ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

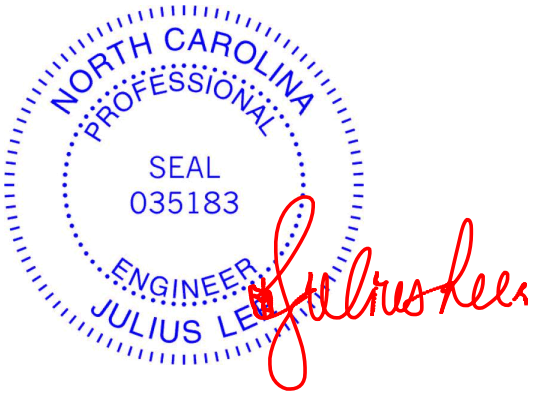
Re: 22020376-02
Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss

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 (Lexington, NC).

Pages or sheets covered by this seal: T27224044 thru T27224064

My license renewal date for the state of North Carolina is December 31, 2022.

North Carolina COA: C-0844




March 24,2022

Lee, Julius

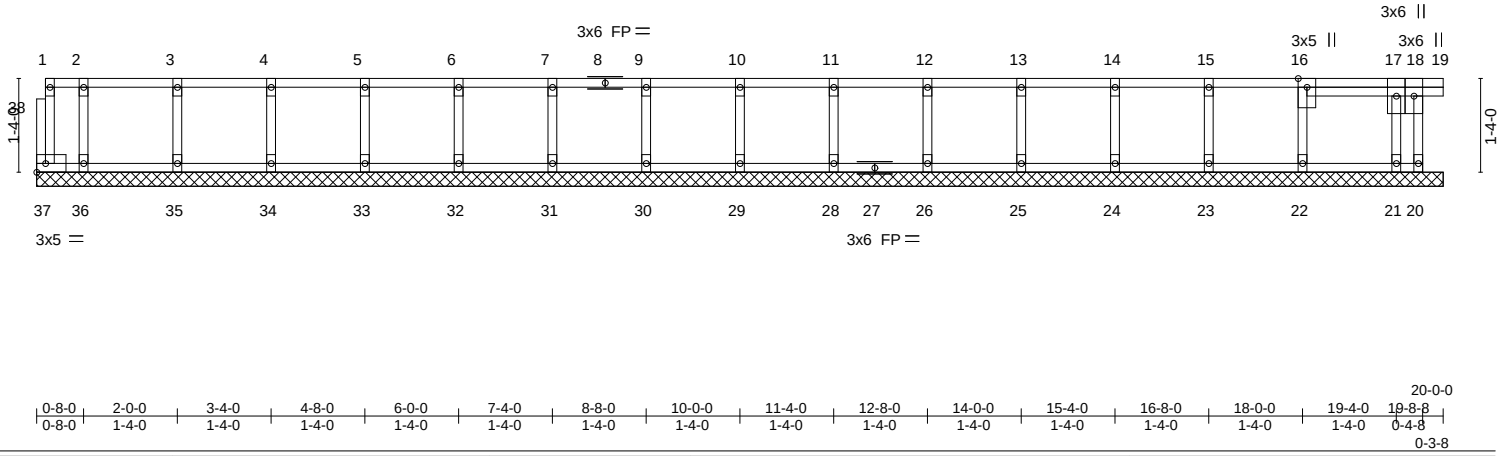
**IMPORTANT NOTE:** The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), 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 | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224044 |
|---|---|---|---|---|---|
| 22020376-02 | L3J | GABLE | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:39 2022 Page 1
ID:Co_LqlUbt4ATaJKEajxSMZzY4vF-wEcDh58XUBTTtxPBqK8oMgjSgzvHTkxyOjUOM2zY1RQ

0-1-8 0-3-8

Scale = 1:32.8







| 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 | 0.08 | Vert(LL) | -0.00 | 18 | n/r | 180 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.01 | Vert(CT) | -0.00 | 18 | n/r | 120 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 20 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 90 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) |

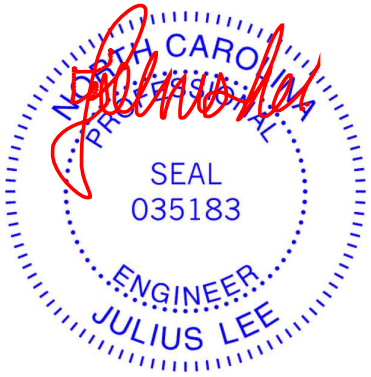
**BRACING-**

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

**REACTIONS.** All bearings 20-0-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 37, 20, 29, 30, 31, 32, 33, 34, 35, 36, 28, 26, 25, 24, 23, 22, 21

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

**NOTES-**
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Attach ribbon block to truss with 3-10d nails applied to flat face.
3) Gable requires continuous bottom chord bearing.
4) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
5) Gable studs spaced at 1-4-0 oc.
6) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
8) CAUTION, Do not erect truss backwards.

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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224045 |
|---|---|---|---|---|---|
| 22020376-02 | F3J | FLOOR | 6 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:26 2022 Page 1
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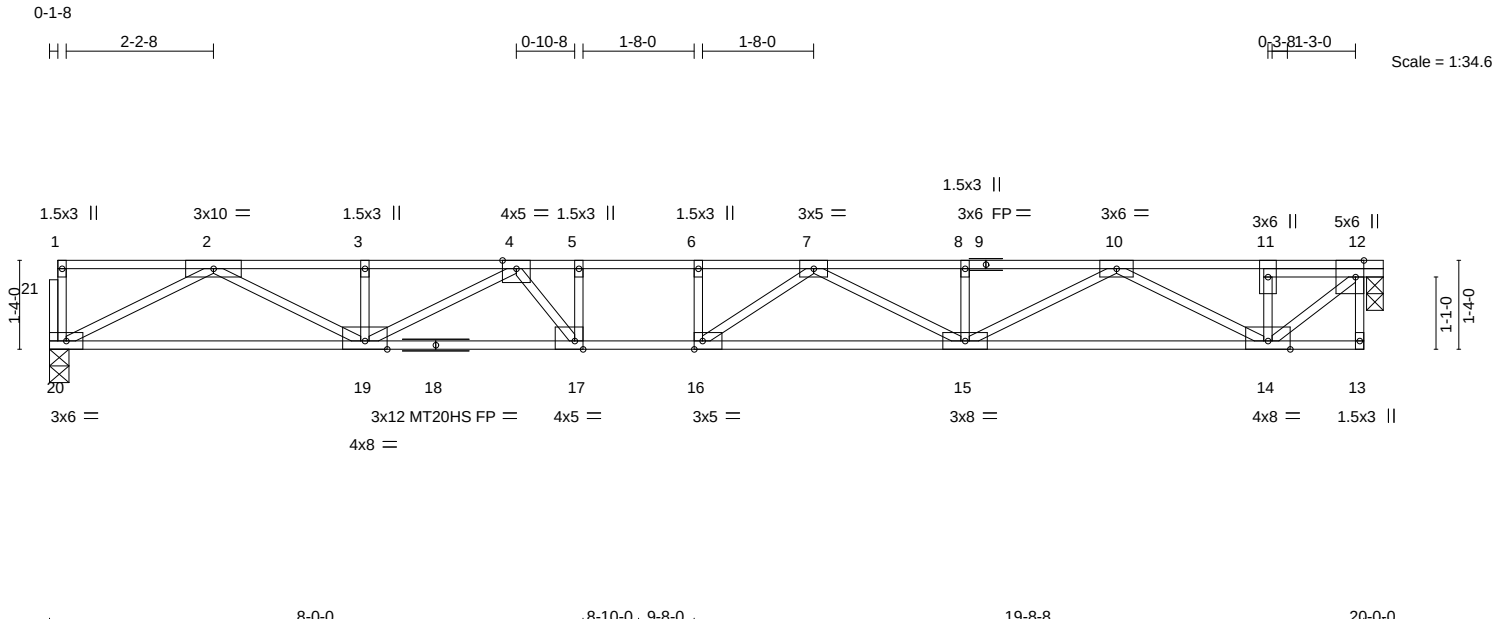



Plate Offsets (X,Y)-- [12:0-3-0,Edge], [16:0-1-8,Edge], [17:0-1-8,Edge]

| 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 | 0.91 | Vert(LL) | -0.39 | 15-16 | >608 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.96 | Vert(CT) | -0.54 | 15-16 | >436 | 360 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.77 | Horz(CT) | -0.01 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 103 lb | FT = 20%F, 11%E |

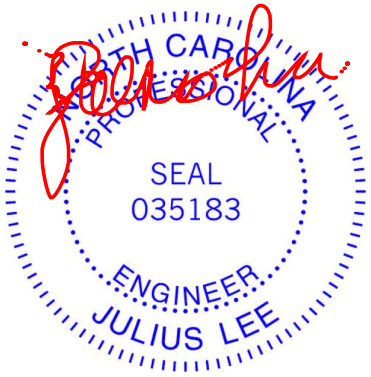
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat) *Except* 1-9: 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

**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: 15-16.

**REACTIONS.** (size) 20=0-3-8, 12=0-3-0
Max Grav 20=1067(LC 1), 12=1074(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3161/0, 3-4=-3161/0, 4-5=-4262/0, 5-6=-4262/0, 6-7=-4262/0, 7-8=-3703/0, 8-10=-3703/0, 10-11=-1242/0, 11-12=-1239/0
BOT CHORD 19-20=0/1844, 17-19=0/3975, 16-17=0/4262, 15-16=0/4229, 14-15=0/2655
WEBS 12-14=0/1613, 5-17=-471/0, 2-20=-2071/0, 2-19=0/1492, 4-19=-922/0, 4-17=-21/758, 10-14=-1605/0, 10-15=0/1187, 7-15=-595/0, 7-16=-280/464

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Attach ribbon block to truss with 3-10d nails applied to flat face.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
6) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
7) CAUTION, Do not erect truss backwards.

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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224046 |
|---|---|---|---|---|---|
| 22020376-02 | L3D | GABLE | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:33 2022 Page 1
ID:Co_LqlUbt4ATaJKEajxSMZzY4vF-54FxR23muLiK90y1T41O7PTQAYsm30S40o148OzY1RW

0-1-8 0-3-0

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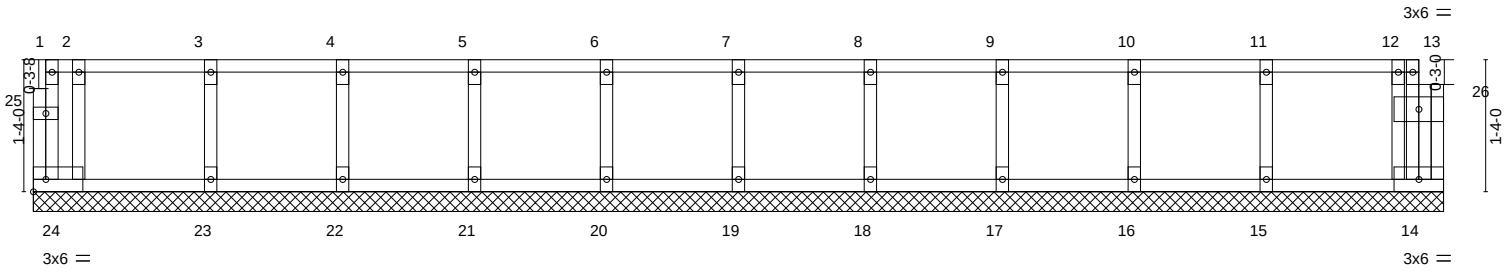



| 0-5-8 | 1-9-8 | 3-1-8 | 4-5-8 | 5-9-8 | 7-1-8 | 8-5-8 | 9-9-8 | 11-1-8 | 12-5-8 | 13-9-8 | 14-3-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 0-5-8 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 0-5-8 |

| **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 | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.02 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 14 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 67 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) |

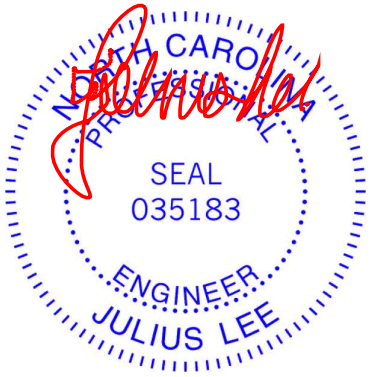
**BRACING-**

| | |
|---|---|
| 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.** All bearings 14-3-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 14, 19, 20, 21, 22, 23, 18, 17, 16, 15

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

**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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224047 |
|---|---|---|---|---|---|
| 22020376-02 | F3D | FLOOR | 8 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:02 2022 Page 1
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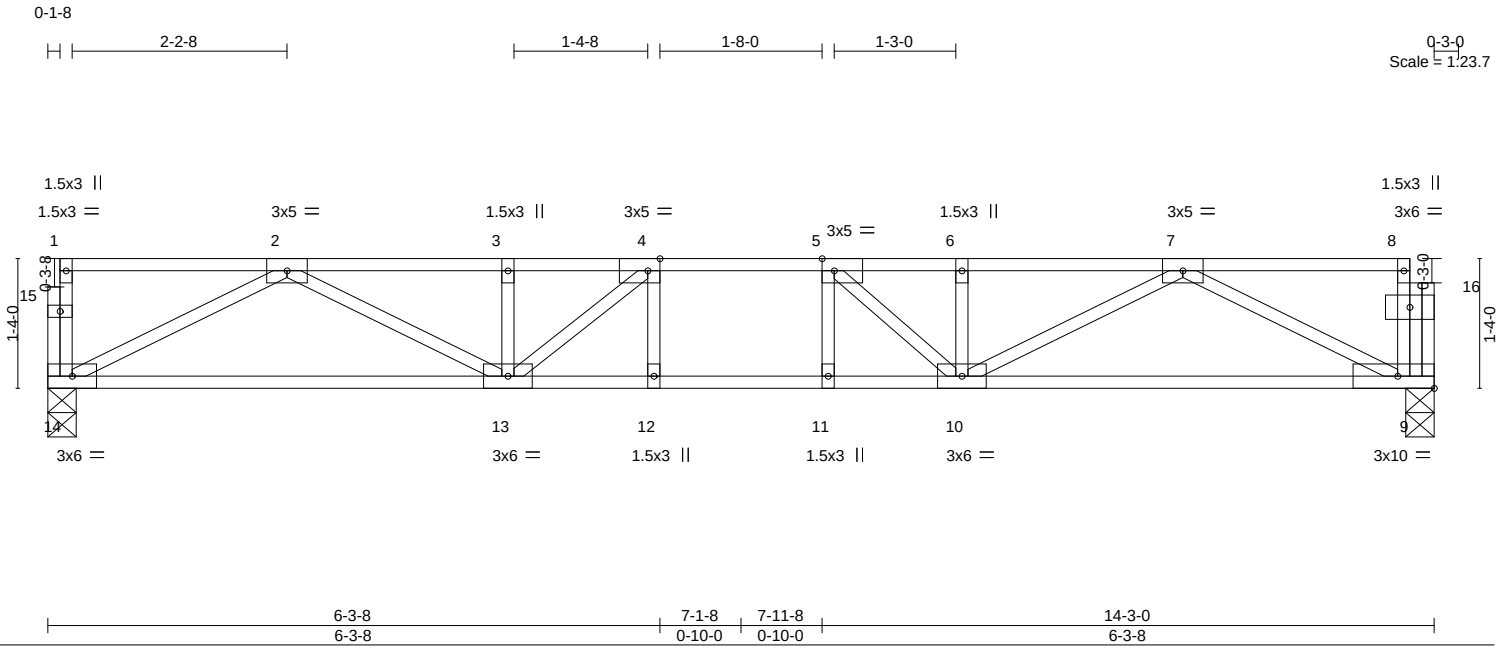






Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

| 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 | 0.41 | Vert(LL) | -0.11 | 12 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.75 | Vert(CT) | -0.15 | 11-12 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.39 | Horz(CT) | 0.04 | 9 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 75 lb | FT = 20%F, 11%E |

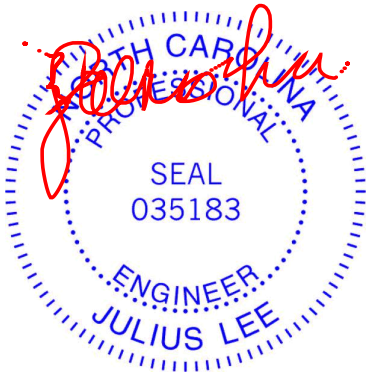
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 14=0-3-8, 9=0-3-8
Max Grav 14=760(LC 1), 9=754(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1986/0, 3-4=-1986/0, 4-5=-2183/0, 5-6=-1998/0, 6-7=-1998/0
BOT CHORD 13-14=0/1261, 12-13=0/2183, 11-12=0/2183, 10-11=0/2183, 9-10=0/1286
WEBS 2-14=-1414/0, 2-13=0/822, 4-13=-466/30, 7-9=-1430/0, 7-10=0/806, 5-10=-464/42

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224048 |
|---|---|---|---|---|---|
| 22020376-02 | L3S | GABLE | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:41 2022 Page 1
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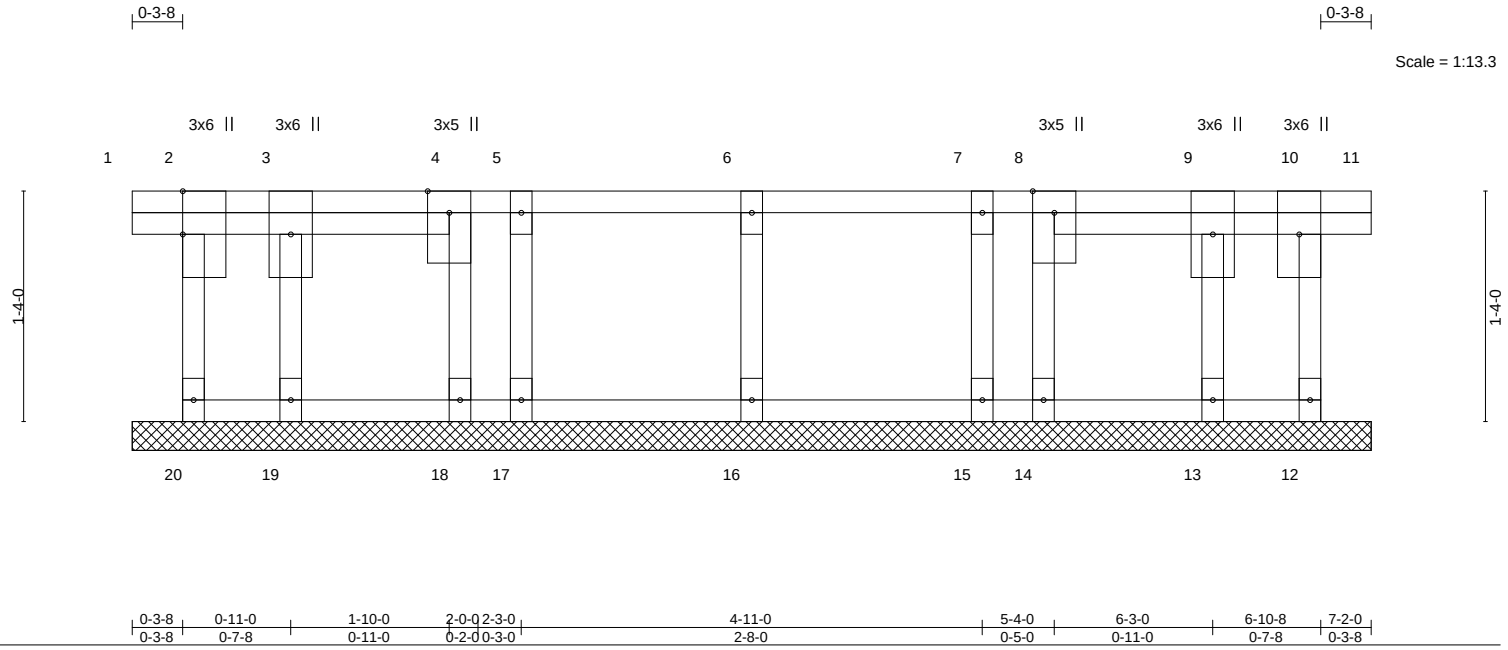



Plate Offsets (X,Y)-- [2:0-3-0,Edge]

| 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 | 0.09 | Vert(LL) | -0.00 | 10 | n/r | 180 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.01 | Vert(CT) | -0.00 | 10 | n/r | 120 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | -0.00 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-R | | | | | | | Weight: 40 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) |

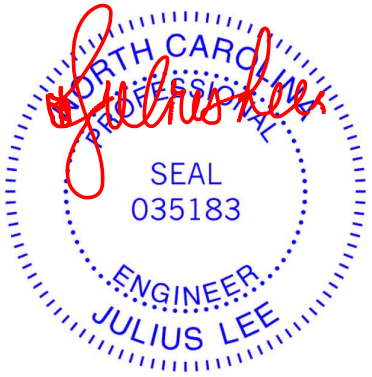
**BRACING-**

| | |
|---|---|
| TOP CHORD | Structural wood sheathing directly applied or 7-2-0 oc purlins, except end verticals. |
| BOT CHORD | Rigid ceiling directly applied or 6-0-0 oc bracing. |

**REACTIONS.** All bearings 7-2-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 20, 12, 16, 17, 19, 15, 13, 18, 14

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

**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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224049 |
|---|---|---|---|---|---|
| 22020376-02 | F3JA | FLOOR | 4 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:28 2022 Page 1
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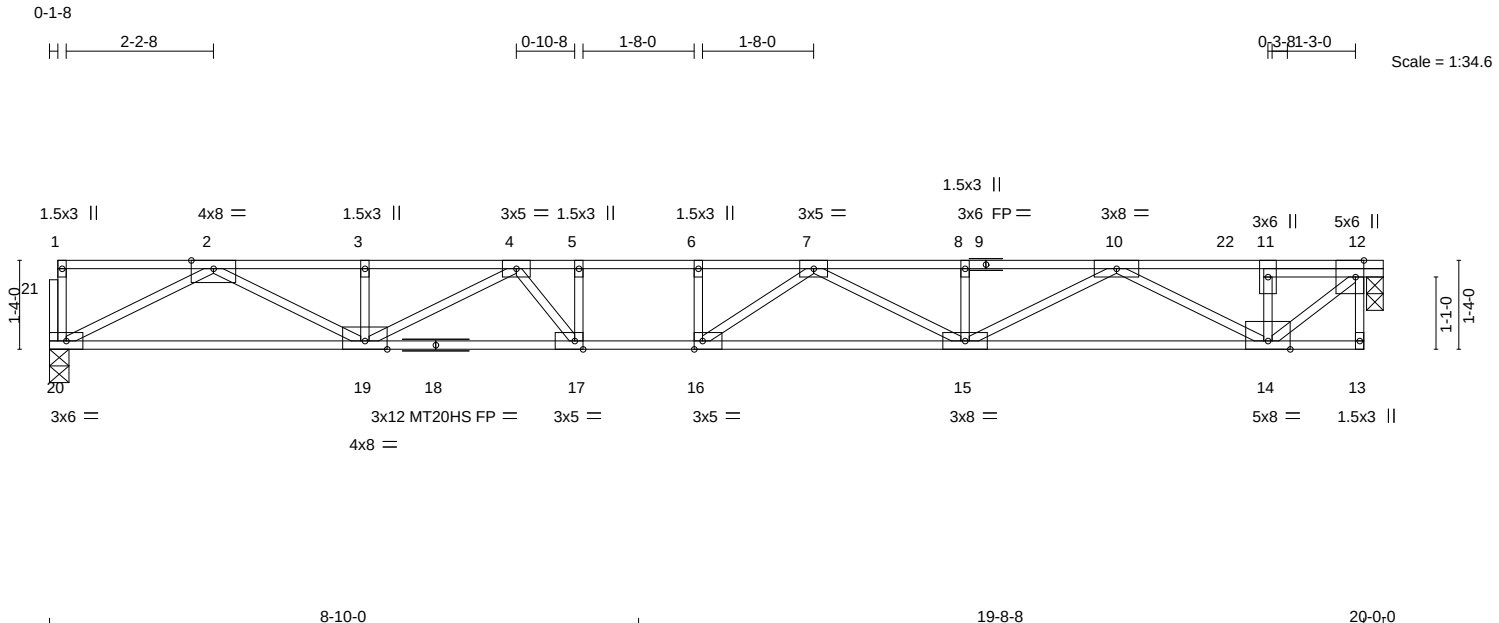



Plate Offsets (X,Y)-- [12:0-3-0,Edge], [16:0-1-8,Edge], [17:0-1-8,Edge]

| 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 | 0.63 | Vert(LL) | -0.32 | 15-16 | >731 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.85 | Vert(CT) | -0.46 | 15-16 | >506 | 360 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | NO | WB | 0.81 | Horz(CT) | 0.01 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 103 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat) *Except*
1-9: 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat) *Except*
13-18: 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

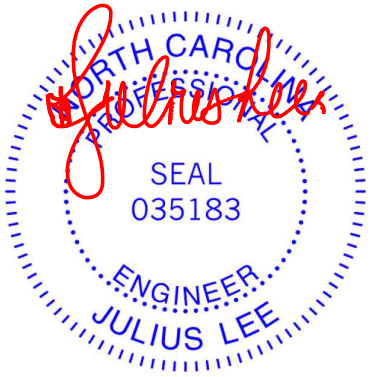
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 20=0-3-8, 12=0-3-0
Max Grav 20=1177(LC 1), 12=1137(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3456/0, 3-4=-3456/0, 4-5=-4579/0, 5-6=-4579/0, 6-7=-4579/0, 7-8=-3892/0, 8-10=-3892/0, 10-11=-1309/0, 11-12=-1305/0
BOT CHORD 19-20=0/2028, 17-19=0/4307, 16-17=0/4579, 15-16=0/4481, 14-15=0/2782
WEBS 11-14=-266/0, 12-14=0/1698, 5-17=-462/3, 2-20=-2278/0, 2-19=0/1617, 3-19=-271/0, 4-19=-964/0, 4-17=-45/733, 10-14=-1673/0, 10-15=0/1258, 7-15=-667/0, 7-16=-202/542

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Attach ribbon block to truss with 3-10d nails applied to flat face.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Load case(s) 1, 2, 3, 4, 5, 6 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
7) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
8) 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 (plf)
Vert: 13-20=-10, 1-6=-115, 6-22=-100, 12-22=-115
2) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 13-20=-10, 1-6=-115, 6-22=-100, 12-22=-115
3) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 13-20=-10, 1-6=-115, 6-22=-20, 12-22=-35

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Continued on page 2



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**LOAD CASE(S)** Standard

4) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 13-20=-10, 1-5=-35, 5-6=-115, 6-22=-100, 12-22=-115
5) 3rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 13-20=-10, 1-6=-115, 6-22=-20, 12-22=-35
6) 4th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 13-20=-10, 1-5=-35, 5-6=-115, 6-22=-100, 12-22=-115

| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224050 |
|---|---|---|---|---|---|
| 22020376-02 | F3DA | FLOOR | 2 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:03 2022 Page 1
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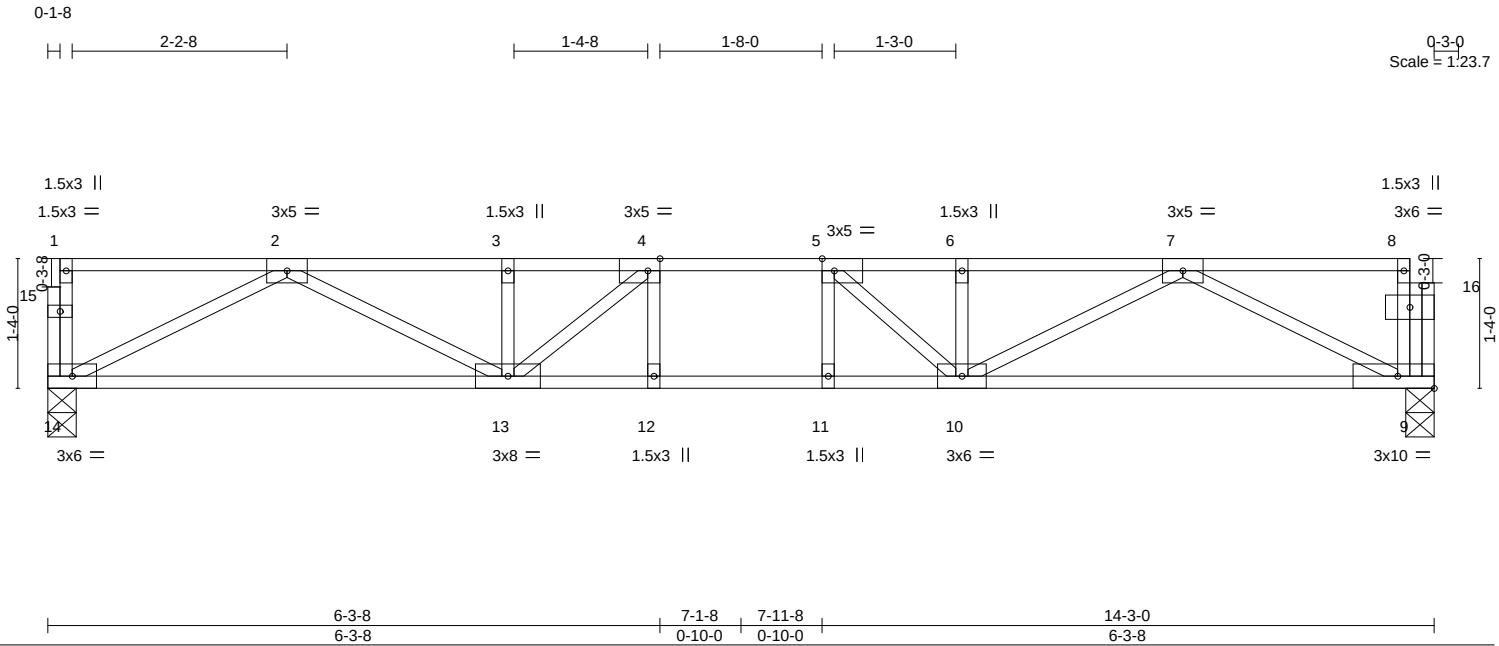



Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

| 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 | 0.45 | Vert(LL) | -0.11 | 12 | >999 | 480 | MT20 | 244/190 |
| TCDL | 22.0 | Lumber DOL | 1.00 | BC | 0.88 | Vert(CT) | -0.18 | 11-12 | >908 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.47 | Horz(CT) | 0.04 | 9 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 75 lb | FT = 20%F, 11%E |

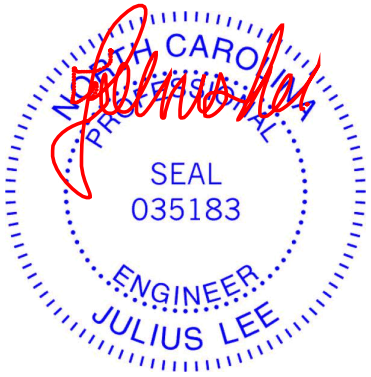
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 14=0-3-8, 9=0-3-8
Max Grav 14=926(LC 1), 9=918(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2417/0, 3-4=-2417/0, 4-5=-2659/0, 5-6=-2431/0, 6-7=-2431/0
BOT CHORD 13-14=0/1539, 12-13=0/2659, 11-12=0/2659, 10-11=0/2659, 9-10=0/1571
WEBS 2-14=-1727/0, 2-13=0/994, 3-13=-266/0, 4-13=-526/0, 7-9=-1746/0, 7-10=0/974, 6-10=-259/0, 5-10=-523/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224051 |
|---|---|---|---|---|---|
| 22020376-02 | F3H | FLOOR | 5 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:24 2022 Page 1
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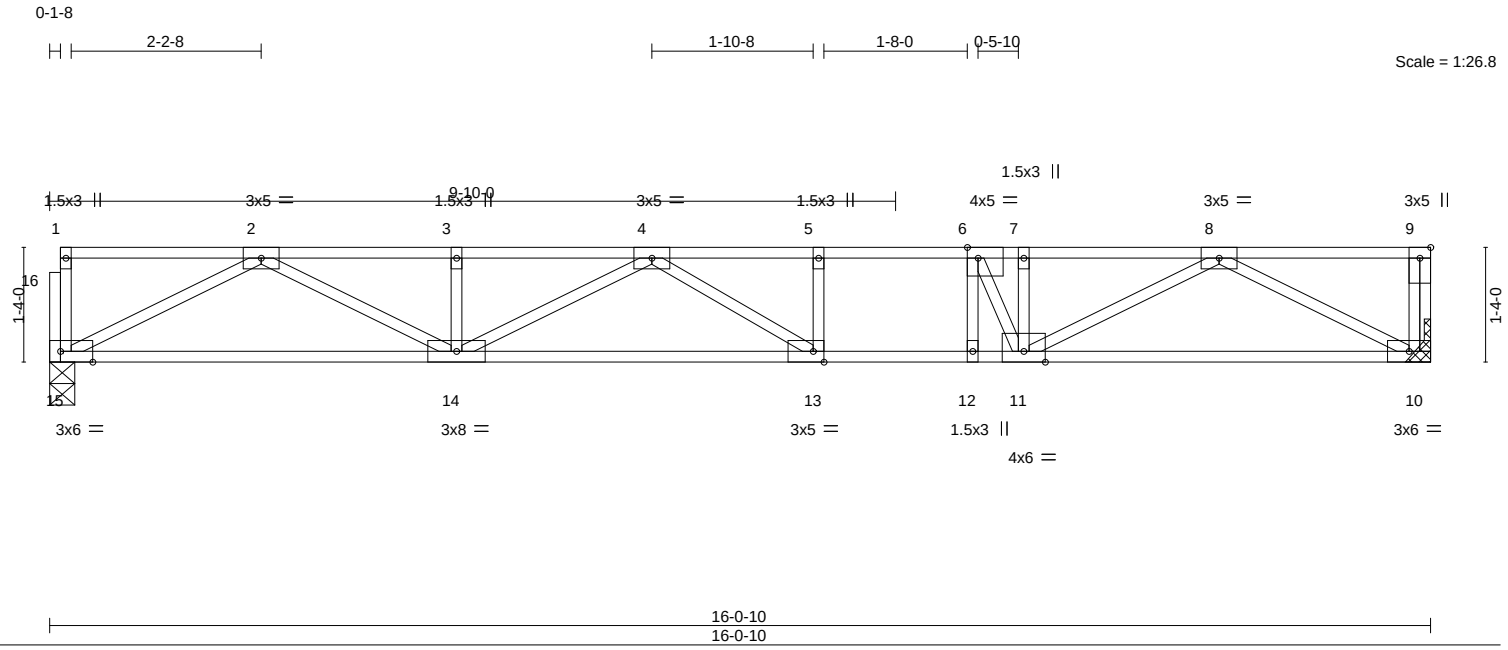



16-0-10
16-0-10

Plate Offsets (X,Y)-- [6:0-1-8,Edge], [13:0-1-8,Edge], [15:0-4-8,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 | 0.78 | Vert(LL) | -0.22 | 13-14 | >870 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.64 | Vert(CT) | -0.31 | 13-14 | >617 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.50 | Horz(CT) | 0.04 | 10 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 83 lb | FT = 20%F, 11%E |

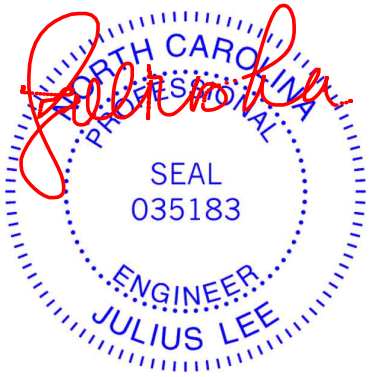
**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 15=0-3-8, 10=Mechanical
Max Grav 15=863(LC 1), 10=869(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2394/0, 3-4=-2394/0, 4-5=-2703/0, 5-6=-2703/0, 6-7=-2360/0, 7-8=-2360/0
BOT CHORD 14-15=0/1464, 13-14=0/2804, 12-13=0/2703, 11-12=0/2703, 10-11=0/1461
WEBS 6-12=-27/377, 2-15=-1643/0, 2-14=0/1054, 4-14=-464/0, 4-13=-291/258, 8-10=-1645/0, 8-11=0/1019, 7-11=-122/282, 6-11=-1012/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) Attach ribbon block to truss with 3-10d nails applied to flat face.
3) Refer to girder(s) for truss to truss connections.
4) Bearing at joint(s) 15 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
7) CAUTION, Do not erect truss backwards.

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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224052 |
|---|---|---|---|---|---|
| 22020376-02 | F3CA | FLOOR | 5 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:01 2022 Page 1
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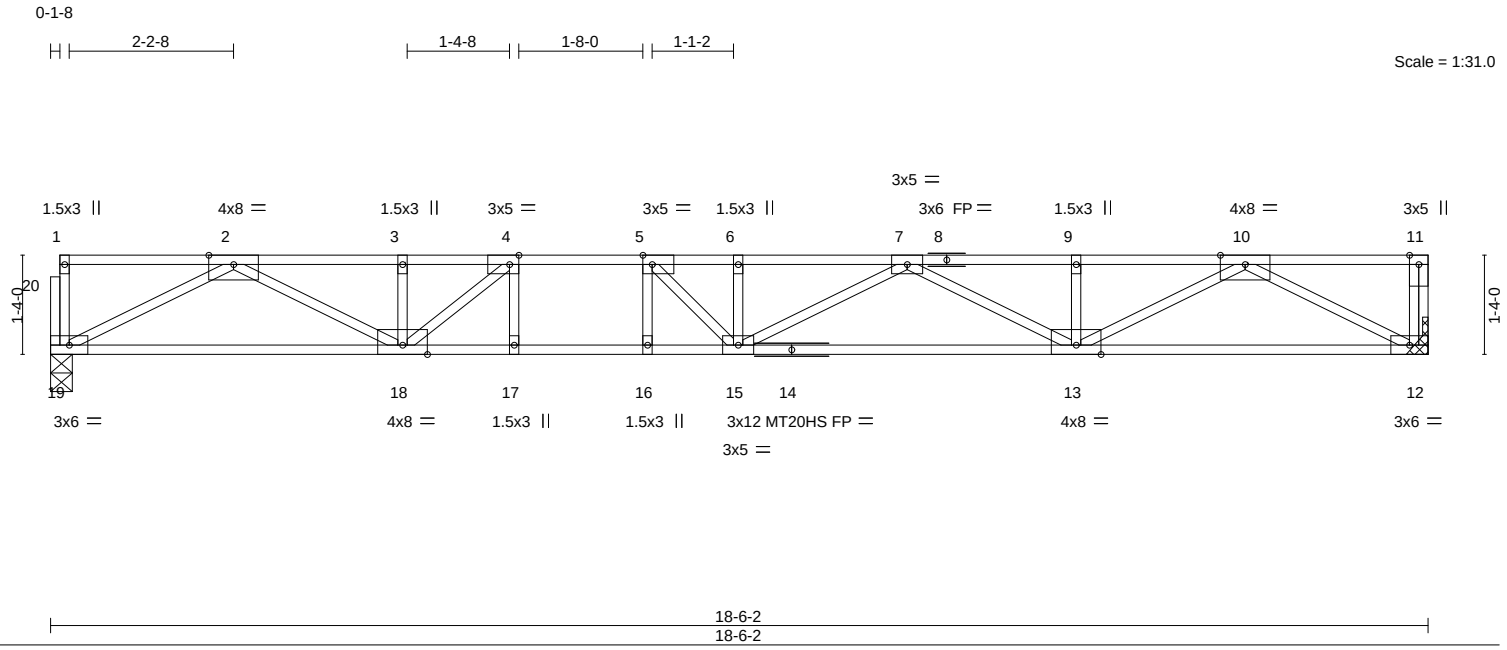



Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

| 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 | 0.60 | Vert(LL) | -0.27 | 15-16 | >799 | 480 | MT20 | 244/190 |
| TCDL | 22.0 | Lumber DOL | 1.00 | BC | 0.83 | Vert(CT) | -0.46 | 15-16 | >477 | 360 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.77 | Horz(CT) | 0.07 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 96 lb | FT = 20%F, 11%E |

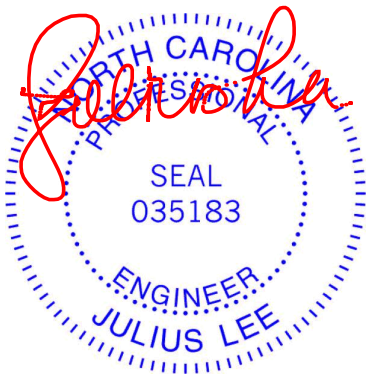
**LUMBER-**
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except*
12-14: 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 19=0-3-8, 12=Mechanical
Max Grav 19=1216(LC 1), 12=1223(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3481/0, 3-4=-3481/0, 4-5=-4325/0, 5-6=-4674/0, 6-7=-4674/0, 7-9=-3529/0, 9-10=-3529/0
BOT CHORD 18-19=0/2095, 17-18=0/4325, 16-17=0/4325, 15-16=0/4325, 13-15=0/4361, 12-13=0/2094
WEBS 4-17=0/298, 5-16=-324/0, 2-19=-2353/0, 2-18=0/1569, 4-18=-1227/0, 10-12=-2358/0, 10-13=0/1626, 9-13=-274/0, 7-13=-942/0, 7-15=0/433, 6-15=-400/0, 5-15=-88/710

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Attach ribbon block to truss with 3-10d nails applied to flat face.
4) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
7) CAUTION, Do not erect truss backwards.

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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224053 |
|---|---|---|---|---|---|
| 22020376-02 | F3GA | FLOOR | 4 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:11 2022 Page 1
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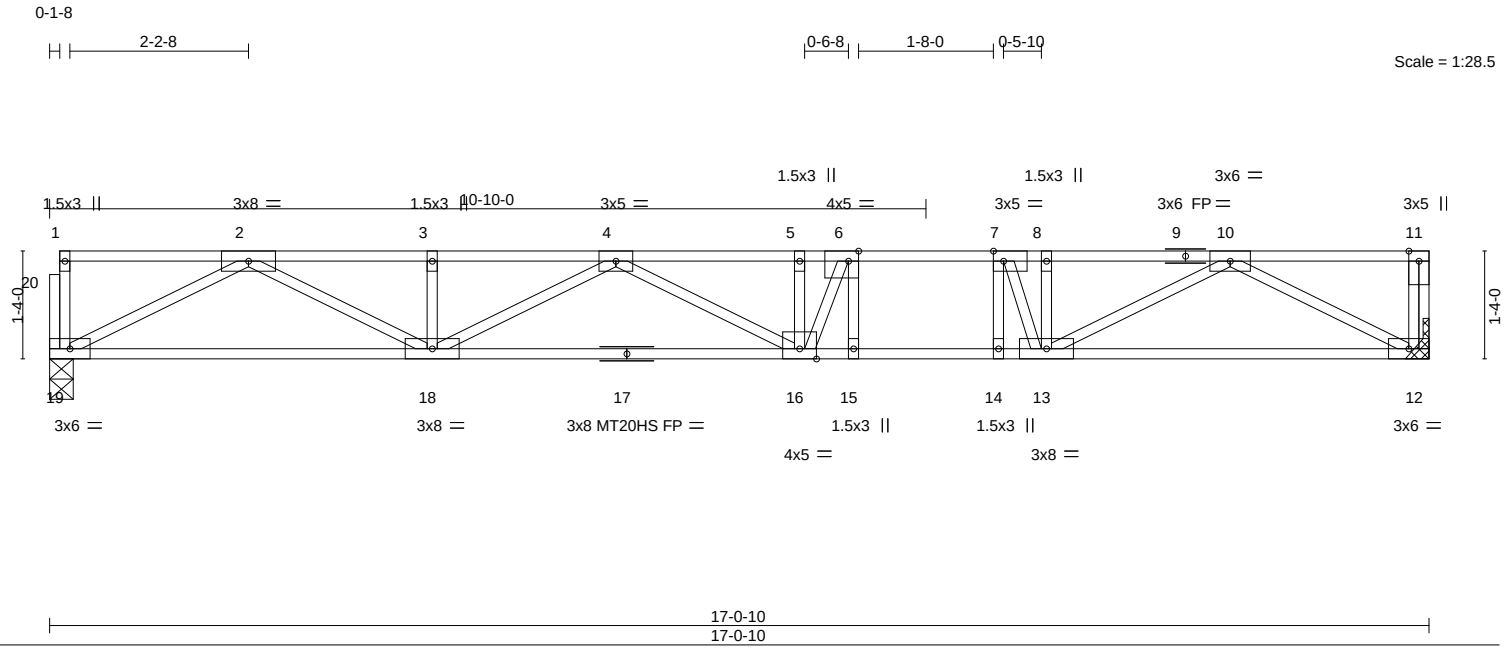



17-0-10
17-0-10

Plate Offsets (X,Y)-- [6:0-1-8,Edge], [7:0-1-8,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 | 0.65 | Vert(LL) | -0.20 | 15-16 | >988 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.81 | Vert(CT) | -0.31 | 15-16 | >659 | 360 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | NO | WB | 0.61 | Horz(CT) | 0.05 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 90 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP 2400F 2.0E(flat)
BOT CHORD 2x4 SP No.1(flat) *Except*
12-17: 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

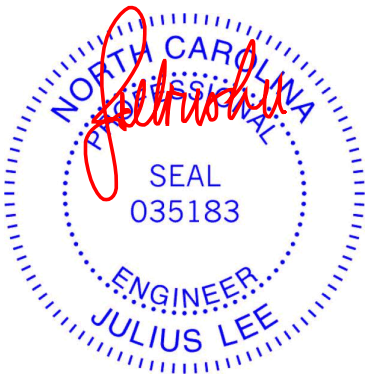
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 19=0-3-8, 12=Mechanical
Max Grav 19=1017(LC 1), 12=961(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2848/0, 3-4=-2848/0, 4-5=-3464/0, 5-6=-3464/0, 6-7=-3128/0, 7-8=-2711/0, 8-10=-2711/0
BOT CHORD 18-19=0/1725, 16-18=0/3404, 15-16=0/3148, 14-15=0/3128, 13-14=0/3107, 12-13=0/1637
WEBS 6-15=-453/0, 7-14=0/457, 2-19=-1937/0, 2-18=0/1272, 3-18=-253/0, 4-18=-630/0, 5-16=-464/0, 6-16=0/890, 10-12=-1844/0, 10-13=0/1216, 8-13=-60/354, 7-13=-1195/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Attach ribbon block to truss with 3-10d nails applied to flat face.
4) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Load case(s) 1, 2, 3, 4, 5, 6 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
7) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
8) 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 (plf)
Vert: 12-19=-10, 1-5=-115, 5-11=-100
2) Dead: Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 12-19=-10, 1-5=-115, 5-11=-100
3) 1st chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 12-19=-10, 1-5=-115, 5-7=-100, 7-11=-20

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Continued on page 2



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**LOAD CASE(S)** Standard

4) 2nd chase Dead + Floor Live (unbalanced): Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 12-19=-10, 1-5=-35, 5-6=-20, 6-11=-100
5) 3rd chase Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 12-19=-10, 1-5=-115, 5-7=-100, 7-11=-20
6) 4th chase Dead: Lumber Increase=1.00, Plate Increase=1.00
   Uniform Loads (plf)
   Vert: 12-19=-10, 1-5=-35, 5-6=-20, 6-11=-100

| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224054 |
|---|---|---|---|---|---|
| 22020376-02 | F3G | FLOOR | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:08 2022 Page 1
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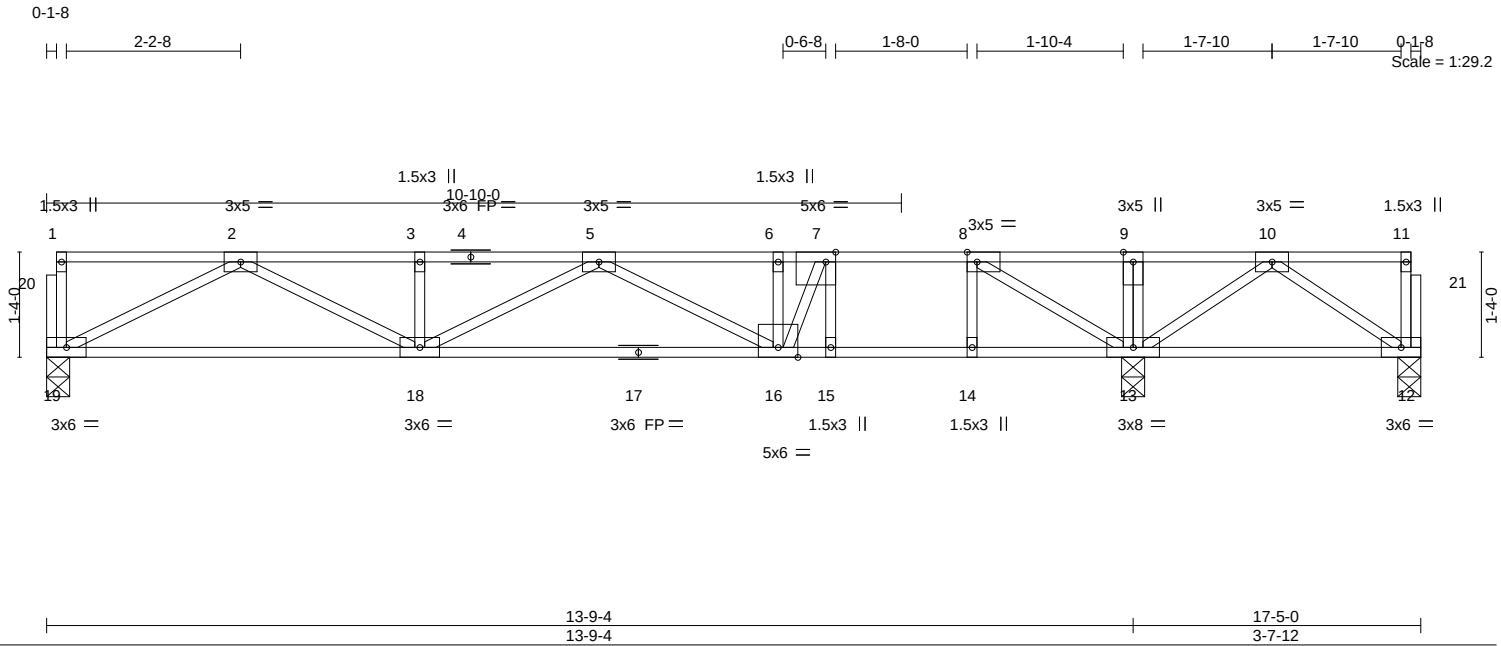



Plate Offsets (X,Y)-- [7:0-1-8,Edge], [8:0-1-8,Edge]

| 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 | 0.87 | Vert(LL) | -0.20 | 15-16 | >807 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.89 | Vert(CT) | -0.28 | 15-16 | >590 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.60 | Horz(CT) | 0.03 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 92 lb | FT = 20%F, 11%E |

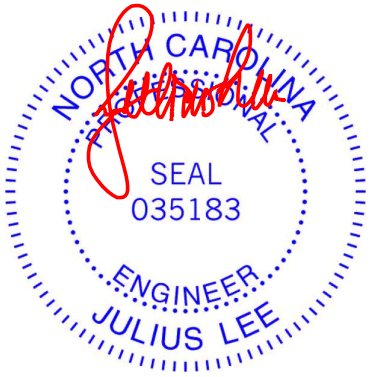
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat) *Except* 4-11: 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 12-17: 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-1-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 6-0-0 oc bracing: 12-13.

**REACTIONS.** (size) 19=0-3-8, 12=0-3-8, 13=0-3-8
Max Uplift 12=-34(LC 3)
Max Grav 19=722(LC 3), 12=161(LC 4), 13=1056(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1849/0, 3-5=-1849/0, 5-6=-1759/0, 6-7=-1759/0, 7-8=-1168/0, 8-9=0/277, 9-10=0/277
BOT CHORD 18-19=0/1184, 16-18=0/2016, 15-16=0/1204, 14-15=0/1168, 13-14=0/1168
WEBS 7-15=-679/0, 8-14=0/379, 2-19=-1328/0, 2-18=0/754, 5-16=-297/2, 6-16=-536/0, 7-16=0/1270, 8-13=-1678/0, 10-13=-364/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) Attach ribbon block to truss with 3-10d nails applied to flat face.
3) One RT7A MiTek connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 12. This connection is for uplift only and does not consider lateral forces.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
6) CAUTION, Do not erect truss backwards.

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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224055 |
|---|---|---|---|---|---|
| 22020376-02 | F3F | FLOOR | 2 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:06 2022 Page 1
ID:Co_LqlUbt4ATaJKEajxSMZzY4vF-Ou6kmpkqF2J9QtOrOv23XjrdogT1EkT5o5_9hSzY1Rx

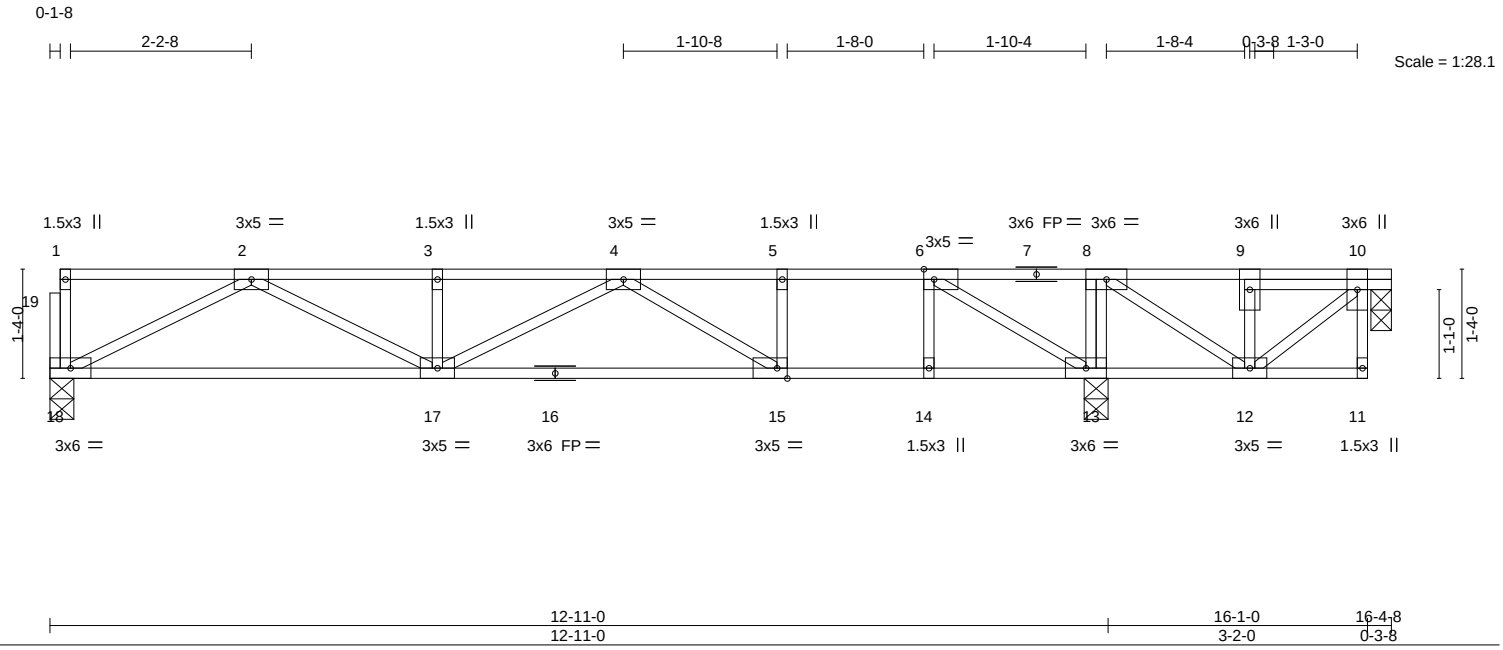



Plate Offsets (X,Y)-- [6:0-1-8,Edge], [15:0-1-8,Edge]

| 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 | 0.86 | Vert(LL) | -0.27 | 15-17 | >569 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.81 | Vert(CT) | -0.37 | 15-17 | >408 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.37 | Horz(CT) | 0.03 | 10 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 87 lb | FT = 20%F, 11%E |

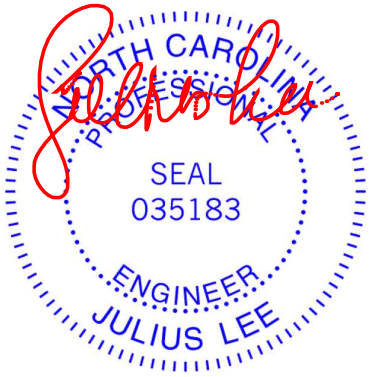
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat) *Except* 1-7: 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 11-16: 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 18=0-3-8, 10=0-3-0, 13=0-3-8
Max Grav 18=721(LC 1), 10=348(LC 7), 13=721(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1859/0, 3-4=-1859/0, 4-5=-1555/0, 5-6=-1555/0, 6-8=-402/0, 8-9=-384/0, 9-10=-380/0
BOT CHORD 17-18=0/1194, 15-17=0/1990, 14-15=0/1555, 13-14=0/1555, 12-13=0/402
WEBS 10-12=0/494, 6-14=0/296, 2-18=-1339/0, 2-17=0/753, 4-15=-519/0, 6-13=-1478/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) Attach ribbon block to truss with 3-10d nails applied to flat face.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
6) CAUTION, Do not erect truss backwards.




March 24,2022



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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224056 |
|---|---|---|---|---|---|
| 22020376-02 | F3E | FLOOR | 4 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:04 2022 Page 1
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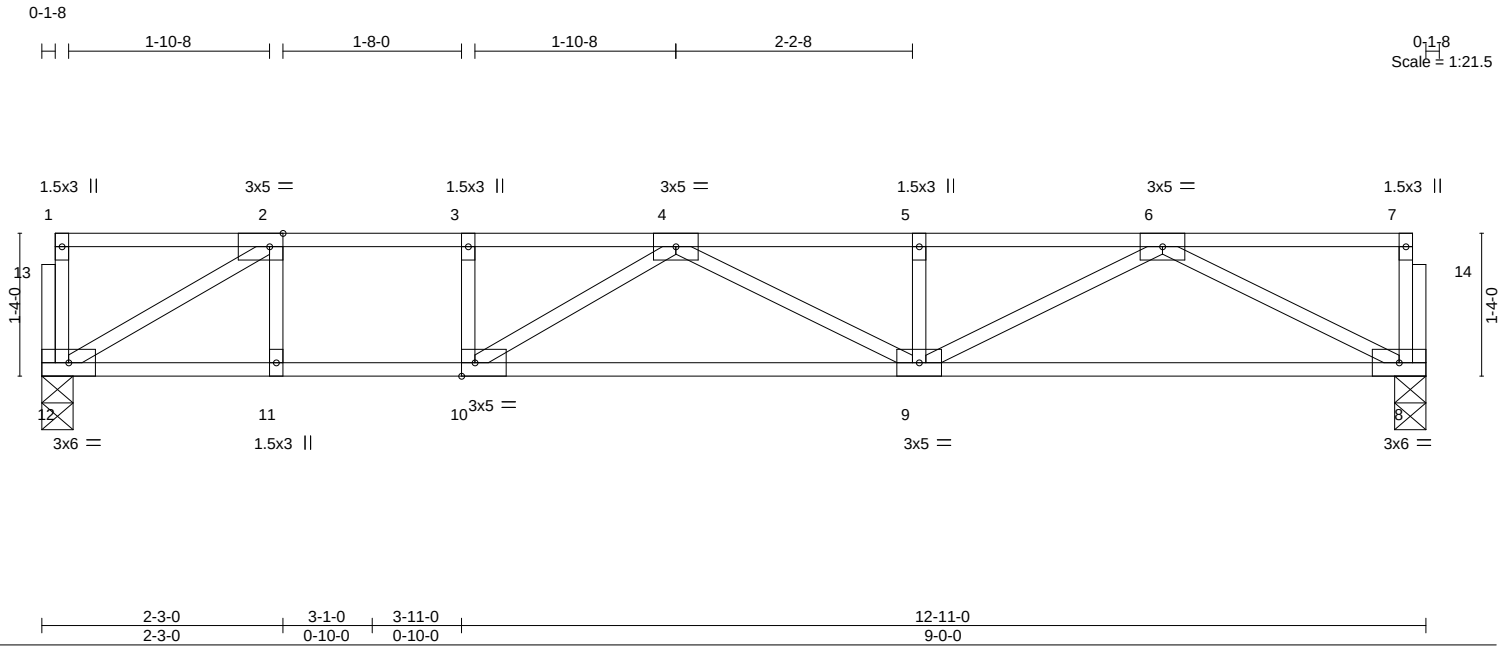






Plate Offsets (X,Y)-- [2:0-1-8,Edge], [10:0-1-8,Edge]

| 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 | 0.92 | Vert(LL) | -0.28 | 9-10 | >535 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.69 | Vert(CT) | -0.39 | 9-10 | >387 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.38 | Horz(CT) | 0.02 | 8 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 66 lb | FT = 20%F, 11%E |

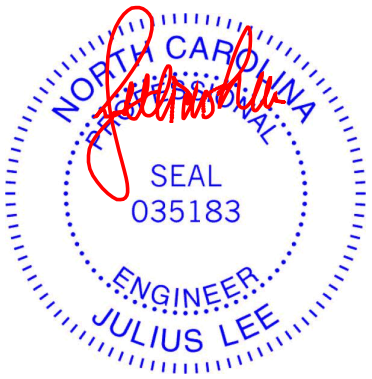
**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

**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.

**REACTIONS.** (size) 12=0-3-8, 8=0-3-8
Max Grav 12=690(LC 1), 8=690(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1309/0, 3-4=-1309/0, 4-5=-1749/0, 5-6=-1749/0
BOT CHORD 11-12=0/1309, 10-11=0/1309, 9-10=0/1819, 8-9=0/1140
WEBS 2-11=0/301, 2-12=-1517/0, 6-8=-1279/0, 6-9=0/689, 4-10=-642/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) Attach ribbon block to truss with 3-10d nails applied to flat face.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.




March 24,2022



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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224057 |
|---|---|---|---|---|---|
| 22020376-02 | L3E | GABLE | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:36 2022 Page 1
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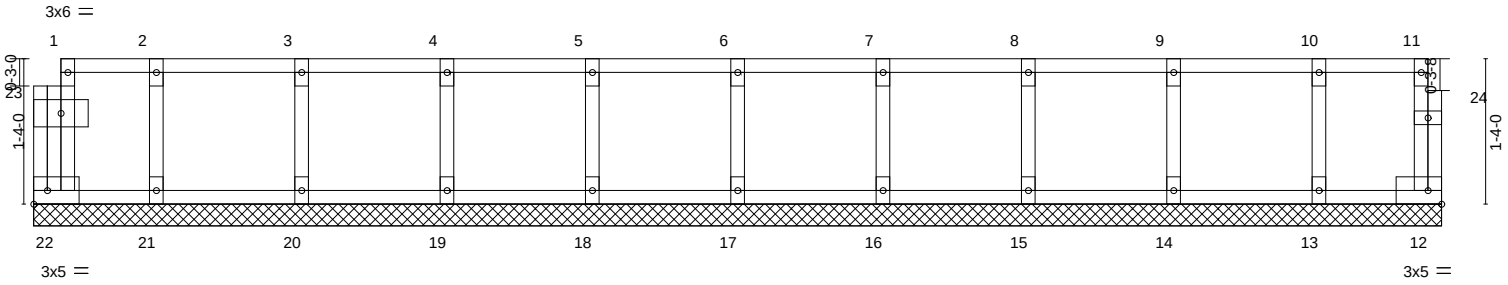
0-3-0 0-1-8

Scale = 1:21.1




| 1-1-8 | 2-5-8 | 3-9-8 | 5-1-8 | 6-5-8 | 7-9-8 | 9-1-8 | 10-5-8 | 11-9-8 | 12-11-0 |
|---|---|---|---|---|---|---|---|---|---|
| 1-1-8 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-1-8 |

| **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 | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.01 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2018/TPI2014 | Matrix-R | | | | | | | Weight: 60 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) |

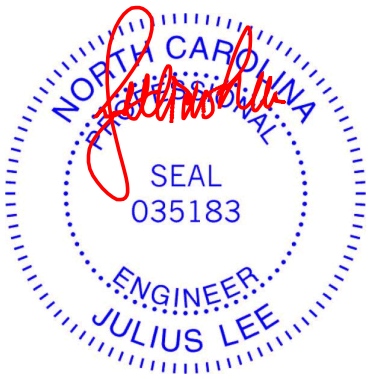
**BRACING-**

| | |
|---|---|
| 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.** All bearings 12-11-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 17, 18, 19, 20, 21, 16, 15, 14, 13

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

**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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.




March 24,2022



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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224058 |
|---|---|---|---|---|---|
| 22020376-02 | F3C | FLOOR | 4 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:00 2022 Page 1
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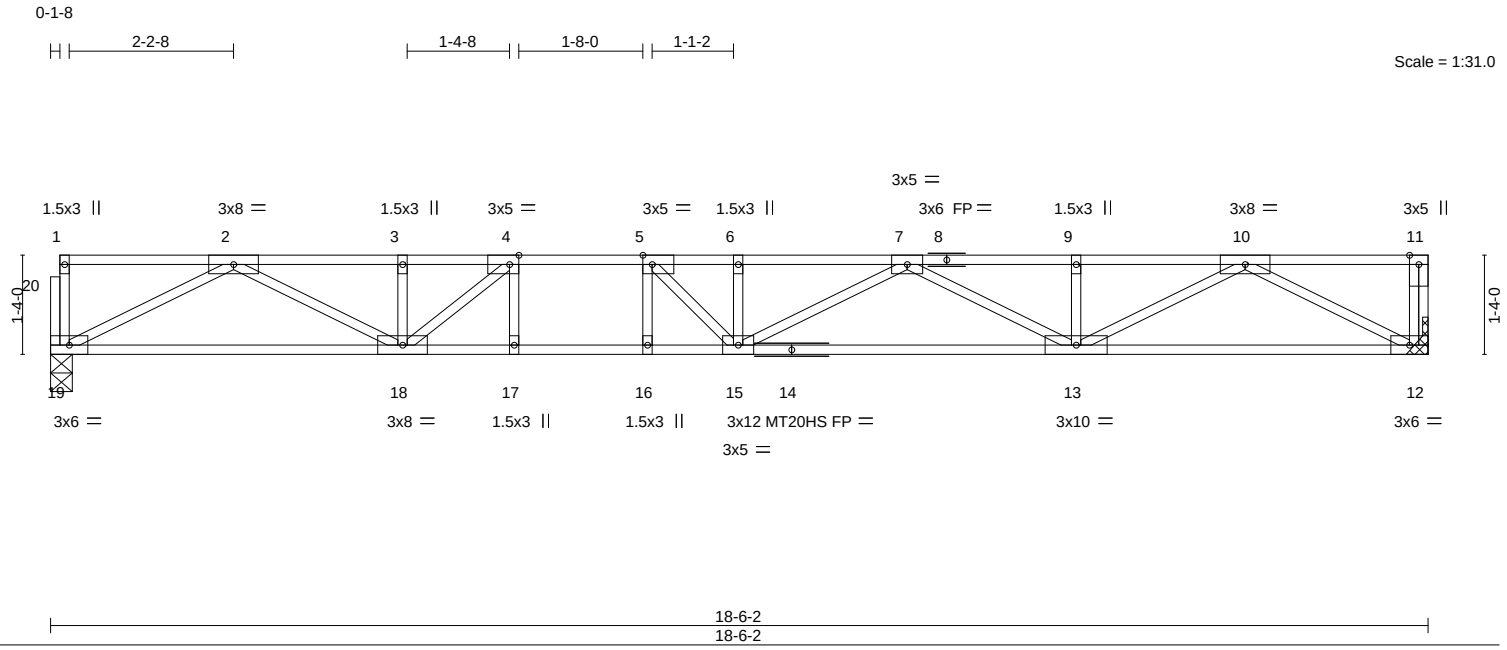



Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

| 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 | 0.95 | Vert(LL) | -0.32 | 15-16 | >678 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.77 | Vert(CT) | -0.44 | 15-16 | >493 | 360 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.64 | Horz(CT) | 0.06 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 96 lb | FT = 20%F, 11%E |

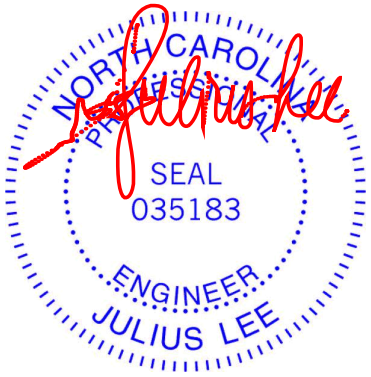
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except*
12-14: 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 19=0-3-8, 12=Mechanical
Max Grav 19=998(LC 1), 12=1004(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2859/0, 3-4=-2859/0, 4-5=-3551/0, 5-6=-3834/0, 6-7=-3834/0, 7-9=-2898/0, 9-10=-2898/0
BOT CHORD 18-19=0/1716, 17-18=0/3551, 16-17=0/3551, 15-16=0/3551, 13-15=0/3583, 12-13=0/1718
WEBS 4-17=-0/304, 5-16=-329/11, 2-19=-1928/0, 2-18=0/1294, 4-18=-1031/0, 10-12=-1935/0, 10-13=0/1336, 7-13=-776/0, 7-15=0/370, 6-15=-301/0, 5-15=-178/618

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Attach ribbon block to truss with 3-10d nails applied to flat face.
4) Refer to girder(s) for truss to truss connections.
5) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
7) CAUTION, Do not erect truss backwards.




March 24,2022



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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224059 |
|---|---|---|---|---|---|
| 22020376-02 | F3B | FLOOR | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:56:59 2022 Page 1
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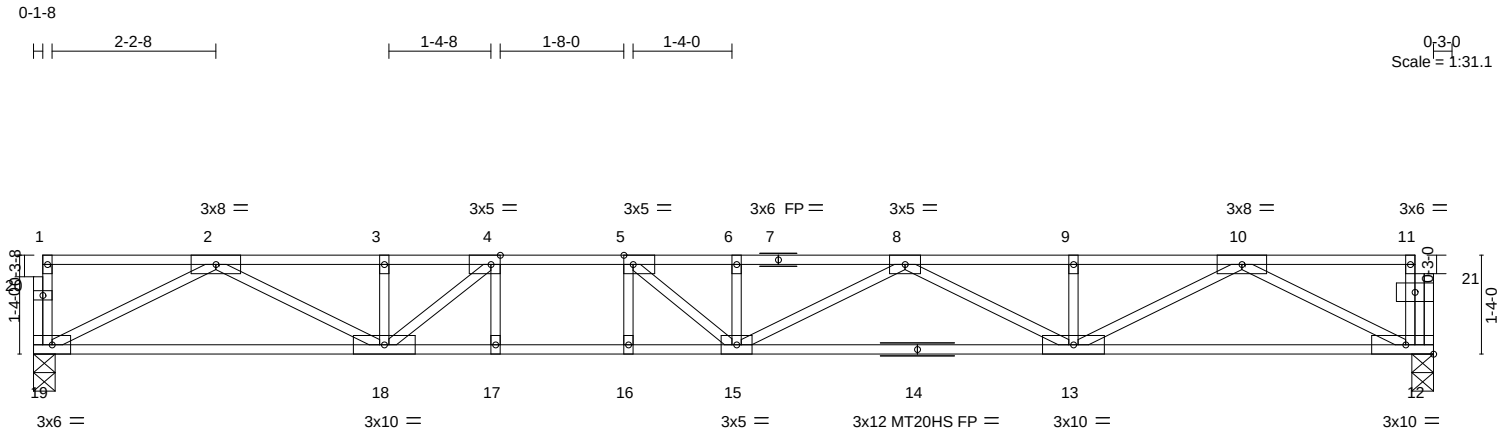



Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge]

| 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) | -0.35 | 15-16 | >642 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.79 | Vert(CT) | -0.48 | 15-16 | >467 | 360 | MT20HS | 187/143 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.65 | Horz(CT) | 0.06 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 98 lb | FT = 20%F, 11%E |

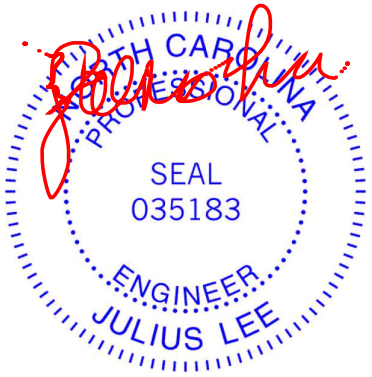
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except*
12-14: 2x4 SP No.1(flat)
WEBS 2x4 SP No.3(flat)

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

**REACTIONS.** (size) 19=0-3-8, 12=0-3-8
Max Grav 19=1015(LC 1), 12=1008(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2919/0, 3-4=-2919/0, 4-5=-3652/0, 5-6=-3965/0, 6-8=-3965/0, 8-9=-2987/0, 9-10=-2987/0
BOT CHORD 18-19=0/1748, 17-18=0/3652, 16-17=0/3652, 15-16=0/3652, 13-15=0/3690, 12-13=0/1786
WEBS 4-17=0/324, 5-16=-316/8, 2-19=-1963/0, 2-18=0/1327, 4-18=-1082/0, 10-12=-1990/0, 10-13=0/1361, 8-13=-796/0, 8-15=0/371, 6-15=-299/0, 5-15=-183/625

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.




March 24,2022



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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224060 |
|---|---|---|---|---|---|
| 22020376-02 | F3GR | FLOOR | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:15 2022 Page 1
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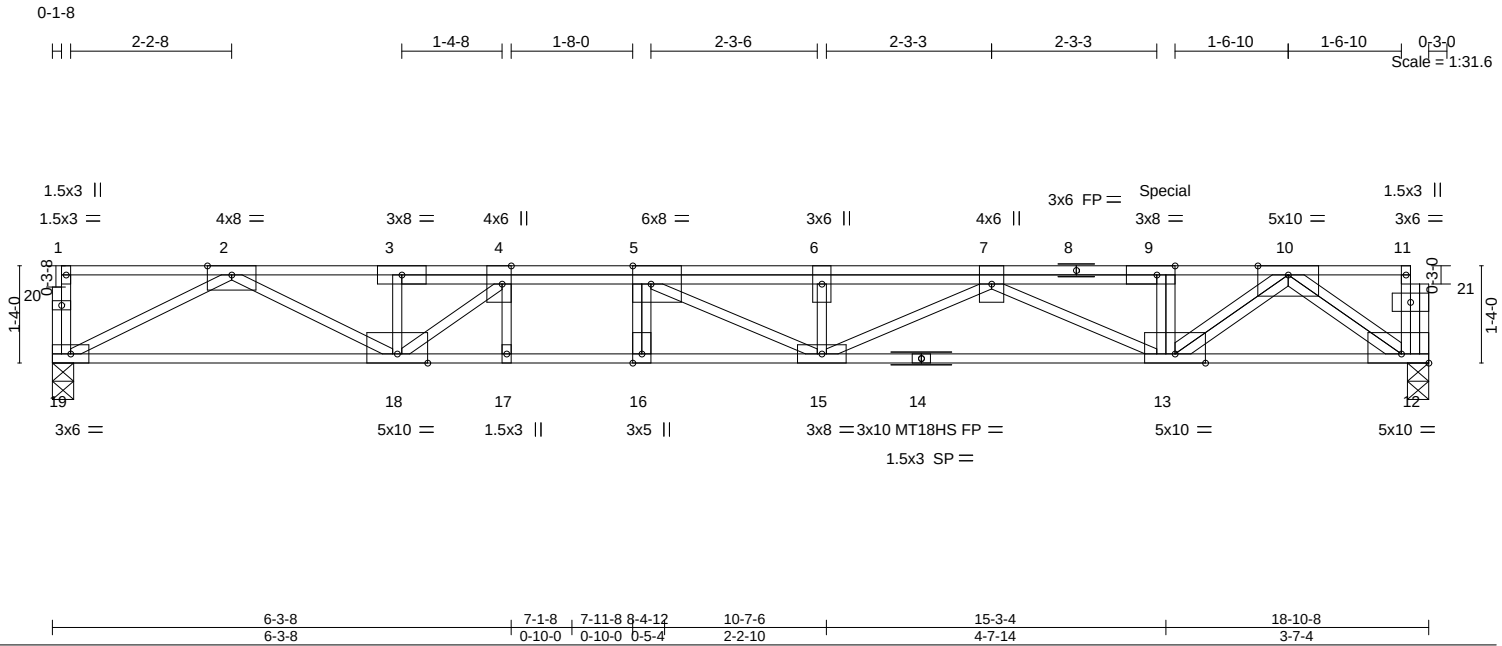






Plate Offsets (X,Y)-- [4:0-3-0,Edge], [5:0-3-0,Edge], [9:0-3-0,Edge], [12:Edge,0-1-8]

| 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 | 0.99 | Vert(LL) | -0.39 | 15-16 | >574 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.84 | Vert(CT) | -0.54 | 15-16 | >416 | 360 | MT18HS | 244/190 |
| BCLL | 0.0 | Rep Stress Incr | NO | WB | 0.84 | Horz(CT) | 0.09 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 121 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat)
WEBS 2x4 SP No.3(flat)

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 3-7-9 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

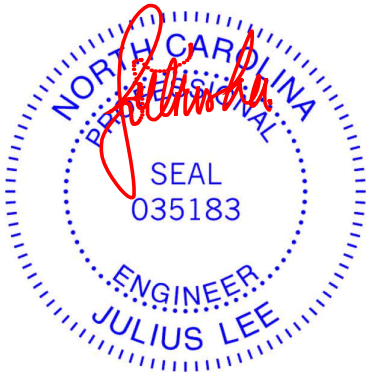
"Special" indicates special hanger(s) or other connection device(s) required at location(s)shown. The design/selection of such special connection device(s) is the responsibility of others. This applies to all applicable truss designs in this job.

**REACTIONS.** (size) 19=0-3-8, 12=0-3-8
Max Grav 19=1217(LC 1), 12=1868(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3694/0, 3-4=-3710/0, 4-5=-5105/0, 5-6=-6013/0, 6-7=-6013/0, 7-9=-5186/0, 9-10=-5034/0
BOT CHORD 18-19=0/2139, 17-18=0/5105, 16-17=0/5105, 15-16=0/5105, 13-15=0/5769, 12-13=0/2579
WEBS 9-13=-1457/0, 10-12=-3132/0, 10-13=0/3018, 2-19=-2404/0, 2-18=0/1761, 3-18=0/387, 4-18=-1876/0, 7-13=-647/0, 7-15=0/272, 6-15=-484/0, 5-15=0/1267

**NOTES-**
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 14 = 11%
4) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
6) CAUTION, Do not erect truss backwards.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1142 lb down at 15-3-4 on top chord. The design/selection of such connection device(s) is the responsibility of others.
8) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 12-19=-10, 1-11=-100
Concentrated Loads (lb)
Vert: 9=-1062(F)




March 24,2022



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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224061 |
|---|---|---|---|---|---|
| 22020376-02 | F3A | FLOOR | 3 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:56:57 2022 Page 1
ID:Co_LqlUbt4ATaJKEajxSMZzY4vF-993KtkdBNHAQrUC6MWNyfpzBg1MvdbzmkBIAuTzY1S4

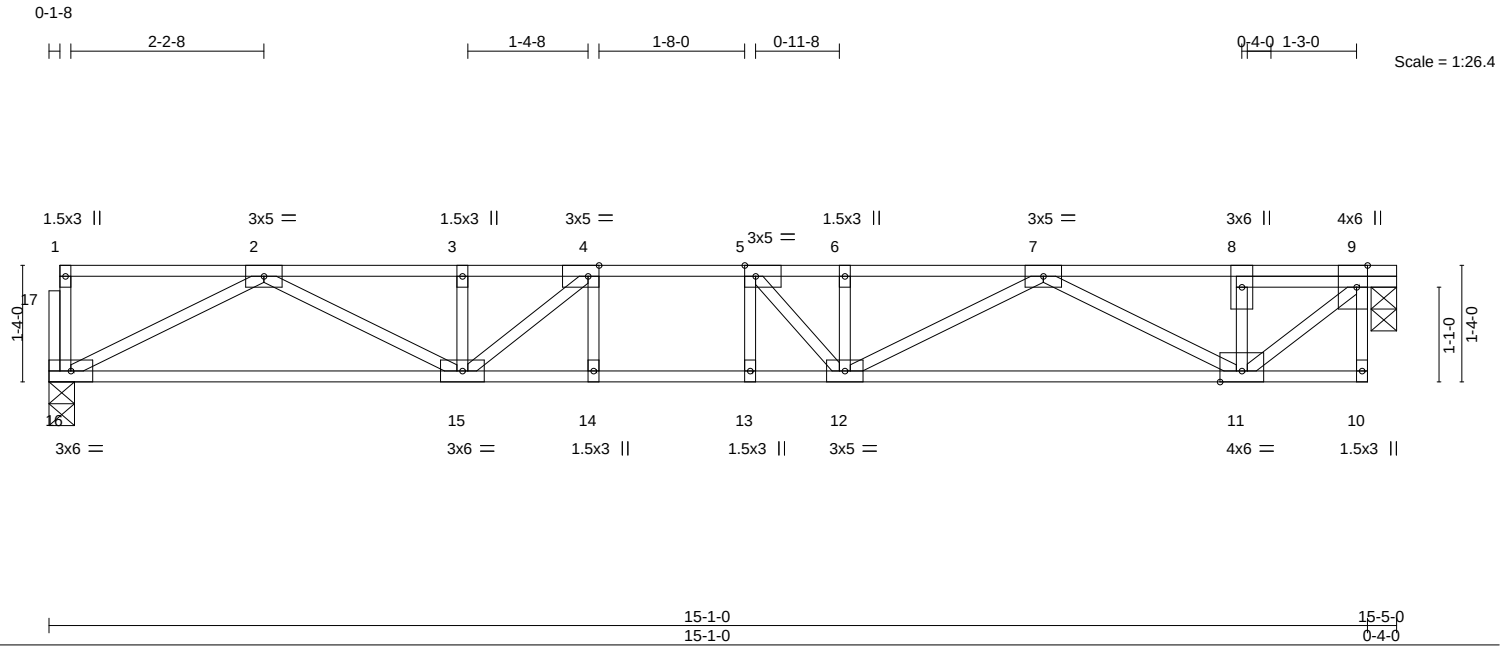



Plate Offsets (X,Y)-- [4:0-1-8,Edge], [5:0-1-8,Edge], [9:0-3-0,Edge]

| 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 | 0.50 | Vert(LL) | -0.15 | 13 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.94 | Vert(CT) | -0.20 | 13 | >888 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.58 | Horz(CT) | 0.01 | 9 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-S | | | | | | | Weight: 82 lb | FT = 20%F, 11%E |

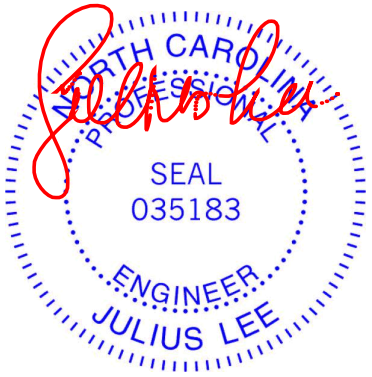
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except: 2-2-0 oc bracing: 13-14.

**REACTIONS.** (size) 16=0-3-8, 9=0-3-8
Max Grav 16=813(LC 1), 9=819(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2180/0, 3-4=-2180/0, 4-5=-2485/0, 5-6=-2448/0, 6-7=-2448/0, 7-8=-939/0, 8-9=-936/0
BOT CHORD 15-16=0/1362, 14-15=0/2485, 13-14=0/2485, 12-13=0/2485, 11-12=0/1889
WEBS 9-11=0/1218, 2-16=-1529/0, 2-15=0/927, 4-15=-583/0, 7-11=-1080/0, 7-12=0/633, 6-12=-250/31, 5-12=-377/213

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) Attach ribbon block to truss with 3-10d nails applied to flat face.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.
5) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
6) CAUTION, Do not erect truss backwards.




March 24,2022



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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224062 |
|---|---|---|---|---|---|
| 22020376-02 | F3GRA | FLOOR | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:22 2022 Page 1
ID:Co_LqlUbt4ATaJKEajxSMZzY4vF-wz4n7HxsUzKtLKcwKGKpA5WOO6yi_wjSUas?FXzY1Rh

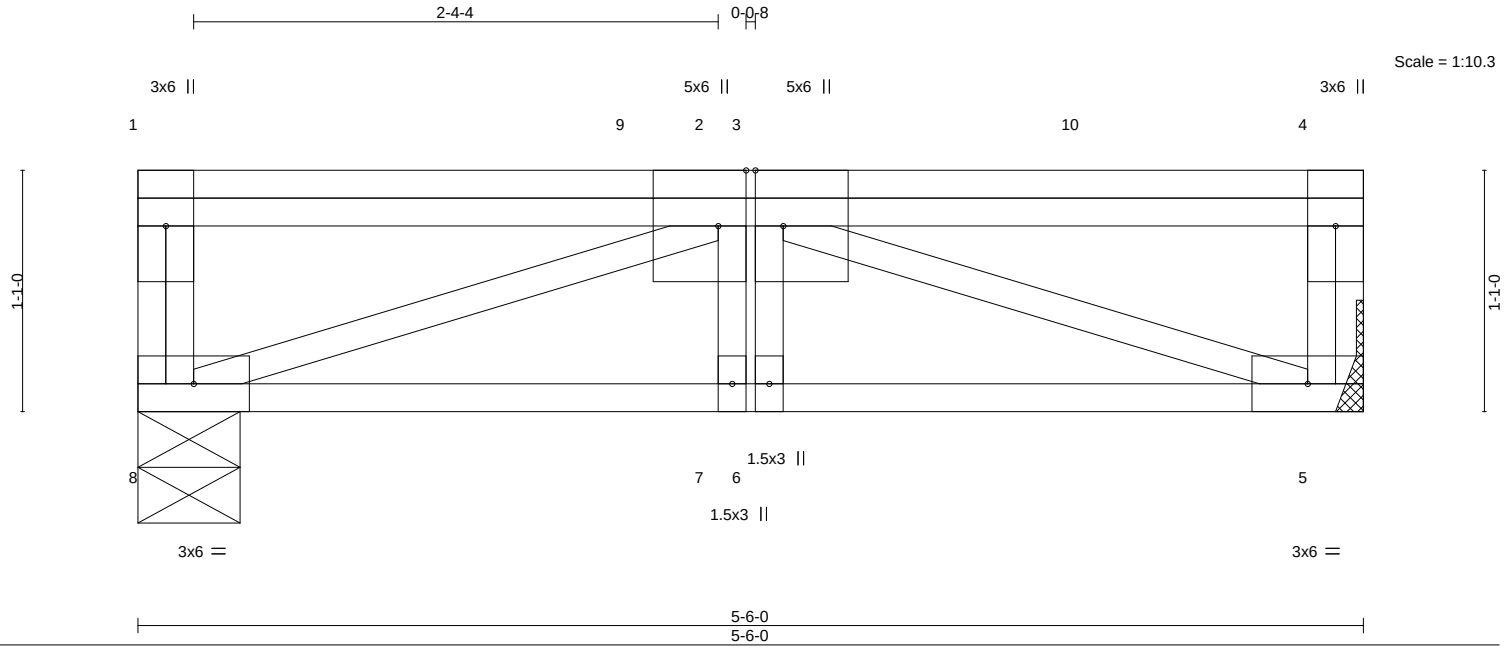



Plate Offsets (X,Y)-- [2:0-3-0,Edge], [3:0-3-0,Edge]

| 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 | 0.76 | Vert(LL) | -0.04 | 6 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.69 | Vert(CT) | -0.05 | 6 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | NO | WB | 0.54 | Horz(CT) | 0.02 | 5 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 38 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

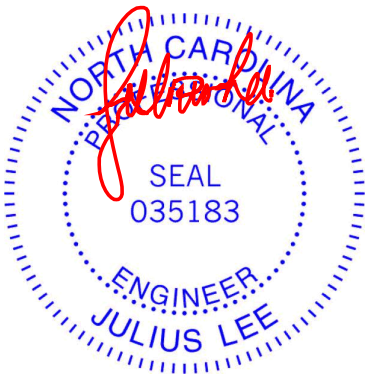
**BRACING-**
TOP CHORD Structural wood sheathing directly applied or 5-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (size) 8=0-5-8, 5=Mechanical
Max Grav 8=854(LC 1), 5=1162(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 4-5=-462/0, 2-3=-1951/0
BOT CHORD 7-8=0/1951, 6-7=0/1951, 5-6=0/1951
WEBS 3-5=-2069/0, 2-8=-2069/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) Refer to girder(s) for truss to truss connections.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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
1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (plf)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 9=-719 10=-719




March 24,2022



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| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224063 |
|---|---|---|---|---|---|
| 22020376-02 | F3 | FLOOR | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:56:56 2022 Page 1
ID:Co_LqlUbt4ATaJKEajxSMZzY4vF-gzWygOdZcz2aDKdwposj7cRzKe1MuAUdVXZdL1zY1S5

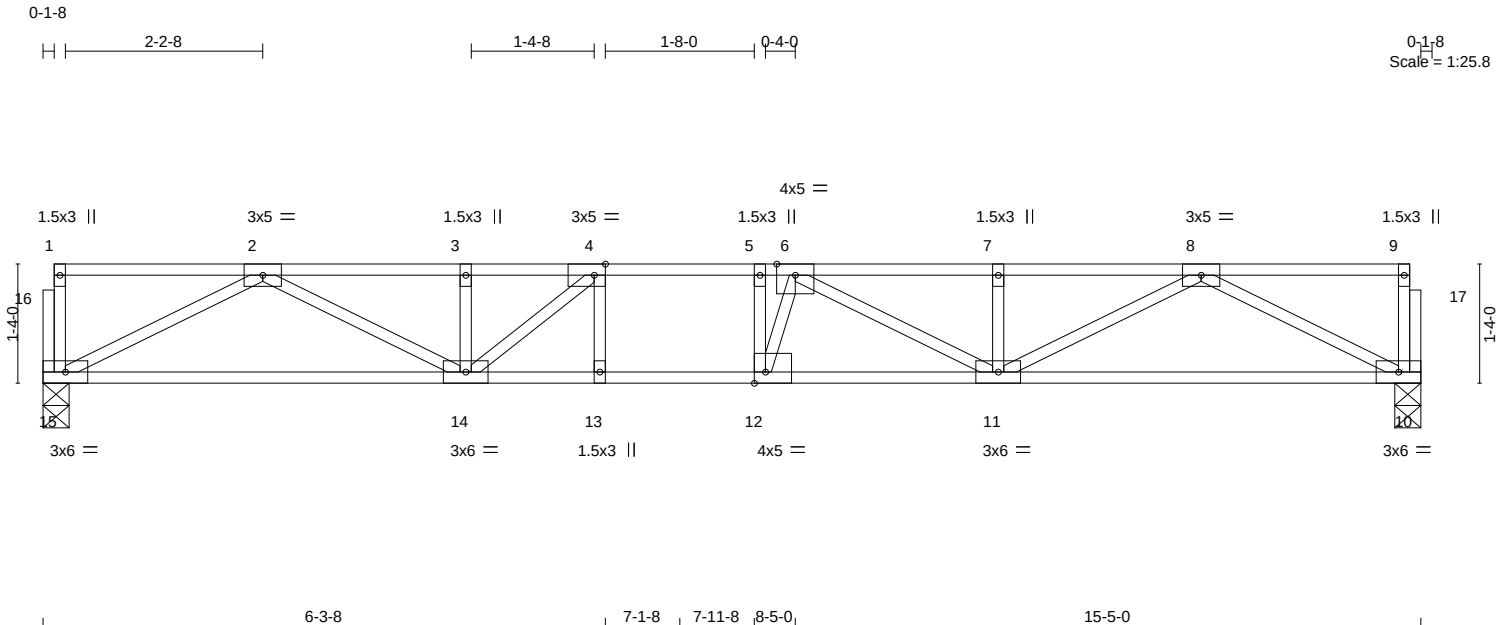



Plate Offsets (X,Y)-- [4:0-1-8,Edge], [12:0-1-8,Edge]

| 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 | 0.67 | Vert(LL) | -0.17 | 11-12 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.90 | Vert(CT) | -0.23 | 11-12 | >801 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.47 | Horz(CT) | 0.05 | 10 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2018/TPI2014 | Matrix-S | | | | | | | Weight: 80 lb | FT = 20%F, 11%E |

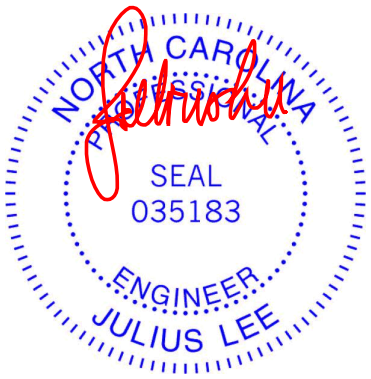
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

**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) 15=0-3-8, 10=0-3-8
Max Grav 15=828(LC 1), 10=828(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-2235/0, 3-4=-2235/0, 4-5=-2572/0, 5-6=-2572/0, 6-7=-2257/0, 7-8=-2257/0
BOT CHORD 14-15=0/1391, 13-14=0/2572, 12-13=0/2572, 11-12=0/2601, 10-11=0/1389
WEBS 5-12=-298/295, 2-15=-1561/0, 2-14=0/956, 4-14=-622/0, 8-10=-1559/0, 8-11=0/983, 6-11=-464/0, 6-12=-384/372

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) Attach ribbon block to truss with 3-10d nails applied to flat face.
3) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
4) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

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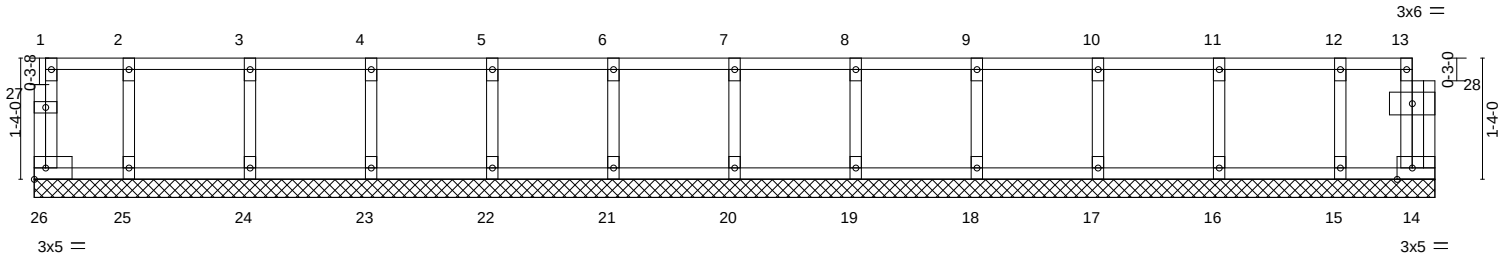
| Job | Truss | Truss Type | Qty | Ply | Carolina Seasons Lot10-Ph2 S2-2913 Elev 'B' Permit-Floor Truss T27224064 |
|---|---|---|---|---|---|
| 22020376-02 | L3 | GABLE | 1 | 1 | Job Reference (optional) |

Carter Components (Lexington), Lexington, NC - 27295, 8.530 s Dec 6 2021 MiTek Industries, Inc. Wed Mar 23 13:57:30 2022 Page 1
ID:Co_LqlUbt4ATaJKEajxSMZzY4vF-hWZpo01ubQKlIZDSoxThVmrwyLr9sfidKqoQX3zY1RZ

0-1-8 0-3-0

Scale = 1:25.4




| 1-0-8 | 2-4-8 | 3-8-8 | 5-0-8 | 6-4-8 | 7-8-8 | 9-0-8 | 10-4-8 | 11-8-8 | 13-0-8 | 14-4-8 | 15-5-0 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-0-8 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-0-8 |

Plate Offsets (X,Y)-- [14:0-2-0,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 | 0.08 | Vert(LL) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.01 | Vert(CT) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(CT) | 0.00 | 14 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2018/TPI2014 | | Matrix-R | | | | | | | 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) |

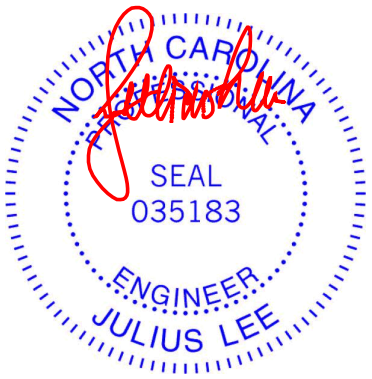
**BRACING-**

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

**REACTIONS.** All bearings 15-5-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 26, 14, 20, 21, 22, 23, 24, 25, 19, 18, 17, 16, 15

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

**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) This truss is designed in accordance with the 2018 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
6) Recommend 2x6 strongbacks, on edge, spaced at 10-0-0 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.

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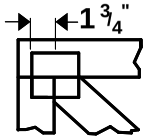
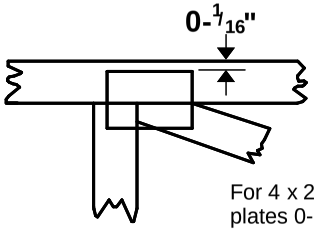
# Symbols

## 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.

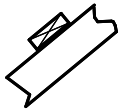
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

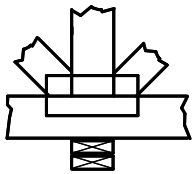
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

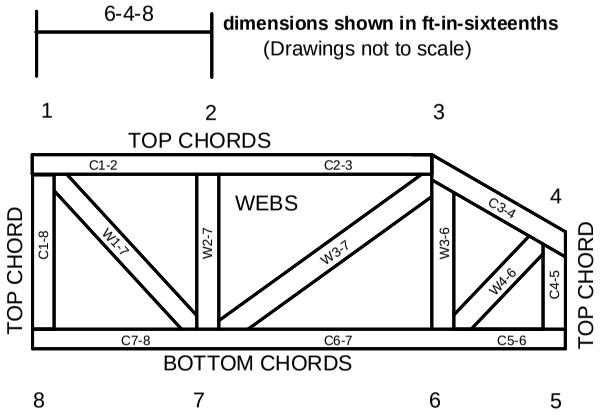


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**Industry Standards:**

ANSI/TPI1: 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




**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-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: MII-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 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/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.