ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 1625536_Jill_FL
Sturtz Homes

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

Pages or sheets covered by this seal: E12549225 thru E12549240

My license renewal date for the state of North Carolina is December 31, 2018.

North Carolina COA: C-0844


December 26,2018

Gilbert, Eric

**IMPORTANT NOTE:** Truss Engineer's responsibility is solely for design of individual trusses based upon design parameters shown on referenced truss drawings. Parameters have not been verified as appropriate for any use. Any location identification specified is for file reference only and has not been used in preparing design. Suitability of truss designs for any particular building is the responsibility of the building designer, not the Truss Engineer, per ANSI/TPI-1, Chapter 2.

| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F1 | Floor Supported Gable | 1 | 1 | E12549225 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:38:53 2018 Page 1
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0-1-8 0-1-8

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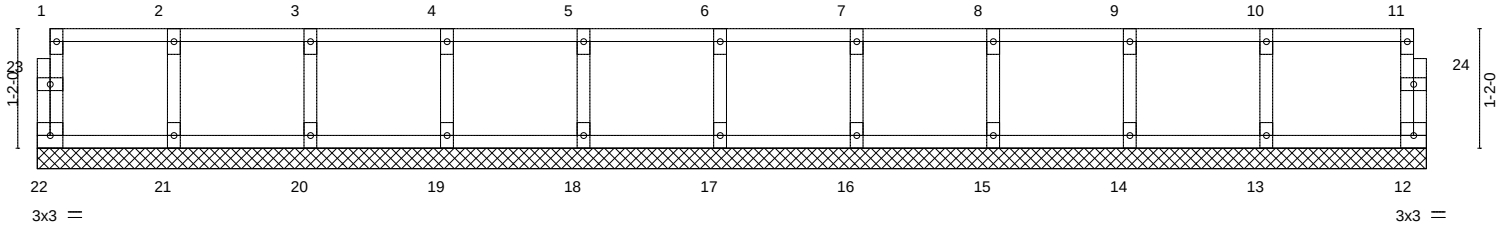



13-6-12
13-6-12

| 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) | n/a | - | n/a | 999 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.02 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(TL) | 0.00 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2009/TPI2007 | Matrix-R | | | | | | | Weight: 57 lb | FT = 20%F, 11%E |

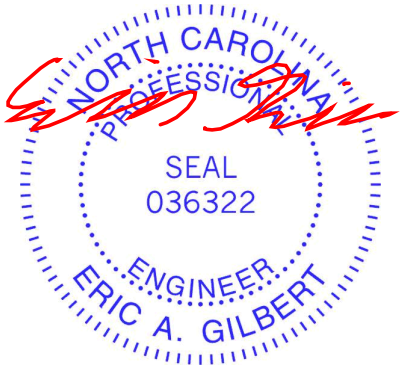
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

**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 13-6-12.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 22, 12, 21, 20, 19, 18, 17, 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) 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 | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F2 | Floor | 16 | 1 | E12549226 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:39:00 2018 Page 1
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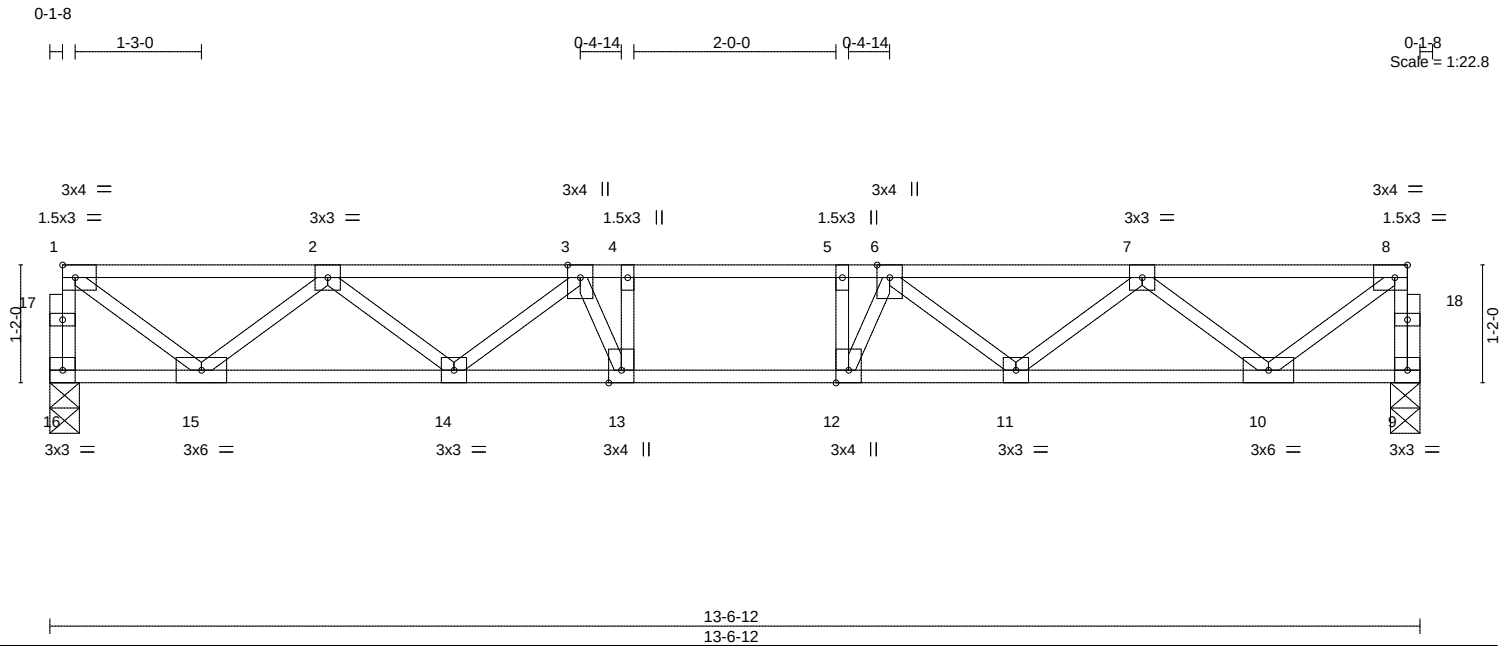


Plate Offsets (X,Y)-- [8:0-1-8,Edge]

| 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 | 0.49 | Vert(LL) | -0.11 | 12-13 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.70 | Vert(TL) | -0.17 | 12-13 | >921 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.47 | Horz(TL) | 0.04 | 9 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2009/TPI2007 | | Matrix-S | | | | | | | Weight: 69 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.** (lb/size) 16=726/0-3-8, 9=726/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-721/0, 8-9=-721/0, 1-2=-822/0, 2-3=-1900/0, 3-4=-2300/0, 4-5=-2300/0, 5-6=-2300/0, 6-7=-1900/0, 7-8=-822/0
BOT CHORD 14-15=0/1538, 13-14=0/2237, 12-13=0/2300, 11-12=0/2237, 10-11=0/1538
WEBS 4-13=-366/77, 5-12=-366/77, 1-15=0/994, 2-15=-932/0, 2-14=0/471, 3-14=-438/0, 3-13=-131/488, 8-10=0/994, 7-10=-932/0, 7-11=0/471, 6-11=-438/0, 6-12=-131/488

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) 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 | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F3 | GABLE | 1 | 1 | E12549227 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001

8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:39:02 2018 Page 1
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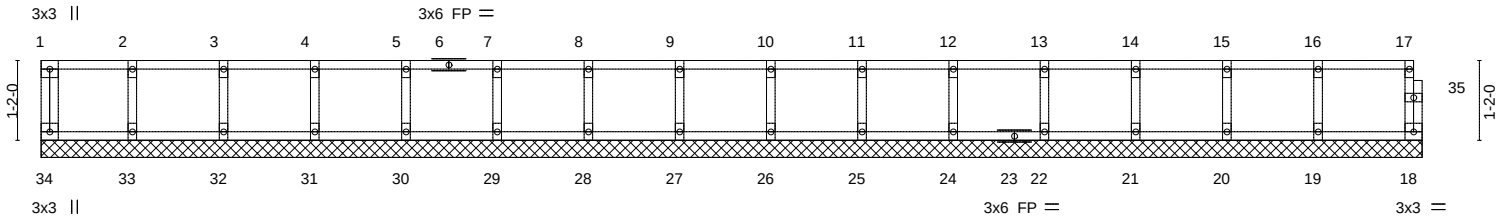


| 1-4-0 | 2-8-0 | 4-0-0 | 5-4-0 | 6-8-0 | 8-0-0 | 9-4-0 | 10-8-0 | 12-0-0 | 13-4-0 | 14-8-0 | 16-0-0 | 17-4-0 | 18-8-0 | 20-2-4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-6-4 |

| **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(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(TL) | 0.00 | 18 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2009/TPI2007 | Matrix-R | | | | | | | Weight: 84 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 20-2-4.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 34, 18, 33, 32, 31, 30, 29, 28, 27, 26, 25, 24, 22, 21, 20, 19

**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) 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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| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F4 | Floor | 4 | 1 | E12549228 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:39:02 2018 Page 1
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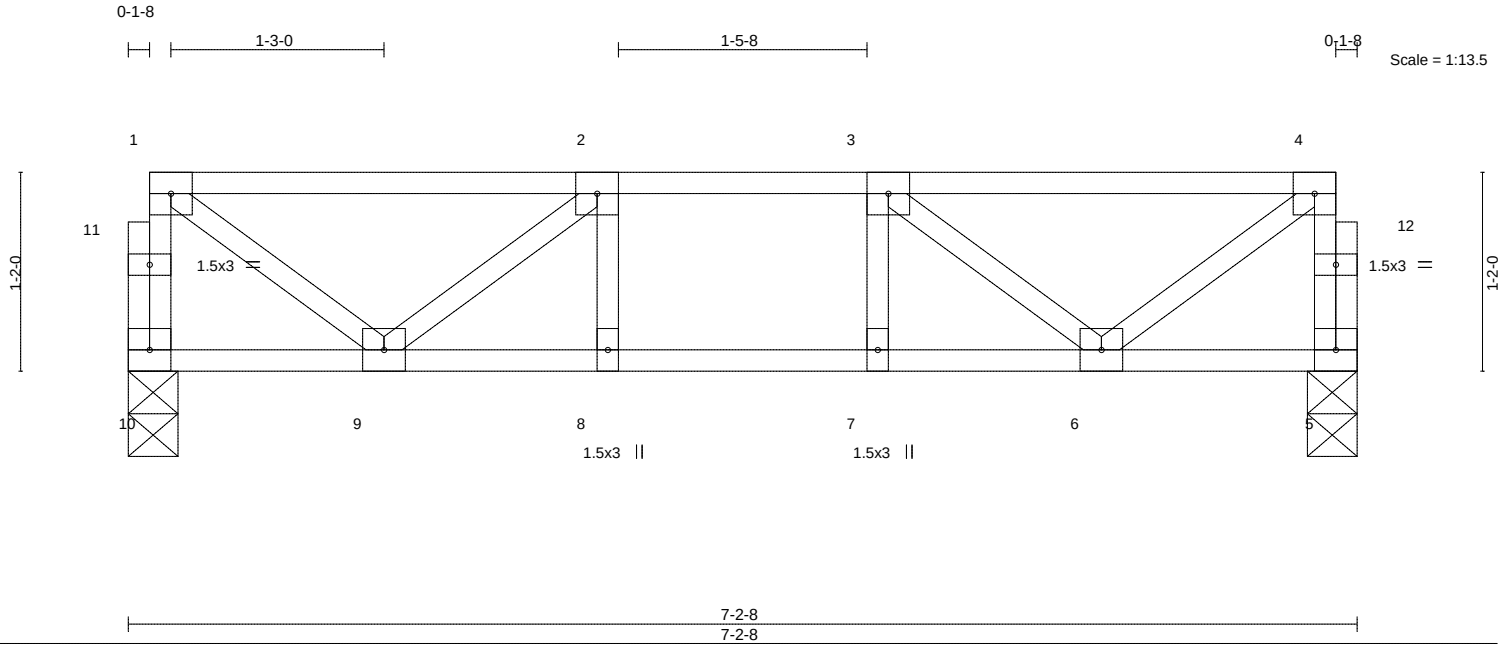


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.46 | Vert(LL) | -0.03 | 8-9 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.37 | Vert(TL) | -0.03 | 8 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.20 | Horz(TL) | 0.01 | 5 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2009/TPI2007 | | Matrix-S | | | | | | | Weight: 38 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.** (lb/size) 10=376/0-3-8, 5=376/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-10=-371/0, 4-5=-371/0, 1-2=-349/0, 2-3=-656/0, 3-4=-349/0
BOT CHORD 8-9=0/656, 7-8=0/656, 6-7=0/656
WEBS 4-6=0/417, 1-9=0/417, 3-6=-392/0, 2-9=-392/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
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 | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F5 | Floor | 4 | 1 | E12549229 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:39:03 2018 Page 1
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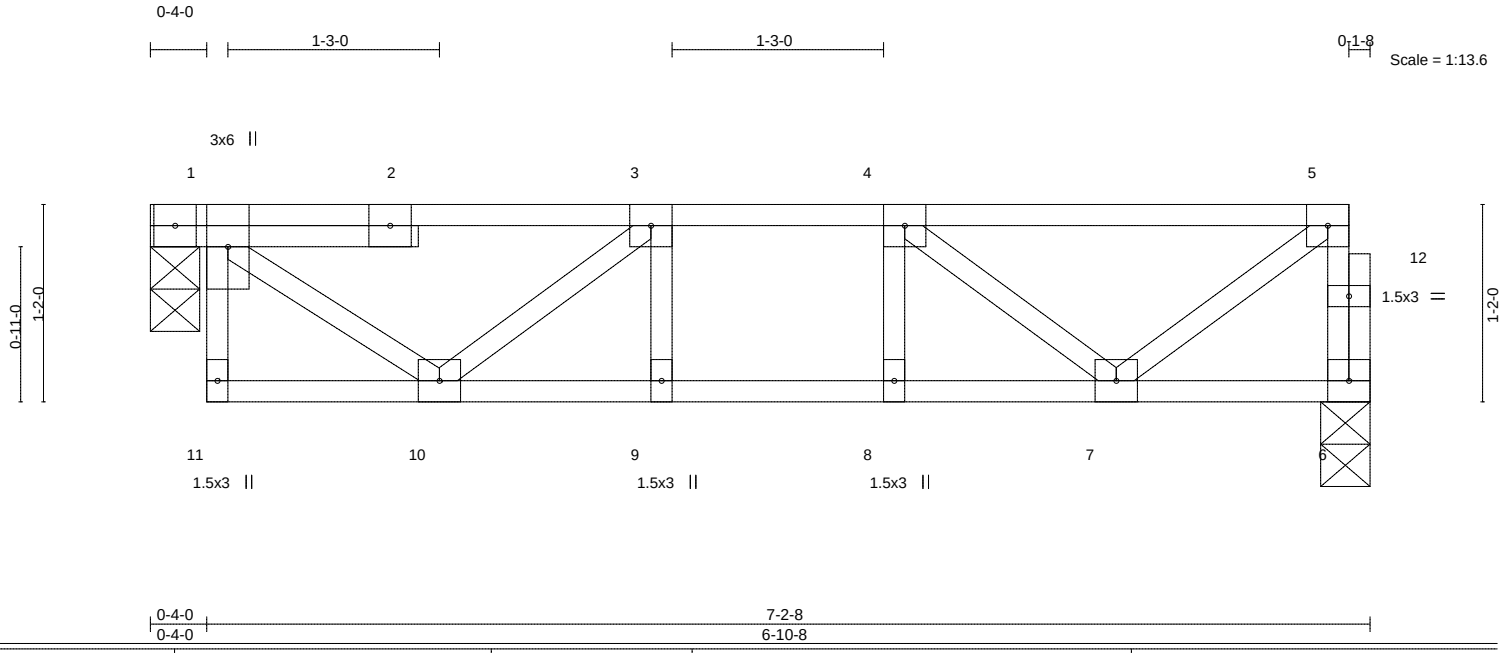


| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.45 | Vert(LL) | -0.02 | 7-8 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.36 | Vert(TL) | -0.03 | 7-8 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.19 | Horz(TL) | 0.01 | 6 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2009/TPI2007 | | Matrix-S | | | | | | | Weight: 39 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.** (lb/size) 6=362/0-3-8, 1=368/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 5-6=-357/0, 1-3=-326/0, 3-4=-610/0, 4-5=-330/0
BOT CHORD 9-10=0/610, 8-9=0/610, 7-8=0/610
WEBS 5-7=0/394, 1-10=0/401, 4-7=-357/0, 3-10=-368/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
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.
4) Gap between inside of top chord bearing and first diagonal or vertical web shall not exceed 0.500in.
5) CAUTION, Do not erect truss backwards.


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| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F6 | GABLE | 1 | 1 | E12549230 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:39:04 2018 Page 1
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0-1-8

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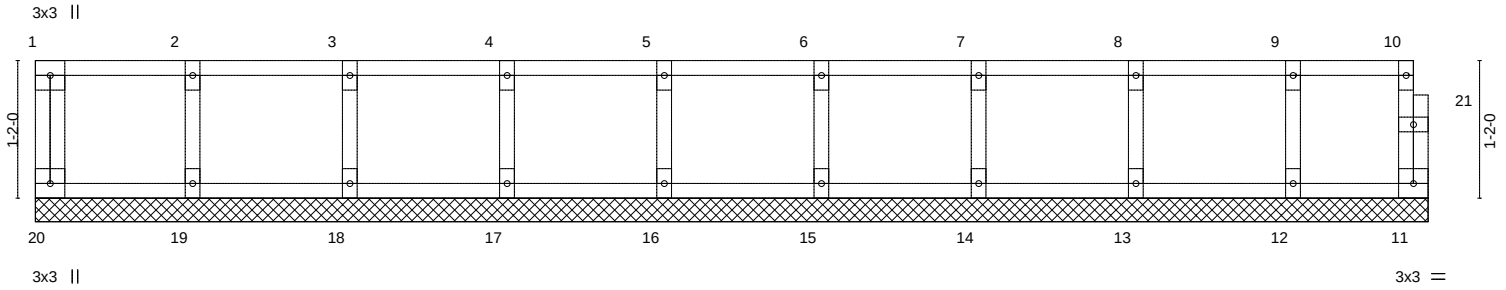


| 1-4-0 | 2-8-0 | 4-0-0 | 5-4-0 | 6-8-0 | 8-0-0 | 9-4-0 | 10-8-0 | 11-9-12 |
|---|---|---|---|---|---|---|---|---|
| 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-1-12 |

| **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(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(TL) | 0.00 | 11 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2009/TPI2007 | Matrix-R | | | | | | | Weight: 51 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 11-9-12.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 20, 11, 19, 18, 17, 16, 15, 14, 13, 12

**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) 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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| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F7 | Floor | 6 | 1 | E12549231 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:39:05 2018 Page 1
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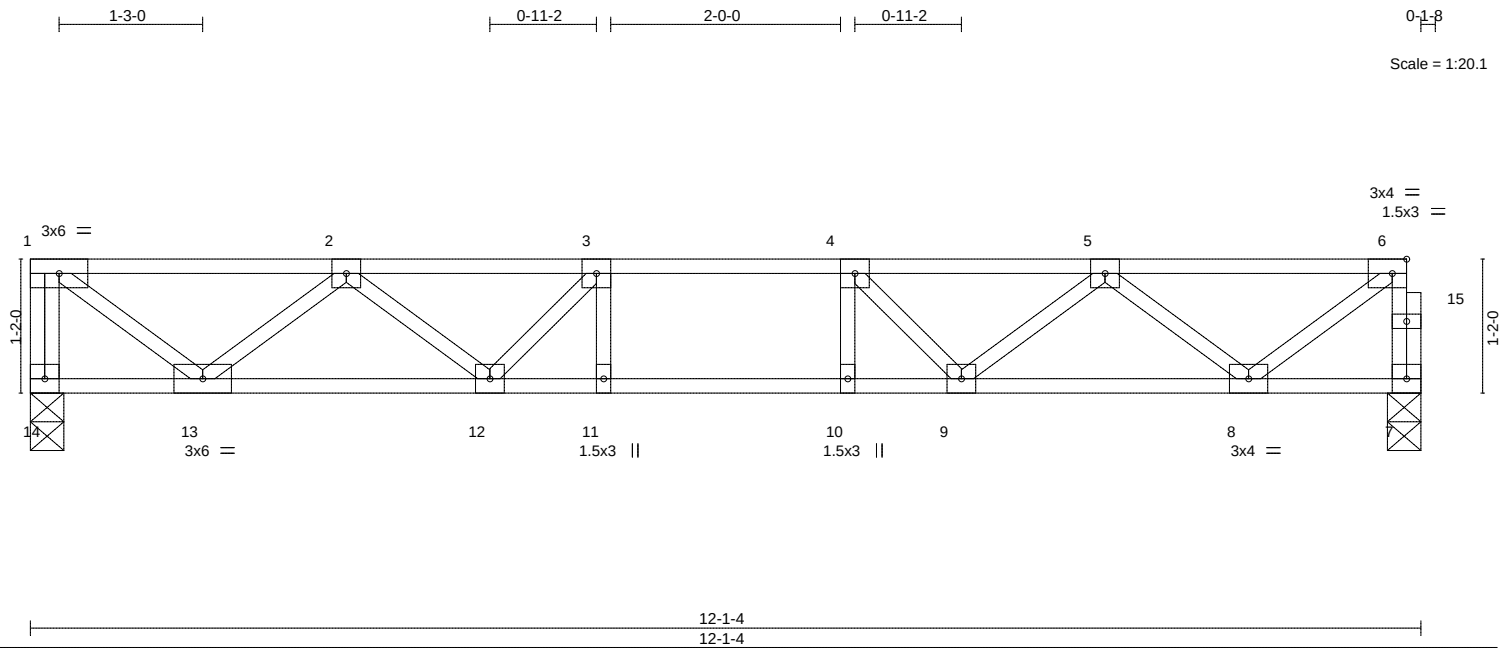


Plate Offsets (X,Y)-- [6:0-1-8,Edge]

| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.38 | Vert(LL) | -0.09 | 10 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.73 | Vert(TL) | -0.12 | 10 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.43 | Horz(TL) | 0.03 | 7 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2009/TPI2007 | | Matrix-S | | | | | | | Weight: 61 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.** (lb/size) 14=652/0-3-8, 7=646/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-14=-646/0, 6-7=-641/0, 1-2=-712/0, 2-3=-1615/0, 3-4=-1821/0, 4-5=-1614/0, 5-6=-713/0
BOT CHORD 12-13=0/1333, 11-12=0/1821, 10-11=0/1821, 9-10=0/1821, 8-9=0/1330
WEBS 1-13=0/893, 2-13=-808/0, 2-12=0/408, 3-12=-430/0, 6-8=0/862, 5-8=-803/0, 5-9=0/408, 4-9=-430/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
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.
4) CAUTION, Do not erect truss backwards.


December 26,2018




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| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F8 | Floor | 1 | 1 | E12549232 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:39:06 2018 Page 1
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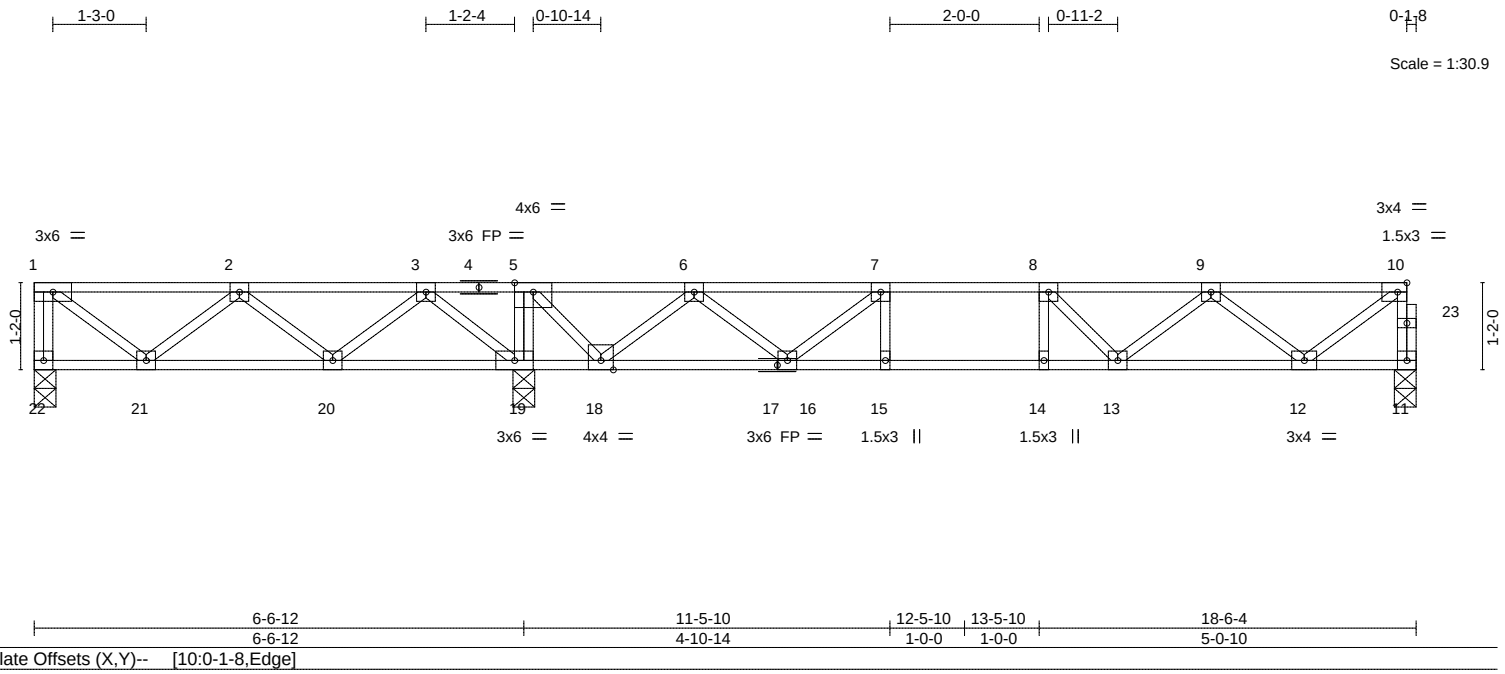


Plate Offsets (X,Y)-- [10:0-1-8,Edge]

| 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 | 0.47 | Vert(LL) | -0.09 | 13-14 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.82 | Vert(TL) | -0.14 | 14 | >999 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.41 | Horz(TL) | 0.02 | 11 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2009/TPI2007 | | Matrix-S | | | | | | | Weight: 95 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: 6-0-0 oc bracing: 20-21,19-20,18-19.

**REACTIONS.** (lb/size) 22=205/0-3-8, 11=564/0-3-8, 19=1235/0-3-8
Max Uplift 22=-37(LC 3)
Max Grav 22=299(LC 2), 11=572(LC 3), 19=1235(LC 1)

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-22=-294/41, 10-11=-566/0, 1-2=-251/81, 2-3=-298/356, 3-5=0/1003, 5-6=0/464, 6-7=-939/0, 7-8=-1405/0, 8-9=-1332/0, 9-10=-618/0
BOT CHORD 20-21=-180/454, 19-20=-560/111, 18-19=-1003/0, 16-18=0/518, 15-16=0/1405, 14-15=0/1405, 13-14=0/1405, 12-13=0/1154
WEBS 5-19=-794/0, 1-21=-101/315, 2-21=-265/130, 2-20=-385/0, 3-20=0/421, 3-19=-707/0, 7-16=-618/0, 6-16=0/563, 6-18=-927/0, 5-18=0/861, 10-12=0/746, 9-12=-698/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) Two HTS20 Simpson Strong-Tie connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 22. This connection is for uplift only and does not consider lateral forces.
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) CAUTION, Do not erect truss backwards.


December 26,2018




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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F9 | Floor | 4 | 1 | E12549233 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:39:07 2018 Page 1
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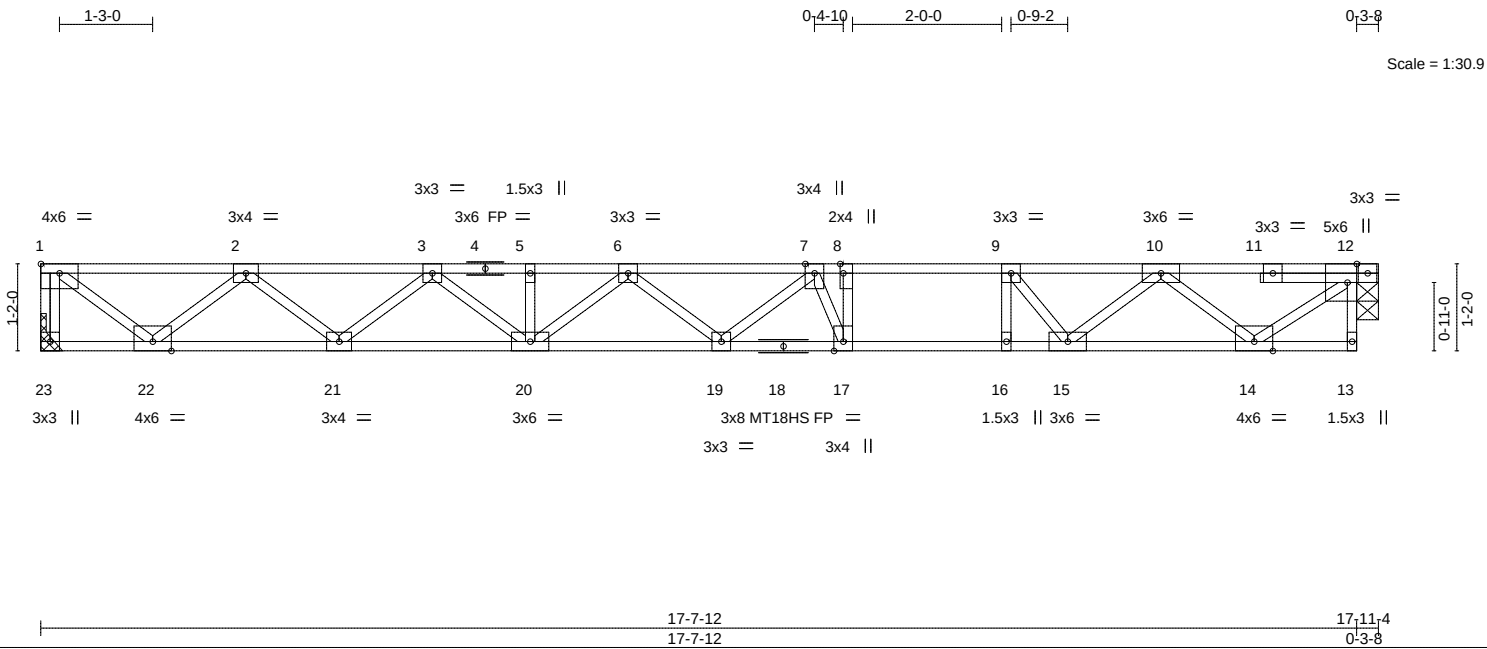


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-1-8,Edge], [12:0-3-0,Edge]

| 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 | 0.78 | Vert(LL) | -0.35 | 17-19 | >596 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 1.00 | Vert(TL) | -0.55 | 17-19 | >381 | 360 | MT18HS | 244/190 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.67 | Horz(TL) | 0.03 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2009/TPI2007 | Matrix-S | | | | | | | Weight: 92 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP No.2(flat) *Except* 4-12: 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, Except: 2-2-0 oc bracing: 17-19.

**REACTIONS.** (lb/size) 23=960/Mechanical, 12=960/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-23=-953/0, 1-2=-1118/0, 2-3=-2749/0, 3-5=-3728/0, 5-6=-3728/0, 6-7=-4003/0, 7-8=-3483/0, 8-9=-3483/0, 9-10=-2775/0, 10-12=-1088/0
BOT CHORD 21-22=0/2113, 20-21=0/3348, 19-20=0/3996, 17-19=0/3834, 16-17=0/3483, 15-16=0/3483, 14-15=0/2001
WEBS 8-17=-20/657, 9-16=0/501, 1-22=0/1403, 2-22=-1295/0, 2-21=0/828, 3-21=-781/0, 3-20=0/484, 6-20=-343/0, 7-19=-101/324, 7-17=-1041/0, 12-14=0/1351, 10-14=-1195/0, 10-15=0/1007, 9-15=-1194/0

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


December 26,2018




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| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F10 | Floor | 5 | 1 | E12549234 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:38:54 2018 Page 1
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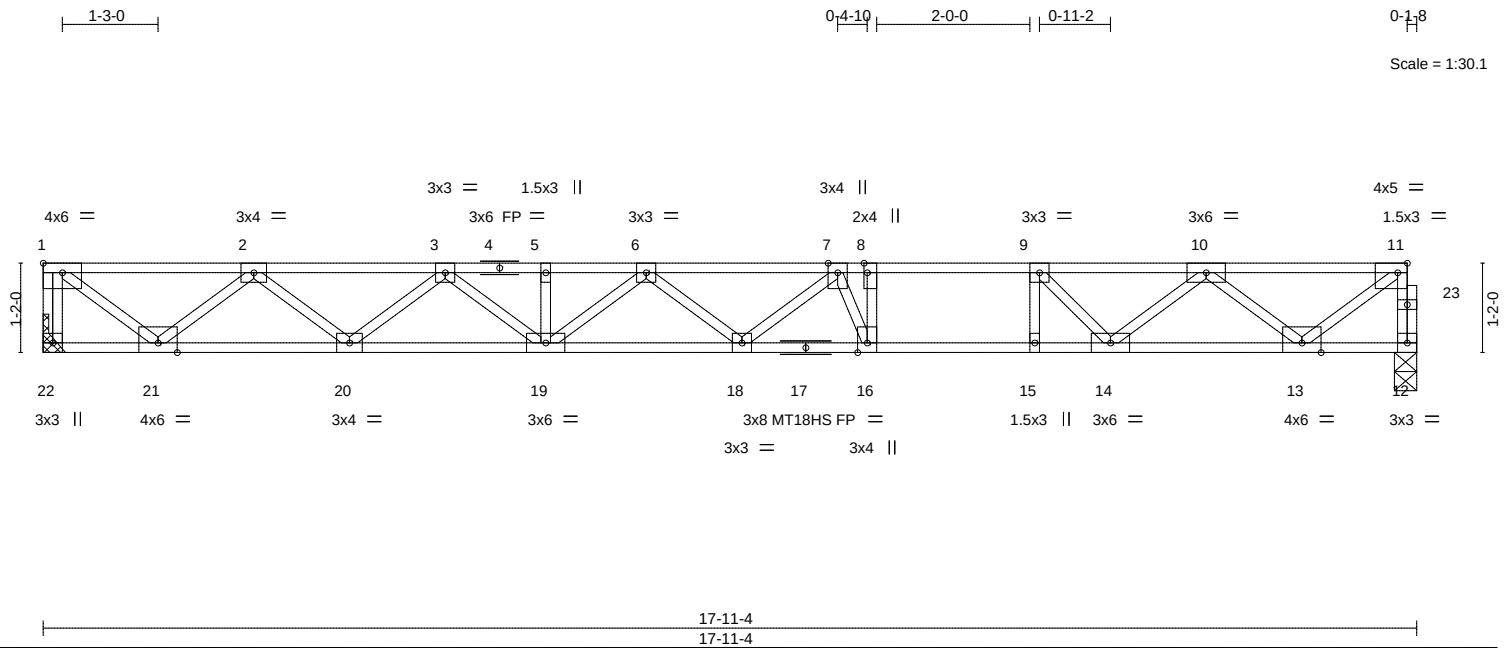


Plate Offsets (X,Y)-- [1:Edge,0-1-8], [8:0-1-8,Edge], [11:0-1-8,Edge]

| 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 | 0.78 | Vert(LL) | -0.35 | 16-18 | >610 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.89 | Vert(TL) | -0.54 | 16-18 | >390 | 360 | MT18HS | 244/190 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.68 | Horz(TL) | 0.06 | 12 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2009/TPI2007 | Matrix-S | | | | | | | Weight: 91 lb | FT = 20%F, 11%E |

**LUMBER-**
TOP CHORD 2x4 SP 2400F 2.0E(flat) *Except* 1-4: 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 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

**REACTIONS.** (lb/size) 22=973/Mechanical, 12=967/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-22=-964/0, 11-12=-968/0, 1-2=-1134/0, 2-3=-2795/0, 3-5=-3802/0, 5-6=-3802/0, 6-7=-4113/0, 7-8=-3619/0, 8-9=-3619/0, 9-10=-2839/0, 10-11=-1126/0
BOT CHORD 20-21=0/2144, 19-20=0/3410, 18-19=0/4092, 16-18=0/3959, 15-16=0/3619, 14-15=0/3619, 13-14=0/2094
WEBS 8-16=-36/648, 9-15=0/442, 1-21=0/1423, 2-21=-1314/0, 2-20=0/848, 3-20=-801/0, 3-19=0/500, 6-19=-369/0, 7-18=-119/315, 7-16=-1030/6, 11-13=0/1364, 10-13=-1260/0, 10-14=0/970, 9-14=-1183/0

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
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) CAUTION, Do not erect truss backwards.


December 26,2018




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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F11 | GABLE | 1 | 1 | E12549235 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:38:55 2018 Page 1
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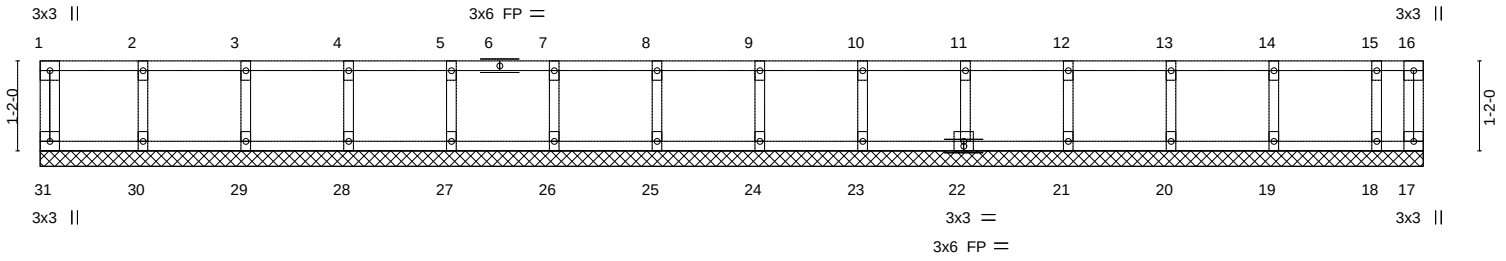


| 1-4-0 | 2-8-0 | 4-0-0 | 5-4-0 | 6-8-0 | 8-0-0 | 9-4-0 | 10-8-0 | 12-0-0 | 13-4-0 | 14-8-0 | 16-0-0 | 17-4-0 | 17-11-4 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 1-4-0 | 0-7-4 |

| **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 | 0.03 | Vert(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(TL) | 0.00 | 17 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2009/TPI2007 | Matrix-R | | | | | | | Weight: 77 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 17-11-4.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 31, 17, 30, 29, 28, 27, 26, 25, 24, 23, 22, 21, 20, 19, 18

**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) 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.


December 26,2018




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Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F13 | Floor | 8 | 1 | E12549236 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:38:56 2018 Page 1
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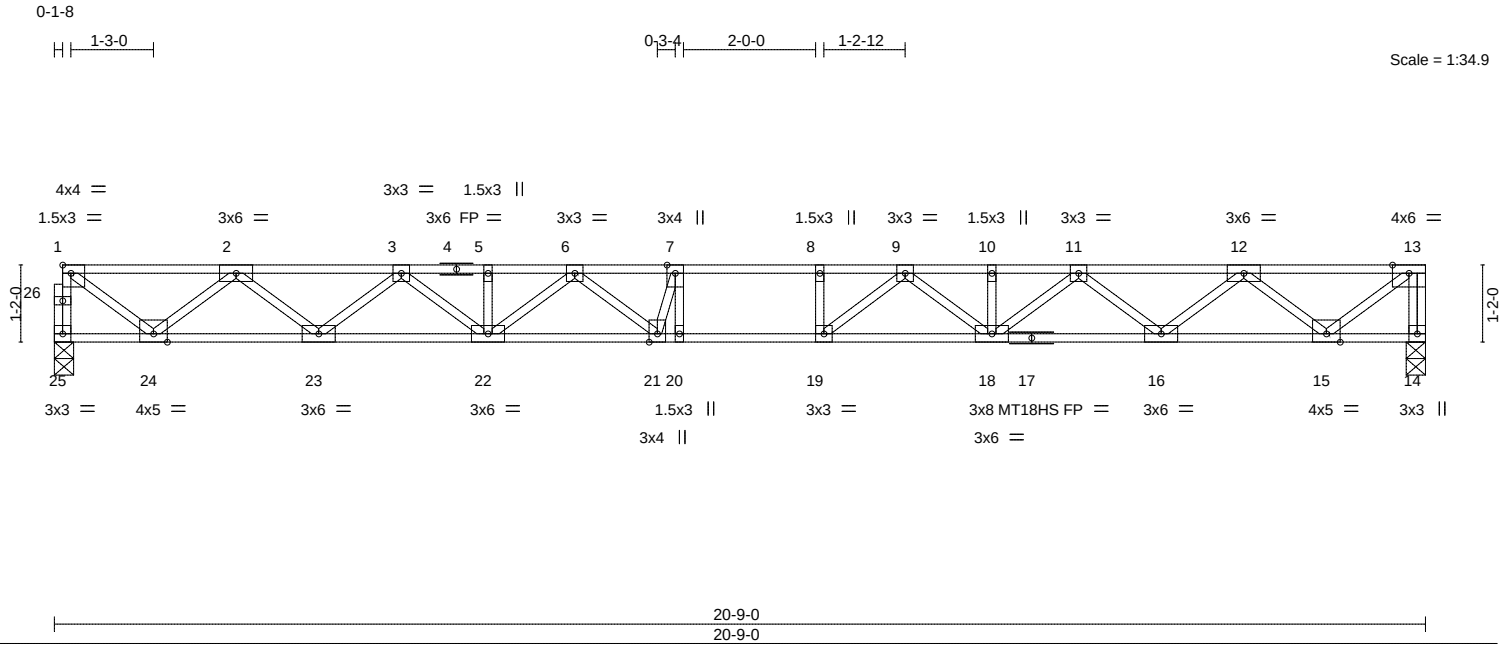



Plate Offsets (X,Y)-- [1:Edge,0-1-8]

| 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 | 0.49 | Vert(LL) | -0.38 | 19-20 | >649 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.93 | Vert(TL) | -0.59 | 19-20 | >415 | 360 | MT18HS | 244/190 |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.64 | Horz(TL) | 0.08 | 14 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2009/TPI2007 | Matrix-S | | | | | | | Weight: 106 lb | FT = 20%F, 11%E |

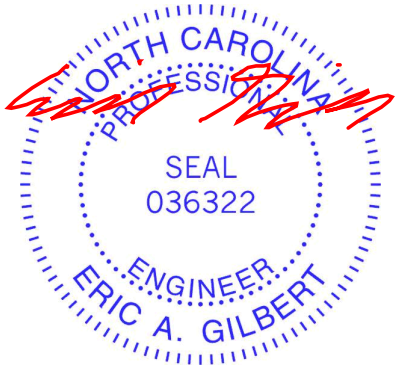
**LUMBER-**
TOP CHORD 2x4 SP No.1(flat)
BOT CHORD 2x4 SP 2400F 2.0E(flat) *Except* 14-17: 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

**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: 16-18.

**REACTIONS.** (lb/size) 25=896/0-3-8, 14=901/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-25=-892/0, 13-14=-895/0, 1-2=-1071/0, 2-3=-2690/0, 3-5=-3810/0, 5-6=-3810/0, 6-7=-4353/0, 7-8=-4389/0, 8-9=-4389/0, 9-10=-3811/0, 10-11=-3811/0, 11-12=-2692/0, 12-13=-1070/0
BOT CHORD 23-24=0/2022, 22-23=0/3334, 21-22=0/4163, 20-21=0/4389, 19-20=0/4389, 18-19=0/4160, 16-18=0/3332, 15-16=0/2024
WEBS 7-20=-386/344, 1-24=0/1299, 2-24=-1237/0, 2-23=0/870, 3-23=-838/0, 3-22=0/608, 6-22=-450/0, 6-21=-22/468, 7-21=-581/357, 13-15=0/1342, 12-15=-1243/0, 12-16=0/869, 11-16=-833/0, 11-18=0/612, 9-18=-463/0, 9-19=-70/585

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
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.
4) CAUTION, Do not erect truss backwards.




December 26,2018

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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F14 | GABLE | 1 | 1 | E12549237 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:38:57 2018 Page 1
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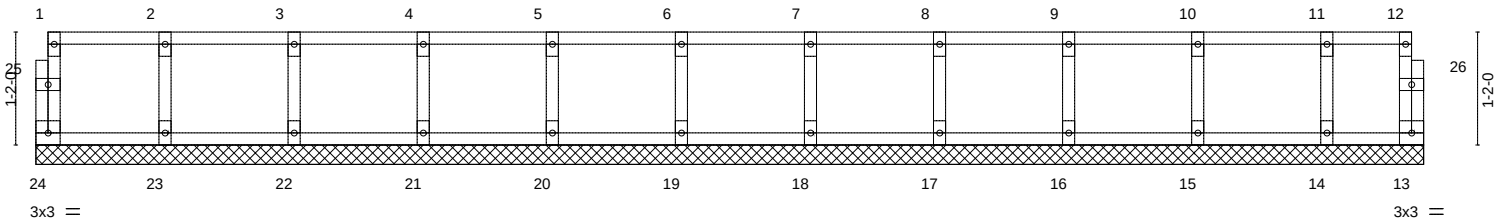
0-1-8 0-1-8

Scale: 1/2"=1'




| 1-4-0 | 2-8-0 | 4-0-0 | 5-4-0 | 6-8-0 | 8-0-0 | 9-4-0 | 10-8-0 | 12-0-0 | 13-4-0 | 14-4-0 |
|---|---|---|---|---|---|---|---|---|---|---|
| 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 | 1-4-0 | 1-0-0 |

| **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(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(TL) | 0.00 | 13 | n/a | n/a | | |
| BCDL | 5.0 | Code | IRC2009/TPI2007 | Matrix-R | | | | | | | Weight: 61 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 14-4-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 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) 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.


December 26,2018



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818 Soundside Road
Edenton, NC 27932

| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F15 | Floor | 4 | 1 | E12549238 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:38:58 2018 Page 1
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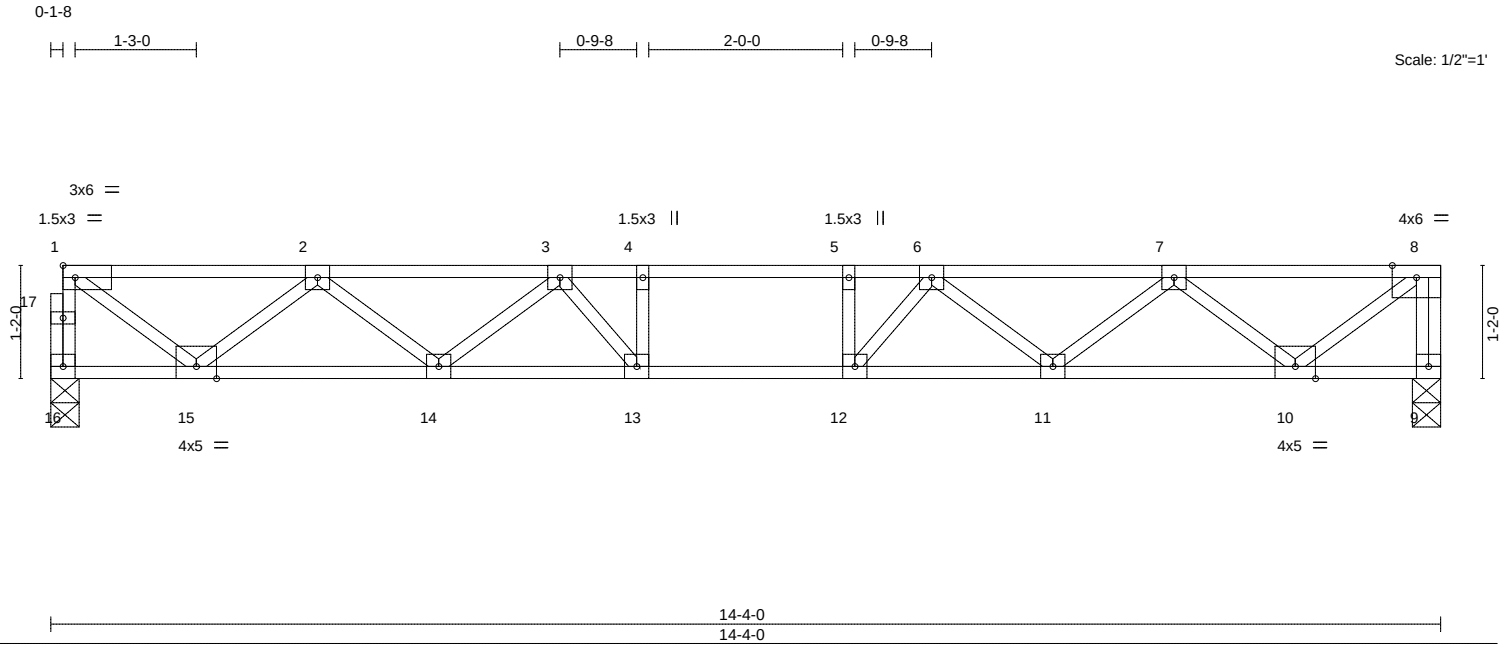



| LOADING (psf) | | SPACING- | 2-0-0 | CSI. | | DEFL. | in | (loc) | l/defl | L/d | PLATES | GRIP |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| TCLL | 40.0 | Plate Grip DOL | 1.00 | TC | 0.54 | Vert(LL) | -0.14 | 12-13 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.78 | Vert(TL) | -0.21 | 12-13 | >791 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.52 | Horz(TL) | 0.04 | 9 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2009/TPI2007 | | Matrix-S | | | | | | | Weight: 72 lb | FT = 20%F, 11%E |

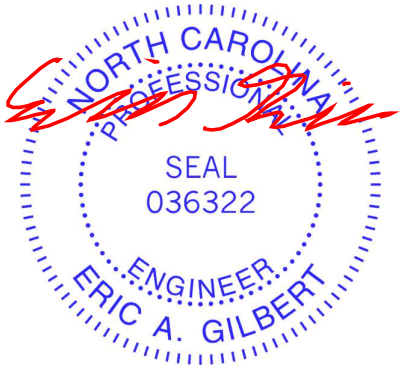
**LUMBER-**
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)

**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.** (lb/size) 16=768/0-3-8, 9=775/0-3-8

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-764/0, 8-9=-768/0, 1-2=-878/0, 2-3=-2056/0, 3-4=-2576/0, 4-5=-2576/0, 5-6=-2576/0, 6-7=-2057/0, 7-8=-876/0
BOT CHORD 14-15=0/1645, 13-14=0/2439, 12-13=0/2576, 11-12=0/2438, 10-11=0/1648
WEBS 4-13=-293/1, 5-12=-293/0, 1-15=0/1063, 2-15=-999/0, 2-14=0/535, 3-14=-498/0, 3-13=-59/488, 8-10=0/1099, 7-10=-1004/0, 7-11=0/533, 6-11=-496/0, 6-12=-57/488

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
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.
4) CAUTION, Do not erect truss backwards.

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| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F16 | Floor | 9 | 1 | E12549239 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 — 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:38:59 2018 Page 1
ID:4lmeeSjiwdRzCfsAnBfHyaylMmJ-dS?bgsYHBizuSBleijKOWCTG3amSSMfslzVaDZy6kkw

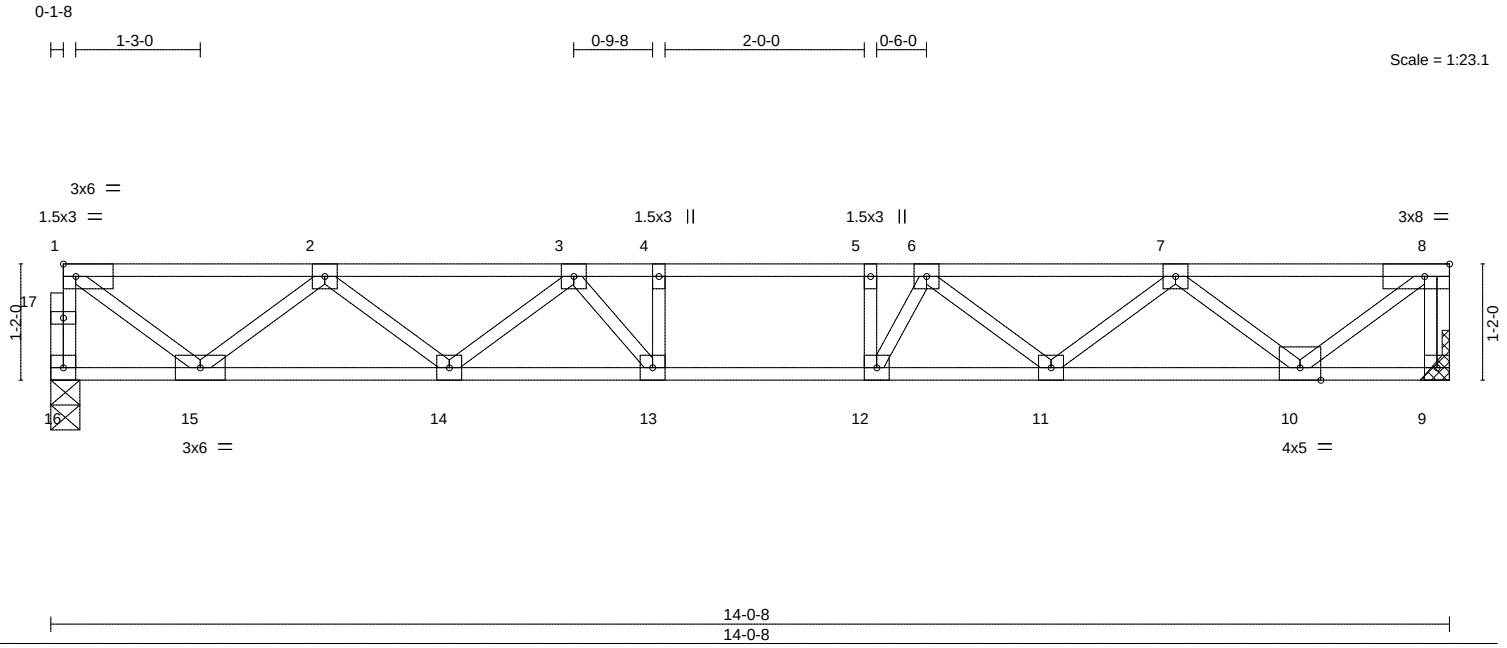


Plate Offsets (X,Y)-- [8:0-3-0,Edge]

| 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 | 0.55 | Vert(LL) | -0.13 | 13-14 | >999 | 480 | MT20 | 244/190 |
| TCDL | 10.0 | Lumber DOL | 1.00 | BC | 0.78 | Vert(TL) | -0.20 | 13-14 | >821 | 360 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.51 | Horz(TL) | 0.04 | 9 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2009/TPI2007 | | Matrix-S | | | | | | | Weight: 71 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.** (lb/size) 16=752/0-3-8, 9=759/Mechanical

**FORCES.** (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-16=-747/0, 8-9=-753/0, 1-2=-856/0, 2-3=-1999/0, 3-4=-2469/0, 4-5=-2469/0, 5-6=-2469/0, 6-7=-1997/0, 7-8=-855/0
BOT CHORD 14-15=0/1605, 13-14=0/2359, 12-13=0/2469, 11-12=0/2366, 10-11=0/1607
WEBS 4-13=-271/13, 5-12=-369/34, 1-15=0/1036, 2-15=-975/0, 2-14=0/512, 3-14=-469/0, 3-13=-77/447, 8-10=0/1073, 7-10=-978/0, 7-11=0/508, 6-11=-481/0, 6-12=-86/521

**NOTES-**
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) Refer to girder(s) for truss to truss connections.
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) CAUTION, Do not erect truss backwards.


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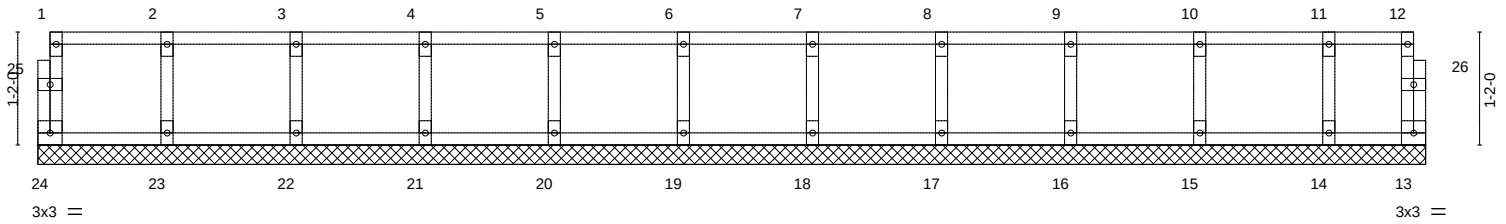
| Job | Truss | Truss Type | Qty | Ply | Sturtz Homes |
|---|---|---|---|---|---|
| 1625536_Jill_FL | F17 | Floor Supported Gable | 1 | 1 | E12549240 |
| | | | | | Job Reference (optional) |

Builders FirstSource, Albemarle , NC 28001 8.220 s Nov 16 2018 MiTek Industries, Inc. Fri Dec 21 12:39:00 2018 Page 1
ID:4lmeeSjiwdRzCfsAnBfHyaylMmJ-5eZztCZvx?5l3LKqGRrd3P0YDzIeBwO?_dE8l?y6kkv

0-1-8 0-1-8

Scale: 1/2"=1'




14-4-0
14-4-0

| 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(TL) | n/a | - | n/a | 999 | | |
| BCLL | 0.0 | Rep Stress Incr | YES | WB | 0.03 | Horz(TL) | 0.00 | 13 | n/a | n/a | | |
| BCDL | 5.0 | Code IRC2009/TPI2007 | | Matrix-R | | | | | | | Weight: 61 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 14-4-0.
(lb) - Max Grav All reactions 250 lb or less at joint(s) 24, 13, 23, 22, 21, 20, 19, 18, 17, 16, 15, 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) 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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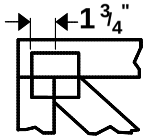
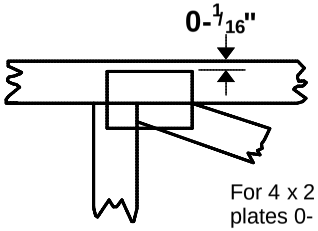
# Symbols

## 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.

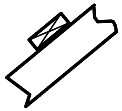
*** Plate location details available in MiTek 20/20 software or upon request.**

## PLATE SIZE

4 x 4

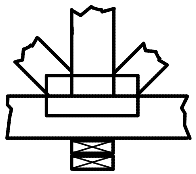
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

## 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

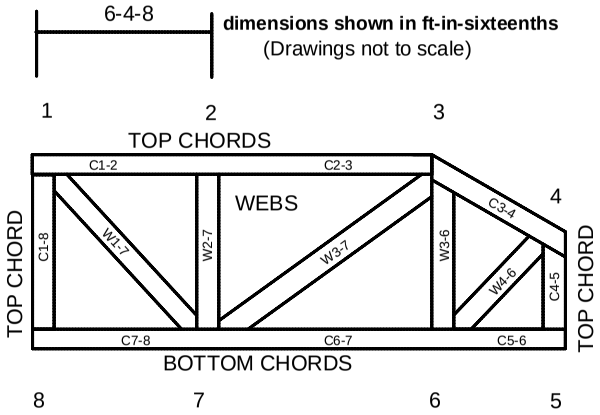


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

**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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# 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.