ENGINEERING BY
TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

Re: GHAZAB
Garman Homes - Azalea A & B Floor

The truss drawing(s) referenced below have been prepared by Truss Engineering Co. under my direct supervision based on the parameters provided by Carolina Structural Systems, LLC.

Pages or sheets covered by this seal: I54287093 thru I54287103

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

North Carolina COA: C-0844

September 20,2022

Gilbert, Eric

IMPORTANT NOTE: The seal on these truss component designs is a certification that the engineer named is licensed in the jurisdiction(s) identified and that the designs comply with ANSI/TPI 1. These designs are based upon parameters shown (e.g., loads, supports, dimensions, shapes and design codes), which were given to MiTek or TRENCO. Any project specific information included is for MiTek's or TRENCO's customers file reference purpose only, and was not taken into account in the preparation of these designs. MiTek or TRENCO has not independently verified the applicability of the design parameters or the designs for any particular building. Before use, the building designer should verify applicability of design parameters and properly incorporate these designs into the overall building design per ANSI/TPI 1, Chapter 2.

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	A01	Common Supported Gable	2	1	I54287093 Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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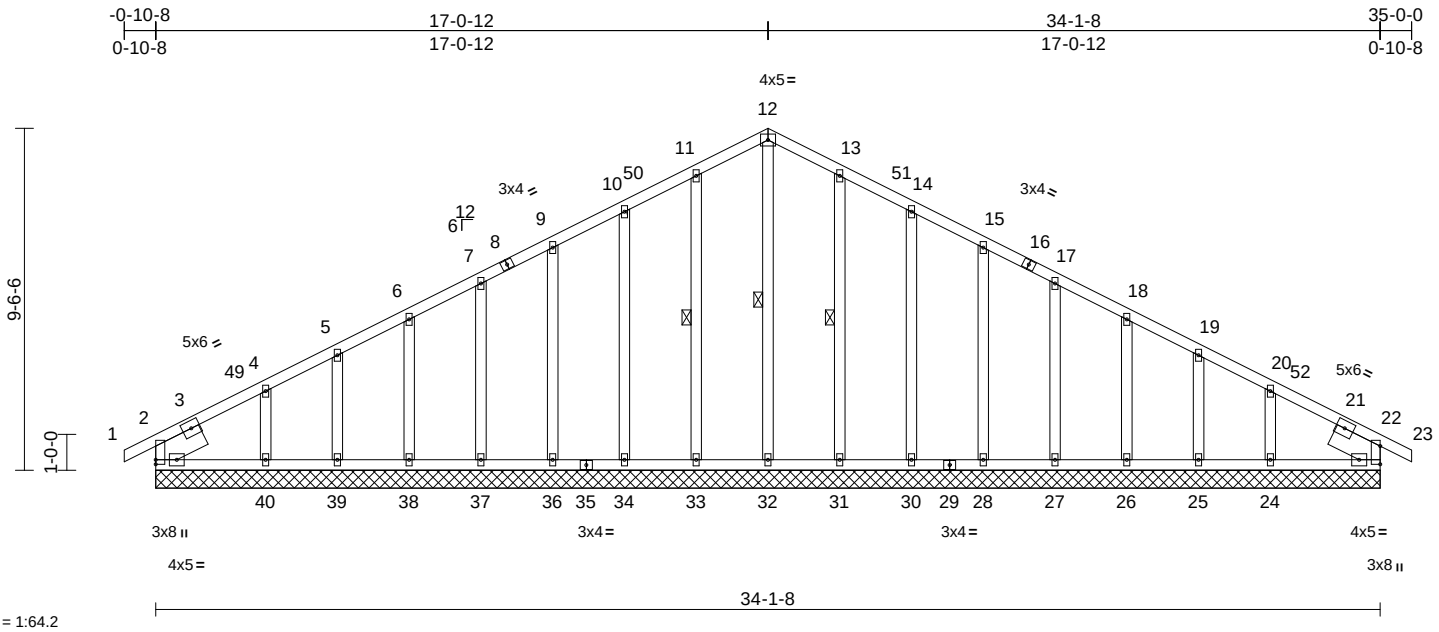

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.08	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.01	22	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 237 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3
SLIDER Left 2x8 SP No.2 -- 1-6-0, Right 2x8 SP No.2 -- 1-6-0

BRACING

TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 12-32, 11-33, 13-31

REACTIONS (size) 2=34-1-8, 22=34-1-8, 24=34-1-8, 25=34-1-8, 26=34-1-8, 27=34-1-8, 28=34-1-8, 30=34-1-8, 31=34-1-8, 32=34-1-8, 33=34-1-8, 34=34-1-8, 36=34-1-8, 37=34-1-8, 38=34-1-8, 39=34-1-8, 40=34-1-8, 41=34-1-8, 45=34-1-8

Max Horiz 2=-140 (LC 10), 41=-140 (LC 10)

Max Uplift 24=-49 (LC 12), 25=-9 (LC 12), 26=-22 (LC 12), 27=-19 (LC 12), 28=-19 (LC 12), 30=-23 (LC 12), 31=-10 (LC 12), 33=-10 (LC 12), 34=-23 (LC 12), 36=-19 (LC 12), 37=-19 (LC 12), 38=-22 (LC 12), 39=-9 (LC 12), 40=-49 (LC 12)

Max Grav 2=202 (LC 18), 22=198 (LC 1), 24=226 (LC 18), 25=140 (LC 1), 26=165 (LC 22), 27=159 (LC 1), 28=160 (LC 22), 30=160 (LC 1), 31=164 (LC 22), 32=150 (LC 12), 33=164 (LC 21), 34=160 (LC 1), 36=160 (LC 21), 37=159 (LC 1), 38=165 (LC 21), 39=140 (LC 1), 40=239 (LC 17), 41=202 (LC 18), 45=198 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

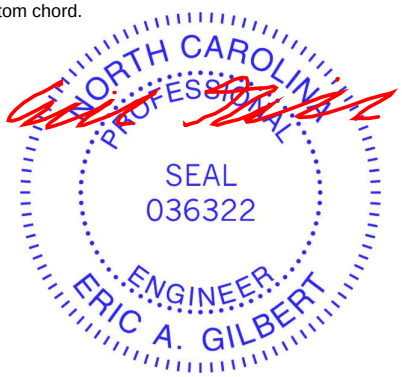
TOP CHORD 1-2=0/23, 2-4=-125/88, 4-5=-125/62, 5-6=-117/94, 6-7=-110/137, 7-9=-103/177, 9-10=-98/218, 10-11=-113/260, 11-12=-125/294, 12-13=-125/296, 13-14=-113/262, 14-15=-98/219, 15-17=-84/179, 17-18=-77/139, 18-19=-83/96, 19-20=-92/64, 20-22=-76/40, 22-23=0/23

BOT CHORD 2-40=-26/83, 39-40=-26/83, 38-39=-26/83, 37-38=-26/83, 36-37=-26/83, 34-36=-26/83, 33-34=-26/83, 32-33=-26/83, 31-32=-26/83, 30-31=-26/83, 28-30=-26/83, 27-28=-26/83, 26-27=-26/83, 25-26=-26/83, 24-25=-26/83, 22-24=-26/83

WEBS 12-32=-171/34, 11-33=-124/108, 10-34=-120/86, 9-36=-120/66, 7-37=-120/67, 6-38=-123/71, 5-39=-109/56, 4-40=-162/129, 13-31=-124/108, 14-30=-120/86, 15-28=-120/66, 17-27=-120/67, 18-26=-123/71, 19-25=-109/56, 20-24=-156/129

NOTES

1) Unbalanced roof live loads have been considered for this design.
2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=29ft; B=45ft; L=34ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -0-10-8 to 2-6-7, Exterior (2) 2-6-7 to 17-0-12, Corner (3) 17-0-12 to 20-5-11, Exterior (2) 20-5-11 to 35-0-0 zone; cantilever left and right exposed ; end vertical left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
3) Truss designed for wind loads in the plane of the truss only. For studs exposed to wind (normal to the face), see Standard Industry Gable End Details as applicable, or consult qualified building designer as per ANSI/TPI 1.
4) All plates are 2x4 MT20 unless otherwise indicated.
5) Gable requires continuous bottom chord bearing.
6) Gable studs spaced at 2-0-0 oc.
7) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-06-00 tall by 2-00-00 wide will fit between the bottom chord and any other members.
9) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 10 lb uplift at joint 33, 23 lb uplift at joint 34, 19 lb uplift at joint 36, 19 lb uplift at joint 37, 22 lb uplift at joint 38, 9 lb uplift at joint 39, 49 lb uplift at joint 40, 10 lb uplift at joint 31, 23 lb uplift at joint 30, 19 lb uplift at joint 28, 19 lb uplift at joint 27, 22 lb uplift at joint 26, 9 lb uplift at joint 25 and 49 lb uplift at joint 24.
10) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 22.
11) 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.
12) This truss design requires that a minimum of 7/16" structural wood sheathing be applied directly to the top chord and 1/2" gypsum sheetrock be applied directly to the bottom chord.



September 20,2022

Continued on page 2

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Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	A01	Common Supported Gable	2	1	I54287093 Job Reference (optional)

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	F201	Floor	3	1	I54287094
					Job Reference (optional)

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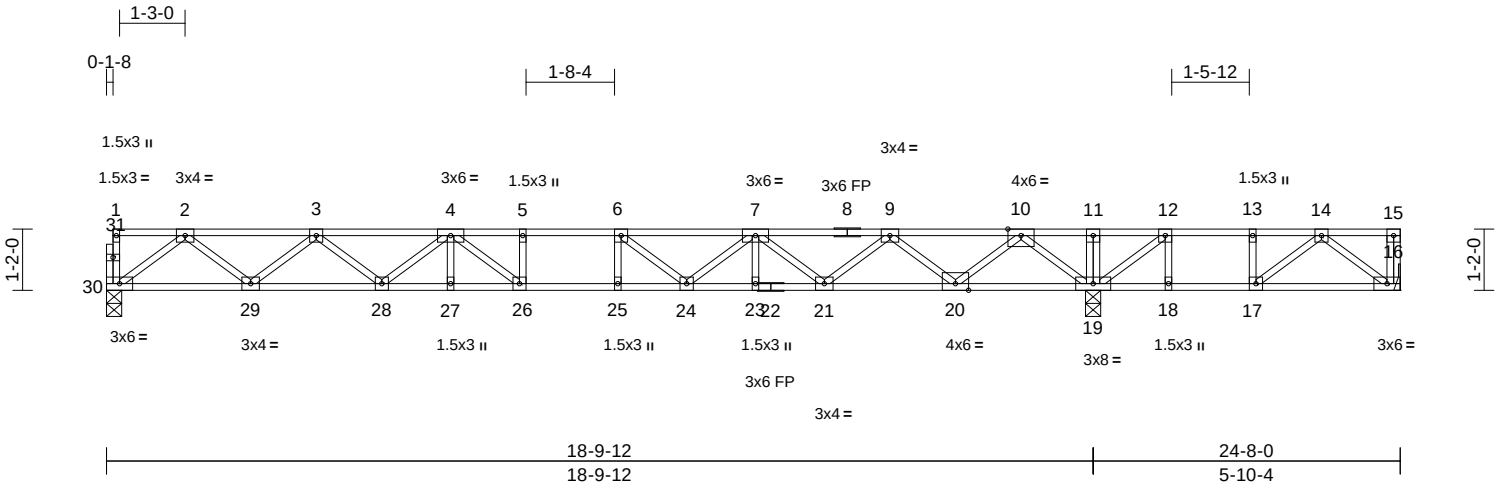

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.61	Vert(LL)	-0.25	25-26	>910	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.99	Vert(CT)	-0.34	25-26	>661	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.52	Horz(CT)	0.05	19	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 126 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat) *Except* 8-15:2x4 SP DSS (flat)
BOT CHORD 2x4 SP No.2(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.2(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) 16= Mechanical, 19=0-3-8, 30=0-3-8
Max Uplift 16=-226 (LC 3)
Max Grav 16=184 (LC 4), 19=1448 (LC 1), 30=732 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-30=-31/0, 15-16=-34/20, 1-2=-2/0, 2-3=-1540/0, 3-4=-2482/0, 4-5=-2930/0, 5-6=-2930/0, 6-7=-2647/0, 7-9=-1796/0, 9-10=-449/0, 10-11=0/1674, 11-12=0/1674, 12-13=-96/887, 13-14=-96/887, 14-15=0/0

BOT CHORD 29-30=0/913, 28-29=0/2140, 27-28=0/2822, 26-27=0/2822, 25-26=0/2930, 24-25=0/2930, 23-24=0/2358, 21-23=0/2358, 20-21=0/1245, 19-20=-495/0, 18-19=-887/96, 17-18=-887/96, 16-17=-321/172

WEBS 11-19=-2/136, 2-30=-1144/0, 10-19=-1487/0, 2-29=0/816, 10-20=0/1095, 3-29=-780/0, 9-20=-1049/0, 3-28=0/445, 9-21=0/728, 4-28=-435/0, 4-27=-50/80, 7-21=-727/0, 7-23=-10/29, 4-26=-180/448, 7-24=0/412, 5-26=-153/0, 14-16=-215/402, 12-19=-1205/0, 14-17=-722/0, 12-18=0/221, 13-17=0/332, 6-24=-521/0, 6-25=-96/147

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 226 lb uplift at joint 16.
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

September 20,2022

ENGINEERING BY TRENCO
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818 Soundside Road
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Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	F202	Floor	10	1	I54287095
					Job Reference (optional)

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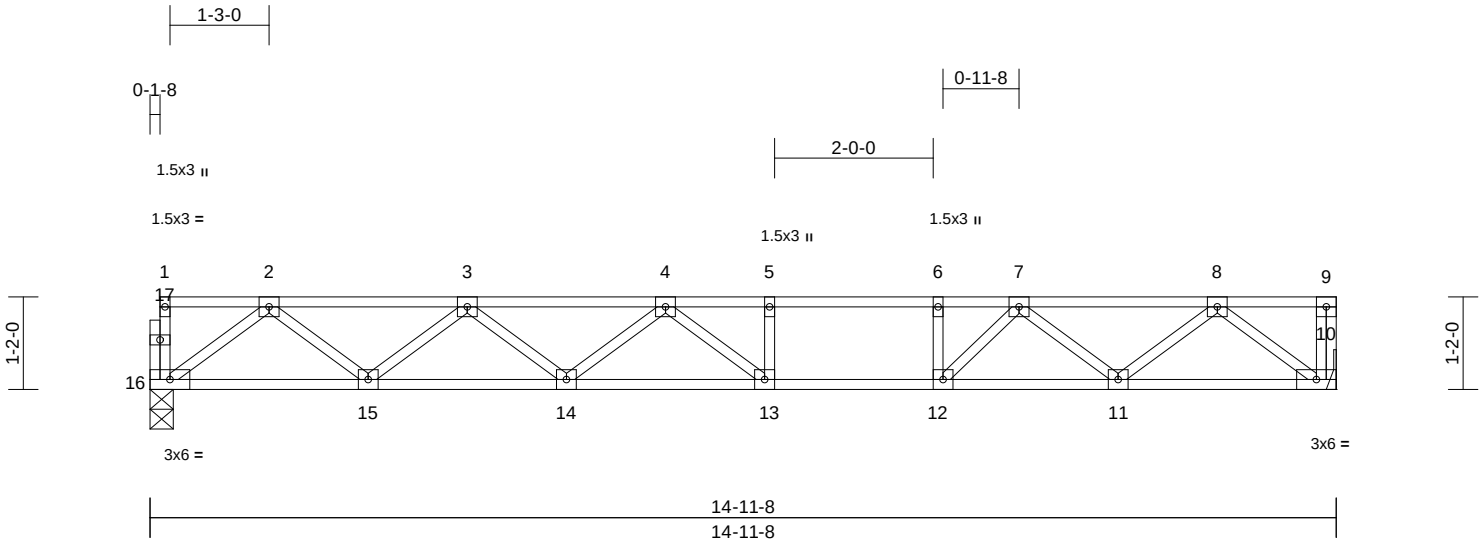

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.88	Vert(LL)	-0.20	13-14	>882	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	1.00	Vert(CT)	-0.27	13-14	>644	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.32	Horz(CT)	0.04	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/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)
OTHERS 2x4 SP No.2(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 1-4-12 oc bracing.

REACTIONS (size) 10= Mechanical, 16=0-3-8
Max Grav 10=647 (LC 1), 16=642 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-30/0, 9-10=-30/0, 1-2=-2/0, 2-3=-1311/0, 3-4=-2062/0, 4-5=-2170/0, 5-6=-2170/0, 6-7=-2170/0, 7-8=-1294/0, 8-9=0/0
BOT CHORD 15-16=0/795, 14-15=0/1810, 13-14=0/2252, 12-13=0/2170, 11-12=0/1804, 10-11=0/799
WEBS 8-10=-1002/0, 2-16=-995/0, 8-11=0/645, 2-15=0/671, 7-11=-663/0, 3-15=-649/0, 3-14=0/328, 4-14=-248/0, 5-13=-116/68, 4-13=-251/221, 6-12=-345/0, 7-12=0/661

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) 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

September 20,2022

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	F203	Floor	2	1	I54287096
					Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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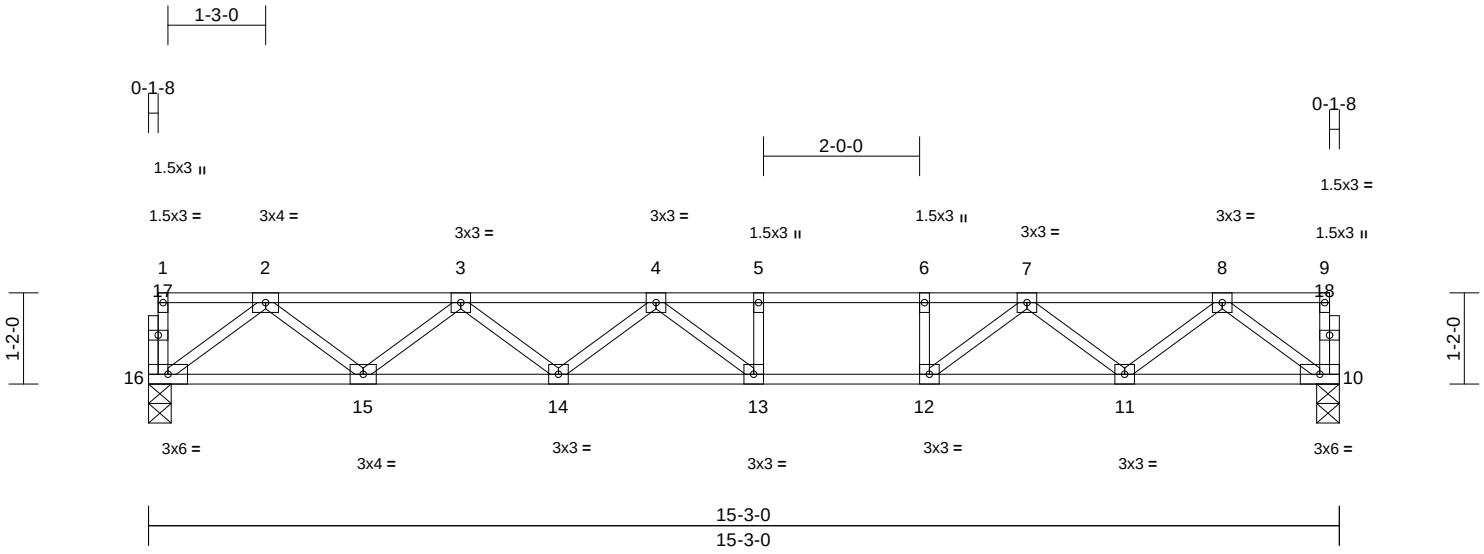

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.78	Vert(LL)	-0.19	13-14	>924	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.74	Vert(CT)	-0.27	13-14	>676	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.03	10	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 76 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.2(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) 10=0-3-8, 16=0-3-8
Max Grav 10=655 (LC 1), 16=655 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-16=-30/0, 9-10=-27/0, 1-2=-2/0, 2-3=-1343/0, 3-4=-2124/0, 4-5=-2274/0, 5-6=-2274/0, 6-7=-2274/0, 7-8=-1327/0, 8-9=-2/0
BOT CHORD 15-16=0/812, 14-15=0/1857, 13-14=0/2328, 12-13=0/2274, 11-12=0/1846, 10-11=0/815
WEBS 8-10=-1021/0, 2-16=-1016/0, 8-11=0/666, 2-15=0/692, 7-11=-676/0, 3-15=-670/0, 7-12=0/676, 3-14=0/347, 4-14=-266/0, 4-13=-231/250, 5-13=-127/50, 6-12=-292/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
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

September 20,2022

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	F204	Floor	8	1	I54287097
					Job Reference (optional)

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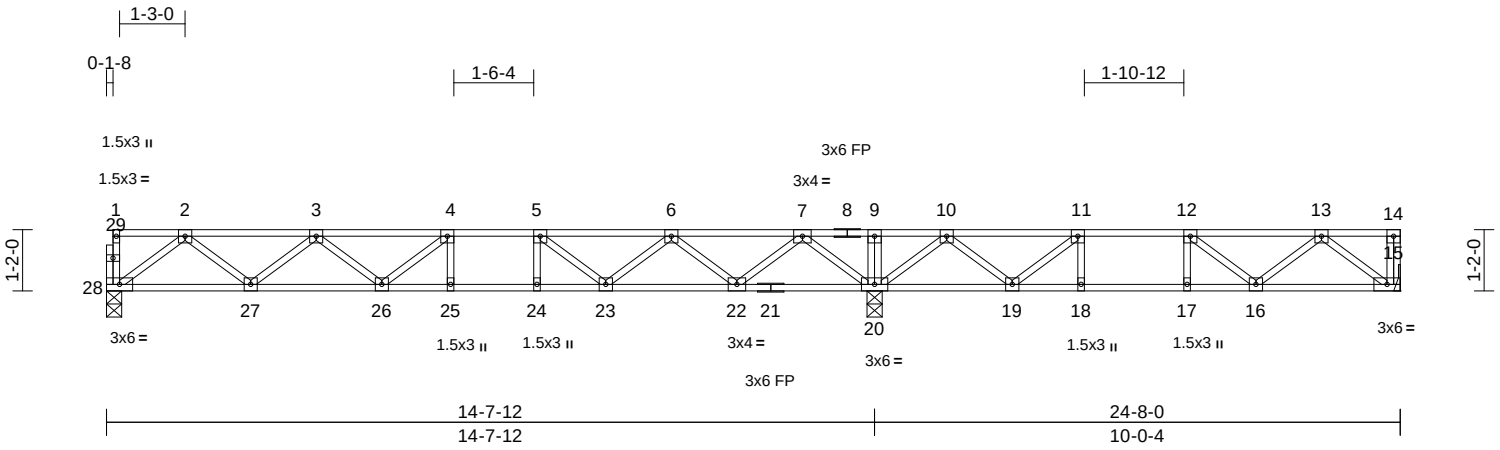

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	-0.11	25-26	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.81	Vert(CT)	-0.15	25-26	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.37	Horz(CT)	0.03	15	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 123 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.2(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) 15= Mechanical, 20=0-3-8, 28=0-3-8

Max Grav 15=386 (LC 4), 20=1261 (LC 1), 28=576 (LC 10)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-28=-34/0, 14-15=-24/3, 1-2=-2/0, 2-3=-1150/0, 3-4=-1715/0, 4-5=-1813/0, 5-6=-1483/0, 6-7=-631/29, 7-9=0/1146, 9-10=0/1146, 10-11=-432/419, 11-12=-787/155, 12-13=-652/16, 13-14=0/0
BOT CHORD	27-28=0/706, 26-27=0/1570, 25-26=0/1813, 24-25=0/1813, 23-24=0/1813, 22-23=0/1180, 20-22=-266/59, 19-20=-624/111, 18-19=-155/787, 17-18=-155/787, 16-17=-155/787, 15-16=0/467
WEBS	9-20=-96/0, 2-28=-883/0, 7-20=-1103/0, 2-27=0/578, 7-22=0/784, 3-27=-547/0, 6-22=-751/0, 3-26=0/215, 6-23=0/438, 4-26=-225/93, 5-23=-524/0, 4-25=-149/49, 5-24=-29/169, 13-15=-586/0, 10-20=-787/0, 13-16=-63/241, 10-19=0/528, 12-16=-172/179, 11-19=-626/0, 11-18=0/177, 12-17=-153/0

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) 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

September 20,2022

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Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	F205	Floor	1	1	I54287098
					Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

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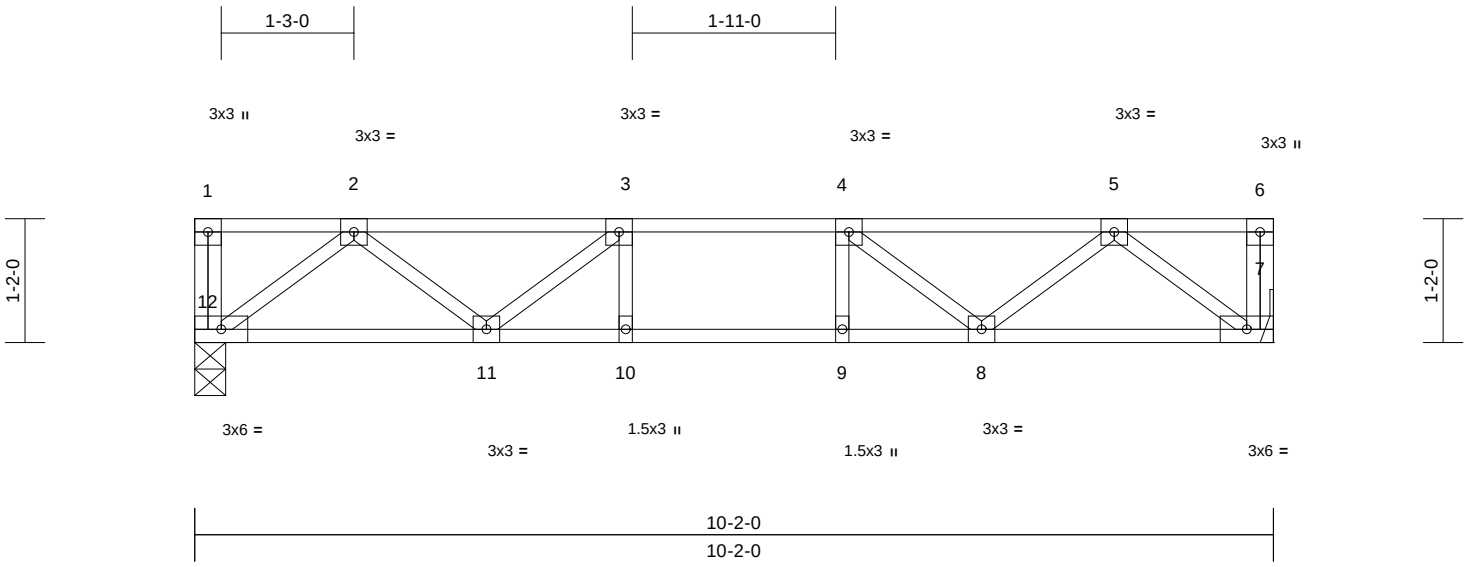


Scale = 1:21.7

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	0.32	Vert(LL)	-0.06	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.57	Vert(CT)	-0.07	10-11	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.20	Horz(CT)	0.02	7	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 52 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)

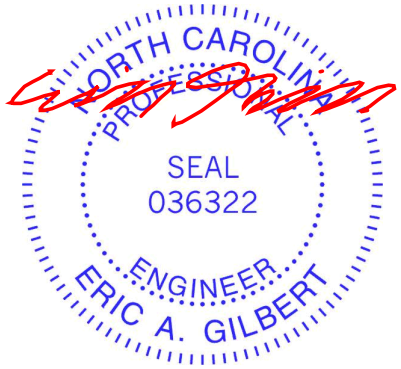
BRACING
TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 7= Mechanical, 12=0-3-8
Max Grav 7=545 (LC 1), 12=545 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-37/0, 6-7=-37/0, 1-2=0/0, 2-3=-976/0, 3-4=-1282/0, 4-5=-976/0, 5-6=0/0
BOT CHORD 11-12=0/656, 10-11=0/1282, 9-10=0/1282, 8-9=0/1282, 7-8=0/656
WEBS 5-7=-823/0, 2-12=-823/0, 5-8=0/417, 2-11=0/417, 4-8=-428/0, 3-11=-428/0, 3-10=-74/100, 4-9=-74/100

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) 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.

LOAD CASE(S) Standard



September 20,2022

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	F206	Floor	3	1	I54287099
					Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Tue Sep 20 08:41:17 Page: 1
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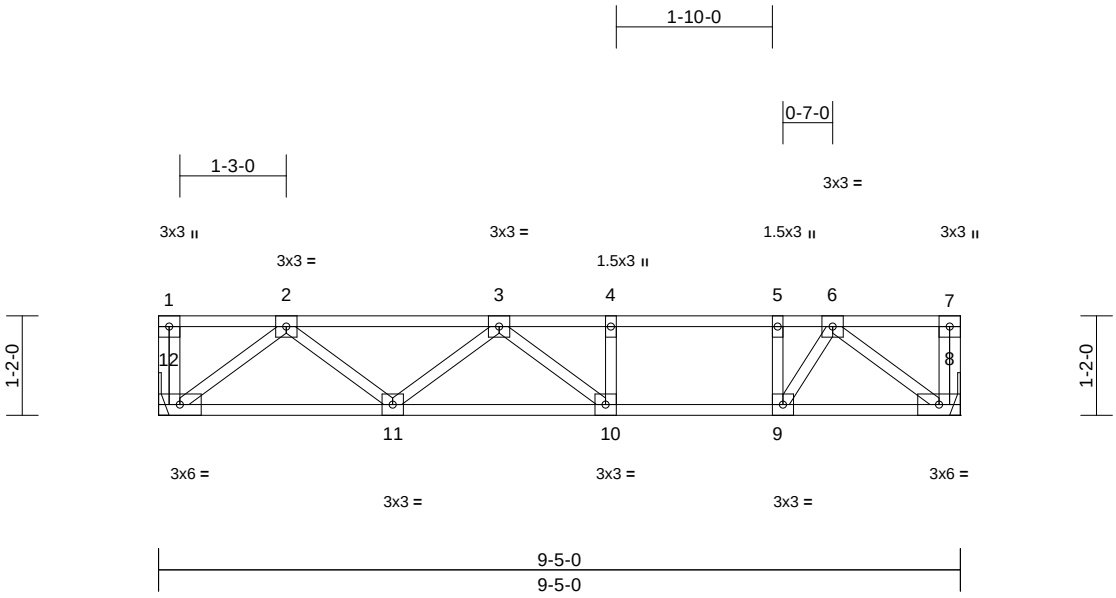

Scale = 1:27.1

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.75	Vert(LL)	-0.09	10-11	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.58	Vert(CT)	-0.12	10-11	>924	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.01	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 49 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) 8= Mechanical, 12= Mechanical
Max Grav 8=403 (LC 1), 12=403 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-12=-33/0, 7-8=-58/0, 1-2=0/0, 2-3=-716/0, 3-4=-765/0, 4-5=-765/0, 5-6=-765/0, 6-7=0/0
BOT CHORD 11-12=0/483, 10-11=0/887, 9-10=0/765, 8-9=0/480
WEBS 6-8=-602/0, 2-12=-605/0, 2-11=0/303, 3-11=-223/0, 3-10=-193/65, 4-10=-47/54, 5-9=-388/0, 6-9=0/577

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) 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.

LOAD CASE(S) Standard

September 20,2022

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	F207	Floor	1	1	I54287100
					Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247, Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Tue Sep 20 08:41:17 Page: 1
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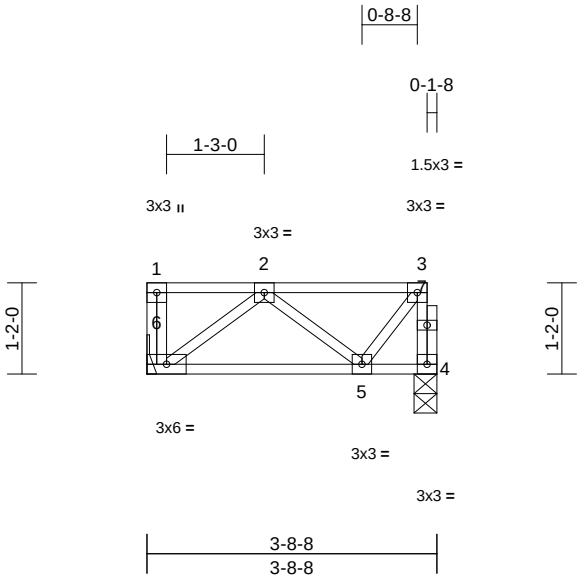

Scale = 1:29.5

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	0.21	Vert(LL)	0.00	5-6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.09	Vert(CT)	-0.01	5-6	>999	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 22 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.2(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-8-8 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4=0-3-8, 6= Mechanical
Max Grav 4=184 (LC 1), 6=190 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-41/0, 3-4=-187/0, 1-2=0/0, 2-3=-89/0
BOT CHORD 5-6=0/183, 4-5=0/11
WEBS 2-6=-229/0, 2-5=-122/0, 3-5=0/130

NOTES
1) Refer to girder(s) for truss to truss connections.
2) 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.
3) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
4) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

September 20,2022

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	K201	Floor Supported Gable	1	1	I54287101
					Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247, Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Tue Sep 20 08:41:18 Page: 1
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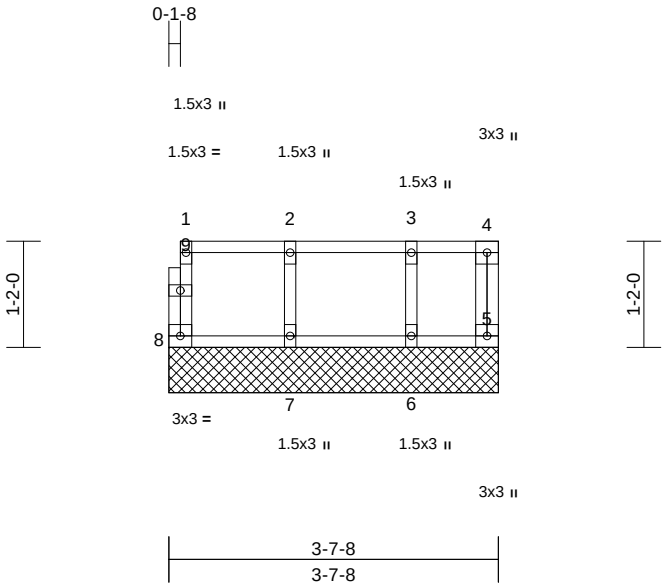

Scale = 1:25.3

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	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 19 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=3-7-8, 6=3-7-8, 7=3-7-8, 8=3-7-8
Max Grav 5=41 (LC 1), 6=120 (LC 1), 7=152 (LC 1), 8=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-48/0, 4-5=-34/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0
BOT CHORD 7-8=0/7, 6-7=0/7, 5-6=0/7
WEBS 2-7=-136/0, 3-6=-113/0

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) 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

NORTH CAROLINA PROFESSIONAL SEAL 036322 ENGINEER ERIC A. GILBERT

September 20,2022

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor
GHAZAB	K202	Floor Supported Gable	1	1	I54287102
					Job Reference (optional)

Carolina Structural Systems, LLC, Ether, NC - 27247, Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Tue Sep 20 08:41:18 Page: 1
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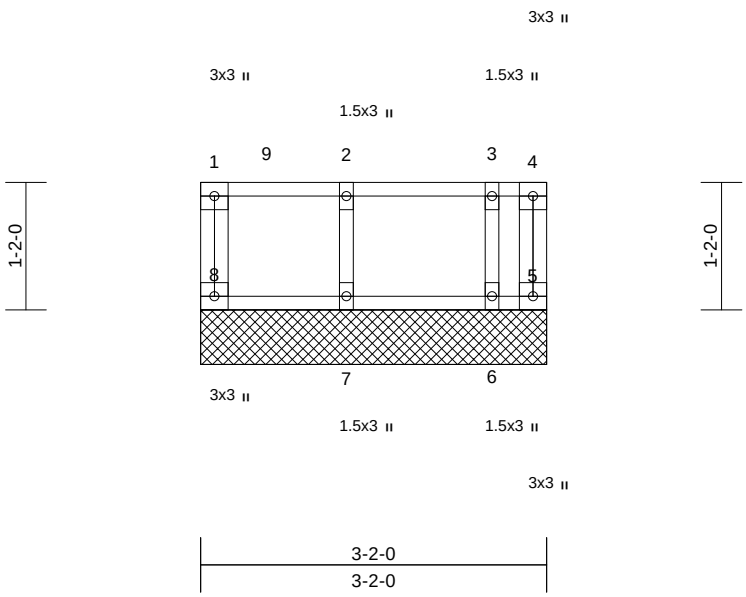

Scale = 1:21.1

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	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.06	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 18 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.2(flat) *Except* 5-4,5-4:2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 5=3-2-0, 6=3-2-0, 7=3-2-0, 8=3-2-0
Max Grav 5=60 (LC 1), 6=142 (LC 1), 7=198 (LC 1), 8=125 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-122/0, 4-5=-31/0, 1-2=-20/0, 2-3=-20/0, 3-4=-20/0
BOT CHORD 7-8=0/20, 6-7=0/20, 5-6=0/20
WEBS 2-7=-180/0, 3-6=-163/0

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) 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.

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=-102, 9=-102

September 20,2022

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Azalea A & B Floor	
GHAZAB	K203	Floor Supported Gable	1	1	Job Reference (optional)	I54287103

Carolina Structural Systems, LLC, Ether, NC - 27247,

Run: 8.43 S Jan 6 2022 Print: 8.430 S Jan 6 2022 MiTek Industries, Inc. Tue Sep 20 08:41:18
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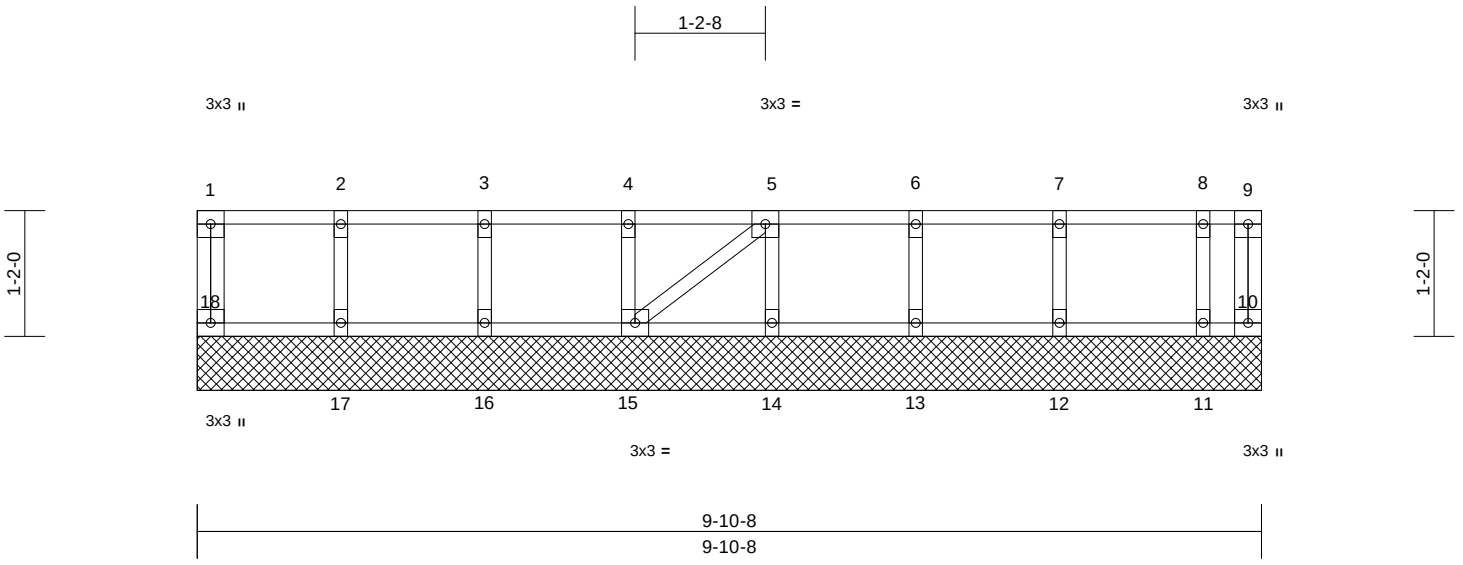


Scale = 1:21.4

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	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	14	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.2(flat)
WEBS	2x4 SP No.2(flat)
OTHERS	2x4 SP No.3(flat)

BRACING

TOP CHORD	Structural wood sheathing directly applied or 9-10-8 oc purlins, except end verticals.
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 10=9-10-8, 11=9-10-8, 12=9-10-8, 13=9-10-8, 14=9-10-8, 15=9-10-8, 16=9-10-8, 17=9-10-8, 18=9-10-8
Max Uplift 10=-6 (LC 1)
Max Grav 10=-6 (LC 1), 11=121 (LC 1), 12=152 (LC 1), 13=145 (LC 1), 14=147 (LC 1), 15=147 (LC 1), 16=145 (LC 1), 17=156 (LC 1), 18=52 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-18=-47/0, 9-10=0/5, 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
BOT CHORD	17-18=0/0, 16-17=0/0, 15-16=0/0, 14-15=0/0, 13-14=0/0, 12-13=0/0, 11-12=0/0, 10-11=0/0
WEBS	2-17=-142/0, 3-16=-132/0, 4-15=-134/0, 5-14=-134/0, 6-13=-132/0, 7-12=-138/0, 8-11=-110/0, 5-15=0/0

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) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 6 lb uplift at joint 10.
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.

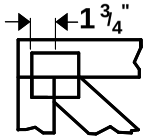
LOAD CASE(S) Standard

September 20,2022

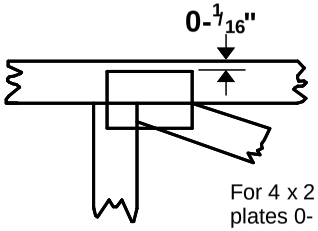
ENGINEERING BY
TRENCO
A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

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.

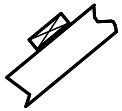
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

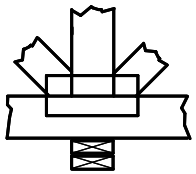
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

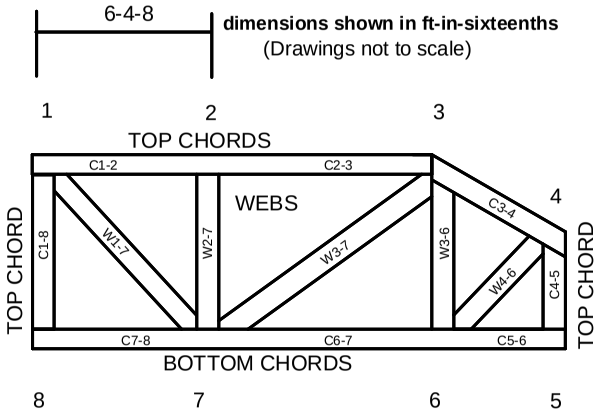


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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.

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.