

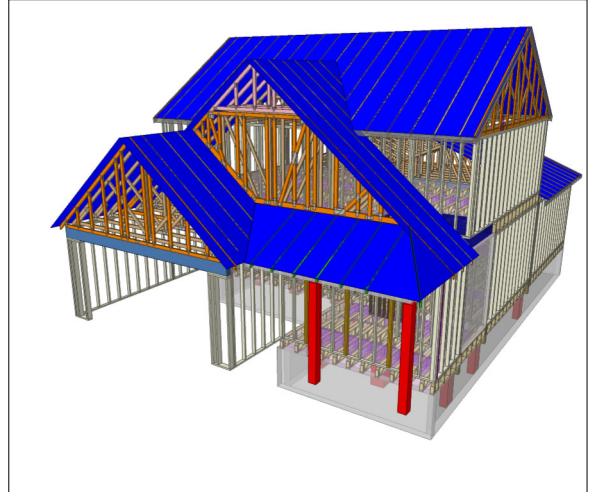


Carter Sanford Component Plant  
298 Harvey Faulk Rd  
Sanford, NC 27332

Phone #:919-775-1450

**Builder:** HH Hunt Homes Raleigh  
Durham

**Model:** Taylor HA FL GLH



**THE PLACEMENT PLAN NOTES:**

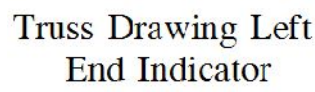
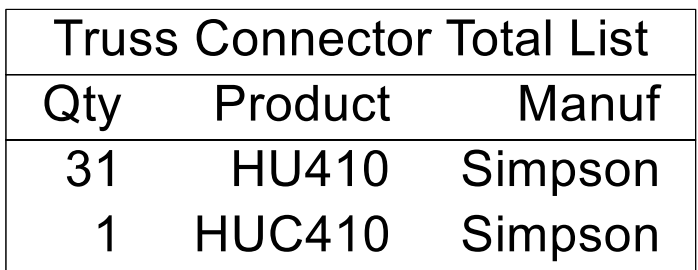
1. The Placement Plan is a diagram for truss installation. It is not an engineered drawing and has not been reviewed by an engineer. The Owner/Building Designer is responsible for obtaining an engineer's review if one is required by the local jurisdiction.
2. The responsibilities of the Owner, Contractor, Building Designer, Component Designer and Component Manufacturer shall be as set forth in ANSI/TPI 1. Capitalized terms shall be as defined in ANSI/TP 1 unless otherwise indicated.
3. Each Component is designed as an individual component utilizing information provided by others. The Owner/Building Designer is responsible for reviewing all Component Submittal Packages and individual Component Design Drawings for compliance with the Construction Documents and compatibility with the overall Building design.
4. Contractor will not proceed with component installation until the Owner/Building Designer has reviewed the Component Submittal Package. Questions on the suitability of any Component will be resolved by the Building Designer.
5. The Building Designer and Contractor are responsible for all temporary and permanent bracing.
6. The Placement Plan assumes the building is dimensionally correct, structurally sound, and in a suitable condition to support each Component during installation and thereafter, including but not limited to installation of all bearing points. Proper design and construction of all structural components, including foundations, headers, beams, walls and columns are the responsibility of the Owner, Building Designer and Contractor.
7. Do not cut, drill, or modify any Component without first consulting the Component Manufacturer or Building Designer. Damaged Components shall not be installed unless directed by the Building Designer or approved by the Component Manufacturer.
8. Components must be handled and installed following all applicable safety standards and best practices, including but not limited to BCSI, OSHA, TPI and local codes. Failure to properly handle, brace or otherwise install Component can result in serious injury or death.
9. All uplift connectors shown within these documents are recommendations only. Per ANSI/TPI 1, all uplift connectors are the responsibility of the building designer and or contractor.

**Approved By:** \_\_\_\_\_

**Date:** \_\_\_\_\_



ALL BEARING POINTS MUST BE INSTALLED PRIOR TO SETTING ANY COMPONENTS.



## STRONGBACK DETAILS

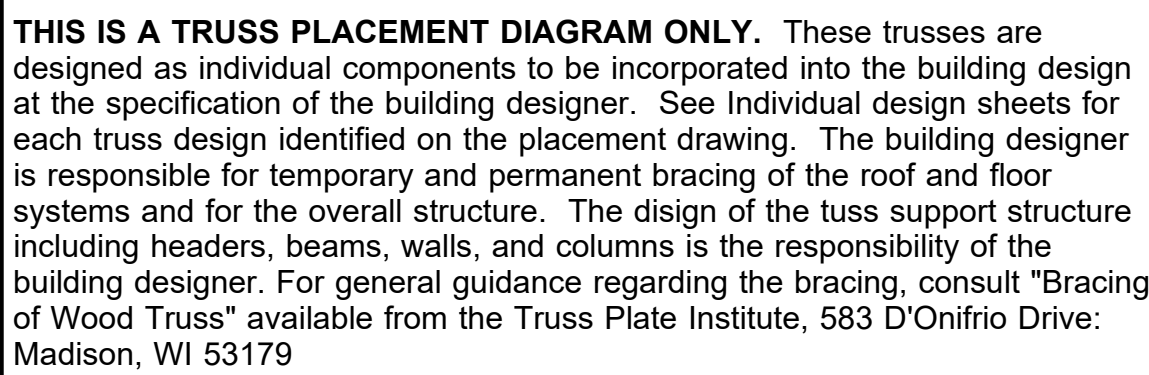
2x6 (MIN) STRONGBACK,  
RESTRAINED @ EACH END.  
SECURE w/ (3) 16d NAILS @ EACH VERTICAL.  
LOCATE AS CLOSE TO BOTTOM CHORD AS POSSIBLE.

STRONGBACKS SPACED AT 10'-0" (MAX) ARE REQUIRED TO MAINTAIN CERTAIN FIRE ASSEMBLIES.

STRONGBACKS ARE RECOMMENDED TO MINIMIZE VIBRATION

TRUSS TO TRUSS CONNECTIONS ARE TOE-NAILED, UNLESS NOTED OTHERWISE.

HH Hunt Homes Raleigh Durham	
Lot 9 - Fawn Valley Taylor FA - 2nd Floor	
<b>FLOOR PLACEMENT PLAN</b>	



Revisions	
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name
00/00/00	Name



Trenco  
818 Soundside Rd  
Edenton, NC 27932

Re: 25080115-02  
44 Magnolia Acres-2nd Floor-Taylor HA FL GLH

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

Pages or sheets covered by this seal: I75896938 thru I75896943

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

North Carolina COA: C-0844



August 26, 2025

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.



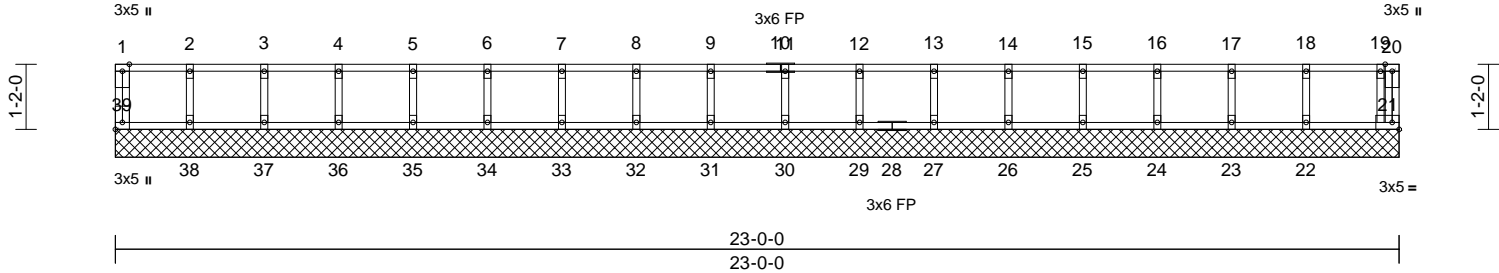
Job	Truss	Truss Type	Qty	Ply	44 Magnolia Acres-2nd Floor-Taylor HA FL GLH
25080115-02	F201	Floor Supported Gable	1	1	I75896938
Job Reference (optional)					

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 15:31:14

Page: 1

ID:00N6mFNHhJzgznLhqrVa16zo52d-RfC?PsB70Hq3NSgPqnL8w3uITxbGKWrcDoi7J4zJC?f



Scale = 1:41.3									
Plate Offsets (X, Y): [39:Edge,0-1-8]									
<b>Loading</b>	(psf)	<b>Spacing</b>	1-7-3	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	Vert(LL)	n/a	-	n/a
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	21	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR					
<b>PLATES</b> MT20 <b>GRIP</b> 244/190									
Weight: 97 lb FT = 20%F, 11%E									

<b>LUMBER</b>		<b>WEBS</b>	2-38=-102/0, 3-37=-108/0, 4-36=-106/0, 5-35=-107/0, 6-34=-107/0, 7-33=-107/0, 8-32=-107/0, 9-31=-107/0, 11-30=-107/0, 12-29=-107/0, 13-27=-107/0, 14-26=-107/0, 15-25=-106/0, 16-24=-107/0, 17-23=-105/0, 18-22=-114/0, 19-21=-74/0
TOP CHORD	2x4 SP No.2(flat)		
BOT CHORD	2x4 SP No.2(flat)		
WEBS	2x4 SP No.3(flat)		
OTHERS	2x4 SP No.3(flat)		

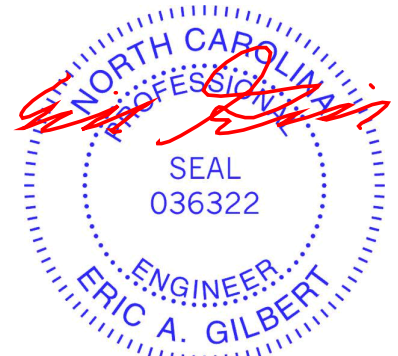
<b>BRACING</b>	
TOP CHORD	Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

<b>REACTIONS</b>	(size)	21=23-0-0, 22=23-0-0, 23=23-0-0, 24=23-0-0, 25=23-0-0, 26=23-0-0, 27=23-0-0, 29=23-0-0, 30=23-0-0, 31=23-0-0, 32=23-0-0, 33=23-0-0, 34=23-0-0, 35=23-0-0, 36=23-0-0, 37=23-0-0, 38=23-0-0, 39=23-0-0
Max Grav		21=68 (LC 1), 22=128 (LC 1), 23=114 (LC 1), 24=118 (LC 1), 25=117 (LC 1), 26=117 (LC 1), 27=117 (LC 1), 29=117 (LC 1), 30=117 (LC 1), 31=117 (LC 1), 32=117 (LC 1), 33=117 (LC 1), 34=117 (LC 1), 35=117 (LC 1), 36=117 (LC 1), 37=119 (LC 1), 38=110 (LC 1), 39=54 (LC 1)

<b>FORCES</b>	(lb) - Maximum Compression/Maximum Tension
TOP CHORD	1-39=-47/0, 20-21=0/9, 1-2=-12/0, 2-3=-12/0, 3-4=-12/0, 4-5=-12/0, 5-6=-12/0, 6-7=-12/0, 7-8=-12/0, 8-9=-12/0, 9-11=-12/0, 11-12=-12/0, 12-13=-12/0, 13-14=-12/0, 14-15=-12/0, 15-16=-12/0, 16-17=-12/0, 17-18=-12/0, 18-19=-12/0, 19-20=-2/0
BOT CHORD	38-39=0/12, 37-38=0/12, 36-37=0/12, 35-36=0/12, 34-35=0/12, 33-34=0/12, 32-33=0/12, 31-32=0/12, 30-31=0/12, 29-30=0/12, 27-29=0/12, 26-27=0/12, 25-26=0/12, 24-25=0/12, 23-24=0/12, 22-23=0/12, 21-22=0/12

- NOTES**
- 1) All plates are 1.5x3 MT20 unless otherwise indicated.
  - 2) Gable requires continuous bottom chord bearing.
  - 3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - 4) Gable studs spaced at 1-4-0 oc.
  - 5) 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.

**LOAD CASE(S)** Standard



August 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



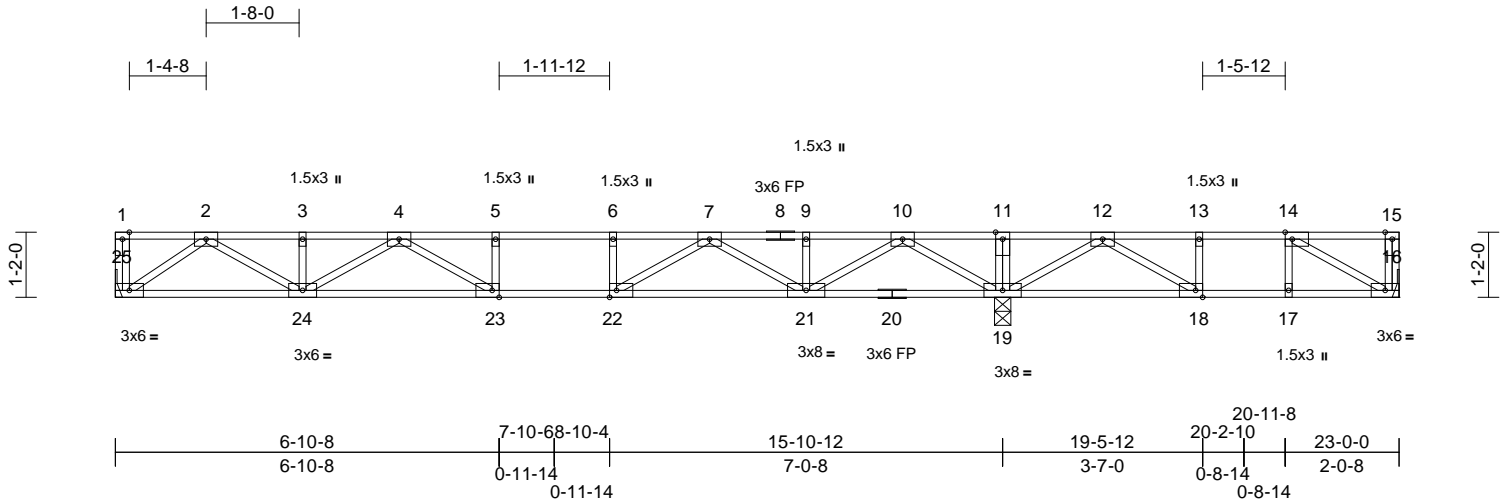
Job	Truss	Truss Type	Qty	Ply	44 Magnolia Acres-2nd Floor-Taylor HA FL GLH
25080115-02	F202	Floor	9	1	I75896939
Job Reference (optional)					

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 15:31:15

Page: 1

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Scale = 1:41.3									
Plate Offsets (X, Y): [14:0-1-8,Edge], [18:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,Edge]									
<b>Loading</b>	(psf)	<b>Spacing</b>	1-7-3	<b>CSI</b>		<b>DEFL</b>	in	(loc)	l/defl
TCLL	40.0	Plate Grip DOL	1.00	TC	0.64	Vert(LL)	-0.18	23-24	>999
TCDL	10.0	Lumber DOL	1.00	BC	0.79	Vert(CT)	-0.24	23-24	>783
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	19	n/a
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH					n/a
<b>PLATES</b> MT20 <b>GRIP</b> 244/190									
Weight: 115 lb FT = 20%F, 11%E									

**LUMBER**  
TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)

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

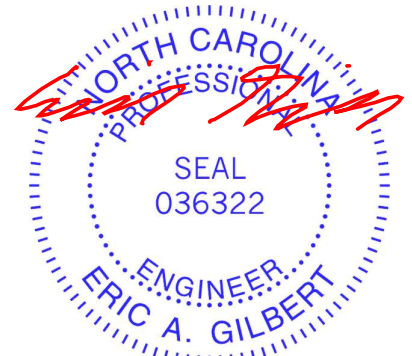
**REACTIONS** (size) 16= Mechanical, 19=0-3-8, 25= Mechanical  
Max Uplift 16=63 (LC 3)  
Max Grav 16=234 (LC 4), 19=1248 (LC 1), 25=629 (LC 10)

**FORCES** (lb) - Maximum Compression/Maximum Tension  
TOP CHORD 1-25=-47/0, 15-16=-92/0, 1-2=0/0, 2-3=-1532/0, 3-4=-1532/0, 4-5=-2117/0, 5-6=-2117/0, 6-7=-2117/0, 7-9=-1082/0, 9-10=-1082/0, 10-11=0/1159, 11-12=0/1159, 12-13=-293/244, 13-14=-293/244, 14-15=0/0  
BOT CHORD 24-25=0/825, 23-24=0/1960, 22-23=0/2117, 21-22=0/1684, 19-21=-145/201, 18-19=-625/49, 17-18=-244/293, 16-17=-244/293  
WEBS 5-23=-140/0, 6-22=-246/0, 11-19=-170/0, 13-18=-218/0, 14-17=-78/9, 10-19=-1339/0, 10-21=0/1058, 9-21=-151/0, 7-21=-733/0, 7-22=0/656, 4-23=-58/346, 4-24=-500/0, 3-24=-129/0, 2-24=0/826, 2-25=-1004/0, 12-19=-764/0, 12-18=0/566, 14-16=-337/280

- NOTES**
- 1) Unbalanced floor live loads have been considered for this design.
  - 2) All plates are 3x5 MT20 unless otherwise indicated.
  - 3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 63 lb uplift at joint 16.
- 5) 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.
- 6) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



August 26,2025

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Edenton, NC 27932



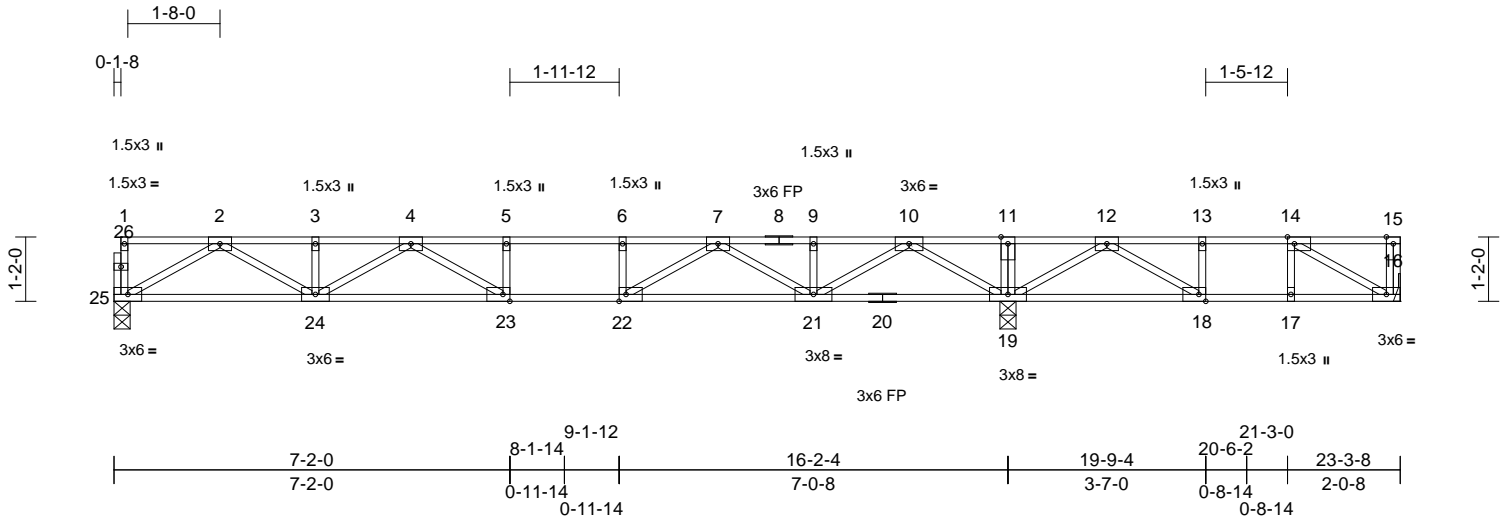
Job	Truss	Truss Type	Qty	Ply	44 Magnolia Acres-2nd Floor-Taylor HA FL GLH
25080115-02	F203	Floor	7	1	I75896940
Job Reference (optional)					

Carter Components (Sanford, NC), Sanford, NC - 27332,

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Page: 1

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Scale = 1:41.7

Plate Offsets (X, Y): [14:0-1-8,Edge], [18:0-1-8,Edge], [22:0-1-8,Edge], [23:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.69	Vert(LL)	-0.20	23-24	>981	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.85	Vert(CT)	-0.27	23-24	>721	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.04	19	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 116 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
 BOT CHORD 2x4 SP No.2(flat)  
 WEBS 2x4 SP No.3(flat)  
 OTHERS 2x4 SP No.3(flat)

#### BRACING

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

**REACTIONS** (size) 16= Mechanical, 19=0-3-8, 25=0-3-8  
 Max Uplift 16=67 (LC 3)  
 Max Grav 16=233 (LC 4), 19=1265 (LC 1), 25=636 (LC 10)

#### FORCES

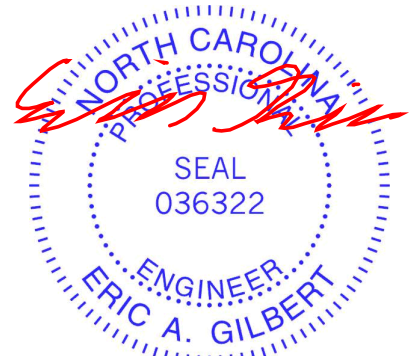
(lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-25=-56/0, 15-16=-93/0, 1-2=-3/0, 2-3=-1666/0, 3-4=-1666/0, 4-5=-2193/0, 5-6=-2193/0, 6-7=-2193/0, 7-9=-1100/0, 9-10=-1100/0, 10-11=0/1184, 11-12=0/1184, 12-13=-291/254, 13-14=-291/254, 14-15=0/0  
 BOT CHORD 24-25=0/983, 23-24=0/2073, 22-23=0/2193, 21-22=0/1725, 19-21=-146/197, 18-19=-644/44, 17-18=-254/291, 16-17=-254/291  
 WEBS 5-23=-134/3, 6-22=-259/0, 11-19=-171/0, 2-25=-1133/0, 2-24=0/798, 3-24=-124/0, 4-24=-474/0, 4-23=-96/327, 10-19=-1364/0, 10-21=0/1083, 9-21=-153/0, 7-21=-759/0, 7-22=0/693, 13-18=-221/0, 14-17=-80/9, 12-19=-772/0, 12-18=0/577, 14-16=-333/291

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x5 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.

- 4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 67 lb uplift at joint 16.
- 5) 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.
- 6) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



August 26, 2025

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

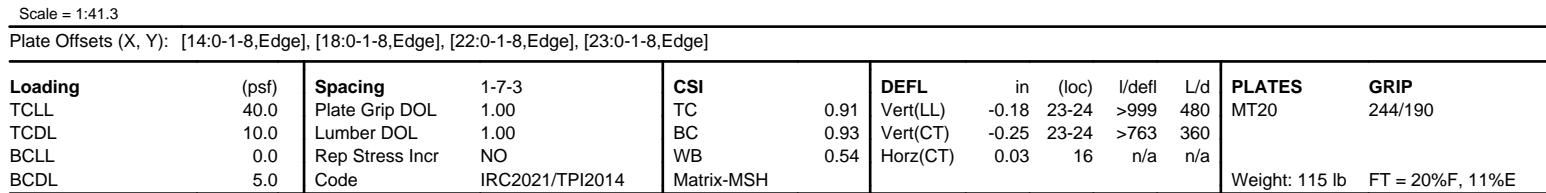
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall 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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**TRENCO**  
 A MiTek Affiliate

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 Edenton, NC 27932



Carter Components (Sanford, NC), Sanford, NC - 27332, Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 15:31:15 Page: 1  
ID:bfPqS\_Ao2bCmoR4HQZf\_R1zo5??-RfC?PsB70Hg3NSgPqnL8w3uITXBGKwRCdoi7J4zJC?f



- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 or 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.
- 6) CAUTION, Do not erect truss backwards.

**LOAD CASE(S) Standard**

- 1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00  
Uniform Loads (lb/ft)  
Vert: 16-25=-8, 1-11=-80, 11-15=-280

August 26, 2025

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**ENGINEERING BY**  
**TRENCO**  
A MiTek Affiliate

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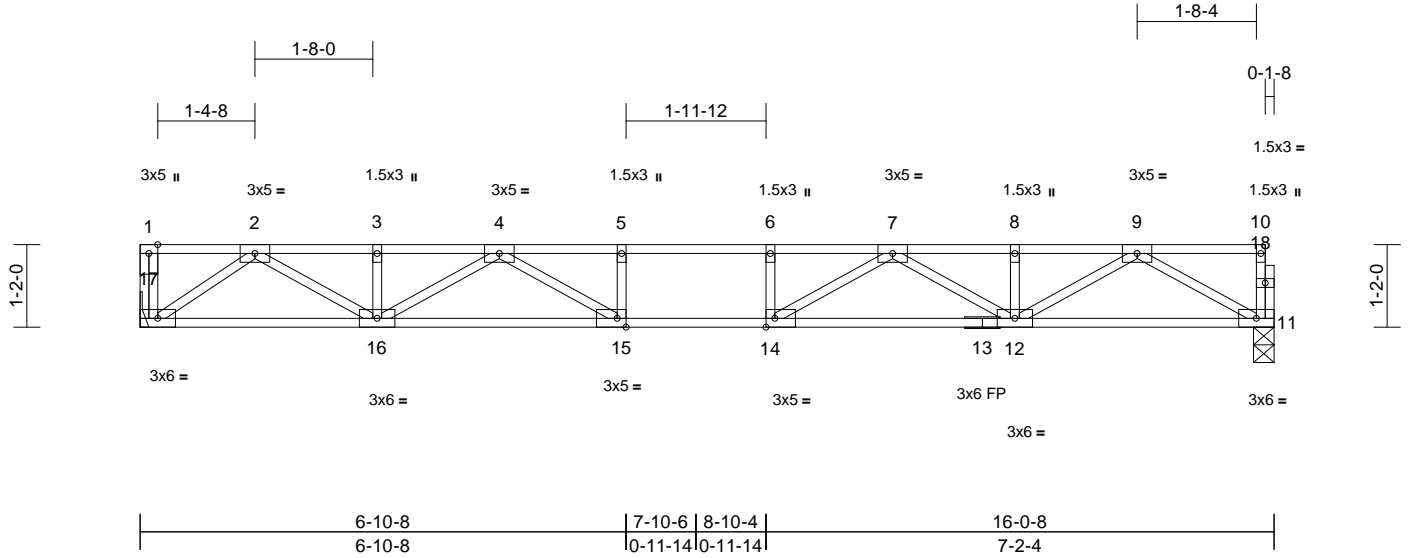


Job	Truss	Truss Type	Qty	Ply	44 Magnolia Acres-2nd Floor-Taylor HA FL GLH
25080115-02	F205	Floor	5	1	I75896942
Job Reference (optional)					

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 15:31:15  
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Page: 1



Scale = 1:32.6

Plate Offsets (X, Y): [14:0-1-8,Edge], [15:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.56	Vert(LL)	-0.19	12-14	>977	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.26	12-14	>726	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.45	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MSH							Weight: 80 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD 2x4 SP No.2(flat)  
BOT CHORD 2x4 SP No.2(flat)  
WEBS 2x4 SP No.3(flat)  
OTHERS 2x4 SP No.3(flat)

#### BRACING

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

**REACTIONS** (size) 11=0-3-8, 17= Mechanical  
Max Grav 11=689 (LC 1), 17=694 (LC 1)

**FORCES** (lb) - Maximum Compression/Maximum  
Tension

TOP CHORD 1-17=-47/0, 10-11=-58/0, 1-2=0/0,  
2-3=-1730/0, 3-4=-1730/0, 4-5=-2600/0,  
5-6=-2600/0, 6-7=-2600/0, 7-8=-1850/0,  
8-9=-1850/0, 9-10=-3/0

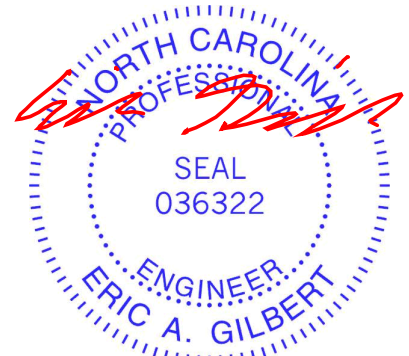
BOT CHORD 16-17=0/915, 15-16=0/2269, 14-15=0/2600,  
12-14=0/2343, 11-12=0/1082

WEBS 5-15=-221/0, 6-14=-201/0, 4-15=0/580,  
4-16=-629/0, 3-16=-139/0, 2-16=0/952,  
2-17=-1113/0, 7-14=0/520, 7-12=-576/0,  
8-12=-132/0, 9-12=0/897, 9-11=-1244/0

#### NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) Refer to girder(s) for truss to truss connections.
- 3) 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.
- 4) CAUTION, Do not erect truss backwards.

**LOAD CASE(S)** Standard



August 26, 2025

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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 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](http://www.tpinst.org)) and **BCSI Building Component Safety Information** available from the Structural Building Component Association ([www.sbcacompnents.com](http://www.sbcacompnents.com))

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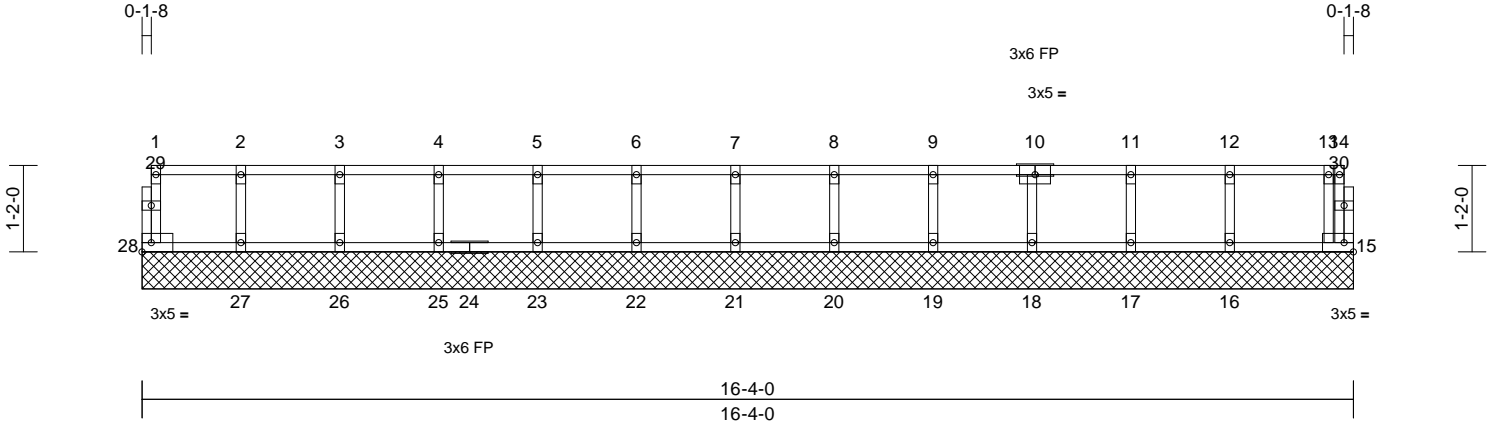


Job	Truss	Truss Type	Qty	Ply	44 Magnolia Acres-2nd Floor-Taylor HA FL GLH
25080115-02	F206	Floor Supported Gable	1	1	I75896943
Job Reference (optional)					

Carter Components (Sanford, NC), Sanford, NC - 27332,

Run: 8.73 S Aug 13 2025 Print: 8.730 S Aug 13 2025 MiTek Industries, Inc. Mon Aug 25 15:31:15  
ID:K8zScXBtDi4pgTipSBj3wyzo52s-RfC?PsB70Hq3NSgPqnL8w3ulTXbGKWrCDoi7J4zJC?f

Page: 1



Scale = 1:31.1

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.07	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	15	n/a		
BCDL	5.0	Code	IRC2021/TPI2014	Matrix-MR						Weight: 70 lb	FT = 20%F, 11%E

#### LUMBER

TOP CHORD	2x4 SP No.2(flat)
BOT CHORD	2x4 SP No.2(flat)
WEBS	2x4 SP No.3(flat)
OTHERS	2x4 SP No.3(flat)

#### BRACING

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

REACTIONS (size)	15=16'-4", 16=16'-4", 17=16'-4", 18=16'-4", 19=16'-4", 20=16'-4", 21=16'-4", 22=16'-4", 23=16'-4", 25=16'-4", 26=16'-4", 27=16'-4", 28=16'-4"
Max Grav	15=65 (LC 1), 16=126 (LC 1), 17=112 (LC 1), 18=118 (LC 1), 19=120 (LC 1), 20=117 (LC 1), 21=117 (LC 1), 22=117 (LC 1), 23=117 (LC 1), 25=117 (LC 1), 26=119 (LC 1), 27=112 (LC 1), 28=47 (LC 1)

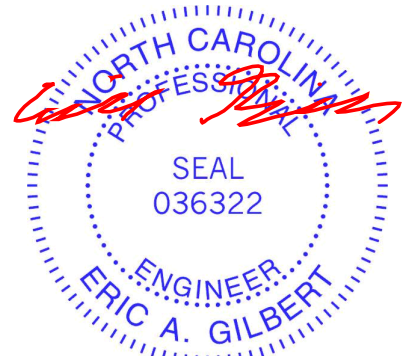
#### FORCES

(lb) - Maximum Compression/Maximum Tension	
TOP CHORD	1-28=-42/0, 14-15=0/20, 1-2=-9/0, 2-3=-9/0, 3-4=-9/0, 4-5=-9/0, 5-6=-9/0, 6-7=-9/0, 7-8=-9/0, 8-9=-9/0, 9-11=-14/0, 11-12=-14/0, 12-13=-14/0, 13-14=-3/0
BOT CHORD	27-28=0/9, 26-27=0/9, 25-26=0/9, 23-25=0/9, 22-23=0/9, 21-22=0/9, 20-21=0/9, 19-20=0/9, 18-19=0/9, 17-18=0/14, 16-17=0/14, 15-16=0/14
WEBS	2-27=-103/0, 3-26=-108/0, 4-25=-106/0, 5-23=-107/0, 6-22=-107/0, 7-21=-107/0, 8-20=-106/0, 9-19=-109/0, 10-18=-107/0, 11-17=-102/0, 12-16=-114/0, 13-15=-81/0

#### NOTES

- All plates are 1.5x3 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.

- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
  - Gable studs spaced at 1'-4" oc.
  - Recommend 2x6 strongbacks, on edge, spaced at 10'-0" 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.
- LOAD CASE(S)** Standard



August 26, 2025

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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.

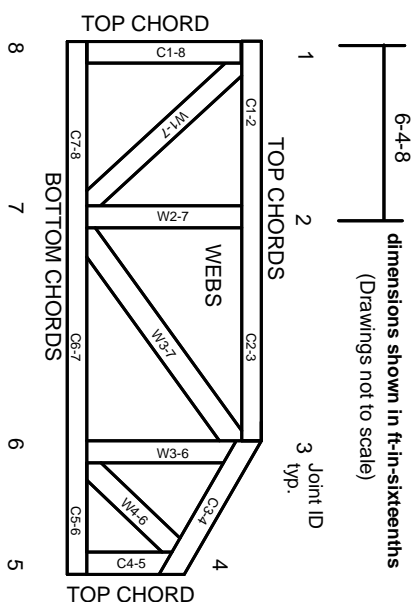
## BEARING



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: National Design Specification for Metal Plate Connected Wood Truss Construction.  
DSB-22: 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 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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