

RE: P250041-02 - Roof - HM Lot 200 Repairs Site Information:	MiTek, Inc. 16023 Swingley Ridge Rd.				
Project Customer: Clayton Properties Project Nar Lot/Block: 200 Subdivi Model:	ne: Charlotte - Mediterranean 3 Ghesterfield, MO 63017 sion: Highland Meadows				
Address: 1055 SW Fiord Dr					
City: Lee's Summit State: MO					
General Truss Engineering Criteria & Design Loa	ds (Individual Truss Design				
Drawings Show Special Loading Conditions):					
Design Code: IRC2018/TPI2014	Design Program: MiTek 20/20 8.6				
Wind Code: ASCE 7-16	Design Method: MWFRS (Envelope)/C-C hybrid Wind ASCE 7-16				
Wind Speed: 115 mph	Floor Load: N/A psf				
Roof Load: 45.0 psf	1				
Mean Roof Height (feet): 35	Exposure Category: C				
No. Seal# Truss Name Date					

No.	Seal#	Truss Name	Date
1 2	172736202 172736203		4/16/25 4/16/25
3	172736204	A8	4/16/25
4	172736205	A10	4/16/25

The truss drawing(s) referenced above have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Premier Building Supply (Springhill, KS)20300 W 207th Street.

Truss Design Engineer's Name: Lu, Jie

My license renewal date for the state of Missouri is December 31, 2026.

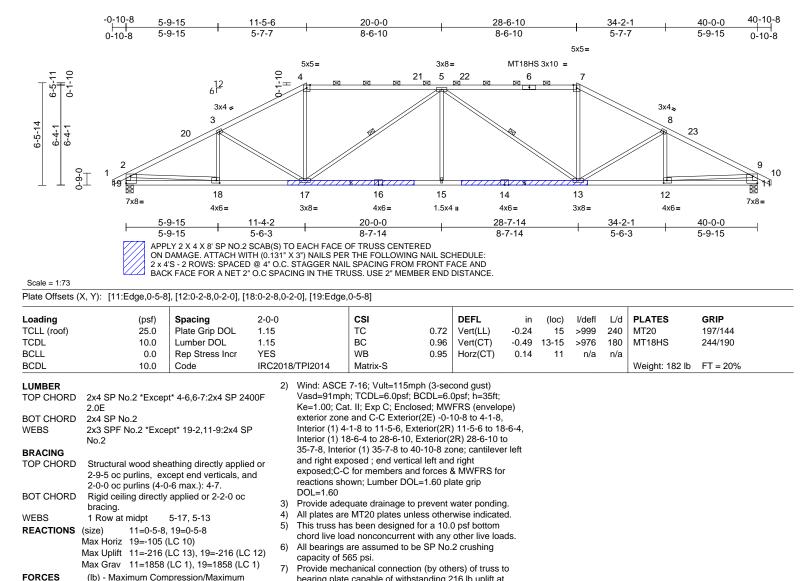
IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which 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	Roof - HM Lot 200 Repairs	
P250041-02	A4	Нір	1	1	Job Reference (optional)	

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

REPAIR: BREAK IN MEMBER 16-17 LOCATED 1-6-0 FROM JOINT 16. BREAK IN MEMBER 13-14 LOCATED 1-0-0 FROM JOINT 14. Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Apr 14 09:28:33 ID:dfLmCUhkNXUHGCbAltnBhFzb2L0-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



 Unbalanced roof live loads have been considered for this design.

1-2=0/32. 2-3=-3033/481. 3-4=-2765/478.

7-8=-2767/479, 8-9=-3032/478, 9-10=0/32,

3-18=-106/90, 3-17=-273/197, 4-17=-53/743, 5-17=-932/236, 5-15=0/364, 5-13=-928/235,

7-13=-51/737, 8-13=-269/196, 8-12=-105/90, 2-18=-240/2011, 9-12=-236/2006

4-5=-2397/468. 5-7=-2398/466.

2-19=-1784/361, 9-11=-1784/363

18-19=-209/622, 17-18=-359/2625

15-17=-400/3040, 13-15=-400/3040,

12-13=-330/2623, 11-12=-122/626

Tension

TOP CHORD

BOT CHORD

WEBS

NOTES

bearing plate capable of withstanding 216 lb uplift at joint 19 and 216 lb uplift at joint 11.
This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and

R802.10.2 and referenced standard ANS//TPI 1. 9) Graphical purlin representation does not depict the size

or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



Page: 1

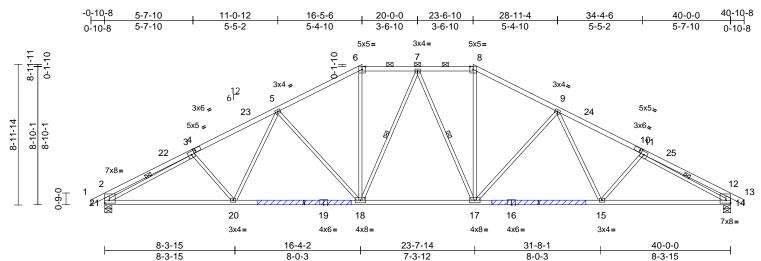
WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 1/2/2023 BEFORE USE. Design valid for use only with MITek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, 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/TP11 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.sbcsccomponents.com)



Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 200 Repairs	
P250041-02	A7	Hip	1	1	Job Reference (optional)	172736203

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

REPAIR: BREAK IN MEMBER 19-20 LOCATED 1-0-0 FROM JOINT 19. BREAK IN MEMBER 15-16 LOCATED 1-6-0 FROM JOINT 16. Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Apr 14 09:28:34 ID:2E1uqVjcgSsr7fKIQ?Luluzb2Kz-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f



APPLY 2 X 4 X 6' SP NO.2 SCAB(S) TO EACH FACE OF TRUSS CENTERED

ON DAMAGE. ATTACH WITH (0.131" X 3") NAILS PER THE FOLLOWING NAIL SCHEDULE: 2 x 4'S - 2 ROWS: SPACED @ 4" O.C. STAGGER NAIL SPACING FROM FRONT FACE AND BACK FACE FOR A NET 2" O.C SPACING IN THE TRUSS. USE 2" MEMBER END DISTANCE.

Scale = 1:73.6

Plate Offsets (X, Y): [2:Edge,0-2-4], [4:0-1-10,0-1-8], [10:0-1-10,0-1-8], [14:Edge,0-2-4]

Loading TCLL (roof) TCDL BCLL BCDL LUMBER TOP CHORD		Spacing Plate Grip DOL Lumber DOL Rep Stress Incr Code	2-0-0 1.15 1.15 YES IRC201	Vasd=91mpl	CSI TC BC WB Matrix-S 7-16; Vult=115r n; TCDL=6.0psf;	BCDL=6.	0psf; h=35ft;		(loc) 15-17 15-17 14	l/defl >999 >999 n/a	L/d 240 180 n/a	PLATES MT20 Weight: 196 lb	GRIP 244/190 FT = 20%
BOT CHORD WEBS BRACING TOP CHORD	2400F 2.0E Structural wood she 3-0-5 oc purlins, ex	ept* 21-2,14-12:2x4 S eathing directly applied coept end verticals, an	d or	exterior zone Interior (1) 4 23-6-10, Exte 30-7-8 to 40- exposed ; en	t. II; Exp C; Encl and C-C Exteri 1-8 to 16-5-6, E erior(2R) 23-6-1 10-8 zone; cant d vertical left an d forces & MWF	or(2E) -0- Exterior(2E 0 to 30-7-8 ilever left ind right exp	10-8 to 4-1-8) 16-5-6 to 3, Interior (1) and right bosed;C-C fo	, , ,					
	2-0-0 oc purlins (4-0 Rigid ceiling directly bracing. 1 Row at midpt (size) 14=0-5-8 Max Horiz 21=144 (1 Max Uplift 14=-269 Max Grav 14=1858	v applied or 8-9-6 oc 3-21, 11-14, 7-18, 7- , 21=0-5-8 LC 16) (LC 13), 21=-269 (LC	5 12) 6	Lumber DOL Provide aded This truss ha chord live loa All bearings capacity of 5 Provide mec	=1.60 plate grip quate drainage t s been designer ad nonconcurrer are assumed to 65 psi. hanical connecti	DOL=1.6 o prevent d for a 10. nt with any be SP No ion (by oth	0 water pondin 0 psf bottom other live loa 2 crushing ers) of truss	ig. ads. to					
FORCES	(lb) - Maximum Con Tension 1-2=0/32, 2-3=-893/ 5-6=-2338/490, 6-7= 7-8=-2011/475, 8-9= 9-11=-2886/501, 11	213, 3-5=-2886/501, 2011/475, 2338/490,	7 8	joint 21 and 2 This truss is International R802.10.2 an Graphical pu	e capable of with 269 lb uplift at jo designed in acc Residential Coo nd referenced st rlin representati ation of the purlin	oint 14. ordance w de sections andard AN on does n	ith the 2018 s R502.11.1 a NSI/TPI 1. ot depict the	and					
BOT CHORD		8-20=-293/2386,		OAD CASE(S)								FE OF	MISSO
WEBS NOTES 1) Unbalance	6-18=-106/721, 8-1 3-21=-2201/308, 11 7-18=-352/137, 7-1 3-20=-164/193, 5-20 5-18=-575/259, 9-1 9-15=-46/348, 11-1 ed roof live loads have	-14=-2201/308, 7=-352/136, 0=-45/348, 7=-575/259, 5=-164/193										JIE NUN	LU #BER 29327

Unbalanced roof live loads have been considered for 1) this design.

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 Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not besign value to dury with with where outputs into design is based only door parameters shown, and is for an individual building design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members and property 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/TPH1 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.sbcscomponents.com)



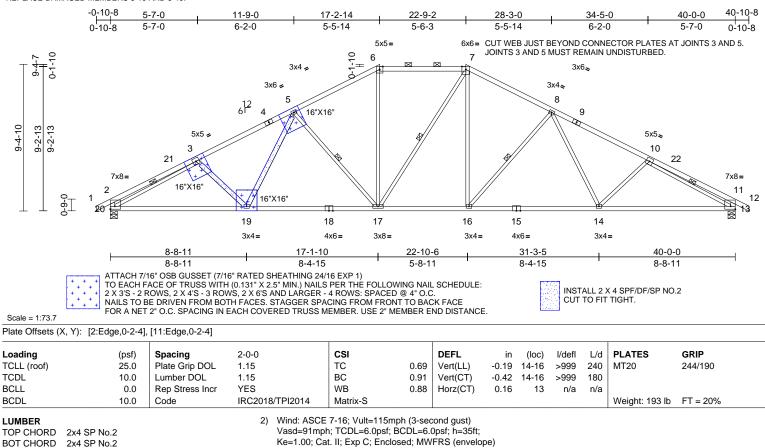
April 16,2025

Page: 1

Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 200 Repairs	
P250041-02	A8	Нір	1	1	Job Reference (optional)	172736204
Premier Building Currely (Cerie et		Burn 8 62 6 6		coo o o o	C 2024 MiTel: Industrian Inc. Mar. Ans. 14 00:20:24	Dana: 1

 Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,
 Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Apr 14 09:28:34

 REPAIR:
 ID:h?iaC_Sprh5zUHeW8NxkPFzb2LJ-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



2x3 SPF No.2 *Except* 20-2,13-11:2x4 SP WEBS No.2 BRACING TOP CHORD Structural wood sheathing directly applied or 2-7-15 oc purlins, except end verticals, and 2-0-0 oc purlins (3-2-2 max.): 6-7. BOT CHORD Rigid ceiling directly applied or 8-5-9 oc bracing. WEBS 1 Row at midpt 7-17, 5-17, 8-16, 3-20, 10-13 REACTIONS (size) 13=0-5-8, 20=0-5-8 Max Horiz 20=151 (LC 16) Max Uplift 13=-276 (LC 13), 20=-276 (LC 12) Max Grav 13=1858 (LC 1), 20=1858 (LC 1) FORCES (lb) - Maximum Compression/Maximum Tension TOP CHORD 1-2=0/32, 2-3=-837/183, 3-5=-2870/484, 5-6=-2272/478, 6-7=-1949/467, 7-8=-2271/478, 8-10=-2871/484, 10-11=-837/183. 11-12=0/32. 2-20=-613/205. 11-13=-613/205 BOT CHORD 19-20=-467/2609, 17-19=-297/2344 16-17=-128/1948, 14-16=-245/2344, 13-14=-343/2609 WEBS 6-17=-69/594, 7-17=-222/225 7-16=-128/606, 3-19=-202/214, 5-19=-39/388, 5-17=-617/273, 8-16=-617/273, 8-14=-39/389, 10-14=-202/214, 3-20=-2263/332,

NOTES

 Unbalanced roof live loads have been considered for this design.

10-13=-2264/332

exterior zone and C-C Exterior(2E) -0-10-8 to 4-1-8, Interior (1) 4-1-8 to 17-2-14, Exterior(2E) 17-2-14 to 22-9-2, Exterior(2R) 22-9-2 to 29-9-15, Interior (1) 29-9-15 to 40-10-8 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 3) Provide adequate drainage to prevent water ponding. 4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads. All bearings are assumed to be SP No.2 crushing 5) capacity of 565 psi. Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 276 lb uplift at joint 20 and 276 lb uplift at joint 13. This truss is designed in accordance with the 2018 7) International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.

 Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.

LOAD CASE(S) Standard



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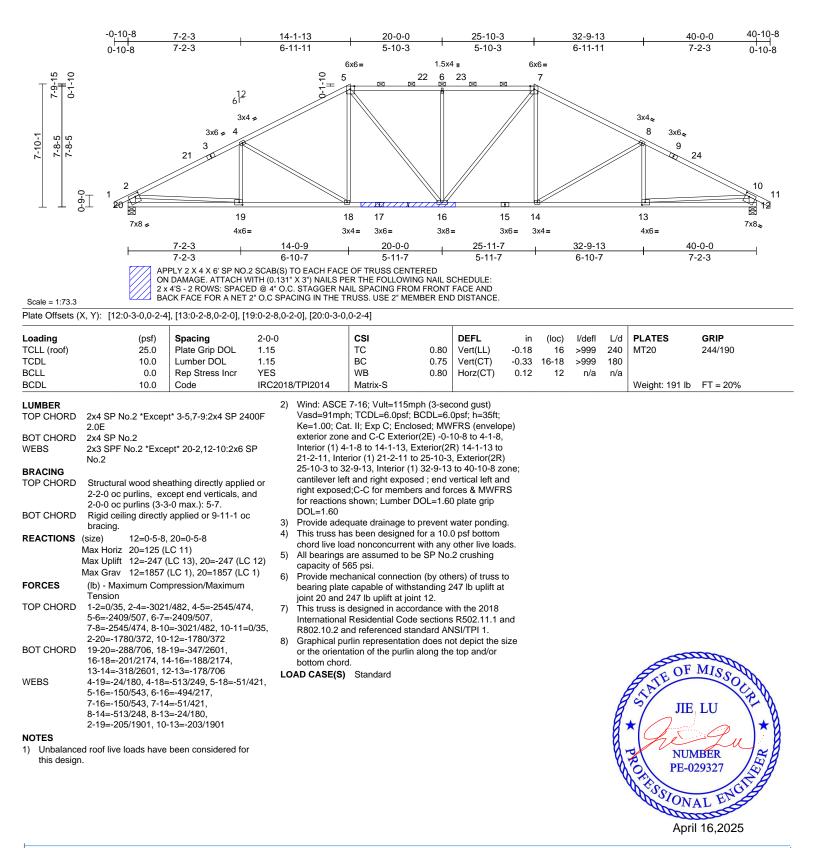
Job	Truss	Truss Type	Qty	Ply	Roof - HM Lot 200 Repairs	
P250041-02	A10	Нір	1	1	Job Reference (optional)	172736205

Premier Building Supply (Springhill, KS), Spring Hills, KS - 66083,

ID:F4Zfks

Run: 8.63 S Sep 26 2024 Print: 8.630 S Sep 26 2024 MiTek Industries, Inc. Mon Apr 14 09:28:34 ID:F4ZfksFKU0oNYNmezflPAWz8PrC-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f Page: 1

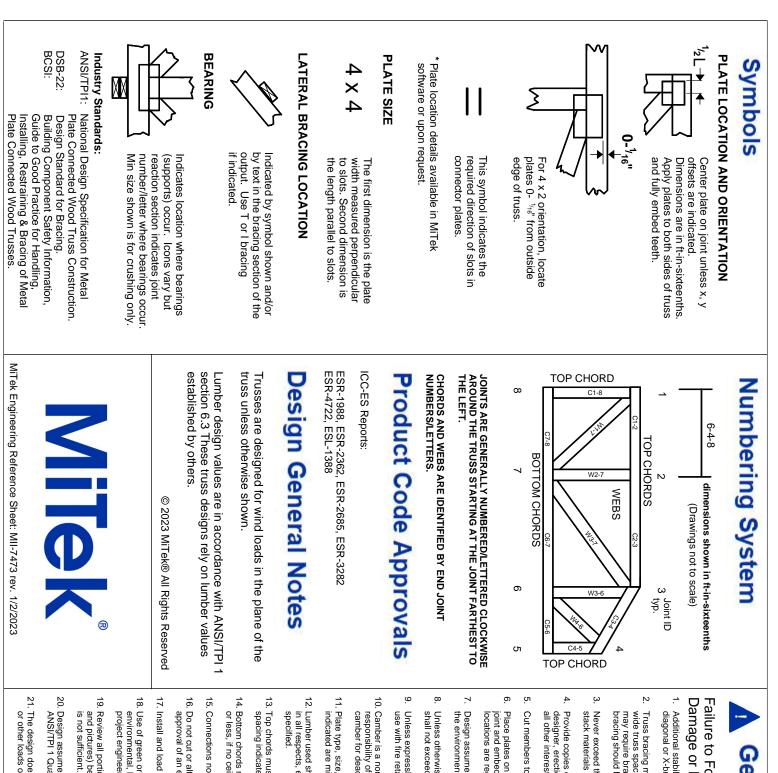
REPAIR: BREAK IN MEMBER 16-17 LOCATED AT MIDPOINT.





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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.
- Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor1 bracing should be considered.
- Never exceed the design loading shown and never stack materials on inadequately braced trusses.
- 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
- 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.
- Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
- Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
- Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
- 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.
- 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.
- Do not cut or alter truss member or plate without prior approval of an engineer.
- 17. Install and load vertically unless indicated otherwise.
- Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
- 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.