



# QUOTE # DP210201

DATE PRINTED: 02/08/21

PAGE 1

10401 CHAPEL HILL ROAD  
MORRISVILLE, NC 27560  
PHONE: (919) 467-9988 \* (800) 672-3129 \* FAX: (919) 481-3255  
SALESMAN: DAVE PHIPPS DESIGNER: DANNY OTTAWAY

**Valued Customer**  
PH:  
FAX:

**JAMES MORSE**  
621 NATCHEZ TRACE  
FUQUAY-VARINA,

**JOB NAME:** JAMES MORSE  
**LOT #:**           **MODEL:**  
**OPTIONS:**  
**CUSTOMER PO #:**  
**TERMS:** COD  
**SUPERINTENDENT:**  
CUSTOMER  
**ORDERED BY:**  
CUSTOMER

**JOB NOTES:**

**SPECIAL INSTRUCTIONS:**

**ROOF TRUSSES**                      TRUSS COUNT TOTAL: 13

PROFILE	QTY PLY	PITCH		TYPE	ID	SPAN	LUMBER		OVERHANG		CANTILEVER		STUB	
		TOP	BOT				TOP	BOT	LEFT	RIGHT	LEFT	RIGHT	LEFT	RIGHT
	11	7.00	0.00	COMMON	CT1	18-00-00	2 X 4	2 X 4	00-10-08	00-10-08				
	2	7.00	0.00	COMMON	CT1GE	18-00-00	2 X 4	2 X 4	00-10-08	00-10-08				

TRUSS WEIGHT TOTAL: 1,101.57

ROOF SUB-TOTAL: \$ 1,300.00

**GENERAL TERMS AND CONDITIONS:**

- \* Lumber: SYP KD 19% #2 minimum chords #3 minimum webs
- \* Price includes hardware for Truss-To-Truss connections only.
- \* NO installation included in price.
- \* Temporary and Permanent Bracing, which are the responsibility of the contractor, are not included.

- \* Approved truss drawings are required before fabrication of trusses. The approval of Shop Drawings for fabrication is the final contract document required by Truss Builders, Inc.
- \* Upon receipt of approved drawings, a delivery date will be assigned.
- \* Sealed drawings will be furnished upon delivery of trusses, when requested.

SUB-TOTAL	\$1,300.00
DELIVERY	\$85.00
SUB-TOTAL	\$1,385.00
SALES TAX 7.250%	\$100.41
<b>GRAND TOTAL</b>	<b>\$1,485.41</b>
DEPOSIT PAID	\$321.00
<b>BALANCE DUE</b>	<b>\$1,164.41</b>

**ADDITIONAL TERMS AND CONDITIONS:**

- \* It is understood that I, the undersigned, have verified the dimensions of these trusses, especially their outer configurations, and the quantities listed.
- \* I, the undersigned, also understand the format used to describe the trusses listed, or a picture has drawn for me to understand the format.
- \* I, the undersigned, therefore accept complete responsibility that I am buying these trusses as described on this form.
- \* It is also understood that Truss Builders, Inc. will deliver the trusses listed F.O. B. (Freight On Board) to the indicated jobsite address at the street nearest the job. I, the customer, have the responsibility of unloading and placing the trusses where I desire.
- \* If the jobsite does not have equipment available to use to unload the trusses and a request is made by the undersigned, or his agent on site, asking that Truss Builders, Inc. unload/dump them, then Truss Builders, Inc. will do so at the risk and responsibility for any broken trusses and for inappropriate placement passed on to me, the undersigned.

**NOTICE TO OWNER:** Failure to pay those person supplying material or services to complete this project can result in the filing of a mechanic's lien of the property.

**BACKCHARGE NOTICE:** Backcharges will not be accepted, regardless of fault, without prior notification and approval.

**Thank you for your business.**

QUOTE # DP210201

By signing this document, the customer is in agreement with all terms and conditions.

PRICE IS SUBJECT TO REVISION IF ANY ENGINEERING CHANGES ARE REQUIRED.

\* Truss Builders, Inc. is a Minority Owned Business. (Disabled)

Signature

Date

18-00-00

24-00-00

24-00-00

CT1GE

CT1(11)

CT1GE

18-00-00



10401 Chapel Hill Rd  
Morrisville, NC 27560  
Ph. 919-467-9988  
Fax. 919-481-3255

DP210201  
JAMES MORSE  
621 NATCHEZ TRACE  
FUQUAY-VARINA, NC

**Trenco**  
818 Soundside Rd  
Edenton, NC 27932

Re: DP210201  
JAMES MORSE

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

Pages or sheets covered by this seal: I44703494 thru I44703495

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

North Carolina COA: C-0844



February 8, 2021

Johnson, Andrew

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

Job	Truss	Truss Type	Qty	Ply	JAMES MORSE	M4703494
DP210201	CT1	Common	11	1		

Truss Builders, Inc., Morrisville, NC

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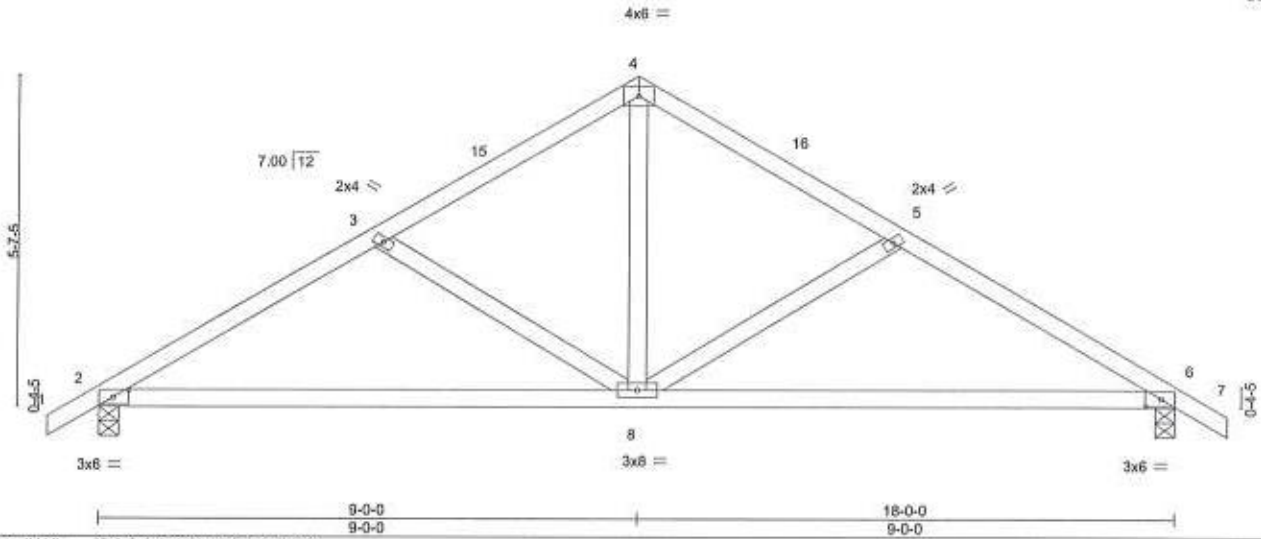


Plate Offsets (X,Y)--	[2-0-3-3,0-1-8], [6-0-3-3,0-1-8]				
<b>LOADING</b> (psf)	<b>SPACING-</b>	<b>CSL</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL (roof) 20.0	2-0-0	TC 0.37	in (loc) l/def L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.75	Vert(LL) -0.11 8-14 >999 240		
TCDL 10.0	Lumber DOL 1.15	WB 0.21	Vert(CT) -0.23 8-14 >944 180		
BCLL 0.0	Rep Stress Incr YES	Matrix-MR	Horz(CT) 0.02 6 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 83 lb	FT = 6%

**LUMBER-**

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

**BRACING-**

TOP CHORD Structural wood sheathing directly applied or 5-2-13 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.**

(size) 2=0-4-0, 6=0-4-0  
 Max Horz 2=-111(LC 10)  
 Max Uplift 2=-29(LC 12), 6=-29(LC 13)  
 Max Grav 2=773(LC 2), 6=773(LC 2)

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

TOP CHORD 2-3=-1081/55, 3-4=-828/43, 4-5=-828/43, 5-6=-1081/55  
 BOT CHORD 2-8=-53/908, 6-8=0/908  
 WEBS 4-8=0/546, 5-8=-312/116, 3-8=-312/115

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- \* This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 1-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 2 and 29 lb uplift at joint 6.



February 8, 2021

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

ENGINEERED BY  
**TRENCO**  
 A MiTek Alliance  
 818 Soundside Road  
 Edenton, NC 27932

Job DP210201	Truss CT1GE	Truss Type Common Supported Gable	Qty 2	Ply 1	JAMES MORSE	144703495
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Truss Builders, Inc., Morrisville, NC

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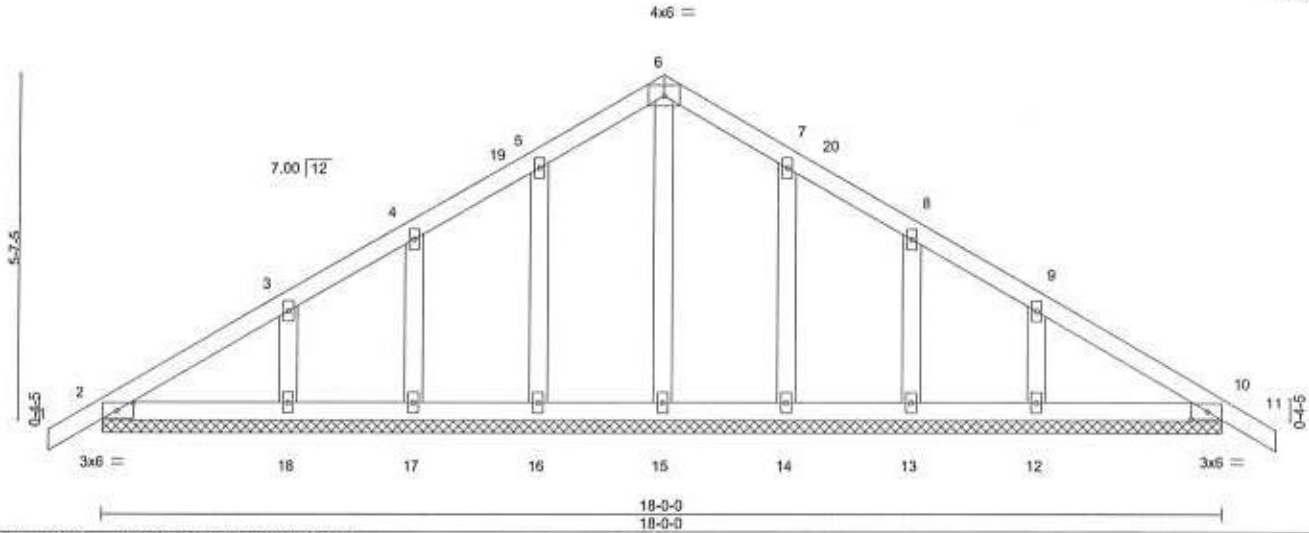


Plate Offsets (X,Y) - [2'-0-3'-3'-0-1'-8"], [10'-0-3'-3'-0-1'-8"]

LOADING (psf)	SPACING	CSI	DEFL	PLATES	GRIP
TCLL (roof) 20.0	2'-0'-0	TC 0.09	in (loc) l/defl L/d	MT20	244/190
Snow (Pf) 15.0	Plate Grip DOL 1.15	BC 0.06	Vert(LL) 0.00 10 n/r 120		
TCDL 10.0	Lumber DOL 1.15	WB 0.06	Vert(CT) 0.00 11 n/r 120		
BCLL 0.0	Rep Stress Incr YES	Matrix-R	Horz(CT) 0.00 10 n/a n/a		
BCDL 10.0	Code IBC2015/TPI2014			Weight: 93 lb	FT = 6%

**LUMBER-**

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

**BRACING-**

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

**REACTIONS.**

All bearings 18'-0'-0.  
(lb) - Max Horz 2--111(LC 10)  
Max Uplift All uplift 100 lb or less at joint(s) 2, 16, 17, 18, 14, 13, 12  
Max Grav All reactions 250 lb or less at joint(s) 2, 10, 15, 16, 17, 18, 14, 13, 12

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

**NOTES-**

- Unbalanced roof live loads have been considered for this design.
- Wind: ASCE 7-10; Vult=115mph (3-second gust) Vasd=91mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (envelope) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.33 plate grip DOL=1.33
- 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.
- TCLL: ASCE 7-10; Pr=20.0 psf (roof live load; Lumber DOL=1.15 Plate DOL=1.15); Pf=15.0 psf (flat roof snow; Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp B; Fully Exp.; Ct=1.10
- Unbalanced snow loads have been considered for this design.
- This truss has been designed for greater of min roof live load of 12.0 psf or 2.00 times flat roof load of 15.0 psf on overhangs non-concurrent with other live loads.
- 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 20.0psf on the bottom chord in all areas where a rectangle 3'-6"-0 tall by 1'-0"-0 wide will fit between the bottom chord and any other members, with BCDL = 10.0psf.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 2, 16, 17, 18, 14, 13, 12.



February 8, 2021

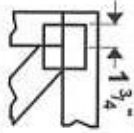
**WARNING -** Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MI-7473 rev. 5/19/2020 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before 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 20687



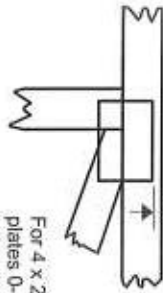
818 Soundside Road  
Edenton, NC 27932

# 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-<sup>1</sup>/<sub>16</sub>" 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

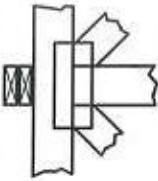
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

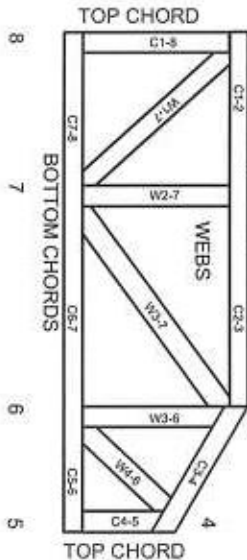


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

## Industry Standards:

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

# Numbering System



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/TPI 1 section 6.3. These truss designs rely on lumber values established by others.

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

# General Safety Notes

## Failure to Follow Could Cause Property Damage or Personal Injury

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