ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: 3780773
CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND FLOOR w/ 3 CAR

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Stock Building Supply.

Pages or sheets covered by this seal: T32207664 thru T32207676

My license renewal date for the state of North Carolina is December 31, 2023.

North Carolina COA: C-0844

November 29,2023

ORegan, Philip

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	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F1	Floor	9	1	T32207664
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Nov 28 09:12:44 Page: 1
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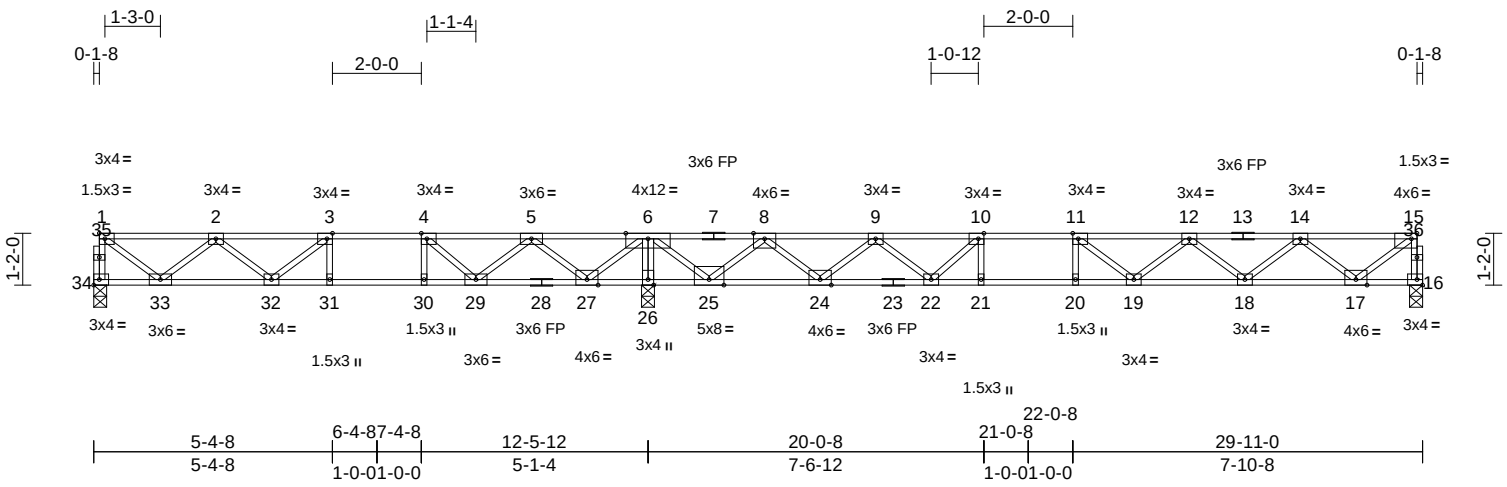

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Plate Offsets (X, Y): [3:0-1-8,Edge], [4:0-1-8,Edge], [10:0-1-8,Edge], [11:0-1-8,Edge], [15:0-1-8,Edge]

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	0.79	Vert(LL)	-0.25	19-20	>835	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.91	Vert(CT)	-0.34	19-20	>613	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.73	Horz(CT)	0.04	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 147 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.1(flat) *Except* 28-23:2x4 SP No.2(flat), 23-16:2x4 SP SS(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-7-14 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.

REACTIONS (size) 16=0-3-8, 26=0-3-8, 34=0-3-8
Max Grav 16=844 (LC 4), 26=1936 (LC 1), 34=591 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-34=-583/0, 15-16=-839/0, 1-2=-645/0, 2-3=-1398/64, 3-4=-1494/312, 4-5=-1042/686, 5-6=0/1284, 6-8=0/878, 8-9=-1406/12, 9-10=-2577/0, 10-11=-3068/0, 11-12=-3011/0, 12-14=-2344/0, 14-15=-974/0
BOT CHORD 33-34=0/35, 32-33=0/1211, 31-32=-312/1494, 30-31=-312/1494, 29-30=-312/1494, 27-29=-986/615, 26-27=-2100/0, 25-26=-2100/0, 24-25=-273/647, 22-24=0/2120, 21-22=0/3068, 20-21=0/3068, 19-20=0/3068, 18-19=0/2842, 17-18=0/1826, 16-17=0/50
WEBS 6-26=-1902/0, 10-21=-14/341, 11-20=-283/43, 3-31=-282/0, 4-30=0/332, 1-33=0/779, 2-33=-736/0, 2-32=-130/243, 3-32=-123/317, 6-27=0/1154, 5-27=-1052/0, 5-29=0/734, 4-29=-907/0, 6-25=0/1533, 8-25=-1441/0, 8-24=0/1038, 9-24=-976/0, 9-22=0/658, 10-22=-867/0, 15-17=0/1179, 14-17=-1109/0, 14-18=0/675, 12-18=-648/0, 12-19=0/289, 11-19=-291/254

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: Joint 34 SP No.1 crushing capacity of 565 psi, Joint 26 SP No.2 crushing capacity of 565 psi, Joint 16 SP SS crushing capacity of 565 psi.
3) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

November 29,2023

ENGINEERING BY TRENCO
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Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F2	Floor	1	1	T32207665
					Job Reference (optional)

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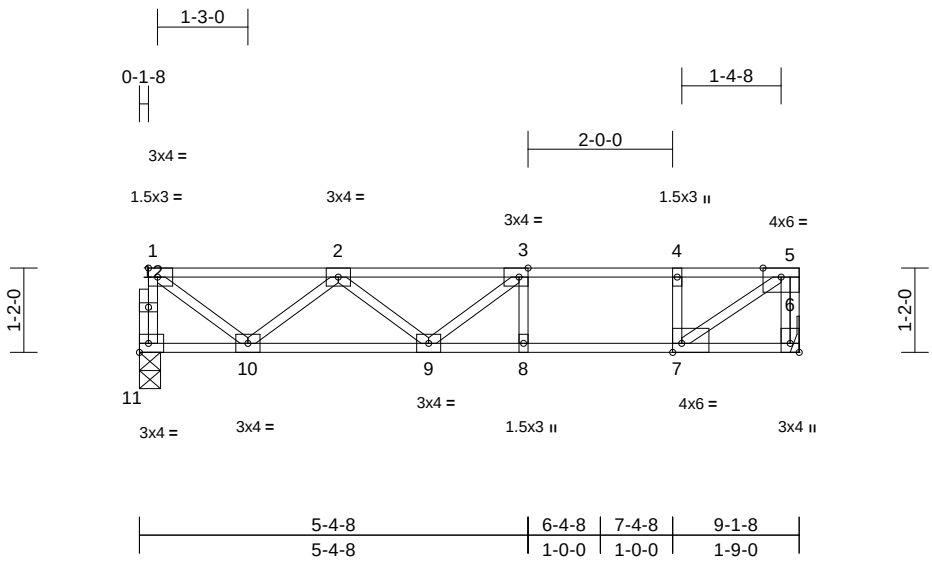

Scale = 1:31.9

Plate Offsets (X, Y): [3:0-1-8,Edge], [6:Edge,0-1-8], [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	0.77	Vert(LL)	-0.14	8-9	>765	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.82	Vert(CT)	-0.19	8-9	>571	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.01	6	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 47 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 6= Mechanical, 11=0-3-8
Max Grav 6=488 (LC 1), 11=482 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-11=-472/0, 5-6=-558/0, 1-2=-504/0, 2-3=-991/0, 3-4=-841/0, 4-5=-841/0
BOT CHORD 10-11=0/28, 9-10=0/953, 8-9=0/841, 7-8=0/841, 6-7=0/0
WEBS 5-7=0/1011, 3-8=-241/0, 4-7=-346/0, 1-10=0/607, 2-10=-585/0, 2-9=0/132, 3-9=-30/228

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: Joint 11 SP No.1 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F3	Floor Girder	1	1	T32207666
					Job Reference (optional)

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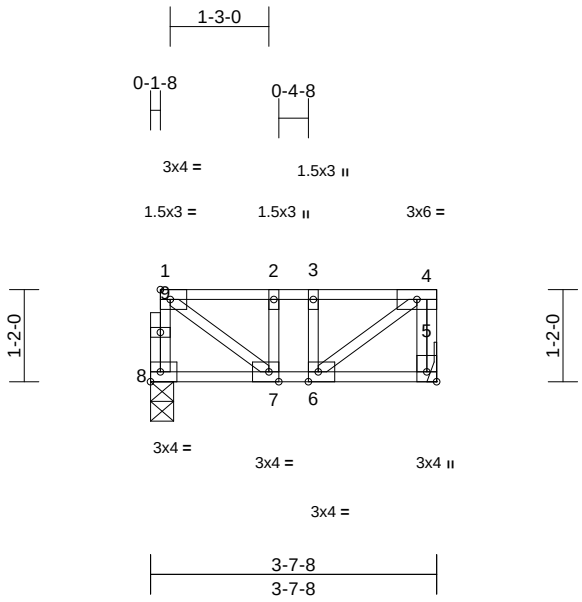

Scale = 1:29.2

Plate Offsets (X, Y): [5:Edge,0-1-8], [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	0.25	Vert(LL)	-0.01	5-6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.32	Vert(CT)	-0.01	5-6	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.26	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 23 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 3-7-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5= Mechanical, 8=0-3-8
Max Grav 5=430 (LC 4), 8=354 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-358/0, 4-5=-399/0, 1-2=-435/0, 2-3=-435/0, 3-4=-435/0
BOT CHORD 7-8=0/21, 6-7=0/435, 5-6=0/0
WEBS 1-7=0/523, 4-6=0/538, 2-7=-223/0, 3-6=-454/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: Joint 8 SP No.2 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 468 lb down at 2-0-0 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 (lb/ft)
Vert: 5-8=-10, 1-4=-100
Concentrated Loads (lb)
Vert: 3=-388 (B)

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Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F4	Floor Girder	1	1	T32207667
					Job Reference (optional)

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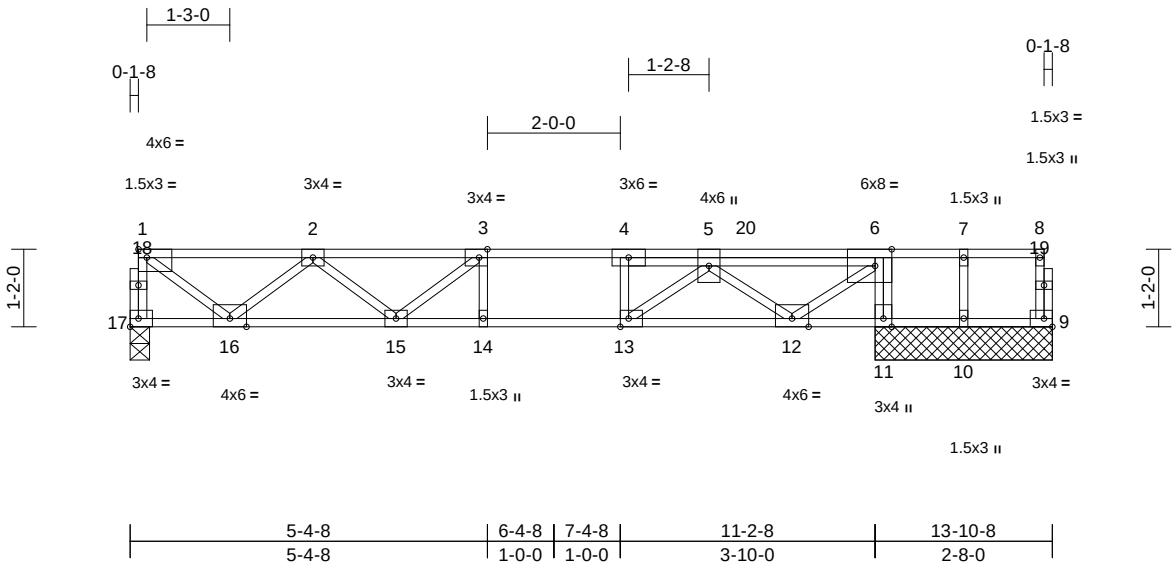

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Plate Offsets (X, Y): [1:Edge,0-1-8], [3:0-1-8,Edge], [6:0-3-0,Edge], [13:0-1-8,Edge]

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)	-0.08	14	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.66	Vert(CT)	-0.10	14	>999	360		
BCLL	0.0	Rep Stress Incr	NO	WB	0.50	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 74 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 9=2-8-0, 10=2-8-0, 11=2-8-0, 17=0-3-8
Max Grav 9=66 (LC 1), 10=51 (LC 1), 11=1036 (LC 1), 17=663 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-17=-658/0, 8-9=-56/0, 1-2=-740/0, 2-3=-1668/0, 3-4=-1925/0, 4-5=-1932/0, 5-6=-956/0, 6-7=-9/0, 7-8=-3/0
BOT CHORD 16-17=0/39, 15-16=0/1383, 14-15=0/1925, 13-14=0/1925, 12-13=0/1801, 11-12=0/127, 10-11=0/3, 9-10=0/3
WEBS 3-14=-10/0, 4-13=-52/0, 6-11=-980/0, 1-16=0/894, 2-16=-838/0, 2-15=0/371, 3-15=-328/0, 6-12=0/1052, 5-12=-1073/0, 5-13=0/157, 7-10=-69/0

NOTES
1) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
2) Gable studs spaced at 1-4-0 oc.
3) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.
7) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 330 lb down at 9-3-4 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 (lb/ft)
Vert: 9-17=-10, 1-8=-100
Concentrated Loads (lb)
Vert: 20=-330 (F)

November 29,2023

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Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F5	Floor	2	1	T32207668
					Job Reference (optional)

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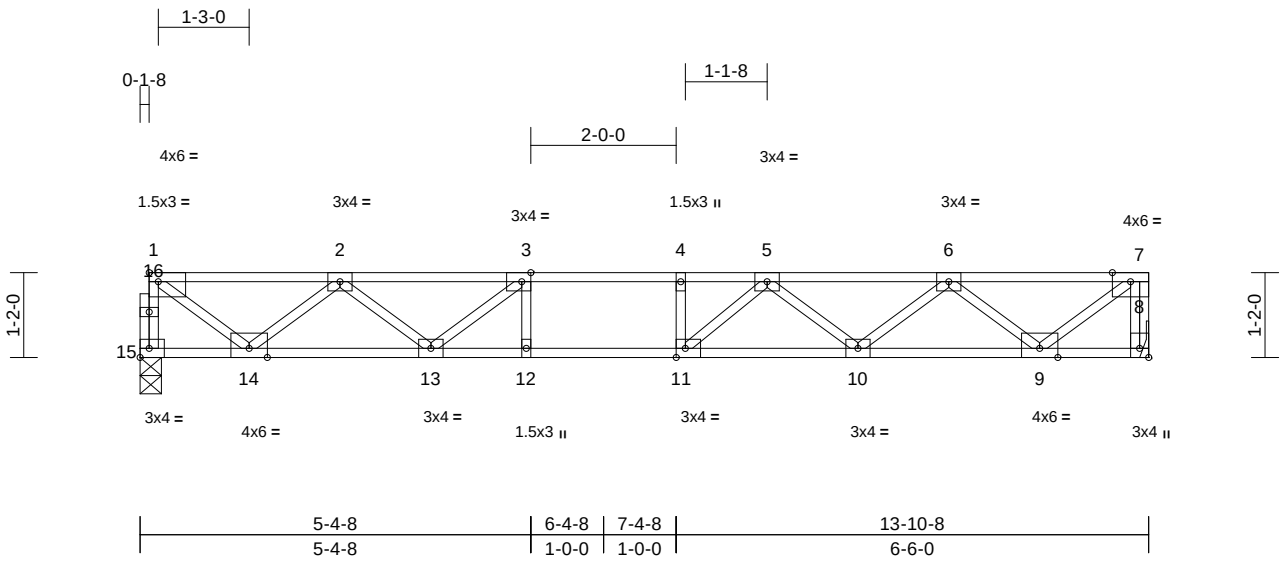

Scale = 1:31.7

Plate Offsets (X, Y): [1:Edge,0-1-8], [3:0-1-8,Edge], [8:Edge,0-1-8], [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	0.60	Vert(LL)	-0.17	10-11	>963	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.22	10-11	>727	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.04	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							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 2-2-0 oc bracing.

REACTIONS (size) 8= Mechanical, 15=0-3-8
Max Grav 8=749 (LC 1), 15=743 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-740/0, 7-8=-742/0, 1-2=-843/0, 2-3=-1969/0, 3-4=-2397/0, 4-5=-2397/0, 5-6=-1973/0, 6-7=-840/0
BOT CHORD 14-15=0/44, 13-14=0/1573, 12-13=0/2397, 11-12=0/2397, 10-11=0/2310, 9-10=0/1586, 8-9=0/0
WEBS 3-12=-53/160, 4-11=-192/0, 1-14=0/1019, 2-14=-950/0, 2-13=0/528, 3-13=-643/0, 7-9=0/1054, 6-9=-970/0, 6-10=0/504, 5-10=-439/0, 5-11=-110/400

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: Joint 15 SP No.2 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

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Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F6	Floor	2	1	T32207669
					Job Reference (optional)

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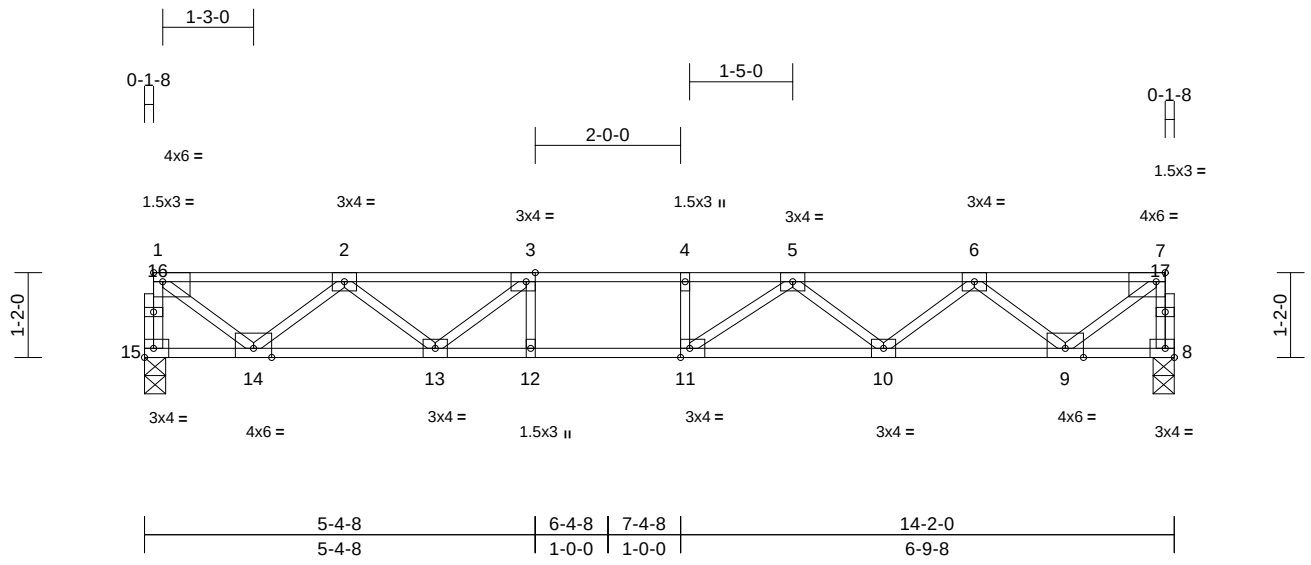

Scale = 1:31.7

Plate Offsets (X, Y): [1:Edge,0-1-8], [3:0-1-8,Edge], [7:0-1-8,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	0.62	Vert(LL)	-0.18	10-11	>915	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.80	Vert(CT)	-0.24	10-11	>687	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 70 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 8=0-3-8, 15=0-3-8
Max Grav 8=759 (LC 1), 15=759 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-756/0, 7-8=-752/0, 1-2=-864/0, 2-3=-2028/0, 3-4=-2495/0, 4-5=-2495/0, 5-6=-2036/0, 6-7=-861/0
BOT CHORD 14-15=0/45, 13-14=0/1610, 12-13=0/2495, 11-12=0/2495, 10-11=0/2391, 9-10=0/1624, 8-9=0/45
WEBS 3-12=-51/189, 4-11=-171/0, 1-14=0/1045, 2-14=-972/0, 2-13=0/550, 3-13=-695/0, 7-9=0/1042, 6-9=-993/0, 6-10=0/537, 5-10=-462/0, 5-11=-102/418

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All bearings are assumed to be SP No.1 crushing capacity of 565 psi.
3) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F7	Floor	4	1	T32207670
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Nov 28 09:12:47 Page: 1
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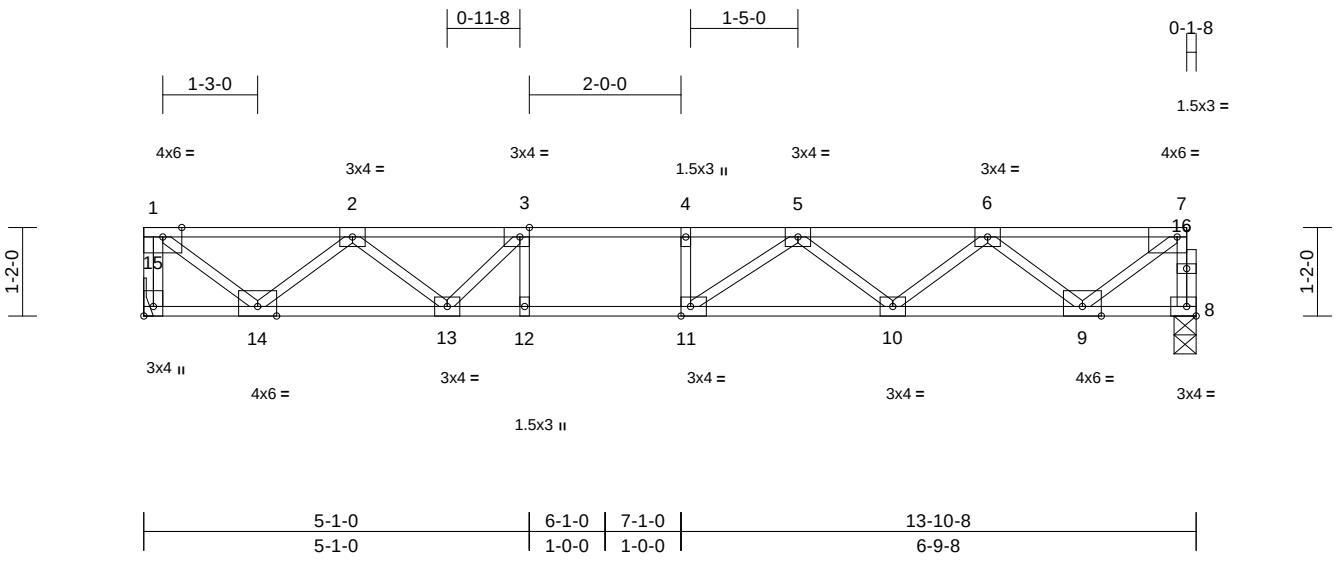


Scale = 1:30.4

Plate Offsets (X, Y): [3:0-1-8,Edge], [7:0-1-8,Edge], [11:0-1-8,Edge], [15: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	0.64	Vert(LL)	-0.18	10-11	>915	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.24	10-11	>682	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 70 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 8=0-3-8, 15= Mechanical
Max Grav 8=743 (LC 1), 15=749 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-745/0, 7-8=-735/0, 1-2=-838/0, 2-3=-1984/0, 3-4=-2378/0, 4-5=-2378/0, 5-6=-1980/0, 6-7=-839/0
BOT CHORD 14-15=0/0, 13-14=0/1565, 12-13=0/2378, 11-12=0/2378, 10-11=0/2311, 9-10=0/1584, 8-9=0/44
WEBS 3-12=-39/228, 4-11=-161/0, 1-14=0/1051, 2-14=-947/0, 2-13=0/567, 3-13=-669/0, 7-9=0/1015, 6-9=-970/0, 6-10=0/516, 5-10=-431/0, 5-11=-122/376

LOAD CASE(S) Standard

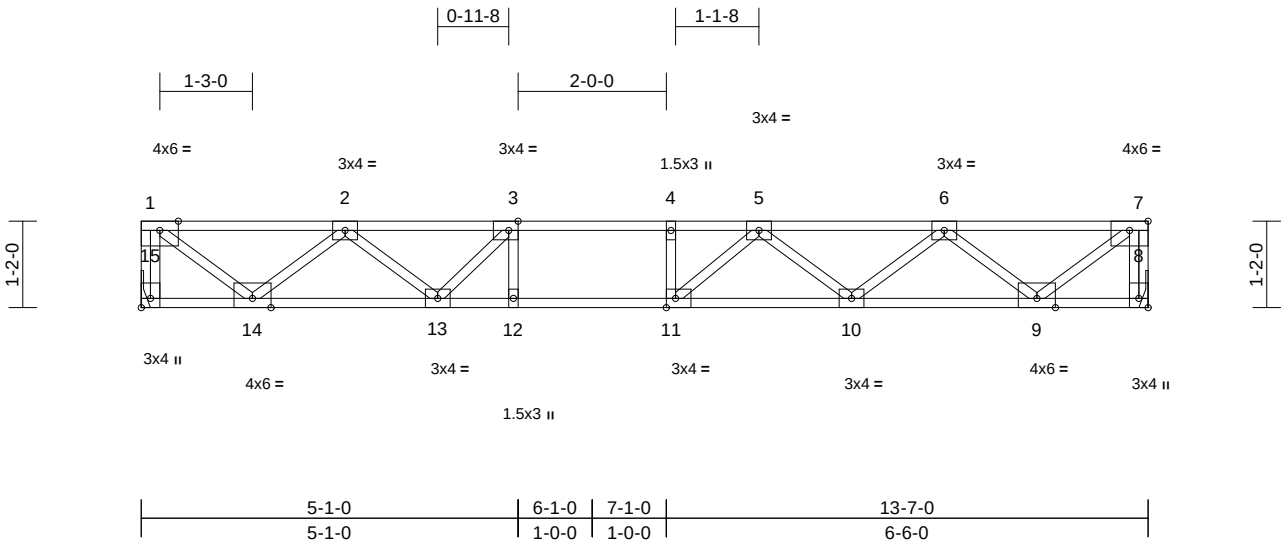
NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: , Joint 8 SP No.1 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

November 29,2023

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F8	Floor	1	1	T32207671
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Nov 28 09:12:47 Page: 1
ID:mnVD05KGxURAPXc41m?6vMzcznU-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:31.1

Plate Offsets (X, Y): [3:0-1-8,Edge], [8:Edge,0-1-8], [11:0-1-8,Edge], [15: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	0.59	Vert(LL)	-0.16	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.21	10-11	>770	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.49	Horz(CT)	0.03	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 69 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 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) 8= Mechanical, 15= Mechanical
Max Grav 8=733 (LC 1), 15=733 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-729/0, 7-8=-725/0, 1-2=-817/0, 2-3=-1923/0, 3-4=-2283/0, 4-5=-2283/0, 5-6=-1917/0, 6-7=-818/0
BOT CHORD 14-15=0/0, 13-14=0/1527, 12-13=0/2283, 11-12=0/2283, 10-11=0/2229, 9-10=0/1546, 8-9=0/0
WEBS 3-12=-46/205, 4-11=-176/0, 1-14=0/1025, 2-14=-925/0, 2-13=0/540, 3-13=-623/0, 7-9=0/1026, 6-9=-948/0, 6-10=0/483, 5-10=-406/0, 5-11=-125/357

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 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

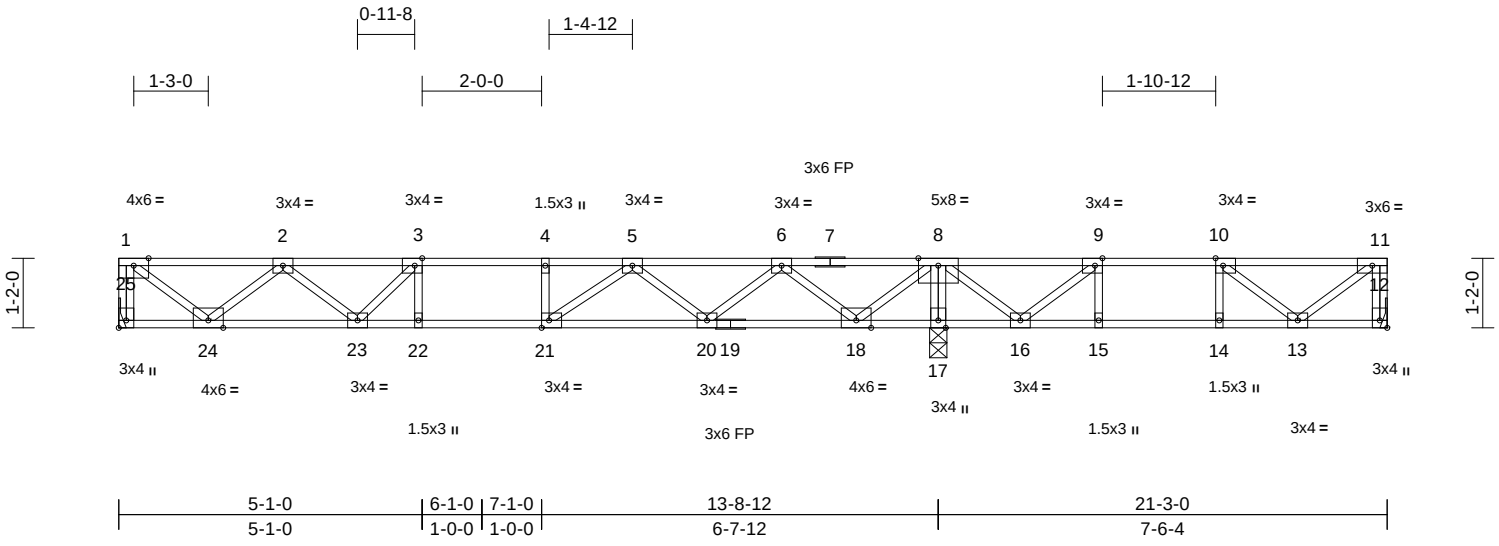
LOAD CASE(S) Standard

November 29,2023

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F9	Floor	3	1	T32207672
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Nov 28 09:12:48 Page: 1
ID:Quo1Ed5n5rNESDwBEVduzeczmV-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:38.6

Plate Offsets (X, Y): [3:0-1-8,Edge], [9:0-1-8,Edge], [10:0-1-8,Edge], [12:Edge,0-1-8], [21:0-1-8,Edge], [25: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	0.58	Vert(LL)	-0.13	20-21	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.76	Vert(CT)	-0.17	20-21	>971	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.53	Horz(CT)	0.03	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 107 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 12= Mechanical, 17=0-3-8, 25= Mechanical
Max Uplift 12=-5 (LC 3)
Max Grav 12=363 (LC 4), 17=1347 (LC 1), 25=696 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-25=-691/0, 11-12=-362/0, 1-2=-768/0, 2-3=-1782/0, 3-4=-2071/0, 4-5=-2071/0, 5-6=-1481/0, 6-8=-231/92, 8-9=-142/549, 9-10=-566/217, 10-11=-322/48
BOT CHORD 24-25=0/0, 23-24=0/1438, 22-23=0/2071, 21-22=0/2071, 20-21=0/1887, 18-20=0/1028, 17-18=-987/0, 16-17=-987/0, 15-16=-217/566, 14-15=-217/566, 13-14=-217/566, 12-13=0/0
WEBS 3-22=-75/129, 4-21=-192/0, 8-17=-1296/0, 1-24=0/964, 2-24=-872/0, 2-23=0/448, 3-23=-469/0, 8-18=0/1123, 6-18=-1052/0, 6-20=0/637, 5-20=-588/0, 5-21=0/462, 8-16=0/625, 11-13=-60/403, 9-16=-772/0, 10-13=-312/216, 9-15=0/222, 10-14=-185/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: , Joint 17 SP No.2 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
4) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 5 lb uplift at joint 12.
5) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

November 29,2023

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	F10	Floor	6	1	T32207673
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Nov 28 09:12:48 Page: 1
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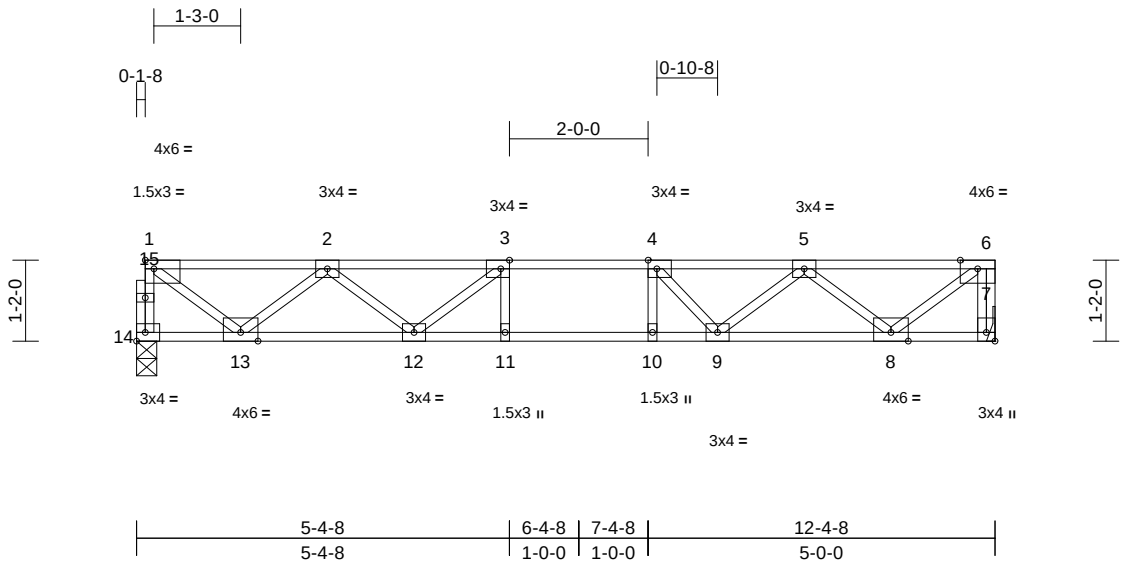

Scale = 1:33.2

Plate Offsets (X, Y): [1:Edge,0-1-8], [3:0-1-8,Edge], [4:0-1-8,Edge], [7: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	0.42	Vert(LL)	-0.11	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.84	Vert(CT)	-0.14	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 63 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 7= Mechanical, 14=0-3-8
Max Grav 7=667 (LC 1), 14=661 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-14=-655/0, 6-7=-662/0, 1-2=-736/0, 2-3=-1659/0, 3-4=-1908/0, 4-5=-1673/0, 5-6=-731/0
BOT CHORD 13-14=0/39, 12-13=0/1377, 11-12=0/1908, 10-11=0/1908, 9-10=0/1908, 8-9=0/1367, 7-8=0/0
WEBS 3-11=-110/100, 4-10=-90/167, 1-13=0/890, 2-13=-834/0, 2-12=0/391, 3-12=-443/0, 6-8=0/917, 5-8=-828/0, 5-9=0/440, 4-9=-480/0

LOAD CASE(S) Standard

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) Bearings are assumed to be: Joint 14 SP No.2 crushing capacity of 565 psi.
3) Refer to girder(s) for truss to truss connections.
4) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
6) CAUTION, Do not erect truss backwards.

November 29,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	K1	Floor Supported Gable	1	1	T32207674
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Nov 28 09:12:48 Page: 1
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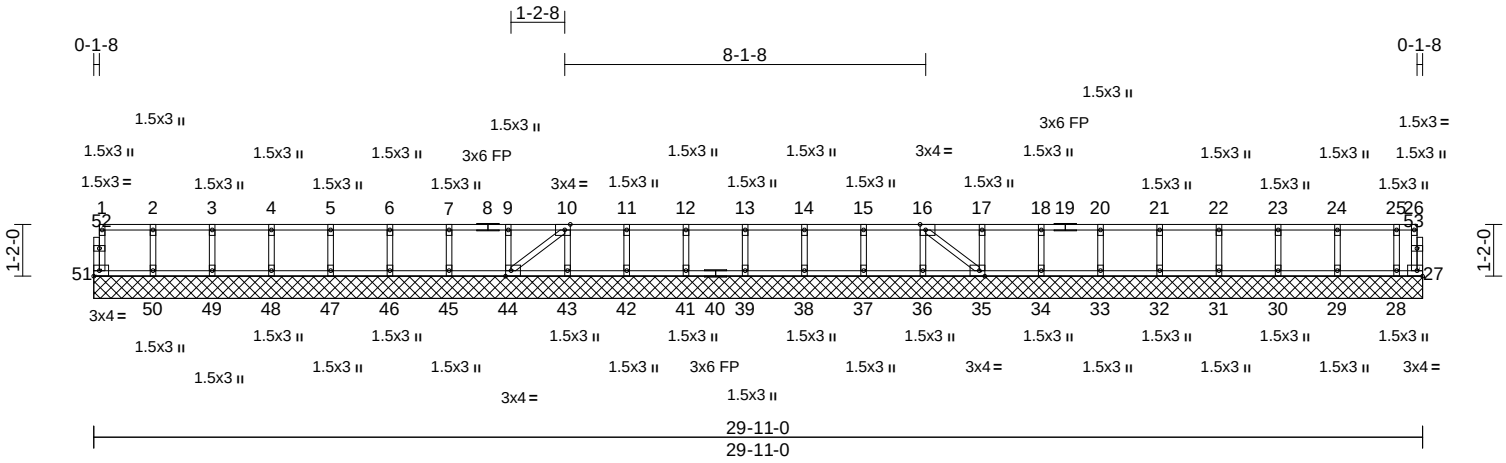

Scale = 1:51.9

Plate Offsets (X, Y): [10:0-1-8,Edge], [16:0-1-8,Edge], [35:0-1-8,Edge], [44:0-1-8,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	0.08	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	Horiz(TL)	0.00	35	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 128 lb	FT = 20%F, 11%E

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

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

REACTIONS (size) 27=29-11-0, 28=29-11-0, 29=29-11-0, 30=29-11-0, 31=29-11-0, 32=29-11-0, 33=29-11-0, 34=29-11-0, 35=29-11-0, 36=29-11-0, 37=29-11-0, 38=29-11-0, 39=29-11-0, 41=29-11-0, 42=29-11-0, 43=29-11-0, 44=29-11-0, 45=29-11-0, 46=29-11-0, 47=29-11-0, 48=29-11-0, 49=29-11-0, 50=29-11-0, 51=29-11-0
Max Uplift 27=-8 (LC 1)
Max Grav 27=-8 (LC 1), 28=121 (LC 1), 29=152 (LC 1), 30=145 (LC 1), 31=147 (LC 1), 32=147 (LC 1), 33=147 (LC 1), 34=147 (LC 1), 35=154 (LC 1), 36=139 (LC 1), 37=147 (LC 1), 38=147 (LC 1), 39=147 (LC 1), 41=147 (LC 1), 42=147 (LC 1), 43=141 (LC 1), 44=152 (LC 1), 45=147 (LC 1), 46=147 (LC 1), 47=147 (LC 1), 48=147 (LC 1), 49=146 (LC 1), 50=152 (LC 1), 51=48 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-51=-44/0, 26-27=0/8, 1-2=-3/0, 2-3=-3/0, 3-4=-3/0, 4-5=-3/0, 5-6=-3/0, 6-7=-3/0, 7-9=-3/0, 9-10=-3/0, 10-11=-9/0, 11-12=-9/0, 12-13=-9/0, 13-14=-9/0, 14-15=-9/0, 15-16=-9/0, 16-17=0/0, 17-18=0/0, 18-20=0/0, 20-21=0/0, 21-22=0/0, 22-23=0/0, 23-24=0/0, 24-25=0/0, 25-26=0/0
BOT CHORD 50-51=0/3, 49-50=0/3, 48-49=0/3, 47-48=0/3, 46-47=0/3, 45-46=0/3, 44-45=0/3, 43-44=0/9, 42-43=0/9, 41-42=0/9, 39-41=0/9, 38-39=0/9, 37-38=0/9, 36-37=0/9, 35-36=0/9, 34-35=0/0, 33-34=0/0, 32-33=0/0, 31-32=0/0, 30-31=0/0, 29-30=0/0, 28-29=0/0, 27-28=0/0
WEBS 2-50=-138/0, 3-49=-133/0, 4-48=-134/0, 5-47=-133/0, 6-46=-133/0, 7-45=-133/0, 9-44=-133/0, 10-43=-128/0, 11-42=-133/0, 12-41=-133/0, 13-39=-133/0, 14-38=-133/0, 15-37=-133/0, 16-36=-126/0, 17-35=-133/0, 18-34=-133/0, 20-33=-133/0, 21-32=-133/0, 22-31=-134/0, 23-30=-132/0, 24-29=-138/0, 25-28=-110/0, 10-44=-9/0, 16-35=-12/0

NOTES
1) Gable requires continuous bottom chord bearing.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 27.
6) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

November 29,2023

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	K2	Floor Supported Gable	1	1	T32207675
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Nov 28 09:12:49 Page: 1

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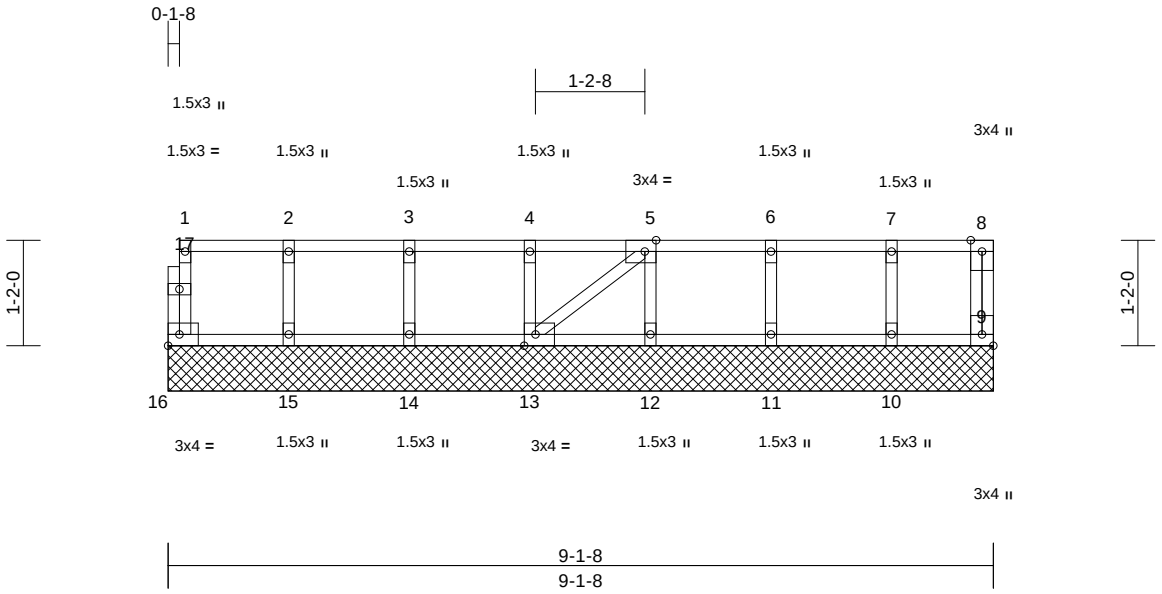


Scale = 1:25.5

Plate Offsets (X, Y): [5:0-1-8,Edge], [9:Edge,0-1-8], [13:0-1-8,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	0.08	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	Horiz(TL)	0.00	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 43 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

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

REACTIONS (size) 9=9-1-8, 10=9-1-8, 11=9-1-8, 12=9-1-8, 13=9-1-8, 14=9-1-8, 15=9-1-8, 16=9-1-8
Max Grav 9=40 (LC 1), 10=142 (LC 1), 11=148 (LC 1), 12=148 (LC 1), 13=145 (LC 1), 14=146 (LC 1), 15=152 (LC 1), 16=48 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-44/0, 8-9=-36/0, 1-2=-3/0, 2-3=-3/0, 3-4=-3/0, 4-5=-3/0, 5-6=0/0, 6-7=0/0, 7-8=0/0
BOT CHORD 15-16=0/3, 14-15=0/3, 13-14=0/3, 12-13=0/0, 11-12=0/0, 10-11=0/0, 9-10=0/0
WEBS 2-15=-138/0, 3-14=-133/0, 4-13=-134/0, 5-12=-135/0, 6-11=-135/0, 7-10=-129/0, 5-13=0/3

NOTES

1) Gable requires continuous bottom chord bearing.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
7) CAUTION, Do not erect truss backwards.

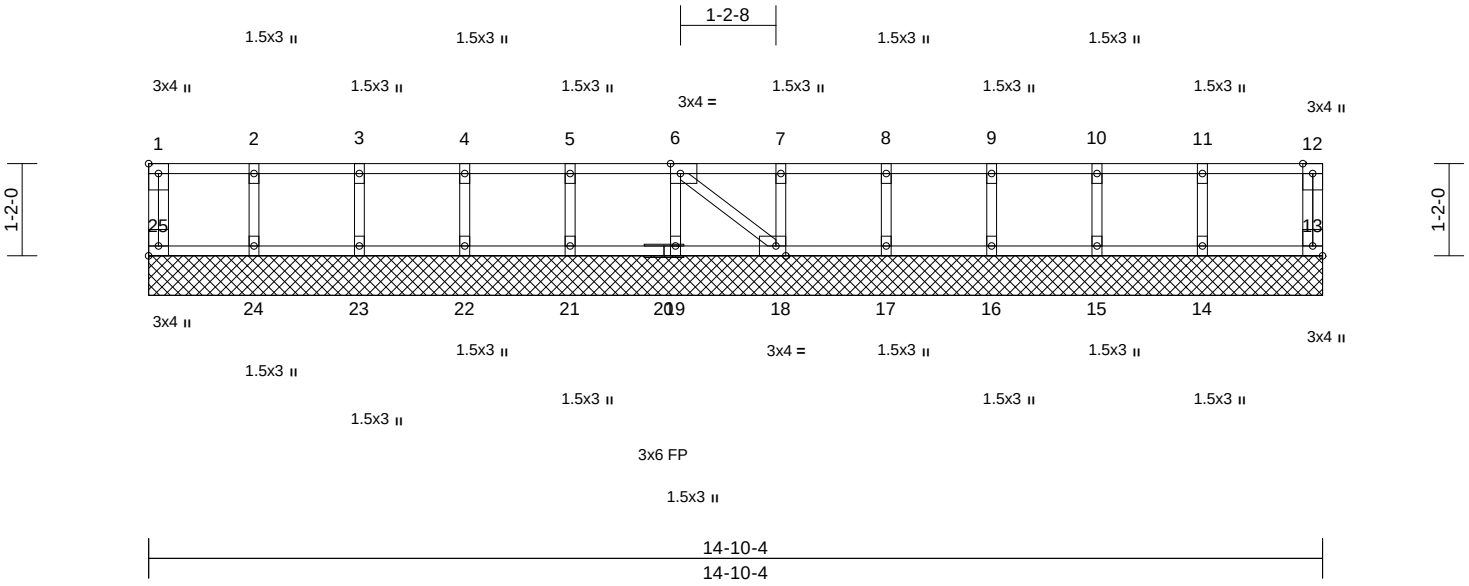
LOAD CASE(S) Standard

November 29,2023

ENGINEERING BY TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	CHESAPEAKE HOMES - PLAN 2343 A,B,C - 2ND
3780773	K9	Floor Supported Gable	1	1	T32207676
					Job Reference (optional)

Builders FirstSource (Middlesex, NC), Middlesex, NC - 27557, Run: 8.63 S Nov 1 2023 Print: 8.630 S Nov 1 2023 MiTek Industries, Inc. Tue Nov 28 09:12:49 Page: 1
ID:NqzeoxXMdvv7nlg6L3GKQEzczIx-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:29.2

Plate Offsets (X, Y): [1:Edge,0-1-8], [6:0-1-8,Edge], [13:Edge,0-1-8], [18:0-1-8,Edge], [25: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	0.10	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	0.04	Horiz(TL)	0.00	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 66 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 10-0-0 oc bracing.

REACTIONS (size) 13=14-10-4, 14=14-10-4, 15=14-10-4, 16=14-10-4, 17=14-10-4, 18=14-10-4, 19=14-10-4, 21=14-10-4, 22=14-10-4, 23=14-10-4, 24=14-10-4, 25=14-10-4
Max Grav 13=61 (LC 1), 14=171 (LC 1), 15=140 (LC 1), 16=148 (LC 1), 17=146 (LC 1), 18=147 (LC 1), 19=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=145 (LC 1), 24=156 (LC 1), 25=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-25=-47/0, 12-13=-56/0, 1-2=0/0, 2-3=0/0, 3-4=0/0, 4-5=0/0, 5-6=0/0, 6-7=0/0, 7-8=0/0, 8-9=0/0, 9-10=0/0, 10-11=0/0, 11-12=0/0
BOT CHORD 24-25=0/0, 23-24=0/0, 22-23=0/0, 21-22=0/0, 19-21=0/0, 18-19=0/0, 17-18=0/0, 16-17=0/0, 15-16=0/0, 14-15=0/0, 13-14=0/0
WEBS 2-24=-142/0, 3-23=-131/0, 4-22=-134/0, 5-21=-133/0, 6-19=-133/0, 7-18=-133/0, 8-17=-133/0, 9-16=-135/0, 10-15=-127/0, 11-14=-155/0, 6-18=0/0

NOTES
1) Gable requires continuous bottom chord bearing.
2) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
3) Gable studs spaced at 1-4-0 oc.
4) All bearings are assumed to be SP No.2 crushing capacity of 565 psi.
5) This truss is designed in accordance with the 2015 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 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard

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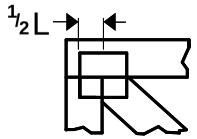
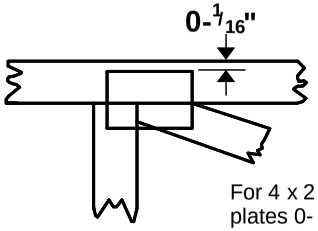
Symbols

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.

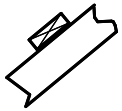
* Plate location details available in MiTek software or upon request.

PLATE SIZE

4 x 4

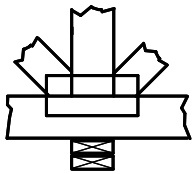
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

LATERAL BRACING LOCATION



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

BEARING

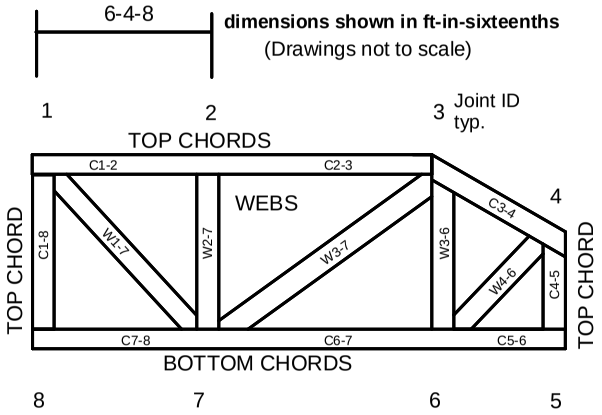


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number/letter where bearings occur. Min size shown is for crushing only.

Industry Standards:

ANSI/TPI1: National Design Specification for Metal Plate Connected Wood Truss Construction.
DSB-22: Design Standard for Bracing.
BCSI: Building Component Safety Information, Guide to Good Practice for Handling, Installing, Restraining & Bracing of Metal Plate Connected Wood Trusses.

Numbering System



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

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

Product Code Approvals

ICC-ES Reports:

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

Design General Notes

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

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

MiTek®

ENGINEERING BY TRENCO
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MiTek Engineering Reference Sheet: MII-7473 rev. 1/2/2023

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.