside Road
 Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Glover Residence	E15280081
J0121-0101	M1GE	GABLE	2	1		

Comtech, Inc. Fayetteville, NC - 28314,

8 330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 6 15:43:49 2021 Page 1
ID:pdPzA5by7CWsCzZcmYVa89zy2HB-kF54MLq_yBrh5FgFoVUJjkykM672taEsgE_WTIzy1Pe



Scale = 1:27.6

Plate Offsets (X, Y) - [2-0-0-0-0-1-10]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.17	Vert(LL)	0.03	13	>999	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.22	Vert(CT)	-0.03	13	>999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.20	Horz(CT)	-0.01	11	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S						
	Code IRC2015/TPI2014						Weight: 89 lb	FT = 20%

LUMBER-

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

BRACING-

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 8-5-5 oc bracing.
JOINTS 1 Brace at Jt(s): 18

REACTIONS.

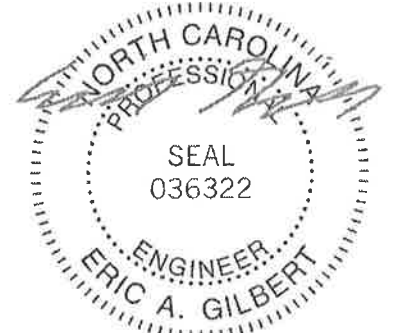
(size) 11=Mechanical, 2=0-3-8
Max Horz 2=204(LC 8)
Max Uplift 11=300(LC 8), 2=290(LC 8)
Max Grav 11=470(LC 1), 2=543(LC 1)

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

TOP CHORD 2-3=-760/729, 3-4=-688/709, 4-5=-664/714
BOT CHORD 2-16=-839/631, 15-16=-839/631, 14-15=-839/631, 13-14=-839/631, 12-13=-839/631, 11-12=-839/631
WEBS 5-14=-292/188, 5-18=-672/896, 17-18=-659/877, 11-17=-685/911

NOTES-

- 1) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) gable end zone and C-C Exterior(2) zone; porch left exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
- 3) All plates are 2x4 MT20 unless otherwise indicated.
- 4) Gable studs spaced at 2-0-0 oc.
- 5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 6) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 7) 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) except (jt=ib) 11=300, 2=290.



January 6, 2021

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

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



818 Soundside Road
Edenton, NC 27932

Job J0121-0101	Truss V1	Truss Type VALLEY	Qty 1	Ply 1	Glover Residence E15280082
Comtech, Inc, Fayetteville, NC - 28314,					Job Reference (optional)

8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 6 15:43:50 2021 Page 1
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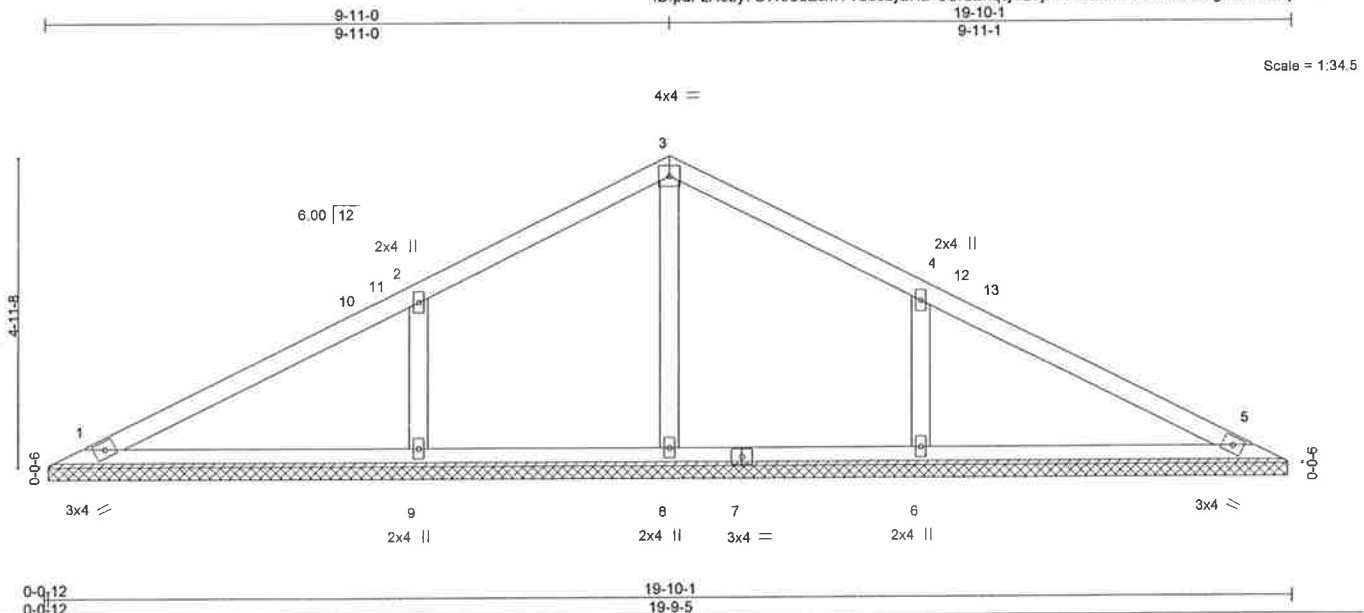


Plate Offsets (X,Y) - [4:0-0-0,0-0-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.26	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.16	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.06	Horz(CT)	0.00	5	n/a		
BCDL 10.0	Rep Stress Incr YES	Matrix-S					Weight: 74 lb	FT = 20%
	Code IRC2015/TPI2014							

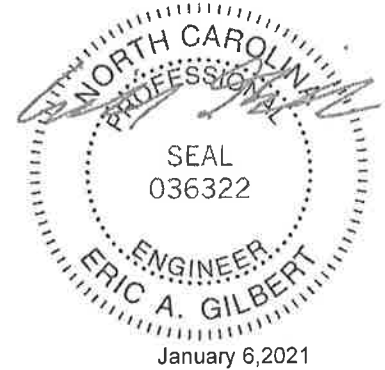
LUMBER-
 TOP CHORD 2x4 SP No.1
 BOT CHORD 2x4 SP No.1
 OTHERS 2x4 SP No.2

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

REACTIONS. All bearings 19-8-9.
 (b) - Max Horz 1=61(LC 11)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 5, 9, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5, 8 except 9=461(LC 23), 6=461(LC 24)

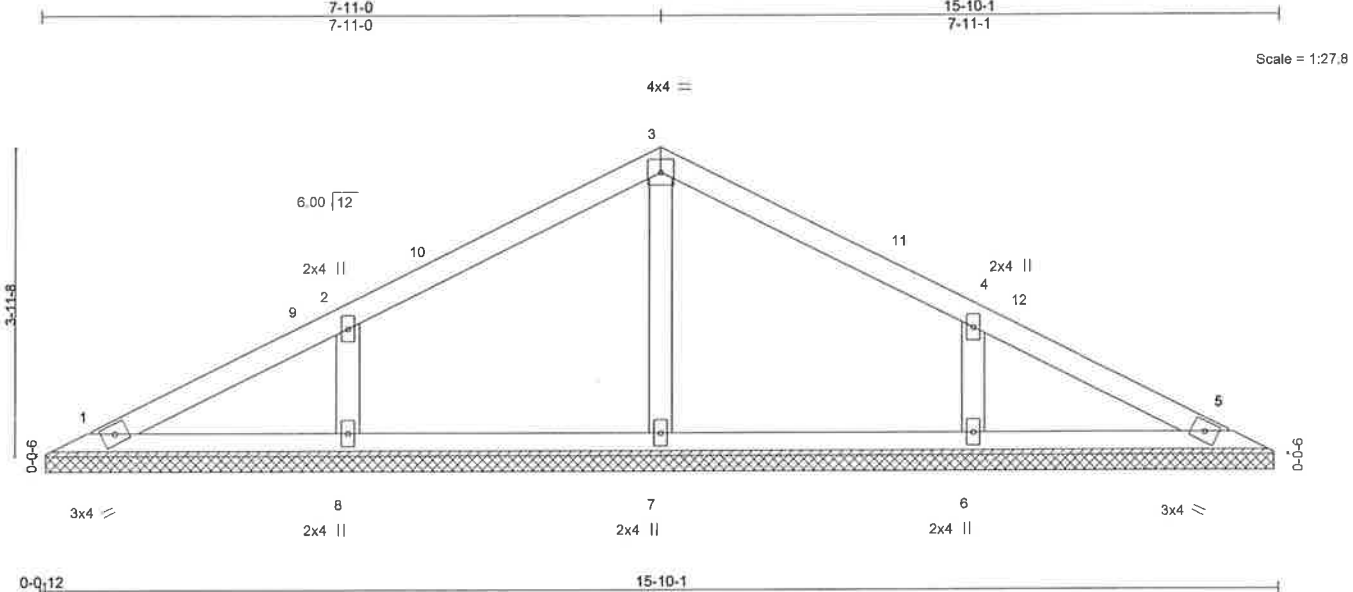
FORCES. (b) - Max, Comp./Max, Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-9=-338/235, 4-6=-338/235

- NOTES-**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 9-11-0, Exterior(2) 9-11-0 to 14-3-13, Interior(1) 14-3-13 to 19-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 5, 9, 6.
 - Non Standard bearing condition. Review required.



Job J0121-0101	Truss V2	Truss Type VALLEY	Qty 1	Ply 1	Glover Residence	E15280083
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Comtech, Inc. Fayetteville, NC - 28314, 8 330 s Oct 7 2020 MITek Industries, Inc. Wed Jan 6 15:43:51 2021 Page 1
 ID:pdPzA5by7CWsCzZcmYVa69zy2HB-gsDqn1rEUp5OKZqdwWwhol14IvrlX688YTdYBzy1Pc



Scale = 1:27.8

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

LOADING (psf)	SPACING-	2-0-0	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP	
TCLL 20.0	Plate Grip DOL	1,15	TC 0.15	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1,15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.05	Horz(CT)	0.00	5	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-S						Weight: 57 lb	FT = 20%

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

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

REACTIONS. All bearings 15-8-9.
 (lb) - Max Horz 1=48(LC 8)
 Max Uplift All uplift 100 lb or less at joint(s) 1, 8, 6
 Max Grav All reactions 250 lb or less at joint(s) 1, 5 except 7=272(LC 1), 8=344(LC 23), 6=344(LC 24)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 WEBS 2-8=260/202, 4-6=260/202

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 7-11-0, Exterior(2) 7-11-0 to 12-3-13, Interior(1) 12-3-13 to 15-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 8, 6.
 - 6) Non Standard bearing condition. Review required.

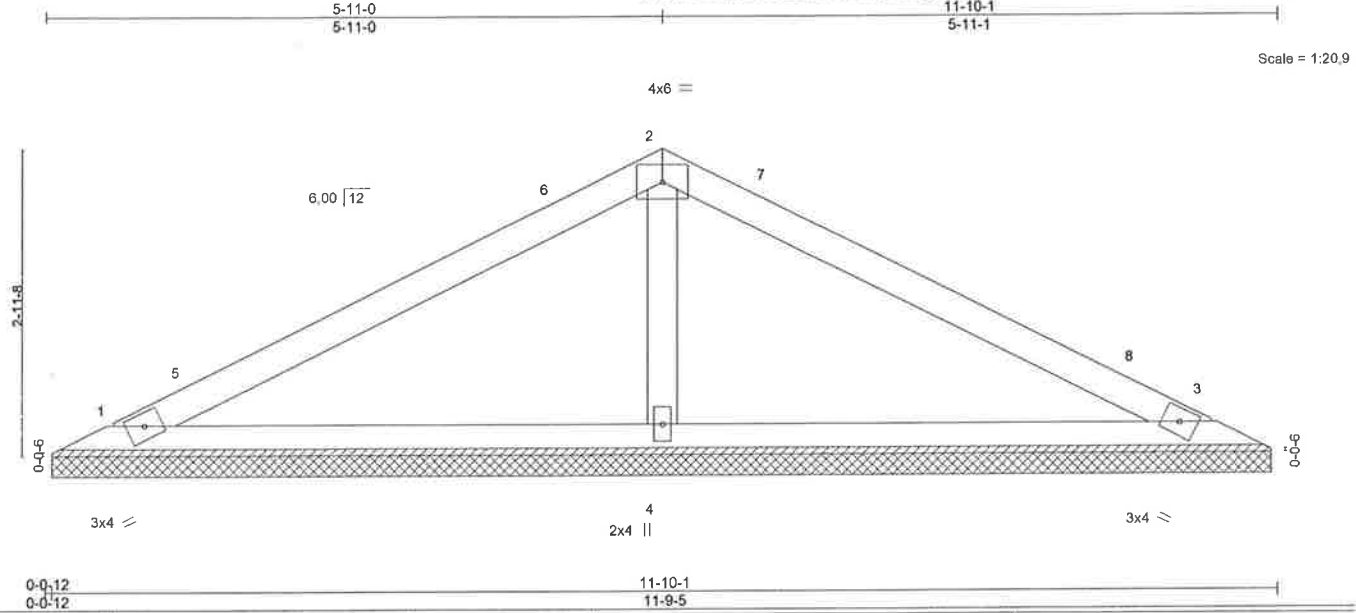


WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-1473 rev. 5/19/2020 BEFORE USE.
 Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSITPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20601

ENGINEERING BY
TRENCO
 A MITek Affiliate
 818 Soundside Road
 Edenon, NC 27932

Job J0121-0101	Truss V3	Truss Type VALLEY	Qty 1	Ply 1	Glover Residence E15280084
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Comtech, Inc. Fayetteville, NC - 28314, 8.330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 6 15:43:51 2021 Page 1
 ID:pdPzA5by7CWsCzZcmYVa69zy2HB-geDqn1rEUp5OKZqdwwWnol12_vprLX688YTdYBzy1Pc



LOADING (psf)	SPACING-	CSI.	DEFL.	PLATES	GRIP
TCLL 20.0	2-0-0	TC 0.29	in (loc) l/defl L/d	MT20	244/190
TCDL 10.0	Plate Grip DOL 1.15	BC 0.20	Vert(LL) n/a - n/a 999		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.05	Vert(CT) n/a - n/a 999		
BCDL 10.0	Rep Stress Incr YES	Matrix-S	Horz(CT) 0.00 3 n/a n/a		
	Code IRC2015/TPI2014			Weight: 38 lb	FT = 20%

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

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

REACTIONS. (size) 1=11-8-9, 3=11-8-9, 4=11-8-9
 Max Horz 1=35(LC 9)
 Max Uplift 1=26(LC 12), 3=32(LC 13)
 Max Grav 1=195(LC 23), 3=195(LC 24), 4=456(LC 1)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
WEBS 2-4=302/187

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) 0-7-13 to 5-0-10, Interior(1) 5-0-10 to 5-11-0, Exterior(2) 5-11-0 to 10-3-13, Interior(1) 10-3-13 to 11-2-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 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.



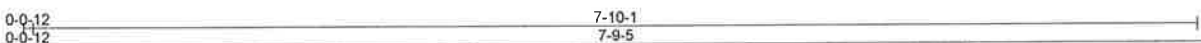
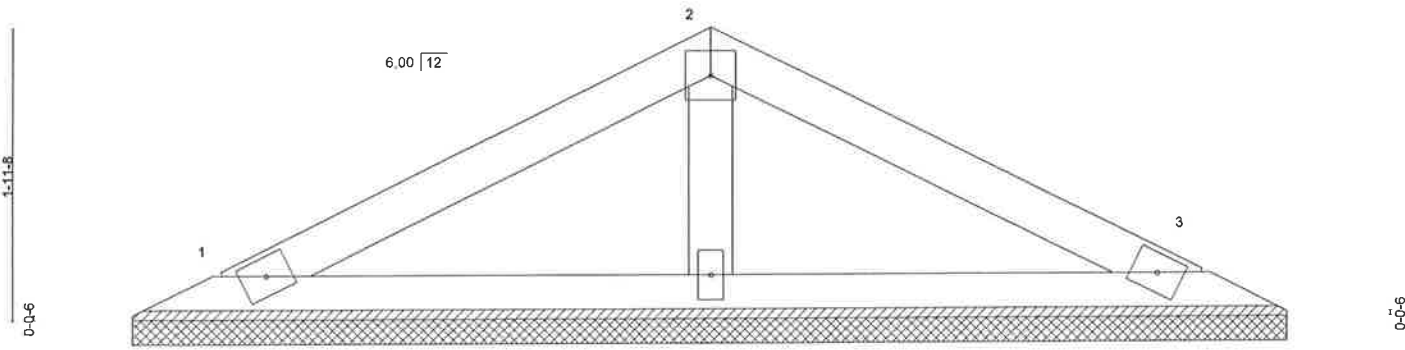
<p>WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information available from Truss Plate Institute, 2670 Crain Highway, Suite 203 Waldorf, MD 20801</p>	<p>ENGINEERING BY TRENCO <small>A MITEK Affiliate</small></p> <p>818 Soundside Road Edenton, NC 27932</p>
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Job J0121-0101	Truss V4	Truss Type VALLEY	Qty 1	Ply 1	Glover Residence	E15280085
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Comtech, Inc. Fayetteville, NC - 28314, 8 330 s Oct 7 2020 MITek Industries, Inc. Wed Jan 6 15:43:52 2021 Page 1
 ID:pdPzA5by7CWsCzZcmYVa69zy2HB-8qnC_NssF6DFyiPPUe10LzaF3JB?4_kINCD4dzy1Pb



Scale = 1:14.5



LOADING (psf)	SPACING-	2-0-0	CSI,	DEFL.	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL 20.0	Plate Grip DOL	1.15	TC 0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.08	Vert(CT)	n/a	-	n/a	999		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.02	Horz(CT)	0.00	3	n/a	n/a		
BCDL 10.0	Code	IRC2015/TPI2014	Matrix-P						Weight: 24 lb	FT = 20%

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

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

REACTIONS. (size) 1=7-8-9, 3=7-8-9, 4=7-8-9
 Max Horz 1=-21(LC 8)
 Max Uplift 1=-21(LC 12), 3=-25(LC 13)
 Max Grav 1=133(LC 1), 3=133(LC 1), 4=256(LC 1)

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

- NOTES-**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
 - 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
 - 6) Non Standard bearing condition. Review required.



Job	Truss	Truss Type	Qty	Ply	Glover Residence	E15280086
J0121-0101	V5	VALLEY	1	1		

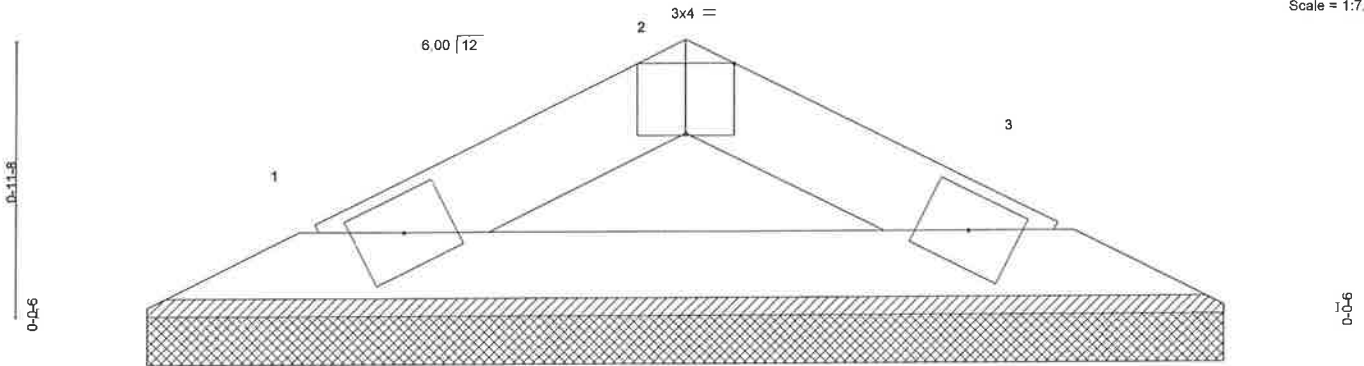
Job Reference (optional)

Comtech, Inc. Fayetteville, NC - 28314,

8 330 s Oct 7 2020 MiTek Industries, Inc. Wed Jan 6 15:43:53 2021 Page 1
 ID:pdPzA5by7CWsCzZcmYVa69zy2HB-c1LaCjtU0QL6as_01LYFtA6SgXbpRLRbsykd3zy1Pa



Scale = 1:7.5



0-0-12
0-0-12

3-10-1
3-9-5

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 0.03	Vert(LL)	n/a	-	n/a	MT20	244/190
TCDL 10.0	Lumber DOL	1.15	BC 0.06	Vert(CT)	n/a	-	n/a		
BCLL 0.0 *	Rep Stress Incr	YES	WB 0.00	Horz(CT)	0.00	3	n/a		
BCDL 10.0	Code IRC2015/TPI2014		Matrix-P						
								Weight: 10 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 3-10-1 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

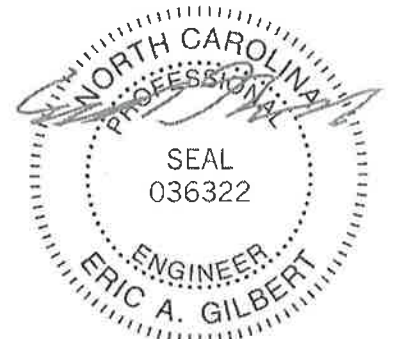
REACTIONS.

(size) 1=3-8-9, 3=3-8-9
 Max Horz 1=8(LC 10)
 Max Uplift 1=6(LC 12), 3=6(LC 13)
 Max Grav 1=101(LC 1), 3=101(LC 1)

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

NOTES-

- 1) Unbalanced roof live loads have been considered for this design.
- 2) Wind: ASCE 7-10; Vult=130mph (3-second gust) Vasd=103mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; Cat. II; Exp C; Enclosed; MWFRS (envelope) and C-C Exterior(2) zone;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 3) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 4) * This truss has been designed for a live load of 30.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 1, 3.
- 6) Non Standard bearing condition. Review required.



January 6, 2021

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

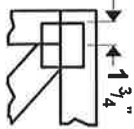
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall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



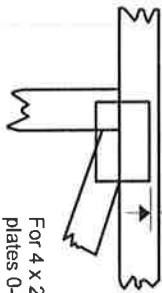
818 Soundside Road
 Edenton, NC 27932

Symbols

PLATE LOCATION AND ORIENTATION



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



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



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

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

PLATE SIZE

4 X 4

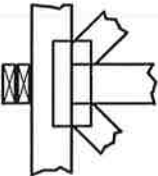
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING



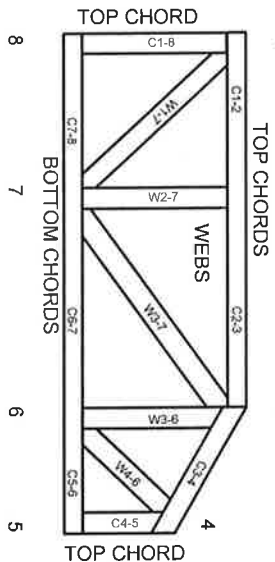
Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

Industry Standards:

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

Numbering System

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



JOINTS ARE GENERALLY NUMBERED/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/TP1 section 6.3. These truss designs rely on lumber values established by others.

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

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative for I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and 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/TP1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.