

RE: 4495532 - 1137 Anderson Creek

Trenco

818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: THE ASCOT CORPORATION Project Name:
Lot/Block: 1137 Subdivision: ANDERSON CREEK
Address: GRADUATE CT
City: SPRING LAKE State: NC

Name Address and License # of Structural Engineer of Record, If there is one, for the building.

Name: License #:
Address:
City, County: State:

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

Design Code: IRC2021/TPI2014 Design Program: MiTek 20/20 8.8
Wind Code: ASCE 7-16 Design Method: MWFRS (Directional)/C-C hybrid Wind ASCE 7-16
Wind Speed: 120 mph
Roof Load: 40.0 psf Floor Load: N/A psf

This package includes 2 individual, dated Truss Design Drawings and 0 Additional Drawings.

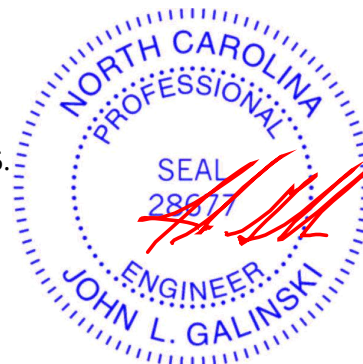
No.	Seal#	Job ID#	Truss Name	Date
1	I76639611	4495532	F01	
2	I76639612	4495532	F02	

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

Truss Design Engineer's Name: Galinski, John

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

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.



September 26, 2025

Galinski, John

RE: \$JOBNAME - \$JOBDESC

Trenco

818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: \$SI_CUSTOMER Project Name: \$SI_JOBNAME
Lot/Block: \$SI_LOTNUM Subdivision: \$SI_SUBDIV
Address: \$SI_SITEADDR
City, County: \$SI_SITECITY State: \$SI_SITESTATE

RE: \$JOBNAME - \$JOBDESC

Trenco

818 Soundside Rd
Edenton, NC 27932

Site Information:

Project Customer: \$SI_CUSTOMER Project Name: \$SI_JOBNAME
Lot/Block: \$SI_LOTNUM Subdivision: \$SI_SUBDIV
Address: \$SI_SITEADDR
City, County: \$SI_SITECITY State: \$SI_SITESTATE

Job	Truss	Truss Type	Qty	Ply	1137 Anderson Creek	I76639611
4495532	F01	Floor	3	1	Job Reference (optional)	

Builders FirstSource (Albermarle), Albermarle, NC - 28001,

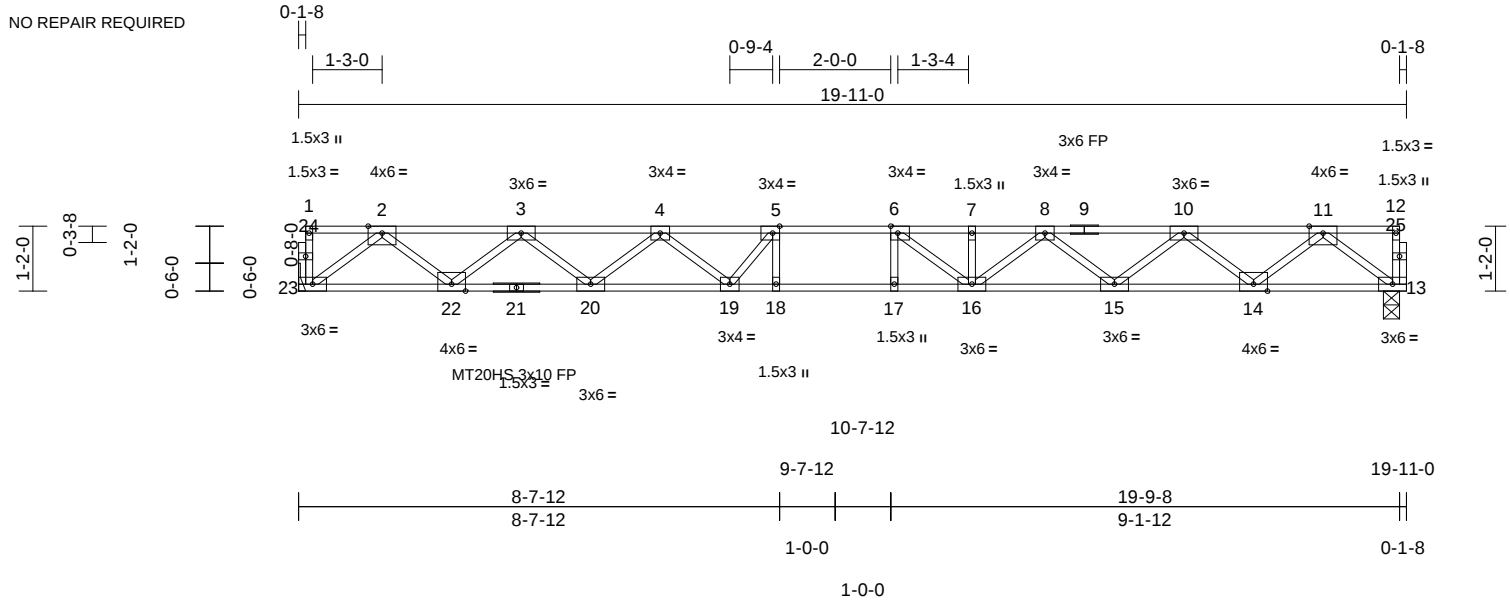
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CANTILEVER RIGHT END BY 1-1/2"

NO REPAIR REQUIRED



Scale = 1:41.4

Plate Offsets (X, Y): [5:0-1-8,Edge], [6:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.79	Vert(LL)	-0.42	17-18	>558	480	MT20HS	187/143
TCDL	15.0	Lumber DOL	1.00	BC	0.99	Vert(CT)	-0.64	17-18	>372	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.66	Horz(CT)	0.10	13	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 100 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD	2x4 SP No.1(flat) *Except* 9-12:2x4 SP No.2 (flat)
BOT CHORD	2x4 SP No.2(flat) *Except* 21-13:2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS (flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

BRACING

TOP CHORD	Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing. Except: 2-2-0 oc bracing: 20-22.

REACTIONS (lb/size) 13=1173/0-3-8, (min. 0-1-8), 23=1173/ Mechanical

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	23-24=-44/0, 1-24=-44/0, 13-25=-43/0, 12-25=-43/0, 1-2=-3/0, 2-3=-2538/0, 3-4=-4245/0, 4-5=-5256/0, 5-6=-5510/0, 6-7=-5292/0, 7-8=-5292/0, 8-9=-4244/0, 9-10=-4244/0, 10-11=-2538/0, 11-12=-3/0
BOT CHORD	22-23=0/1476, 21-22=0/3566, 20-21=0/3566, 19-20=0/4894, 18-19=0/5510, 17-18=0/5510, 16-17=0/5510, 15-16=0/4895, 14-15=0/3566, 13-14=0/1477
WEBS	5-18=-185/288, 6-17=-185/161, 2-23=-1849/0, 2-22=0/1382, 3-22=-1338/0, 3-20=0/884, 4-20=-844/0, 4-19=0/637, 5-19=-722/54, 11-13=-1849/0, 11-14=0/1382, 10-14=-1338/0, 10-15=0/883, 8-15=-848/0, 8-16=0/507, 7-16=-191/68, 6-16=-720/198

NOTES (7)

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) The Fabrication Tolerance at joint 21 = 11%

- 4) Bearings are assumed to be: , Joint 13 SP DSS or SS or 2400F 2.0E crushing capacity of 565 psi.
- 5) Refer to girder(s) for truss to truss connections.
- 6) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 7) This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



September 26, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	1137 Anderson Creek
4495532	F02	Floor	3	1	176639612
Job Reference (optional)					

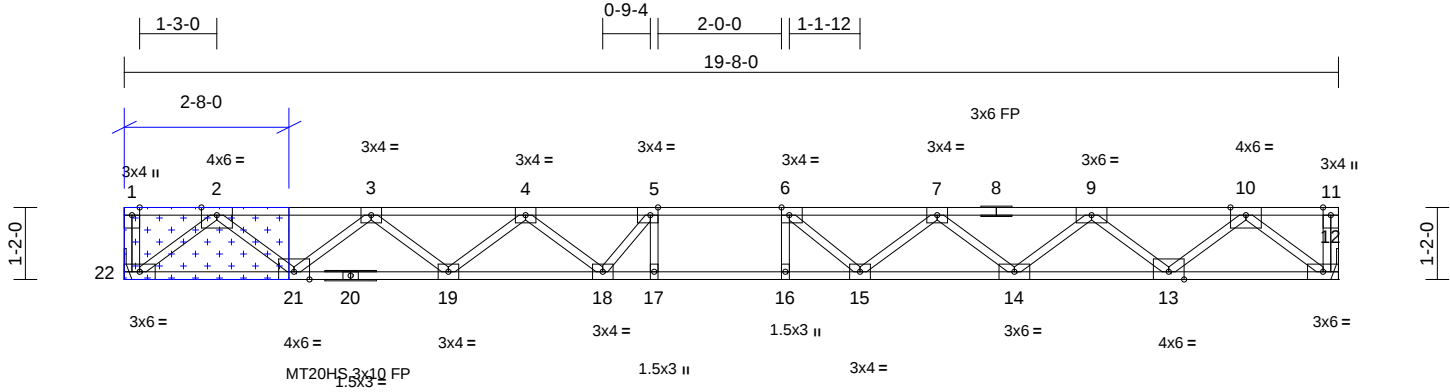
Builders FirstSource (Albermarle), Albermarle, NC - 28001,

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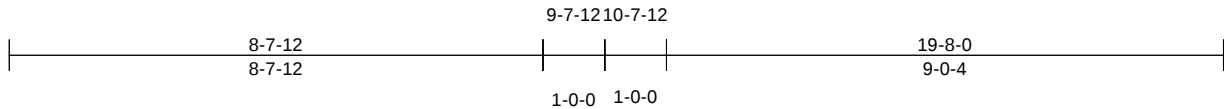
LOOSE PLATE AT JOINT 22



GUSSET MAY BE TRIMMED
TIGHT TO SINGLE PLY HANGER.



ATTACH 3/4" PLYWOOD OR OSB GUSSET (23/32" RATED SHEATHING 48/24 EXP 1) TO EACH SIDE OF TRUSS WITH ONE ROW OF (0.131" X 2.5") NAILS SPACED 2" O.C. FROM EACH FACE INTO EACH COVERED TRUSS MEMBER. IN ADDITION TO REQUIRED NAILING, CONSTRUCTION QUALITY ADHESIVE RECOMMENDED TO REDUCE POTENTIAL SQUEAKS.



Scale = 1:37.3

Plate Offsets (X, Y): [5:0-1-8,Edge], [6:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.97	Vert(LL)	-0.42	16-17	>548	480	MT20HS	187/143
TCDL	15.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.64	16-17	>366	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.65	Horz(CT)	0.09	12	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-S							Weight: 98 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 20-12:2x4 SP 2400F 2.0E or 2x4 SP DSS or 2x4 SP SS (flat)
WEBS 2x4 SP No.3(flat)

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 19-21.

REACTIONS (size) 12= Mechanical, 22= Mechanical
Max Grav 12=1165 (LC 1), 22=1165 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-22=-47/0, 11-12=-46/0, 1-2=0/0, 2-3=-2501/0, 3-4=-4172/0, 4-5=-5143/0, 5-6=-5380/0, 6-7=-5126/0, 7-9=-4176/0, 9-10=-2499/0, 10-11=0/0
BOT CHORD 21-22=0/1458, 19-21=0/3510, 18-19=0/4804, 17-18=0/5380, 16-17=0/5380, 15-16=0/5380, 14-15=0/4819, 13-14=0/3506, 12-13=0/1459
WEBS 5-17=-222/314, 6-16=-223/205, 2-22=-1829/0, 2-21=0/1358, 3-21=-1314/0, 3-19=0/862, 4-19=822/0, 4-18=0/602, 5-18=-714/88, 10-12=-1831/0, 10-13=0/1354, 9-13=-1310/0, 9-14=0/872, 7-14=-837/0, 7-15=0/545, 6-15=-664/84

NOTES (6)

- Unbalanced floor live loads have been considered for this design.
- All plates are MT20 plates unless otherwise indicated.
- The Fabrication Tolerance at joint 20 = 11%
- Refer to girder(s) for truss to truss connections.

- Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- This manufactured truss is designed as an individual building component. The suitability and use of this component for any particular building is the responsibility of the building designer per ANSI TPI 1 as referenced by the building code.

LOAD CASE(S) Standard



September 26, 2025

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE.

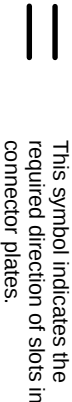
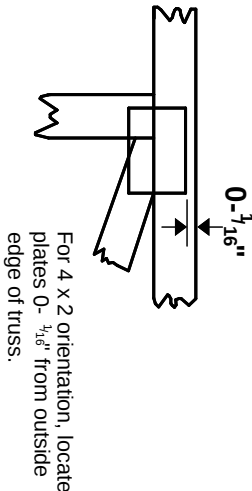
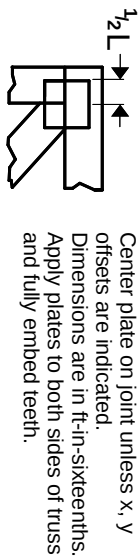
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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 and DSB-22** available from Truss Plate Institute (www.tpinst.org) and **BCSI Building Component Safety Information** available from the Structural Building Component Association (www.sbcacompnents.com)

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Symbols

PLATE LOCATION AND ORIENTATION



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

PLATE SIZE

4 X 4

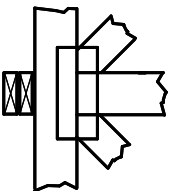
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

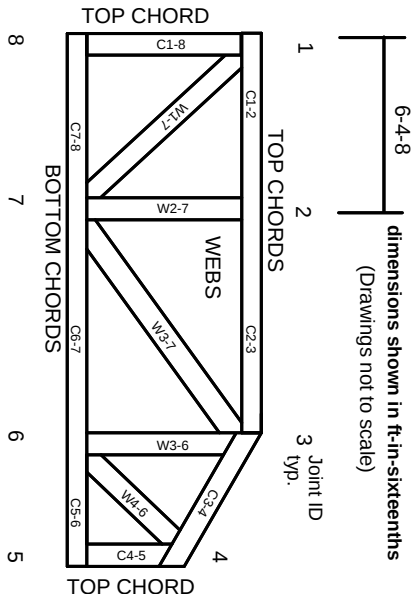


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TP1.1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

ESR-1988, ESR-2362, ESR-2685, ESR-3282
ESR-4722, ESL-1388

Design General Notes

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

Lumber design values are in accordance with ANSI/TP1 1 section 6.3. These truss designs rely on lumber values established by others.

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General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.

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