ENGINEERING BY TRENCO
A MiTek Affiliate

Trenco
818 Soundside Rd
Edenton, NC 27932

RE: GHWISAR WUA - Garman Homes-Wisteria A & B WUA

Site Information:

Project Customer: Project Name:
Lot/Block: Subdivision:
Model:
Address:
City: State:

General Truss Engineering Criteria & Design Loads (Individual Truss Design Drawings Show Special Loading Conditions):

Design Code: IRC2015/TPI2014
Design Program: MiTek 20/20 8.6
Wind Code: ASCE 7-10 Wind Speed: 120 mph
Design Method: MWFRS (Directional)/C-C hybrid Wind ASCE 7-10
Roof Load: 40.0 psf
Floor Load: N/A psf

Mean Roof Height (feet): 25
Exposure Category: B

No.	Seal#	Truss Name	Date	No.	Seal#	Truss Name	Date
1	I56098783	A01	1/11/23	35	I56098817	P01	1/11/23
2	I56098784	A02	1/11/23	36	I56098818	P02	1/11/23
3	I56098785	A03	1/11/23	37	I56098819	P03	1/11/23
4	I56098786	A04	1/11/23	38	I56098820	P04	1/11/23
5	I56098787		1/11/23	39	I56098821	P05	1/11/23
6	I56098788	A06	1/11/23	40	I56098822	P06	1/11/23
7	I56098789	B01	1/11/23	41	I56098823	V01	1/11/23
8	I56098790	B02	1/11/23		I56098824	V02	1/11/23
9	I56098791	C01	1/11/23	43	I56098825	V03	1/11/23
10	I56098792	C02	1/11/23	44	I56098826	V04	1/11/23
11	I56098793		1/11/23	45	I56098827	V05	1/11/23
12	I56098794	D01	1/11/23	46	I56098828	V06	1/11/23
13	I56098795		1/11/23	47	I56098829	V07	1/11/23
14	I56098796		1/11/23	48	I56098830	V08	1/11/23
	I56098797	F201	1/11/23	49	I56098831	V09	1/11/23
16	I56098798	F202	1/11/23	50	I56098832	V10	1/11/23
17	I56098799	F203	1/11/23		I56098833	V11	1/11/23
18	I56098800	F204	1/11/23	52	I56098834	V12	1/11/23
19	I56098801	F205	1/11/23				
20	I56098802	F206	1/11/23				
21	I56098803	F207	1/11/23				
22	I56098804	F208	1/11/23				
23	I56098805	F209	1/11/23				
	I56098806	F210	1/11/23				
25	I56098807	F211	1/11/23				
26	I56098808	K201	1/11/23				
27	I56098809	K202	1/11/23				
28	I56098810	K203	1/11/23				
29	I56098811	K204	1/11/23				
30	I56098812	K205	1/11/23				
31	I56098813	K206	1/11/23				
32	I56098814	K207	1/11/23				
	I56098815	L01	1/11/23				
34	I56098816	L02	1/11/23				

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

Truss Design Engineer's Name: Gilbert, Eric
My license renewal date for the state of North Carolina is December 31, 2023.

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.

January 11,2023

Gilbert, Eric

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	A01	Attic Supported Gable	1	1	I56098783 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:07 Page: 1
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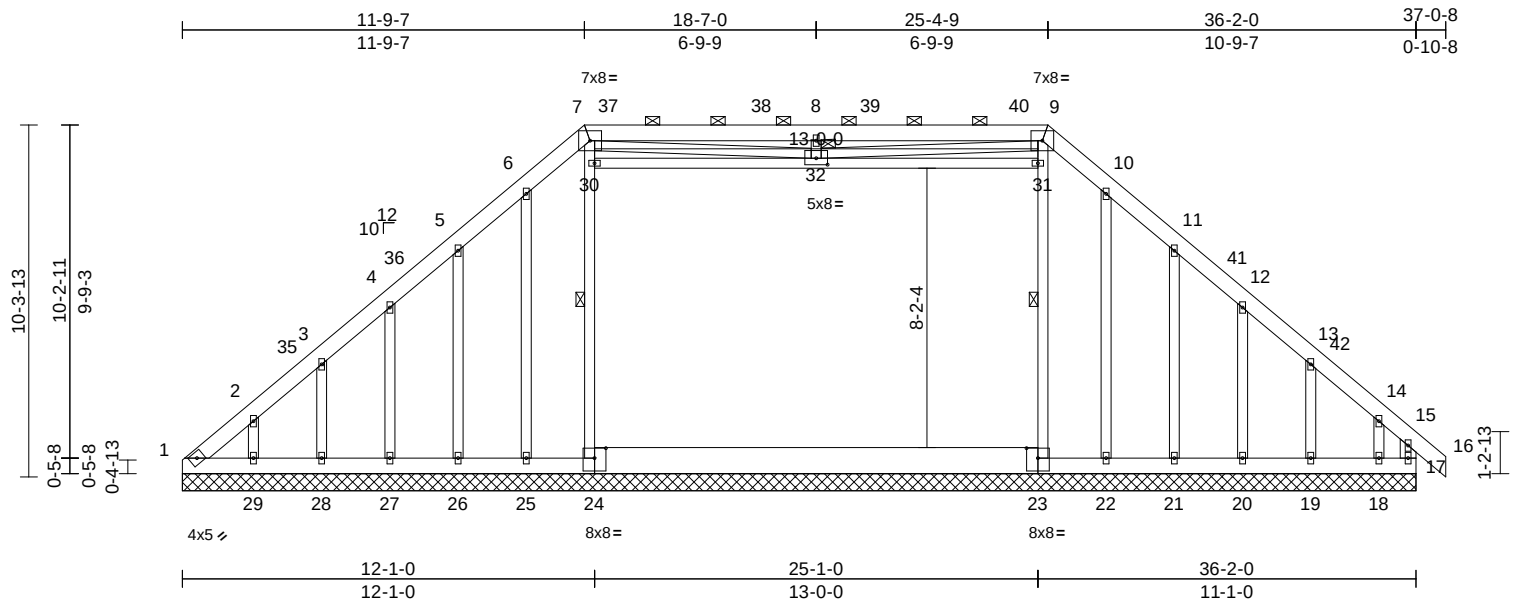

Scale = 1:67.6

Plate Offsets (X, Y): [23:0-4-0,0-3-8], [24:0-4-0,0-3-8], [32:0-4-0,0-2-4]

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	0.46	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.53	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.71	Horz(CT)	0.00	17	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 344 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 24-23:2x10 SP No.2
WEBS 2x4 SP No.2 *Except* 17-15:2x6 SP No.2, 32-8,7-32,32-9:2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (5-2-0 max.): 7-9.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 24-30, 23-31
JOINTS 1 Brace at Jt(s): 32

REACTIONS (size) 1=36-2-0, 17=36-2-0, 18=36-2-0, 19=36-2-0, 20=36-2-0, 21=36-2-0, 22=36-2-0, 23=36-2-0, 24=36-2-0, 25=36-2-0, 26=36-2-0, 27=36-2-0, 28=36-2-0, 29=36-2-0
Max Horiz 1=205 (LC 11)
Max Uplift 1=-81 (LC 10), 17=-90 (LC 11), 18=-122 (LC 12), 19=-28 (LC 12), 20=-44 (LC 12), 21=-17 (LC 12), 22=-531 (LC 28), 25=-530 (LC 29), 26=-18 (LC 12), 27=-42 (LC 12), 28=-35 (LC 12), 29=-30 (LC 12)
Max Grav 1=122 (LC 11), 17=129 (LC 8), 18=173 (LC 23), 19=177 (LC 23), 20=158 (LC 27), 21=263 (LC 23), 22=-59 (LC 9), 23=1414 (LC 22), 24=1434 (LC 22), 25=-54 (LC 8), 26=261 (LC 22), 27=160 (LC 1), 28=168 (LC 22), 29=195 (LC 22)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-138/199, 2-3=-132/173, 3-4=-113/150, 4-5=-98/123, 5-6=-112/153, 6-7=-56/224, 7-8=-1586/221, 8-9=-1586/221, 9-10=-56/222, 10-11=-112/141, 11-12=-57/83, 12-13=-28/70, 13-14=-64/112, 14-15=-129/183, 15-16=0/42, 15-17=-99/133
BOT CHORD 1-29=-134/125, 28-29=-135/125, 27-28=-135/125, 26-27=-135/125, 25-26=-135/125, 22-25=-139/125, 21-22=-135/125, 20-21=-135/125, 19-20=-135/125, 18-19=-135/125, 17-18=-134/125
WEBS 24-30=-857/0, 7-30=-793/15, 23-31=-858/0, 9-31=-794/22, 30-32=-97/9, 31-32=-97/9, 6-25=-15/209, 5-26=-126/88, 3-28=-128/70, 2-29=-129/72, 10-22=-10/210, 11-21=-126/88, 12-20=-136/68, 13-19=-132/72, 14-18=-151/92, 8-32=-178/113, 7-32=-59/1716, 9-32=-60/1717, 4-27=-137/68

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=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-0 to 3-7-6, Interior (1) 3-7-6 to 11-10-7, Exterior (2) 11-10-7 to 16-11-13, Interior (1) 16-11-13 to 25-3-9, Exterior (2) 25-3-9 to 30-4-15, Interior (1) 30-4-15 to 37-0-8 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) Provide adequate drainage to prevent water ponding.
5) All plates are 2x4 MT20 unless otherwise indicated.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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, with BCDL = 10.0psf.
10) Ceiling dead load (10.0 psf) on member(s). 30-32, 31-32
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 81 lb uplift at joint 1, 90 lb uplift at joint 17, 530 lb uplift at joint 25, 18 lb uplift at joint 26, 35 lb uplift at joint 28, 30 lb uplift at joint 29, 531 lb uplift at joint 22, 17 lb uplift at joint 21, 44 lb uplift at joint 20, 28 lb uplift at joint 19, 122 lb uplift at joint 18 and 42 lb uplift at joint 27.
12) 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.

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13) 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.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	A02	Attic	4	1	I56083414 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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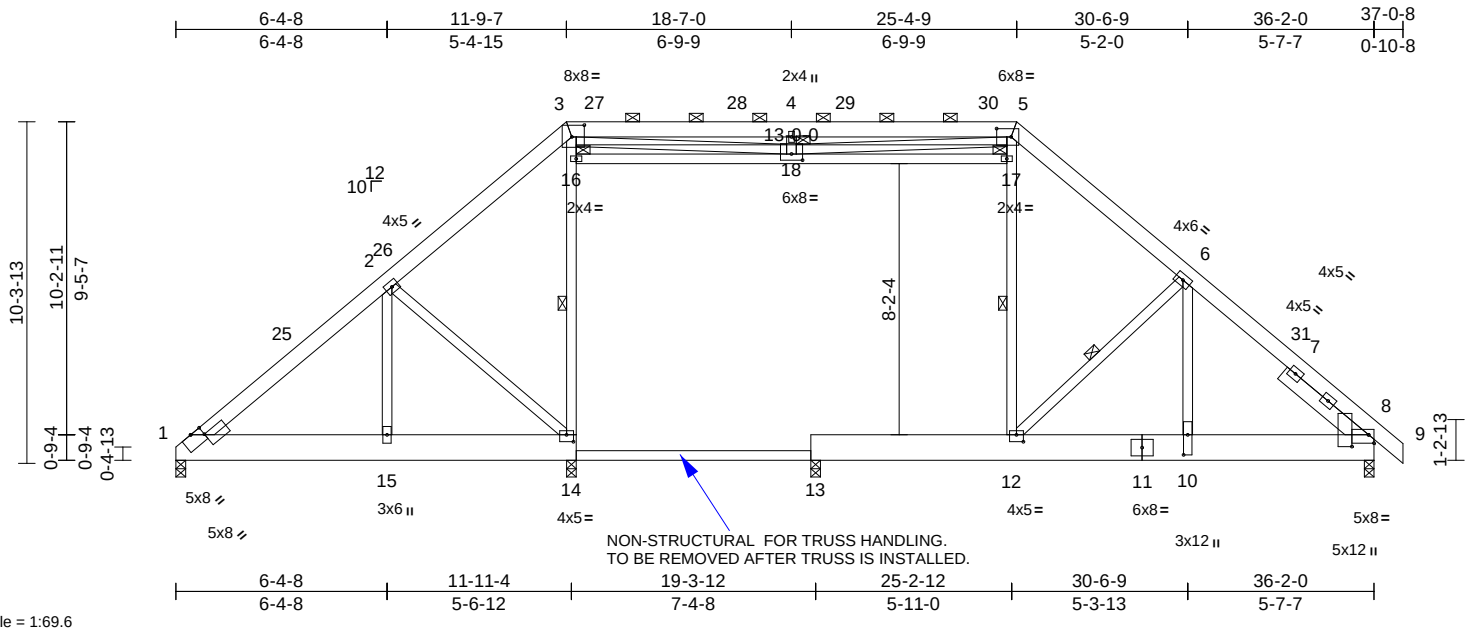

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Plate Offsets (X, Y): [1:0-4-0,0-3-0], [3:0-4-8,0-4-4], [5:0-5-4,0-3-0], [8:Edge,0-3-0], [8:0-4-4,0-6-1], [10:0-7-4,0-1-8], [12:0-2-8,0-2-8], [14:0-2-8,0-2-8], [18:0-4-0,0-2-4]

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	0.71	Vert(LL)	-0.28	10-12	>718	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.92	Vert(CT)	-0.60	10-12	>333	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.95	Horz(CT)	0.51	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.09	10-12	>999	240	Weight: 335 lb	FT = 20%

LUMBER
- TOP CHORD 2x6 SP No.2
- BOT CHORD 2x10 SP No.2 *Except* 11-13:2x10 SP DSS, 14-13:2x4 SP No.2
- WEBS 2x4 SP No.3 *Except* 3-14,5-12,16-17:2x4 SP No.2
- SLIDER Right 2x6 SP No.2 -- 3-2-5

BRACING
- TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-9-12 max.): 3-5.
- BOT CHORD Rigid ceiling directly applied.
- WEBS 1 Row at midpt 14-16, 12-17, 6-12
- JOINTS 1 Brace at Jt(s): 16, 17, 18

REACTIONS All bearings 0-3-8.
(lb) - Max Horiz 1=-193 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s) 8 except 1=-117 (LC 12)
Max Grav All reactions 250 (lb) or less at joint (s) except 1=413 (LC 23), 8=917 (LC 19), 13=1003 (LC 19), 14=1194 (LC 18)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
- TOP CHORD 1-25=-484/226, 2-25=-451/249, 2-26=-234/267, 3-26=-228/308, 3-27=-2090/40, 27-28=-2090/40, 4-28=-2090/40, 4-29=-2090/40, 29-30=-2090/40, 5-30=-2090/40, 5-6=-284/308, 6-31=-1112/114, 7-31=-1126/92, 7-8=-375/36
- BOT CHORD 1-15=-94/274, 14-15=-94/274, 11-12=0/791, 10-11=0/791, 8-10=0/791
- WEBS 2-15=0/305, 2-14=-382/125, 14-16=-924/0, 3-16=-832/0, 12-17=-735/0, 5-17=-638/0, 6-10=0/1159, 6-12=-1095/0, 3-18=0/2294, 5-18=0/2050

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=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-1-12 to 3-8-14, Interior (1) 3-8-14 to 11-10-7, Exterior (2) 11-10-7 to 16-11-7, Interior (1) 16-11-7 to 25-3-9, Exterior (2) 25-3-9 to 30-6-9, Interior (1) 30-6-9 to 37-0-8 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) Provide adequate drainage to prevent water ponding.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Ceiling dead load (10.0 psf) on member(s). 16-18, 17-18
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 1=116.
8) 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.
9) Load case(s) 1, 2 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-5=-60, 5-9=-60, 1-14=-20, 12-13=-30, 12-21=-20, 16-18=-30, 17-18=-30
2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-50, 3-5=-50, 5-9=-50, 1-14=-20, 12-13=-90, 12-21=-20, 16-18=-30, 17-18=-30

January 11,2023

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	A03	ATTIC	1	3	I56083415
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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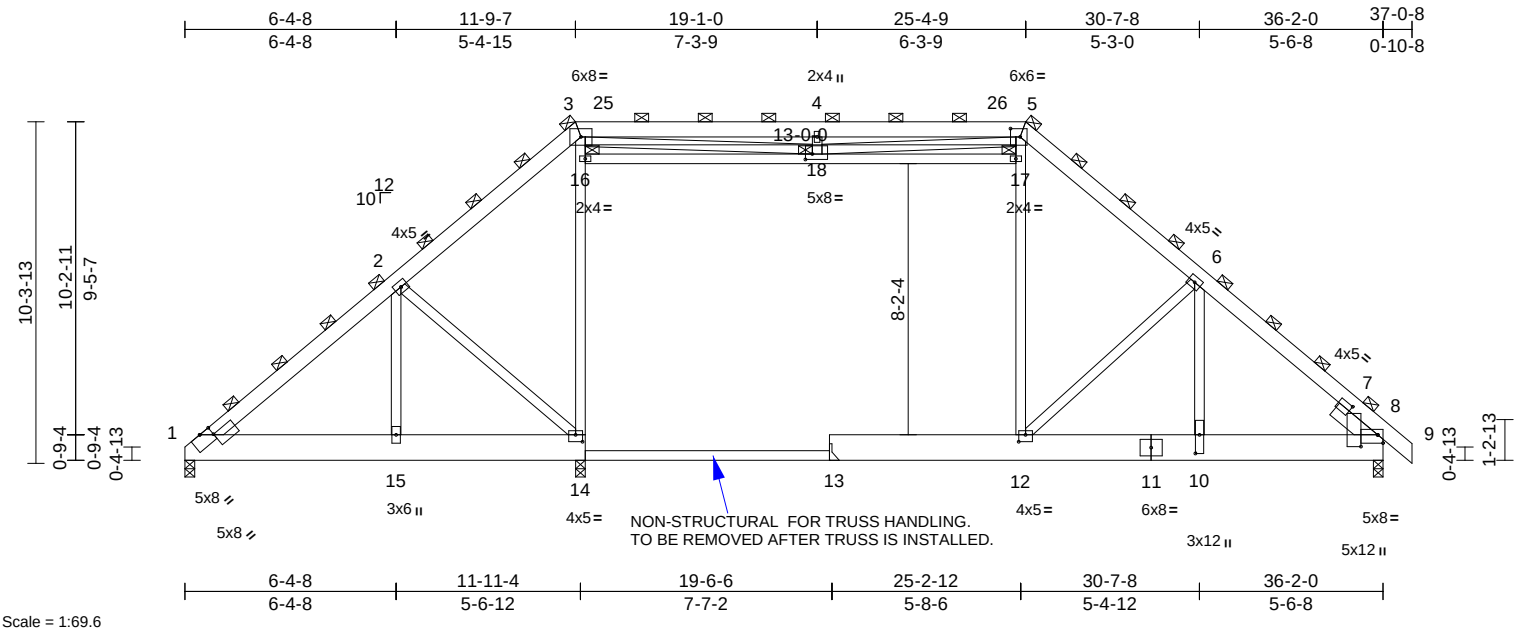

Scale = 1:69.6

Plate Offsets (X, Y): [1:0-4-0,0-3-0], [5:0-3-8,0-3-0], [8:Edge,0-3-0], [8:1-1-8,0-2-0], [8:0-4-4,0-6-1], [10:0-6-12,0-1-8], [12:0-2-8,0-2-8], [14:0-2-8,0-2-8], [18:0-2-8,0-2-0]

Loading	(psf)	Spacing	4-8-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.54	Vert(LL)	-0.20	10-12	>984	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.47	10-12	>422	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.79	Horz(CT)	0.38	13	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.07	10-12	>999	240	Weight: 990 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x10 SP No.2 *Except* 11-13:2x10 SP DSS, 14-13:2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 3-14,5-12,16-17:2x4 SP No.2
SLIDER Right 2x6 SP No.2 -- 1-6-0

BRACING
TOP CHORD 2-0-0 oc purlins (6-0-0 max.) (Switched from sheeted: Spacing > 2-8-0).
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS 1 Brace at Jt(s): 3, 5, 16, 17, 18

REACTIONS All bearings 0-3-8. except 13= Mechanical
(lb) - Max Horiz 1=-450 (LC 6)
Max Uplift All uplift 100 (lb) or less at joint(s) 8 except 1=-270 (LC 8)
Max Grav All reactions 250 (lb) or less at joint (s) except 1=996 (LC 19), 8=2178 (LC 15), 13=2473 (LC 15), 14=3318 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 1-2=-1095/518, 2-3=-363/667, 3-25=-5250/0, 4-25=-5250/0, 4-26=-5250/0, 5-26=-5250/0, 5-6=-404/641, 6-7=-2734/10, 7-8=-2005/0
BOT CHORD 1-15=-177/649, 14-15=-177/649, 11-12=0/1888, 10-11=0/1888, 8-10=0/1888
WEBS 2-15=0/705, 2-14=-911/232, 14-16=-2667/0, 3-16=-2433/0, 12-17=-1716/0, 5-17=-1506/0, 6-12=-2585/0, 6-10=0/2655, 16-18=-492/0, 4-18=-508/267, 3-18=0/5739, 5-18=0/5211

NOTES

1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) Ceiling dead load (10.0 psf) on member(s). 16-18, 17-18
9) Refer to girder(s) for truss to truss connections.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 8 except (jt=lb) 1=270.
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) Load case(s) 1, 2 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
14) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 625 lb down at 11-10-7 on top chord, and 208 lb down at 25-2-9 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
15) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-140, 3-5=-140, 5-9=-140, 1-14=-47, 12-13=-70 (F=-23), 12-21=-47, 16-18=-70, 17-18=-70
Concentrated Loads (lb)
Vert: 3=-625 (F), 12=-208 (F)
2) Dead + 0.75 Roof Live (balanced) + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)

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Vert: 1-3=-117, 3-5=-117, 5-9=-117, 1-14=-47, 12-13=-210 (F=-163), 12-21=-47, 16-18=-70, 17-18=-70

Concentrated Loads (lb)

Vert: 3=-521 (F), 12=-208 (F)

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	A04	Attic Girder	1	2	I56098786
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:12 Page: 1

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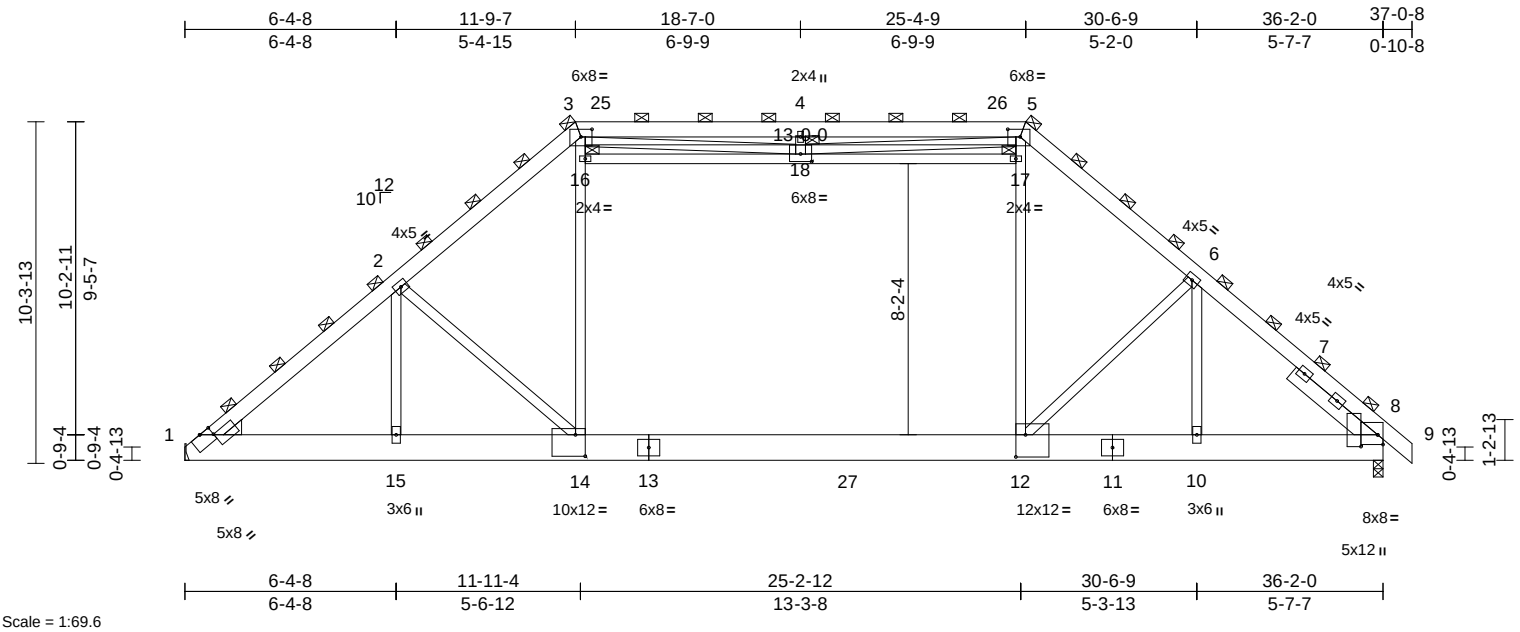

Scale = 1:69.6

Plate Offsets (X, Y): [1:0-4-0,0-3-0], [3:0-4-0,0-2-12], [5:0-4-8,0-2-12], [8:Edge,0-3-8], [8:0-4-4,0-6-1], [12:0-3-8,0-8-0], [14:0-3-8,0-7-12], [18:0-4-0,0-2-12]

Loading	(psf)	Spacing	4-8-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.77	Vert(LL)	-0.24	12-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.65	Vert(CT)	-0.38	12-14	>999	240		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.85	Horz(CT)	0.06	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	-0.07	14-15	>999	240	Weight: 707 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2 *Except* 3-5:2x6 SP No.1
BOT CHORD	2x10 SP DSS *Except* 11-8:2x10 SP No.2
WEBS	2x4 SP No.3 *Except* 3-14,5-12,16-17:2x4 SP No.2
WEDGE	Left: 2x6 SP No.2
SLIDER	Right 2x6 SP No.2 -- 3-2-5

BRACING

TOP CHORD	2-0-0 oc purlins (4-2-15 max.) (Switched from sheeted: Spacing > 2-0-0).
BOT CHORD	Rigid ceiling directly applied or 10-0-0 oc bracing.
JOINTS	1 Brace at Jt(s): 3, 5, 16, 17, 18

REACTIONS (size) 1= Mechanical, 8=0-3-8
Max Horiz 1=-451 (LC 6)
Max Grav 1=5139 (LC 14), 8=5416 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-7621/0, 2-3=-7054/0, 3-4=-8493/0, 4-5=-8493/0, 5-6=-6980/0, 6-8=-6402/0, 8-9=0/91
BOT CHORD	1-15=0/5998, 14-15=0/5998, 12-14=0/5473, 10-12=0/4670, 8-10=0/4670
WEBS	2-15=-512/850, 2-14=-1205/361, 14-16=0/2759, 3-16=0/2898, 12-17=0/2937, 5-17=0/3078, 16-18=-87/90, 17-18=-207/132, 6-10=-1431/0, 6-12=-122/1289, 4-18=-420/235, 3-18=0/3983, 5-18=-28/4095

NOTES

1) 2-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
Bottom chords connected as follows: 2x10 - 2 rows staggered at 0-9-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) Provide adequate drainage to prevent water ponding.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) Ceiling dead load (10.0 psf) on member(s). 16-18, 17-18
9) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 12-14
10) Refer to girder(s) for truss to truss connections.
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) Load case(s) 1, 2 has/have been modified. Building designer must review loads to verify that they are correct for the intended use of this truss.
13) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 625 lb down at 11-10-7 on top chord, and 580 lb down at 25-2-9, and 602 lb down at 20-0-4 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.
14) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-140, 3-5=-140, 5-9=-140, 1-14=-47, 12-14=-70, 12-21=-47, 16-18=-47, 17-18=-47
Concentrated Loads (lb)
Vert: 3=-625 (B), 12=-280 (B), 27=-164 (B)
2) Dead + 0.75 Roof Live (balanced) + 0.75 Uninhab. Attic Storage + 0.75 Attic Floor: Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-117, 3-5=-117, 5-9=-117, 1-14=-47, 12-14=-210, 12-21=-47, 16-18=-47, 17-18=-47
Concentrated Loads (lb)
Vert: 3=-521 (B), 12=-505 (B), 27=-493 (B)

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	A05	Attic	3	1	I56098787
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:12 Page: 1

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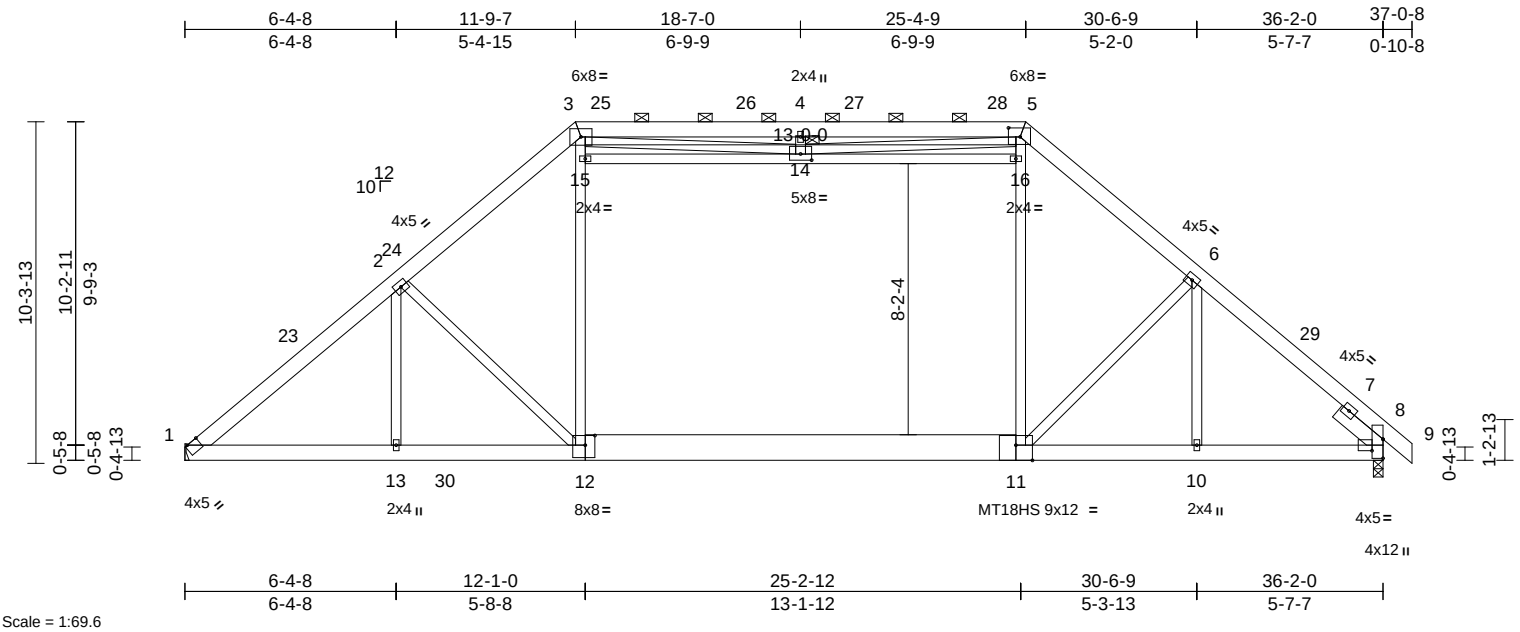

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Plate Offsets (X, Y): [1:0-4-1,Edge], [5:0-4-4,0-3-4], [8:0-4-0,0-4-2], [11:0-6-0,Edge], [12:0-3-8,0-3-8], [14:0-4-0,0-2-4]

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	0.65	Vert(LL)	-0.29	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.42	11-12	>999	240	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	-0.14	12-13	>999	240	Weight: 315 lb	FT = 20%

LUMBER

TOP CHORD 2x6 SP No.2

BOT CHORD 2x6 SP No.2 *Except* 12-11:2x10 SP No.1, 11-8:2x6 SP DSS

WEBS 2x4 SP No.3 *Except* 3-12,5-11,15-16:2x4 SP No.2

SLIDER Right 2x6 SP No.2 -- 1-8-9

BRACING

TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-2-8 max.): 3-5.

BOT CHORD Rigid ceiling directly applied.

JOINTS 1 Brace at Jt(s): 14

REACTIONS (size) 1= Mechanical, 8=0-3-8
Max Horiz 1=-193 (LC 10)
Max Grav 1=1983 (LC 22), 8=1999 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-2=-2870/0, 2-3=-2500/33, 3-4=-3111/124, 4-5=-3111/124, 5-6=-2434/33, 6-8=-2394/0, 8-9=0/34

BOT CHORD 1-13=0/2289, 10-13=0/2289, 8-10=0/1703

WEBS 4-14=-157/115, 2-13=0/265, 2-12=-464/148, 12-15=0/1013, 3-15=0/1074, 11-16=0/878, 5-16=0/936, 14-15=-85/84, 14-16=-133/32, 6-10=-384/52, 6-11=-118/420, 3-14=-72/1614, 5-14=-73/1659

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=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-12 to 3-7-14, Interior (1) 3-7-14 to 11-10-7, Exterior (2) 11-10-7 to 16-11-7, Interior (1) 16-11-7 to 25-3-9, Exterior (2) 25-3-9 to 30-6-9, Interior (1) 30-6-9 to 37-0-8 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 14-15, 14-16
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-12
9) Refer to girder(s) for truss to truss connections.
10) 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.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	A06	Attic	1	1	I56098788
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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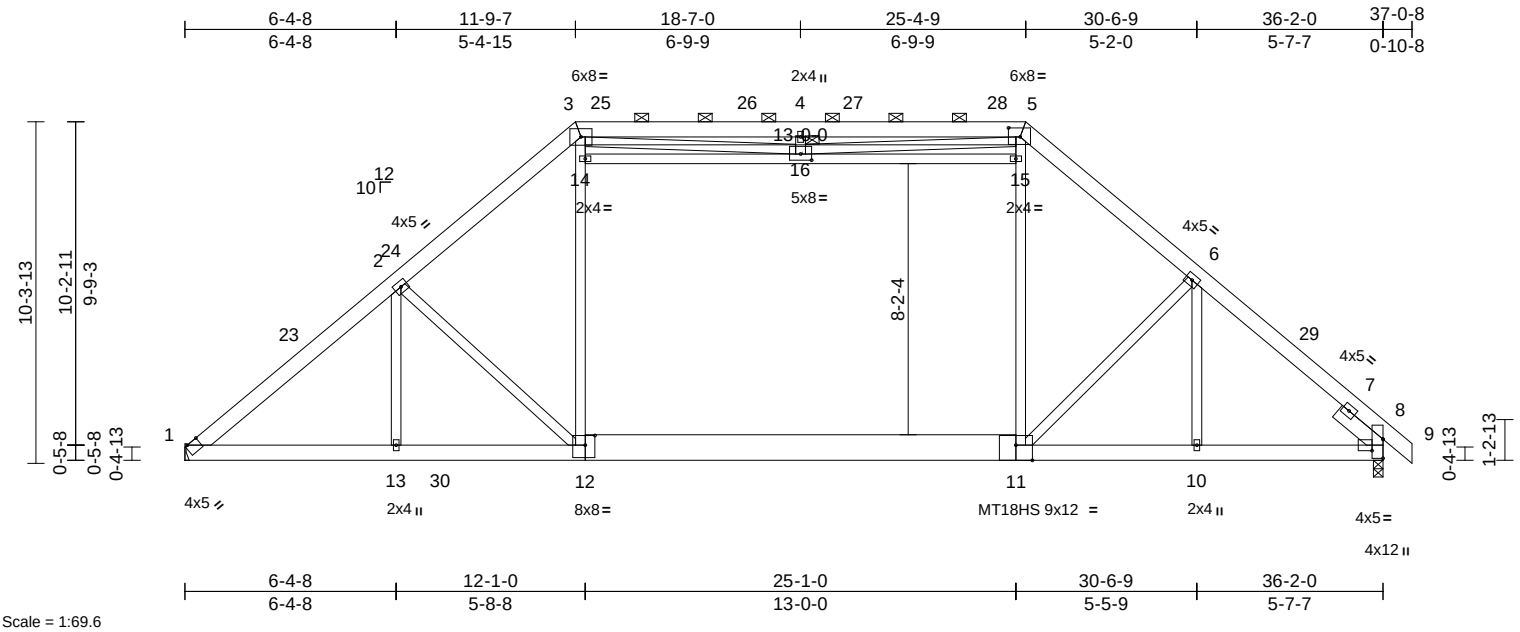

Scale = 1:69.6

Plate Offsets (X, Y): [1:0-4-1,Edge], [5:0-4-4,0-3-4], [8:0-4-0,0-4-2], [11:0-6-0,Edge], [12:0-3-8,0-3-8], [16:0-4-0,0-2-4]

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	0.65	Vert(LL)	-0.30	11-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.86	Vert(CT)	-0.43	11-12	>999	240	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.69	Horz(CT)	0.07	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	-0.14	12-13	>999	240	Weight: 315 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 12-11:2x10 SP No.1, 11-8:2x6 SP DSS
WEBS 2x4 SP No.3 *Except* 3-12,5-11,14-15:2x4 SP No.2
SLIDER Right 2x6 SP No.2 -- 1-8-9

BRACING
TOP CHORD Structural wood sheathing directly applied, except
2-0-0 oc purlins (3-2-8 max.): 3-5.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 16

REACTIONS (size) 1= Mechanical, 8=0-3-8
Max Horiz 1=-193 (LC 10)
Max Grav 1=1987 (LC 22), 8=2000 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-2877/0, 2-3=-2503/33, 3-4=-3112/125, 4-5=-3112/125, 5-6=-2436/33, 6-8=-2395/0, 8-9=0/34
BOT CHORD 1-13=0/2294, 10-13=0/2294, 8-10=0/1704
WEBS 2-13=0/265, 2-12=-468/148, 12-14=0/1015, 3-14=0/1077, 11-15=0/879, 5-15=0/937, 14-16=-85/85, 15-16=-133/32, 6-10=-385/52, 6-11=-118/422, 4-16=-157/115, 3-16=-72/1614, 5-16=-74/1659

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=25ft; B=45ft; L=36ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-12 to 3-8-2, Interior (1) 3-8-2 to 11-10-7, Exterior (2) 11-10-7 to 16-11-13, Interior (1) 16-11-13 to 25-3-9, Exterior (2) 25-3-9 to 30-6-9, Interior (1) 30-6-9 to 37-0-8 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 14-16, 15-16
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 11-12
9) Refer to girder(s) for truss to truss connections.
10) 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.
11) 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.
12) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
13) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	B01	Attic	4	1	I56098789 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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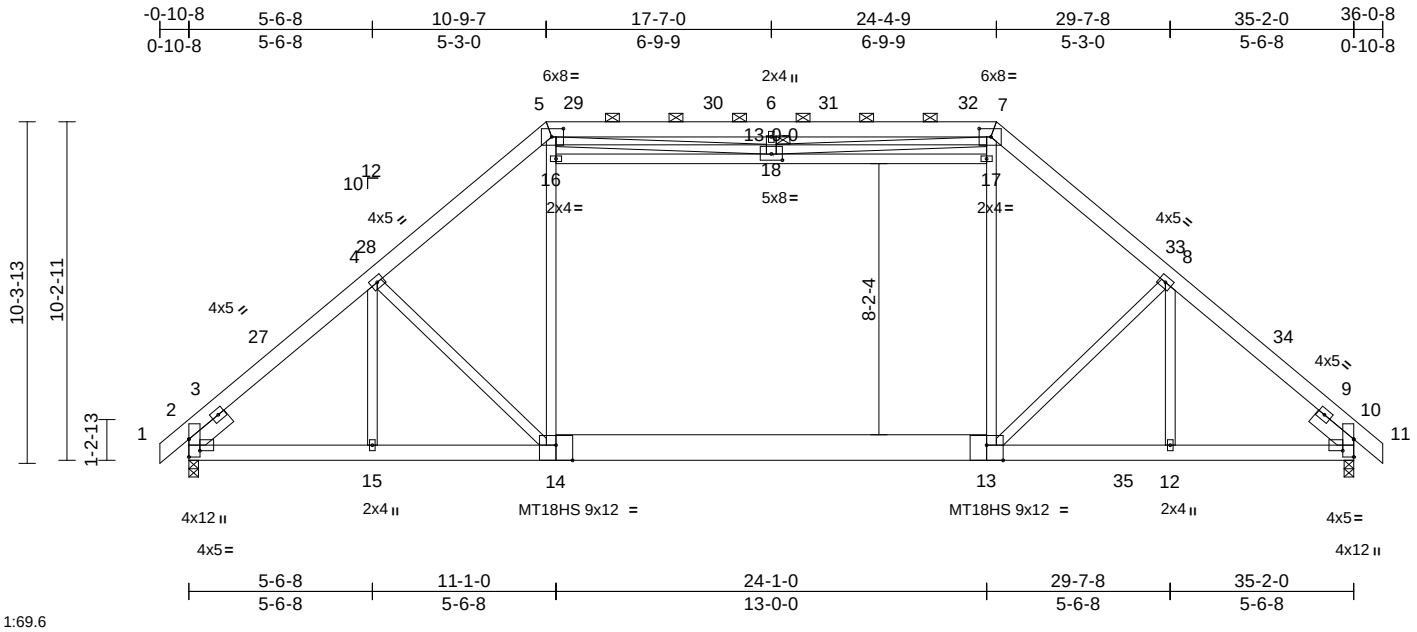

Scale = 1:69.6

Plate Offsets (X, Y): [2:0-4-0,0-4-2], [5:0-4-4,0-3-0], [7:0-4-4,0-3-0], [10:0-4-0,0-4-2], [13:0-6-0,Edge], [14:0-6-0,Edge], [18:0-4-0,0-2-4]

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	0.62	Vert(LL)	-0.25	13-14	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.82	Vert(CT)	-0.37	13-14	>999	240	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.67	Horz(CT)	0.05	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	-0.12	14-15	>999	240	Weight: 317 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP DSS *Except* 14-13:2x10 SP No.1
WEBS 2x4 SP No.3 *Except* 5-14,7-13,16-17:2x4 SP No.2
SLIDER Left 2x6 SP No.2 -- 1-6-0, Right 2x6 SP No.2 -- 1-6-0

BRACING
TOP CHORD Structural wood sheathing directly applied, except 2-0-0 oc purlins (3-4-0 max.): 5-7.
BOT CHORD Rigid ceiling directly applied.
JOINTS 1 Brace at Jt(s): 18

REACTIONS (size) 2=0-3-8, 10=0-3-8
Max Horiz 2=-188 (LC 10)
Max Grav 2=1948 (LC 22), 10=2008 (LC 23)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/34, 2-4=-2336/0, 4-5=-2332/32, 5-6=-3011/121, 6-7=-3011/121, 7-8=-2350/32, 8-10=-2449/0, 10-11=0/34
BOT CHORD 2-15=0/1802, 12-15=0/1866, 10-12=0/1744
WEBS 4-14=-146/358, 14-16=0/845, 5-16=0/903, 13-17=0/905, 7-17=0/965, 8-13=-146/249, 16-18=-104/32, 17-18=-104/48, 6-18=-155/114, 4-15=-325/83, 8-12=-197/83, 5-18=-71/1623, 7-18=-71/1623

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=25ft; B=45ft; L=35ft; eave=5ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -0-10-8 to 2-7-11, Interior (1) 2-7-11 to 10-10-7, Exterior (2) 10-10-7 to 15-10-2, Interior (1) 15-10-2 to 24-3-9, Exterior (2) 24-3-9 to 29-3-4, Interior (1) 29-3-4 to 36-0-8 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) Provide adequate drainage to prevent water ponding.
4) All plates are MT20 plates unless otherwise indicated.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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, with BCDL = 10.0psf.
7) Ceiling dead load (10.0 psf) on member(s). 16-18, 17-18
8) Bottom chord live load (40.0 psf) and additional bottom chord dead load (5.0 psf) applied only to room. 13-14
9) 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.
10) 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.
11) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
12) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	B02	Attic Supported Gable	1	1	I56098790 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:14 Page: 1
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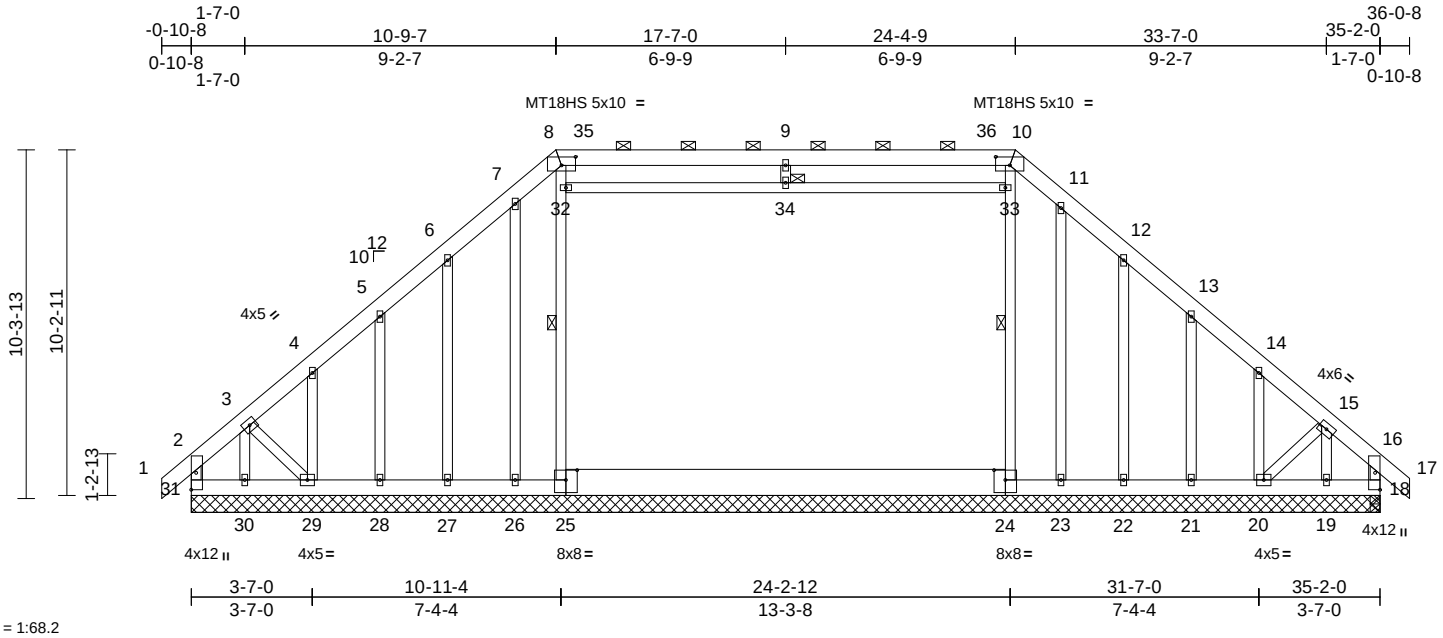


Scale = 1:68.2

Plate Offsets (X, Y): [8:0-5-0,0-3-0], [10:0-5-0,0-3-0], [24:0-4-0,0-3-8], [25:0-4-0,0-3-8]

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	0.67	Vert(LL)	-0.07	24-25	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.58	Vert(CT)	-0.11	24-25	>999	240	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.48	Horz(CT)	0.00	18	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.00	30-31	>999	240	Weight: 337 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x6 SP No.2 *Except* 25-24:2x10 SP No.2
WEBS 2x4 SP No.2 *Except* 34-9,3-29,20-15:2x4 SP No.3
OTHERS 2x4 SP No.3

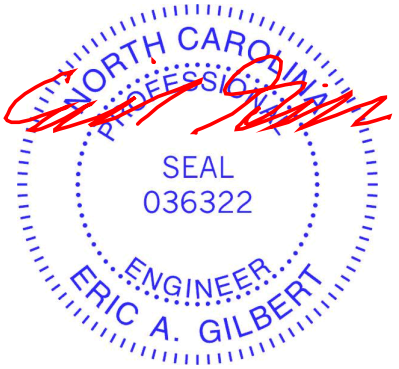
BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals, and 2-0-0 oc purlins (6-0-0 max.): 8-10.
BOT CHORD Rigid ceiling directly applied.
WEBS 1 Row at midpt 8-25, 10-24
JOINTS 1 Brace at Jt(s): 34

REACTIONS (size) 18=35-2-0, 19=35-2-0, 20=35-2-0, 21=35-2-0, 22=35-2-0, 23=35-2-0, 24=35-2-0, 25=35-2-0, 26=35-2-0, 27=35-2-0, 28=35-2-0, 29=35-2-0, 30=35-2-0, 31=35-2-0
Max Horiz 31=-211 (LC 10)
Max Uplift 18=-25 (LC 12), 20=-76 (LC 12), 21=-48 (LC 12), 22=-4 (LC 12), 23=-730 (LC 28), 26=-775 (LC 29), 27=-4 (LC 12), 28=-48 (LC 12), 29=-77 (LC 12), 31=-39 (LC 8)
Max Grav 18=249 (LC 27), 19=261 (LC 27), 20=135 (LC 11), 21=163 (LC 1), 22=229 (LC 23), 23=-23 (LC 9), 24=1325 (LC 22), 25=1406 (LC 22), 26=-27 (LC 8), 27=210 (LC 22), 28=165 (LC 26), 29=147 (LC 10), 30=272 (LC 26), 31=244 (LC 26)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 2-31=-207/65, 1-2=0/39, 2-3=-169/50, 3-4=-307/82, 4-5=-313/97, 5-6=-308/165, 6-7=-257/224, 7-8=-136/172, 8-9=-204/217, 9-10=-204/217, 10-11=-143/176, 11-12=-254/224, 12-13=-298/165, 13-14=-289/94, 14-15=-271/53, 15-16=-154/28, 16-17=0/39, 16-18=-212/59
BOT CHORD 30-31=-129/171, 29-30=-129/171, 28-29=-42/217, 27-28=-42/217, 26-27=-42/217, 23-26=-46/217, 22-23=-42/216, 21-22=-42/216, 20-21=-42/216, 19-20=-23/67, 18-19=-18/86
WEBS 25-32=-726/156, 8-32=-705/149, 24-33=-706/148, 10-33=-686/141, 32-34=-41/11, 33-34=-41/11, 9-34=-45/16, 7-26=-97/358, 6-27=-102/65, 5-28=-144/91, 4-29=-138/78, 3-30=-271/22, 11-23=-92/350, 12-22=-105/68, 13-21=-142/90, 14-20=-144/82, 15-19=-256/10, 3-29=-43/208, 15-20=-26/200

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=25ft; B=45ft; L=35ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -0-10-8 to 2-7-11, Exterior (2) 2-7-11 to 10-10-7, Corner (3) 10-10-7 to 14-4-10, Exterior (2) 14-4-10 to 24-3-9, Corner (3) 24-3-9 to 27-7-0, Exterior (2) 27-7-0 to 36-0-8 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) Provide adequate drainage to prevent water ponding.
5) All plates are MT20 plates unless otherwise indicated.
6) All plates are 2x4 MT20 unless otherwise indicated.
7) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
8) Gable studs spaced at 2-0-0 oc.
9) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
10) * 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, with BCDL = 10.0psf.
11) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 39 lb uplift at joint 31, 25 lb uplift at joint 18, 775 lb uplift at joint 26, 4 lb uplift at joint 27, 48 lb uplift at joint 28, 77 lb uplift at joint 29, 730 lb uplift at joint 23, 4 lb uplift at joint 22, 48 lb uplift at joint 21 and 76 lb uplift at joint 20.
12) 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.



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Continued on page 2

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Edenton, NC 27932

13) 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.
14) Graphical purlin representation does not depict the size or the orientation of the purlin along the top and/or bottom chord.
15) Attic room checked for L/360 deflection.

LOAD CASE(S) Standard

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	C01	Common Supported Gable	1	1	I56098791 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:15 Page: 1
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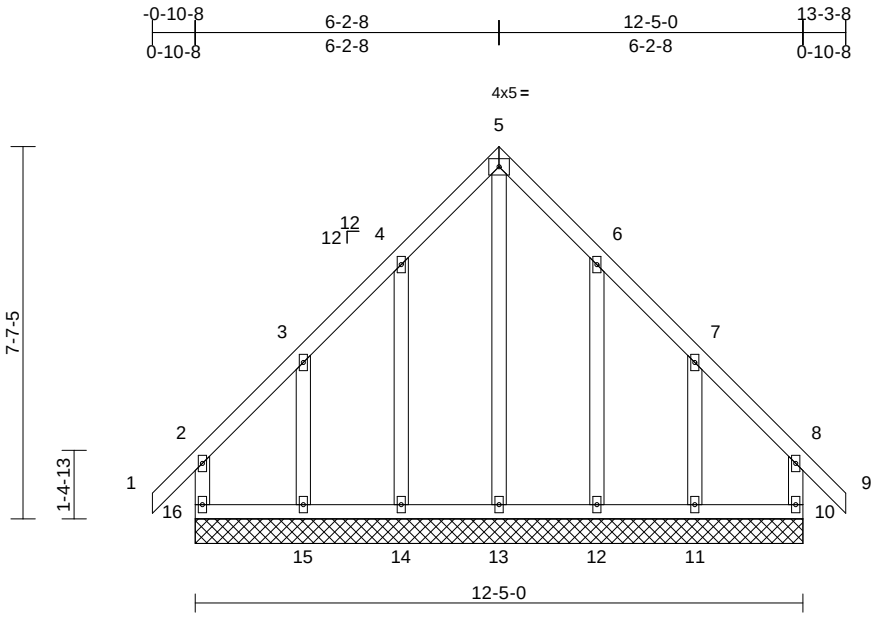

Scale = 1:47.1

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	0.09	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.30	Horz(CT)	0.00	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 86 lb	FT = 20%

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

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=12-5-0, 11=12-5-0, 12=12-5-0, 13=12-5-0, 14=12-5-0, 15=12-5-0, 16=12-5-0
Max Horiz 16=-169 (LC 10)
Max Uplift 10=-60 (LC 9), 11=-72 (LC 8), 12=-39 (LC 12), 14=-39 (LC 12), 15=-75 (LC 9), 16=-66 (LC 8)
Max Grav 10=185 (LC 17), 11=222 (LC 18), 12=169 (LC 22), 13=270 (LC 12), 14=169 (LC 21), 15=226 (LC 17), 16=192 (LC 18)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 2-16=-154/102, 1-2=0/43, 2-3=-114/98, 3-4=-127/166, 4-5=-199/252, 5-6=-198/251, 6-7=-128/168, 7-8=-107/90, 8-9=0/43, 8-10=-148/100
BOT CHORD 15-16=-83/80, 14-15=-83/80, 13-14=-83/80, 12-13=-83/80, 11-12=-83/80, 10-11=-83/80
WEBS 5-13=-298/167, 4-14=-142/98, 3-15=-169/129, 6-12=-141/98, 7-11=-168/128

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=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -0-10-8 to 2-2-8, Exterior (2) 2-2-8 to 6-2-8, Corner (3) 6-2-8 to 9-2-8, Exterior (2) 9-2-8 to 13-3-8 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) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
7) Gable studs spaced at 2-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 66 lb uplift at joint 16, 60 lb uplift at joint 10, 39 lb uplift at joint 14, 75 lb uplift at joint 15, 39 lb uplift at joint 12 and 72 lb uplift at joint 11.
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.

LOAD CASE(S) Standard

January 11,2023

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Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	C02	Common	1	1	I56098792 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:15 Page: 1
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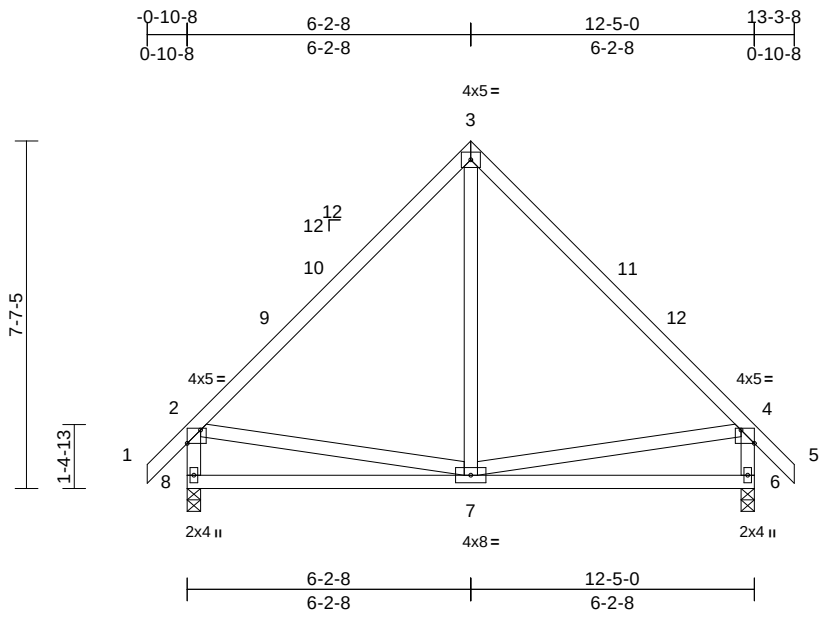

Scale = 1:50.4

Plate Offsets (X, Y): [2:0-3-8,Edge], [4:0-3-8,Edge]

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	0.45	Vert(LL)	-0.03	6-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.33	Vert(CT)	-0.06	6-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.09	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.00	7	>999	240	Weight: 80 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3 *Except* 8-2,6-4:2x4 SP No.2

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=0-3-8, 8=0-3-8
Max Horiz 8=-169 (LC 10)
Max Uplift 6=-29 (LC 12), 8=-29 (LC 12)
Max Grav 6=546 (LC 1), 8=546 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/43, 2-3=-453/90, 3-4=-453/90, 4-5=0/43, 2-8=-492/112, 4-6=-492/112
BOT CHORD 7-8=-140/295, 6-7=-82/231
WEBS 3-7=0/242, 2-7=-97/195, 4-7=-99/195

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-2-8, Exterior (2) 6-2-8 to 9-2-8, Interior (1) 9-2-8 to 13-3-8 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) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
4) * 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.
5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 29 lb uplift at joint 8 and 29 lb uplift at joint 6.
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.

LOAD CASE(S) Standard

January 11,2023

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818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	C03	Common Girder	1	3	I56098793 Job Reference (optional)

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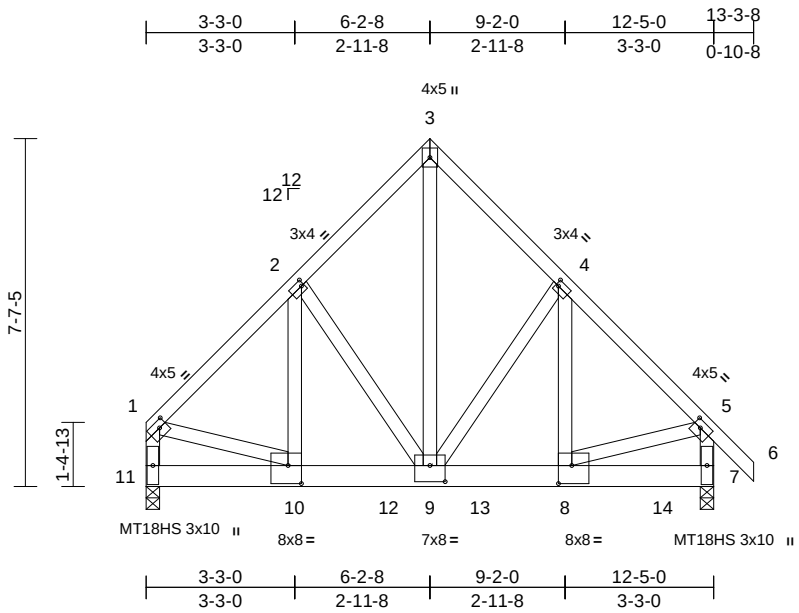

Scale = 1:50.4

Plate Offsets (X, Y): [1:0-2-0,0-1-12], [2:0-0-12,0-1-8], [4:0-0-12,0-1-8], [5:0-2-0,0-1-12], [8:0-3-8,0-4-12], [9:0-4-0,0-4-4], [10:0-3-8,0-4-12]

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	0.31	Vert(LL)	-0.04	9-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.62	Vert(CT)	-0.07	9-10	>999	240	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	0.88	Horz(CT)	0.01	7	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS		Wind(LL)	0.00	9-10	>999	240	Weight: 315 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
WEBS 2x4 SP No.3 *Except* 11-1,7-5:2x4 SP No.2

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=0-3-8, 11=0-3-8
Max Horiz 11=-160 (LC 6)
Max Grav 7=7061 (LC 14), 11=6818 (LC 15)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-6939/0, 2-3=-4804/0, 3-4=-4803/0, 4-5=-5935/0, 5-6=0/43, 1-11=-6622/0, 5-7=-5641/0
BOT CHORD 10-11=-44/327, 9-10=0/4920, 8-9=0/4150, 7-8=0/405
WEBS 3-9=0/6498, 5-8=0/3982, 2-9=-2588/0, 4-9=-1337/0, 2-10=0/3492, 4-8=0/1773, 1-10=0/4933

NOTES
1) 3-ply truss to be connected together with 10d (0.131"x3") nails as follows:
Top chords connected as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected as follows: 2x6 - 3 rows staggered at 0-5-0 oc.
Web connected as follows: 2x4 - 1 row at 0-9-0 oc, Except member 2-10 2x4 - 2 rows staggered at 0-4-0 oc, Except member 4-8 2x4 - 2 rows staggered at 0-4-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) All plates are MT20 plates unless otherwise indicated.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) 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.
9) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 5095 lb down at 3-4-8, 1965 lb down at 5-3-12, 1965 lb down at 7-3-12, and 1965 lb down at 9-3-12, and 1969 lb down at 11-3-12 on bottom chord. The design/selection of such connection device(s) is the responsibility of others.

LOAD CASE(S) Standard
1) Dead + Roof Live (balanced): Lumber Increase=1.15, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 1-3=-60, 3-5=-60, 5-6=-60, 7-11=-20
Concentrated Loads (lb)
Vert: 8=-1616 (B), 10=-4335 (B), 12=-1616 (B), 13=-1616 (B), 14=-1617 (B)

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA	I56098794
GHWISAR WUA	D01	Monopitch Structural Gable	1	1	Job Reference (optional)	

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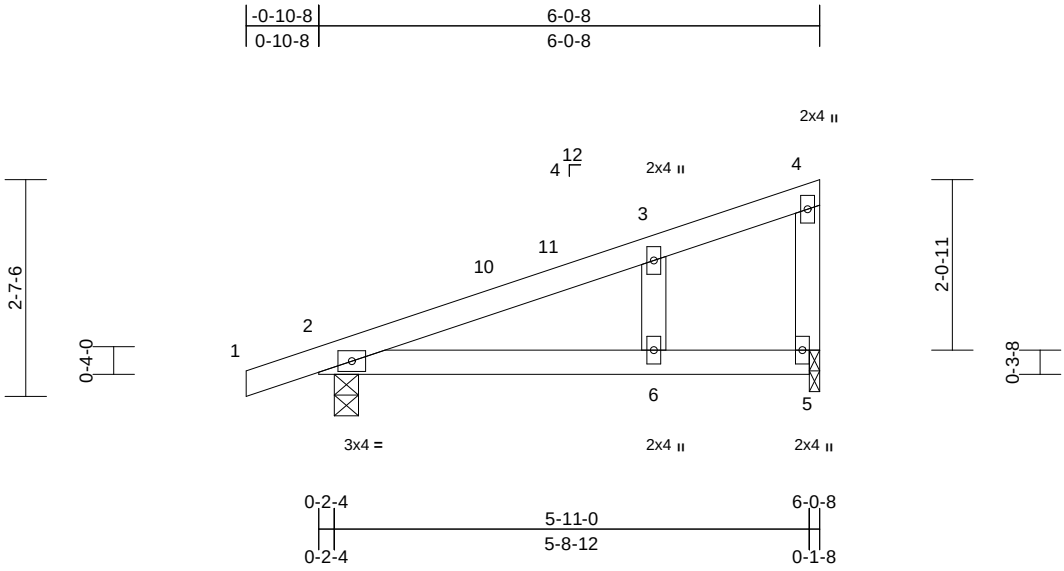

Scale = 1:27.8

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	0.41	Vert(LL)	-0.07	6-9	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.44	Vert(CT)	-0.14	6-9	>524	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.01	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.11	6-9	>655	240	Weight: 24 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 5=0-1-8
Max Horiz 2=63 (LC 11)
Max Uplift 2=-74 (LC 12), 5=-52 (LC 12)
Max Grav 2=292 (LC 1), 5=232 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-122/85, 3-4=-63/50, 4-5=-127/113
BOT CHORD 2-6=-109/101, 5-6=-31/33
WEBS 3-6=-62/28

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Bearing at joint(s) 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
7) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 5.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 74 lb uplift at joint 2 and 52 lb uplift at joint 5.
9) 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.
10) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA	I56098795
GHWISAR WUA	D02	Monopitch	6	1	Job Reference (optional)	

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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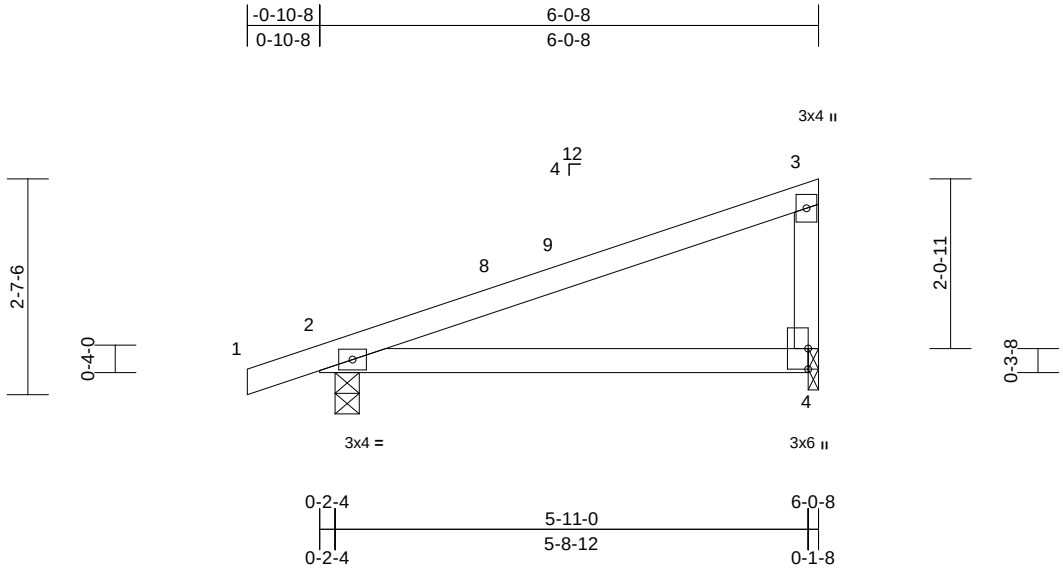

Scale = 1:27.9

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	0.42	Vert(LL)	-0.02	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.29	Vert(CT)	-0.06	4-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.05	4-7	>999	240	Weight: 22 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 4=0-1-8
Max Horiz 2=98 (LC 12)
Max Uplift 2=-61 (LC 12), 4=-65 (LC 12)
Max Grav 2=292 (LC 1), 4=232 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-174/101, 3-4=-140/101
BOT CHORD 2-4=-150/139

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 5-10-12 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 61 lb uplift at joint 2 and 65 lb uplift at joint 4.
7) 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.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	E01	Monopitch	6	1	I56098796
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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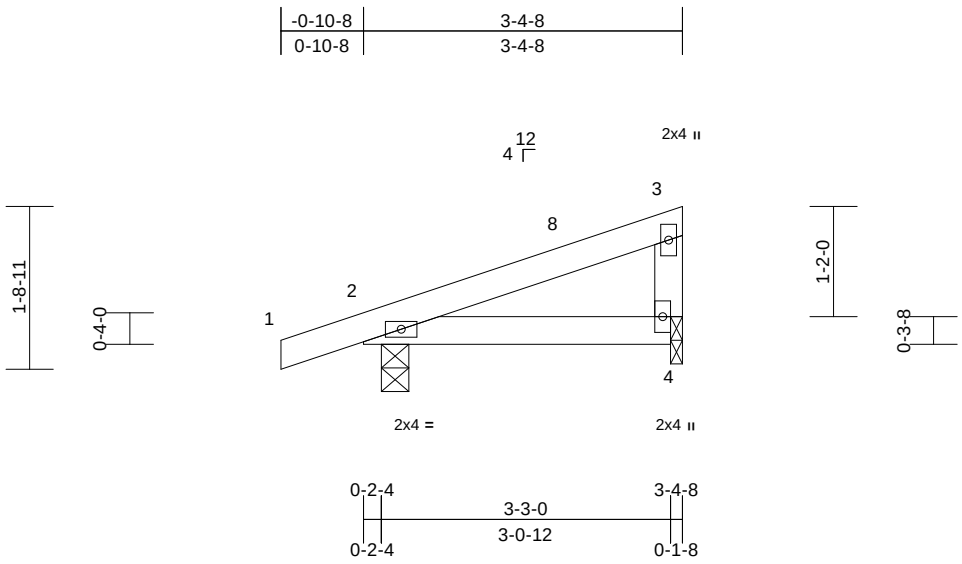

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	0.00	4-7	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.09	Vert(CT)	-0.01	4-7	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR		Wind(LL)	0.01	4-7	>999	240	Weight: 13 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.2

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-8 oc purlins.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 2=0-3-8, 4=0-1-8
Max Horiz 2=59 (LC 12)
Max Uplift 2=-45 (LC 12), 4=-33 (LC 12)
Max Grav 2=189 (LC 1), 4=122 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-83/57, 3-4=-71/59
BOT CHORD 2-4=-89/67

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 3-2-12 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left and right exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 45 lb uplift at joint 2 and 33 lb uplift at joint 4.
7) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	F201	Floor	5	1	I56098797
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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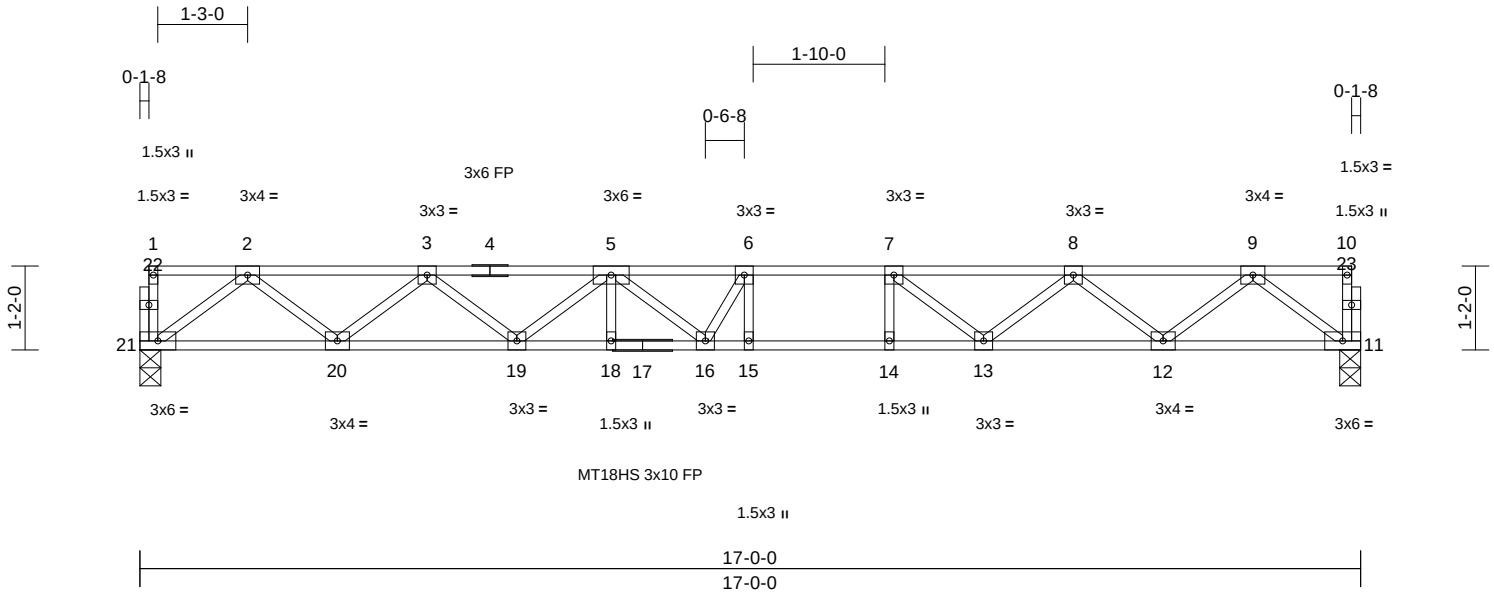

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.48	Vert(LL)	-0.23	15-16	>891	480	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.31	15-16	>647	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 86 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 17-11:2x4 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, Except:
2-2-0 oc bracing: 14-15.

REACTIONS (size) 11=0-3-8, 21=0-3-8
Max Grav 11=732 (LC 1), 21=732 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-21=-31/0, 10-11=-32/0, 1-2=-2/0, 2-3=-1539/0, 3-5=-2484/0, 5-6=-2913/0, 6-7=-2890/0, 7-8=-2482/0, 8-9=-1539/0, 9-10=-2/0
BOT CHORD 20-21=0/914, 19-20=0/2137, 18-19=0/2827, 16-18=0/2827, 15-16=0/2890, 14-15=0/2890, 13-14=0/2890, 12-13=0/2129, 11-12=0/916
WEBS 9-11=-1147/0, 2-21=-1144/0, 9-12=0/811, 2-20=0/814, 8-12=-767/0, 3-20=-778/0, 8-13=0/485, 3-19=0/452, 7-13=-629/0, 5-19=-437/0, 7-14=-60/206, 5-18=-11/17, 6-15=-309/132, 5-16=-31/275, 6-16=-292/294

LOAD CASE(S) Standard

NOTES

1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates 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.

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	F202	Floor	3	1	I56098798 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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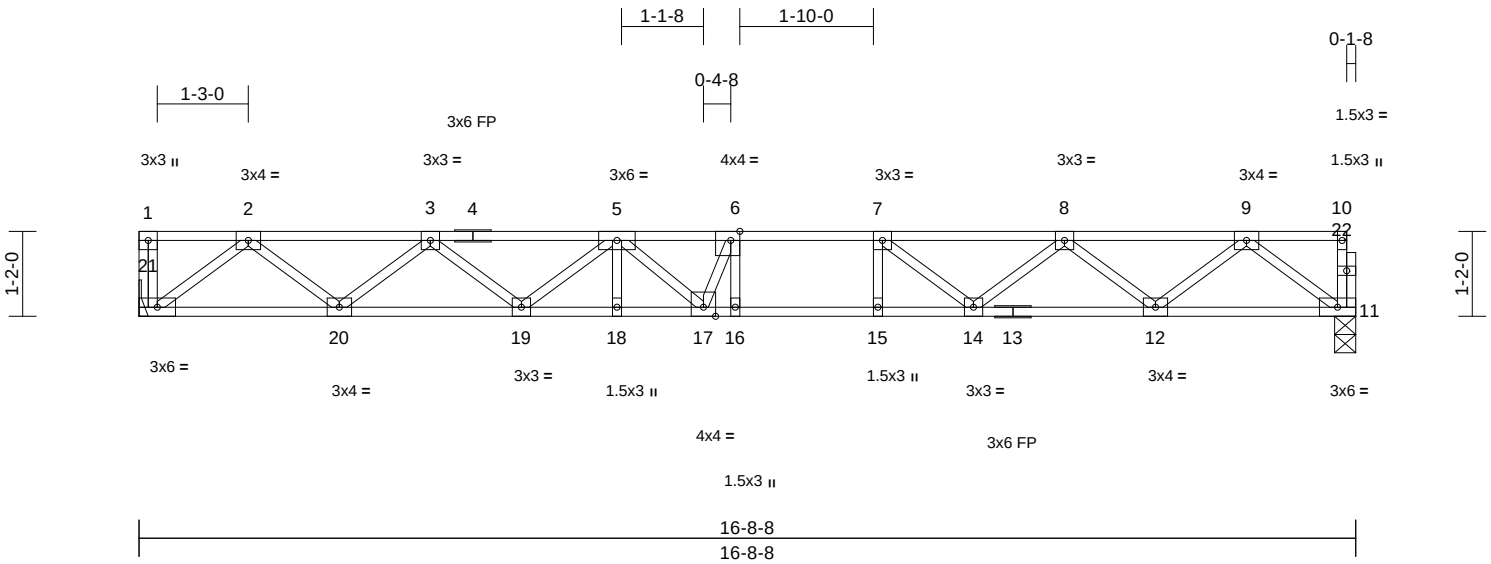

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Plate Offsets (X, Y): [6:0-1-8,Edge]

Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.45	Vert(LL)	-0.20	16	>974	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.88	Vert(CT)	-0.28	16	>707	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.22	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 85 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.1(flat) *Except* 13-11:2x4 SP No.2(flat)
WEBS 2x4 SP No.2(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) 11=0-3-8, 21= Mechanical
Max Grav 11=719 (LC 1), 21=724 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-34/0, 10-11=-32/0, 1-2=0/0, 2-3=-1508/0, 3-5=-2420/0, 5-6=-2817/0, 6-7=-2798/0, 7-8=-2420/0, 8-9=-1507/0, 9-10=-2/0
BOT CHORD 20-21=0/897, 19-20=0/2090, 18-19=0/2745, 17-18=0/2745, 16-17=0/2798, 15-16=0/2798, 14-15=0/2798, 12-14=0/2083, 11-12=0/899
WEBS 9-11=-1126/0, 2-21=-1126/0, 9-12=0/792, 2-20=0/795, 8-12=-750/0, 3-20=-759/0, 8-14=0/465, 3-19=0/428, 7-14=-592/0, 5-19=-415/0, 5-17=-48/271, 7-15=-66/187, 6-16=-349/174, 5-18=-6/16, 6-17=-325/336

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.
5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	F203	Floor	6	1	I56098799
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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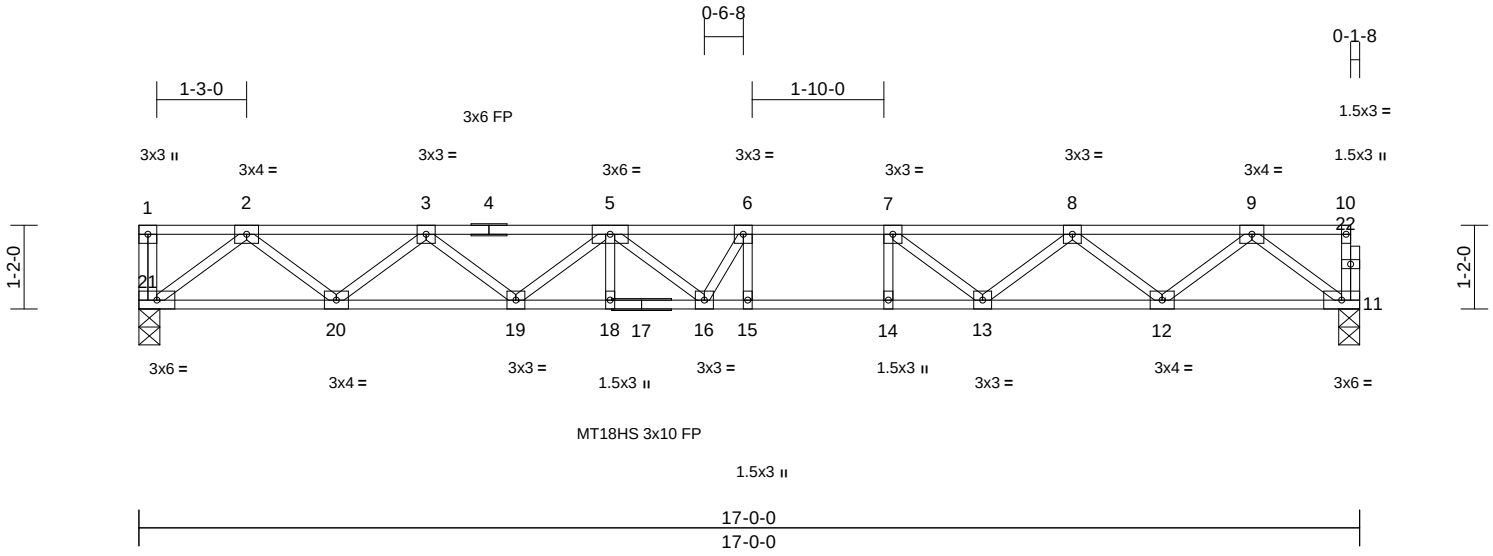

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.48	Vert(LL)	-0.23	15-16	>891	480	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.31	15-16	>647	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.39	Horz(CT)	0.05	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 87 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 17-11:2x4 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, Except:
2-2-0 oc bracing: 14-15.

REACTIONS (size) 11=0-3-8, 21=0-3-8
Max Grav 11=732 (LC 1), 21=737 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-21=-34/0, 10-11=-32/0, 1-2=0/0, 2-3=-1539/0, 3-5=-2484/0, 5-6=-2913/0, 6-7=-2890/0, 7-8=-2482/0, 8-9=-1539/0, 9-10=-2/0
BOT CHORD 20-21=0/914, 19-20=0/2137, 18-19=0/2827, 16-18=0/2827, 15-16=0/2890, 14-15=0/2890, 13-14=0/2890, 12-13=0/2129, 11-12=0/916
WEBS 9-11=-1147/0, 2-21=-1147/0, 9-12=0/811, 2-20=0/813, 8-12=-767/0, 3-20=-778/0, 8-13=0/485, 3-19=0/452, 7-13=-629/0, 5-19=-437/0, 5-16=-31/275, 7-14=-60/206, 6-15=-309/132, 5-18=-11/17, 6-16=-292/294

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

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	F204	Floor	7	1	I56098800 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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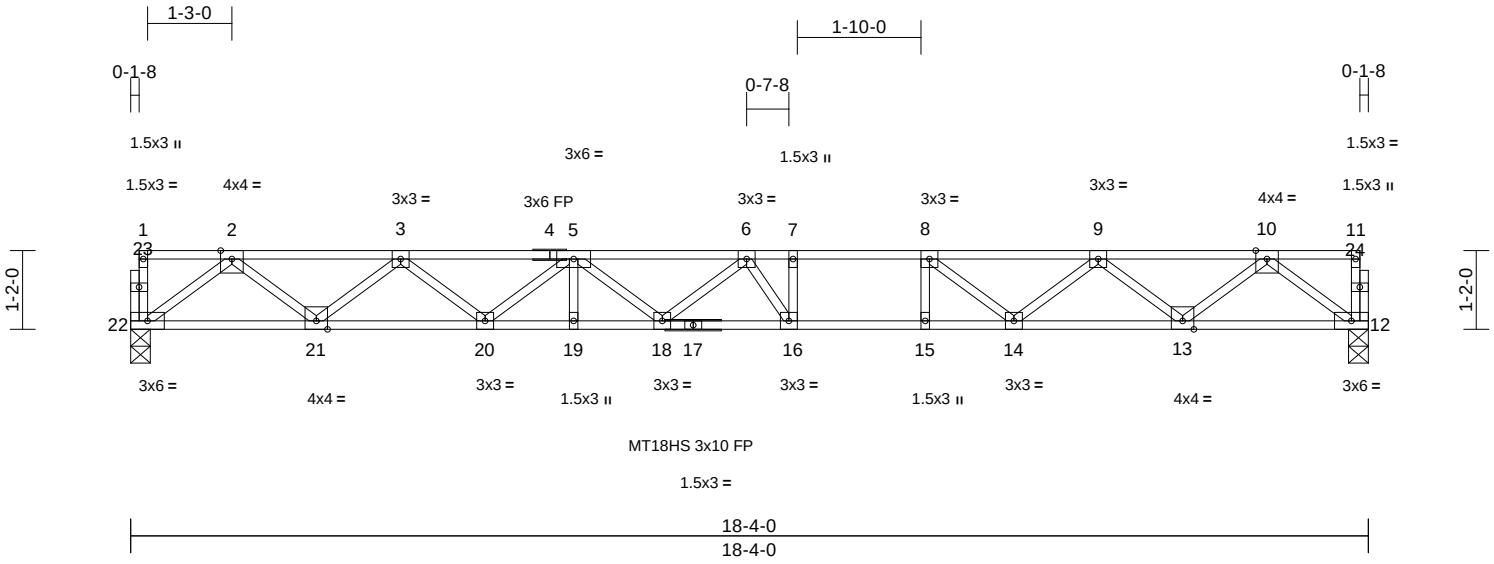

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.91	Vert(LL)	-0.31	16-18	>707	480	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.42	16-18	>512	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.43	Horz(CT)	0.06	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 92 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 17-12:2x4 SP DSS(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 2-2-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
2-2-0 oc bracing: 16-18.

REACTIONS (size) 12=0-3-8, 22=0-3-8
Max Grav 12=790 (LC 1), 22=790 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-22=-31/0, 11-12=-31/0, 1-2=-2/0, 2-3=-1686/0, 3-5=-2773/0, 5-6=-3360/0, 6-7=-3302/0, 7-8=-3302/0, 8-9=-2771/0, 9-10=-1685/0, 10-11=-2/0
BOT CHORD 21-22=0/991, 20-21=0/2354, 19-20=0/3186, 18-19=0/3186, 16-18=0/3436, 15-16=0/3302, 14-15=0/3302, 13-14=0/2338, 12-13=0/996
WEBS 10-12=-1247/0, 2-22=-1241/0, 10-13=0/898, 2-21=0/905, 9-13=-849/0, 3-21=-870/0, 9-14=0/580, 3-20=0/545, 8-14=-773/0, 5-20=-528/0, 5-18=0/250, 8-15=-26/246, 7-16=-125/185, 5-19=-28/13, 6-18=-246/58, 6-16=-436/206

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 1.5x3 MT20 unless otherwise indicated.
4) The Fabrication Tolerance at joint 17 = 11%
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

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	F205	Floor	3	1	I56098801
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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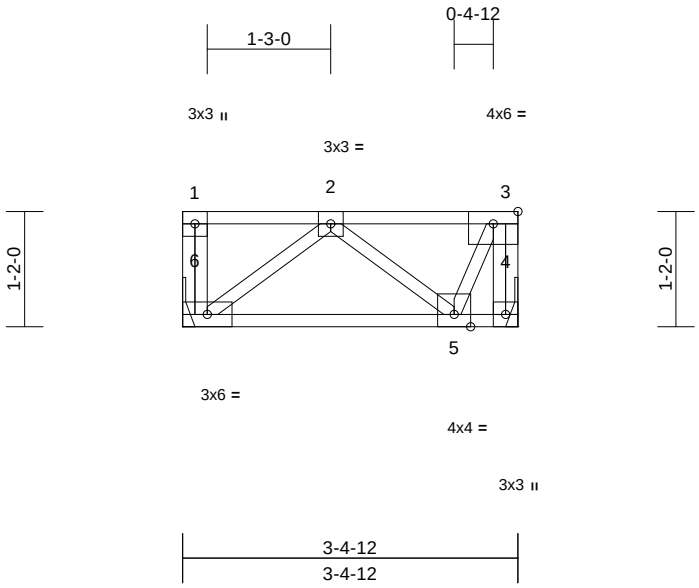

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Loading	(psf)	Spacing	1-7-3	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.13	Vert(LL)	0.00	5-6	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.06	Vert(CT)	0.00	5-6	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	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)

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 4= Mechanical, 6= Mechanical
Max Grav 4=138 (LC 1), 6=138 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-6=-37/0, 3-4=-146/0, 1-2=0/0, 2-3=-44/0
BOT CHORD 5-6=0/122, 4-5=0/0
WEBS 2-6=-154/0, 2-5=-102/0, 3-5=0/99

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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	F206	Floor	2	1	I56098802
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:19 Page: 1
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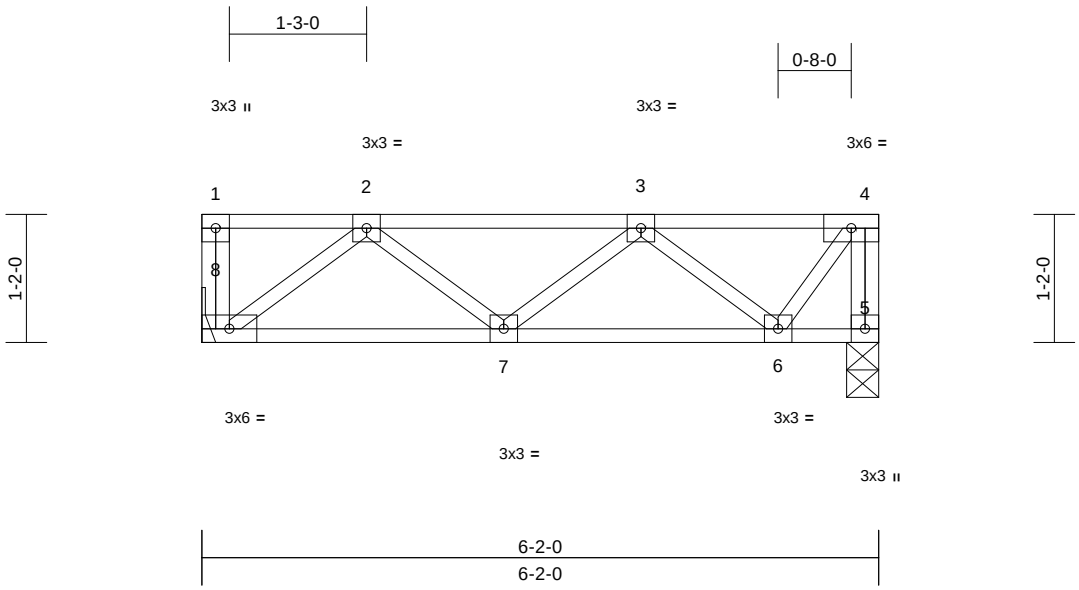


Scale = 1:21

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	0.22	Vert(LL)	0.00	7	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.12	Vert(CT)	-0.01	7-8	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	5	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 35 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) 5=0-3-8, 8= Mechanical
Max Grav 5=260 (LC 1), 8=260 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-8=-32/0, 4-5=-259/0, 1-2=0/0, 2-3=-344/0, 3-4=-151/0
BOT CHORD 7-8=0/289, 6-7=0/372, 5-6=0/0
WEBS 2-8=-363/0, 2-7=0/72, 3-7=-36/0, 3-6=-288/0, 4-6=0/249

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.

LOAD CASE(S) Standard

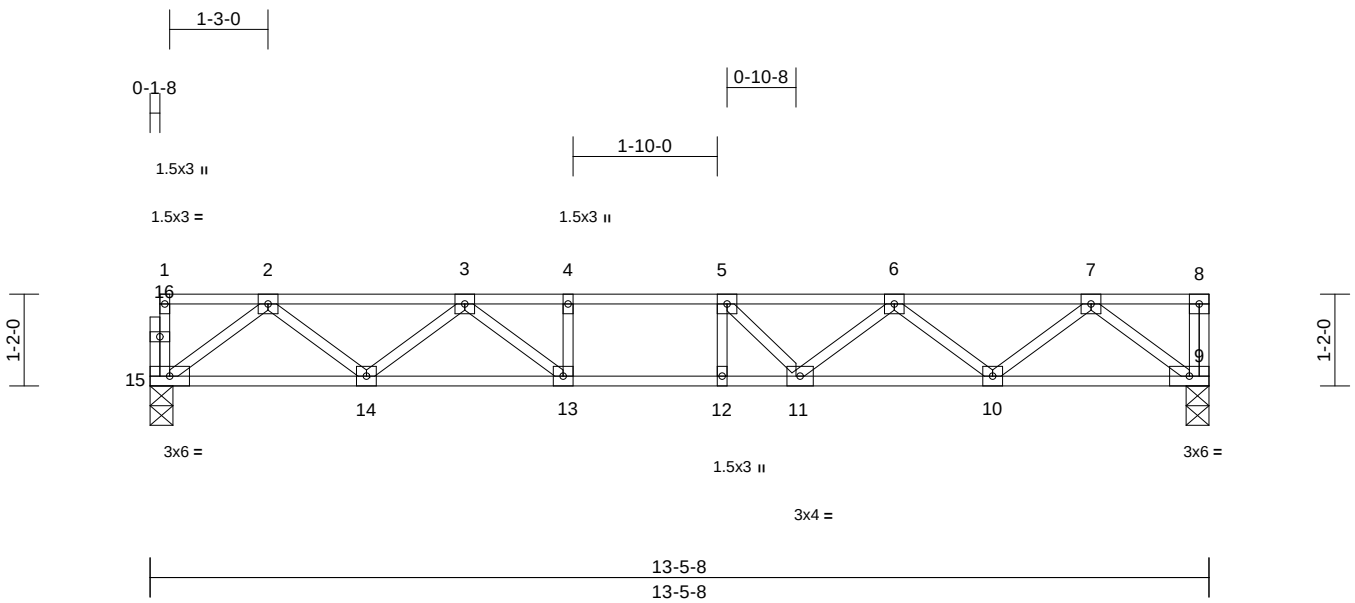
January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	F207	Floor	7	1	I56098803 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:19 ID:qcO406UExAWZGV4a9dbQ_1ypTtW-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



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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	0.42	Vert(LL)	-0.10	11-12	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.77	Vert(CT)	-0.14	11-12	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.27	Horz(CT)	0.03	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 68 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=0-3-8, 15=0-3-8
Max Grav 9=581 (LC 1), 15=576 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-15=-28/0, 8-9=-35/0, 1-2=-2/0, 2-3=-1139/0, 3-4=-1805/0, 4-5=-1805/0, 5-6=-1721/0, 6-7=-1148/0, 7-8=0/0
BOT CHORD 14-15=0/712, 13-14=0/1550, 12-13=0/1805, 11-12=0/1805, 10-11=0/1561, 9-10=0/710
WEBS 7-9=-890/0, 2-15=-892/0, 7-10=0/570, 2-14=0/555, 6-10=-538/0, 3-14=-536/0, 6-11=0/287, 3-13=0/466, 4-13=-194/0, 5-12=-121/70, 5-11=-285/47

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.
5) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	F208	Floor	1	1	I56098804
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:19 Page: 1
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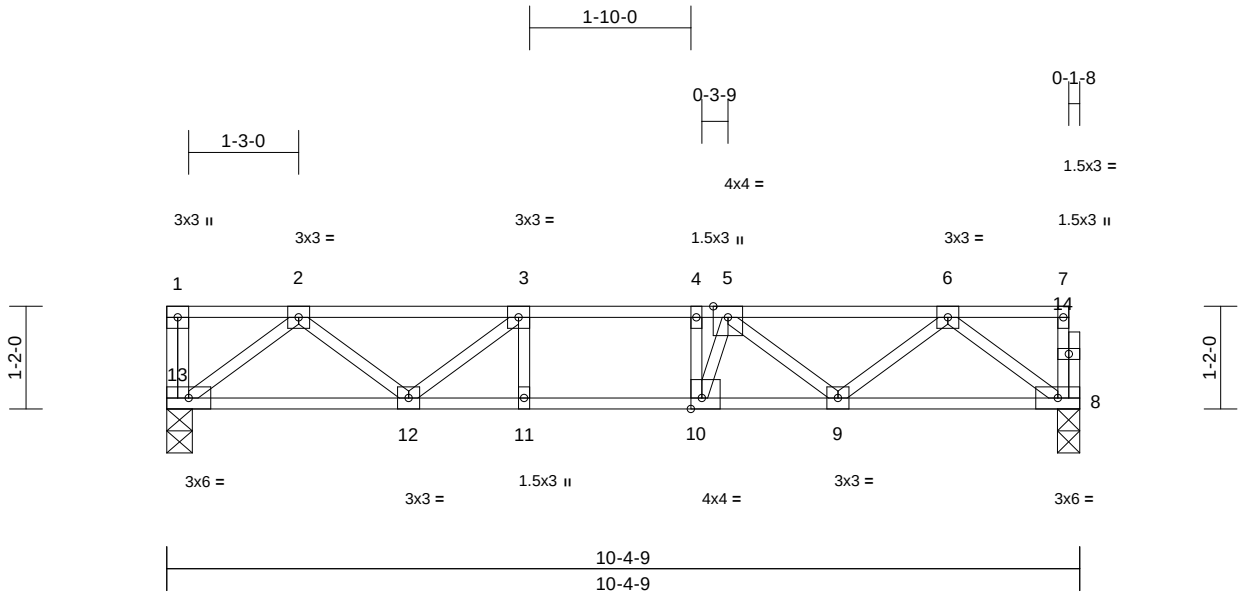

Scale = 1:26.2

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	0.32	Vert(LL)	-0.06	9-10	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.51	Vert(CT)	-0.07	9-10	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.21	Horz(CT)	0.02	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 54 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) 8=0-3-1, 13=0-3-8
Max Grav 8=551 (LC 1), 13=557 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-13=-38/0, 7-8=-35/0, 1-2=0/0, 2-3=-1007/0, 3-4=-1329/0, 4-5=-1329/0, 5-6=-1008/0, 6-7=-2/0
BOT CHORD 12-13=0/670, 11-12=0/1329, 10-11=0/1329, 9-10=0/1320, 8-9=0/667
WEBS 6-8=-834/0, 2-13=-840/0, 6-9=0/444, 2-12=0/439, 5-9=-406/0, 3-12=-434/0, 3-11=-52/84, 4-10=-269/123, 5-10=-183/361

NOTES
1) Unbalanced floor live loads have been considered for this design.
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

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	F209	Floor	11	1	I56098805
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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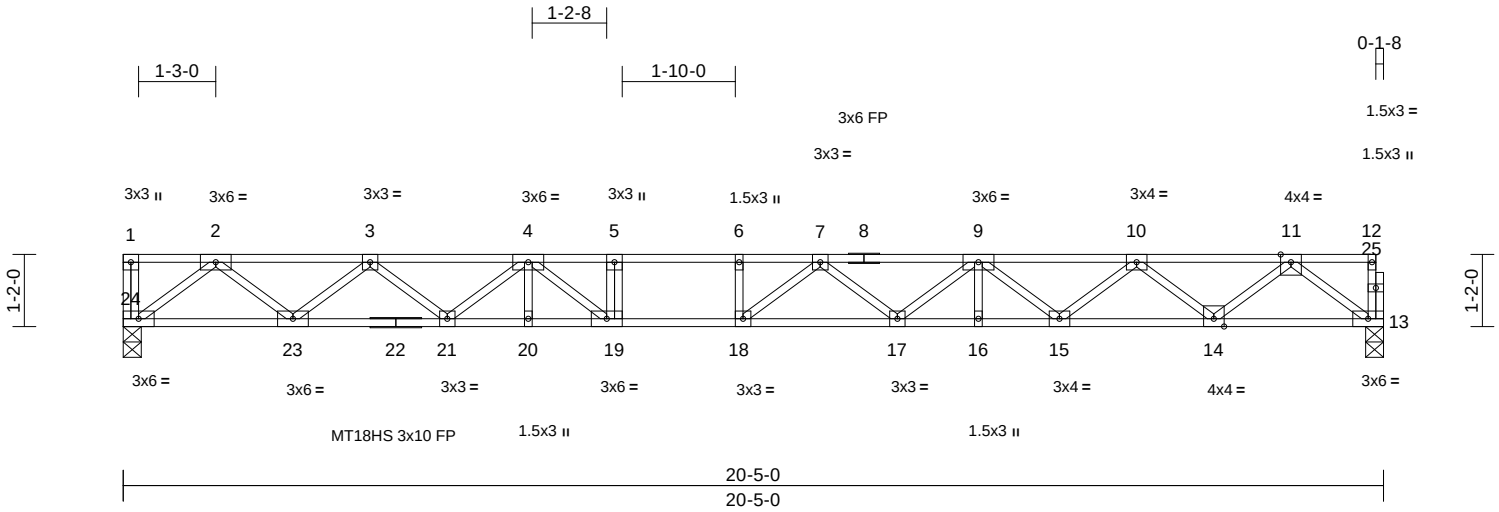


Scale = 1:37.3

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	0.76	Vert(LL)	-0.41	17-18	>596	480	MT18HS	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.75	Vert(CT)	-0.56	17-18	>433	360	MT20	244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.50	Horz(CT)	0.07	13	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 105 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.1(flat) *Except* 8-12:2x4 SP No.2 (flat)
BOT CHORD 2x4 SP No.2(flat) *Except* 22-13:2x4 SP DSS(flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.3(flat)

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-5-3 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 13=0-3-8, 24=0-3-8
Max Grav 13=882 (LC 1), 24=887 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-24=-36/0, 12-13=-31/0, 1-2=0/0, 2-3=-1918/0, 3-4=-3214/0, 4-5=-4188/0, 5-6=-4188/0, 6-7=-4188/0, 7-9=-4038/0, 9-10=-3220/0, 10-11=-1915/0, 11-12=-2/0
BOT CHORD 23-24=0/1110, 21-23=0/2699, 20-21=0/3719, 19-20=0/3719, 18-19=0/4188, 17-18=0/4243, 16-17=0/3752, 15-16=0/3752, 14-15=0/2692, 13-14=0/1111
WEBS 11-13=-1392/0, 2-24=-1392/0, 11-14=0/1047, 2-23=0/1052, 10-14=-1011/0, 3-23=-1017/0, 10-15=0/687, 3-21=0/670, 9-15=-679/0, 4-21=-645/0, 9-17=0/366, 4-19=0/852, 7-17=-327/0, 7-18=-334/354, 6-18=-156/74, 9-16=-29/19, 4-20=-117/46, 5-19=-292/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are MT20 plates unless otherwise indicated.
3) All plates are 3x6 MT20 unless otherwise indicated.
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

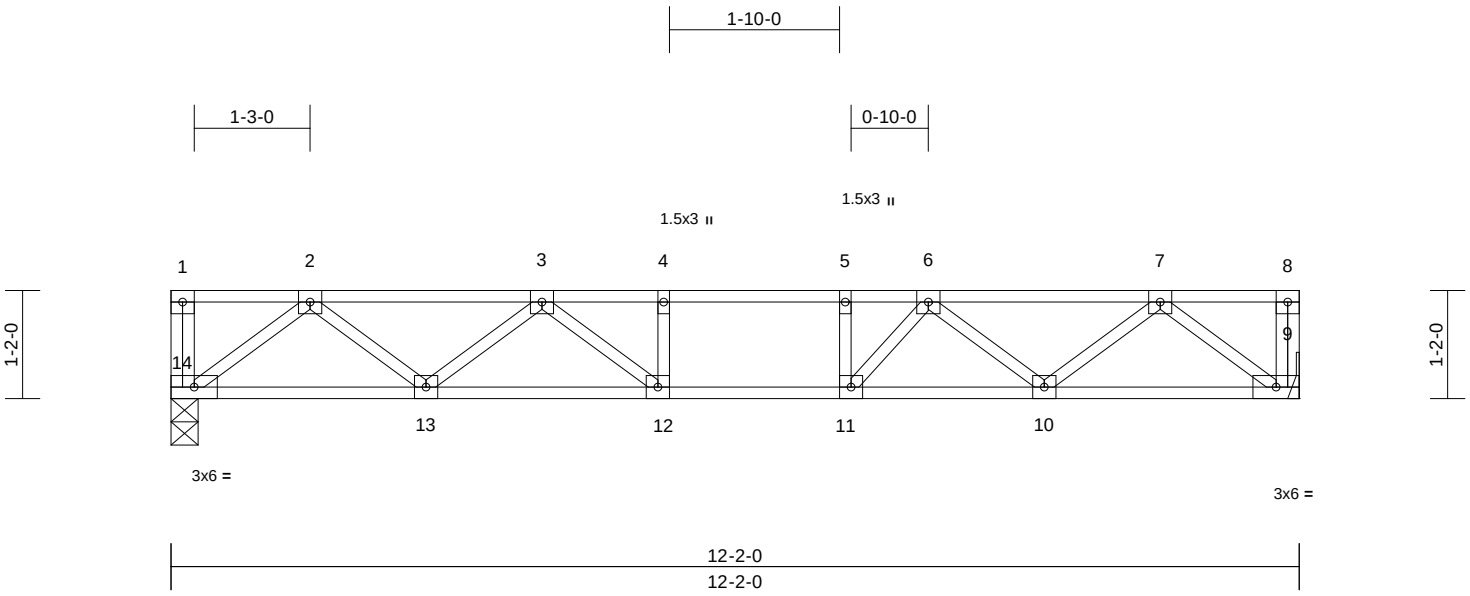
January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA	I56098806
GHWISAR WUA	F210	Floor	1	1	Job Reference (optional)	

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:20 ID:cG_DZn0OSHuJt5d7bFlHBCypTjo-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:24.8

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	0.37	Vert(LL)	-0.07	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.49	Vert(CT)	-0.10	12-13	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 62 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) 9= Mechanical, 14=0-3-8
Max Grav 9=524 (LC 1), 14=524 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-14=-32/0, 8-9=-31/0, 1-2=0/0, 2-3=-1005/0, 3-4=-1469/0, 4-5=-1469/0, 5-6=-1469/0, 6-7=-1000/0, 7-8=0/0
BOT CHORD 13-14=0/640, 12-13=0/1336, 11-12=0/1469, 10-11=0/1340, 9-10=0/639
WEBS 7-9=-801/0, 2-14=-803/0, 7-10=0/470, 2-13=0/475, 6-10=-443/0, 3-13=-432/0, 3-12=0/331, 4-12=-158/0, 5-11=-213/0, 6-11=0/363

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

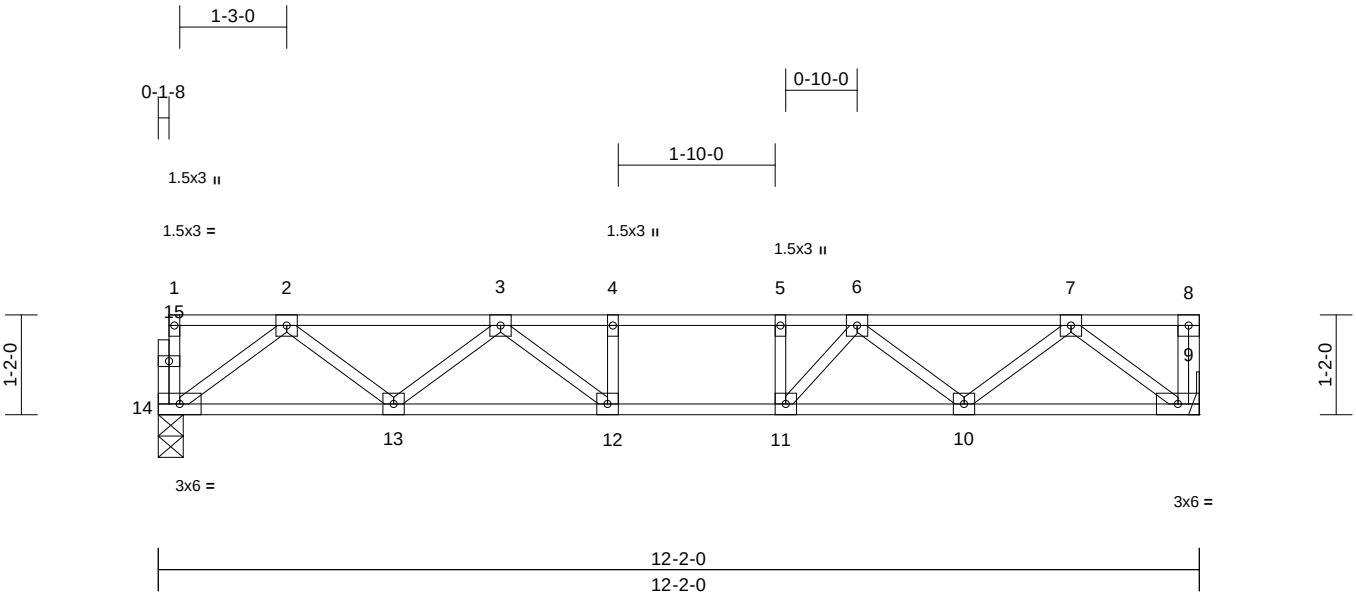
January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA	I56098807
GHWISAR WUA	F211	Floor	1	1	Job Reference (optional)	

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:20 ID:5G7tUZe?CGRx75b7eAgUlAypTj_-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:26.9

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	0.37	Vert(LL)	-0.07	12-13	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.49	Vert(CT)	-0.10	12-13	>999	360		
BCLL	0.0	Rep Stress Incr	YES	WB	0.23	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 62 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= Mechanical, 14=0-3-8
Max Grav 9=524 (LC 1), 14=519 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-14=-29/0, 8-9=-31/0, 1-2=-2/0, 2-3=-1004/0, 3-4=-1469/0, 4-5=-1469/0, 5-6=-1469/0, 6-7=-1000/0, 7-8=0/0
BOT CHORD 13-14=0/639, 12-13=0/1336, 11-12=0/1469, 10-11=0/1340, 9-10=0/639
WEBS 7-9=-801/0, 2-14=-800/0, 7-10=0/470, 2-13=0/475, 6-10=-443/0, 3-13=-432/0, 3-12=0/331, 4-12=-158/0, 5-11=-213/0, 6-11=0/363

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

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	K201	Floor Supported Gable	1	1	I56098808
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:20 Page: 1
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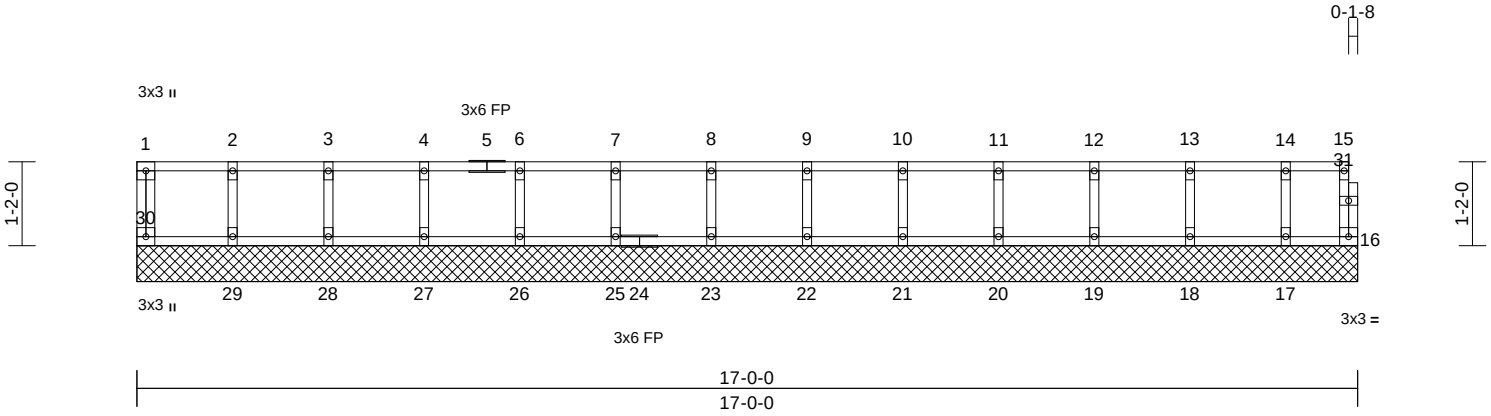


Scale = 1:32.1

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	0.08	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	16	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							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.2(flat)
OTHERS	2x4 SP No.3(flat) *Except* 16-31:2x4 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) 16=17-0-0, 17=17-0-0, 18=17-0-0, 19=17-0-0, 20=17-0-0, 21=17-0-0, 22=17-0-0, 23=17-0-0, 25=17-0-0, 26=17-0-0, 27=17-0-0, 28=17-0-0, 29=17-0-0, 30=17-0-0
Max Grav 16=37 (LC 1), 17=122 (LC 1), 18=152 (LC 1), 19=145 (LC 1), 20=147 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 30=59 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-30=-55/0, 15-16=-32/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-6=-7/0, 6-7=-7/0, 7-8=-7/0, 8-9=-7/0, 9-10=-7/0, 10-11=-7/0, 11-12=-7/0, 12-13=-7/0, 13-14=-7/0, 14-15=-7/0
BOT CHORD	29-30=0/7, 28-29=0/7, 27-28=0/7, 26-27=0/7, 25-26=0/7, 23-25=0/7, 22-23=0/7, 21-22=0/7, 20-21=0/7, 19-20=0/7, 18-19=0/7, 17-18=0/7, 16-17=0/7
WEBS	2-29=-132/0, 3-28=-134/0, 4-27=-133/0, 6-26=-133/0, 7-25=-133/0, 8-23=-133/0, 9-22=-133/0, 10-21=-133/0, 11-20=-134/0, 12-19=-132/0, 13-18=-138/0, 14-17=-113/0

NOTES

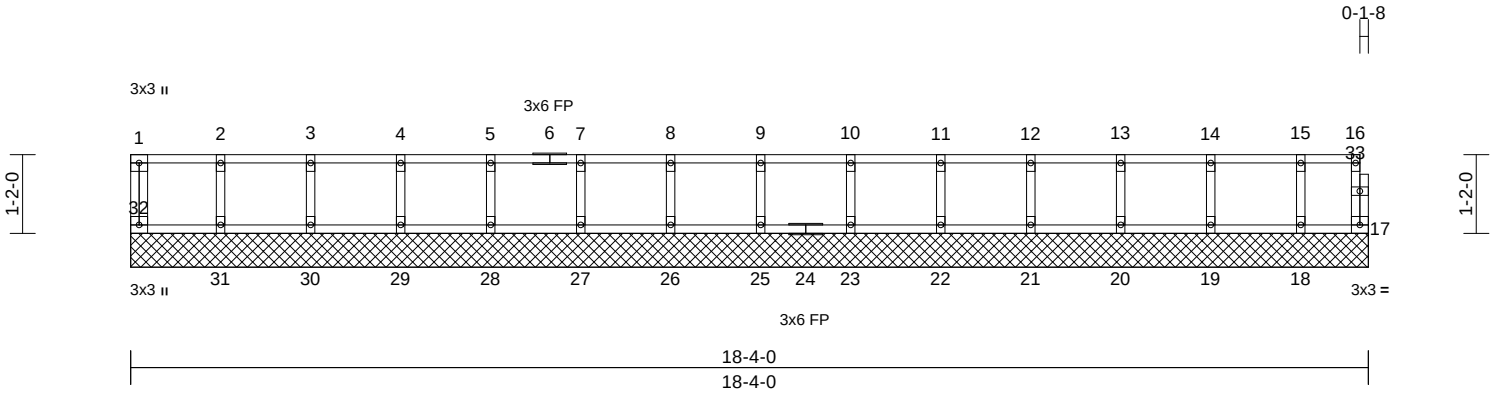
1) All plates are 1.5x3 MT20 unless otherwise indicated.
2) Gable requires continuous bottom chord bearing.
3) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
4) Gable studs spaced at 1-4-0 oc.
5) This truss is designed in accordance with the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

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	K202	Floor Supported Gable	1	1	I56098809
					Job Reference (optional)



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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	0.08	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	17	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	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.2(flat)
OTHERS	2x4 SP No.3(flat) *Except* 17-33:2x4 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) 17=18-4-0, 18=18-4-0, 19=18-4-0, 20=18-4-0, 21=18-4-0, 22=18-4-0, 23=18-4-0, 25=18-4-0, 26=18-4-0, 27=18-4-0, 28=18-4-0, 29=18-4-0, 30=18-4-0, 31=18-4-0, 32=18-4-0

Max Grav 17=37 (LC 1), 18=122 (LC 1), 19=152 (LC 1), 20=145 (LC 1), 21=147 (LC 1), 22=147 (LC 1), 23=147 (LC 1), 25=147 (LC 1), 26=147 (LC 1), 27=147 (LC 1), 28=147 (LC 1), 29=147 (LC 1), 30=147 (LC 1), 31=147 (LC 1), 32=59 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-32=-55/0, 16-17=-31/0, 1-2=-7/0, 2-3=-7/0, 3-4=-7/0, 4-5=-7/0, 5-7=-7/0, 7-8=-7/0, 8-9=-7/0, 9-10=-7/0, 10-11=-7/0, 11-12=-7/0, 12-13=-7/0, 13-14=-7/0, 14-15=-7/0, 15-16=-7/0
BOT CHORD	31-32=0/7, 30-31=0/7, 29-30=0/7, 28-29=0/7, 27-28=0/7, 26-27=0/7, 25-26=0/7, 23-25=0/7, 22-23=0/7, 21-22=0/7, 20-21=0/7, 19-20=0/7, 18-19=0/7, 17-18=0/7
WEBS	2-31=-132/0, 3-30=-134/0, 4-29=-133/0, 5-28=-133/0, 7-27=-133/0, 8-26=-133/0, 9-25=-133/0, 10-23=-133/0, 11-22=-133/0, 12-21=-134/0, 13-20=-132/0, 14-19=-138/0, 15-18=-113/0

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) 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

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	K203	Floor Supported Gable	2	1	I56098810 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:21 Page: 1
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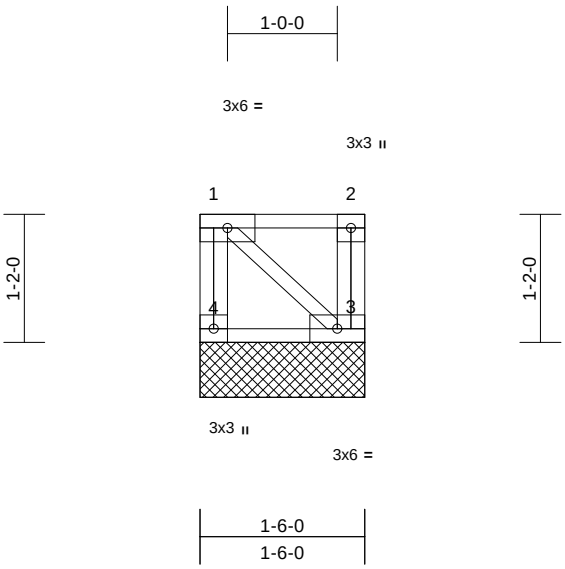

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.11	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.00	Horiz(TL)	0.00	3	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-P							Weight: 12 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 1-6-0 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 3=1-6-0, 4=1-6-0
Max Grav 3=69 (LC 1), 4=69 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-4=-62/0, 2-3=-62/0, 1-2=0/0
BOT CHORD 3-4=0/0
WEBS 1-3=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) 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

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	K204	Floor Supported Gable	1	1	I56098811
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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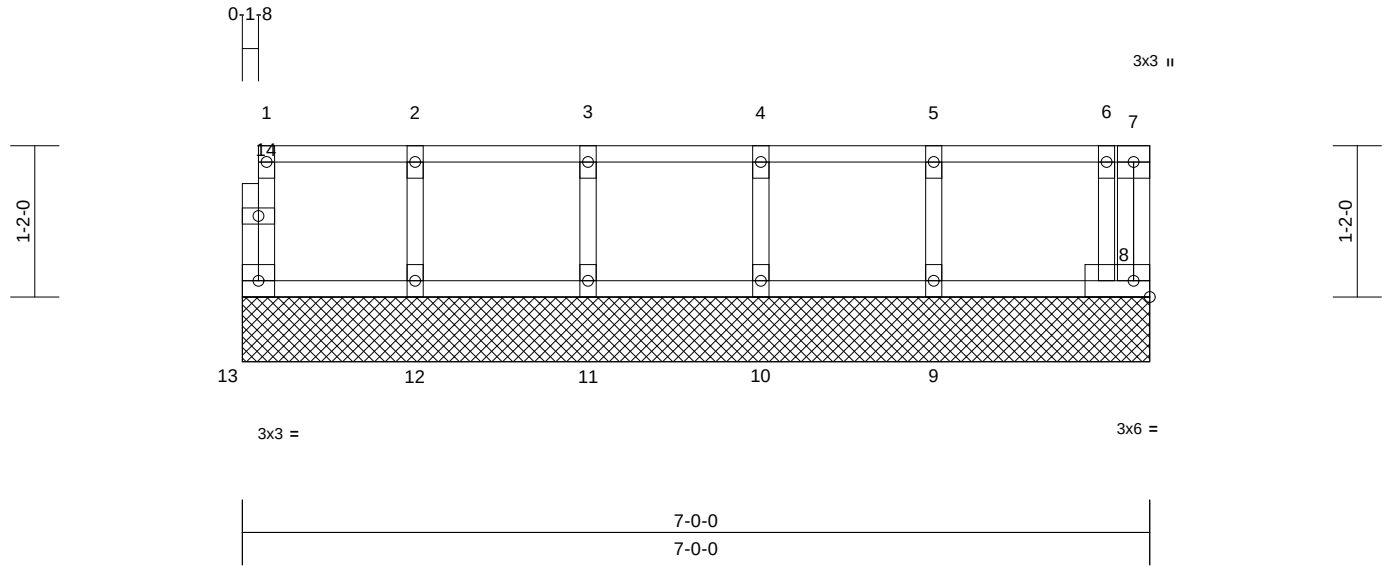

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 33 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) *Except* 13-14:2x4 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) 8=7-0-0, 9=7-0-0, 10=7-0-0, 11=7-0-0, 12=7-0-0, 13=7-0-0
Max Grav 8=86 (LC 1), 9=159 (LC 1), 10=143 (LC 1), 11=150 (LC 1), 12=135 (LC 1), 13=62 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-13=-54/0, 7-8=0/13, 1-2=-16/0, 2-3=-16/0, 3-4=-16/0, 4-5=-16/0, 5-6=-16/0, 6-7=-3/0
BOT CHORD 12-13=0/16, 11-12=0/16, 10-11=0/16, 9-10=0/16, 8-9=0/16
WEBS 2-12=-126/0, 3-11=-136/0, 4-10=-131/0, 5-9=-142/0, 6-8=-94/0

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) 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

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	K205	Floor Supported Gable	1	1	I56083442 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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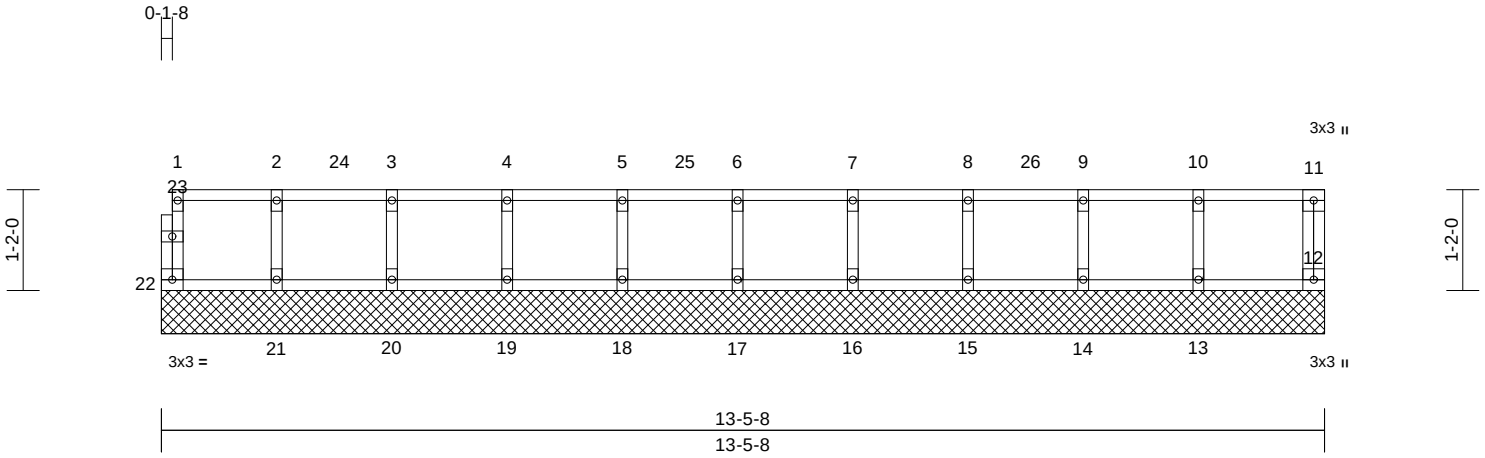

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.17	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.05	Horiz(TL)	0.00	12	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	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.2(flat)
OTHERS 2x4 SP No.3(flat) *Except* 22-23:2x4 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 All bearings 13-5-8.
(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22

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

NOTES

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

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 12-22=-10, 1-11=-100
Concentrated Loads (lb)
Vert: 4=-97, 7=-97, 10=-97, 24=-97, 25=-97, 26=-97

January 11,2023

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	K206	Floor Supported Gable	1	1	I56083443 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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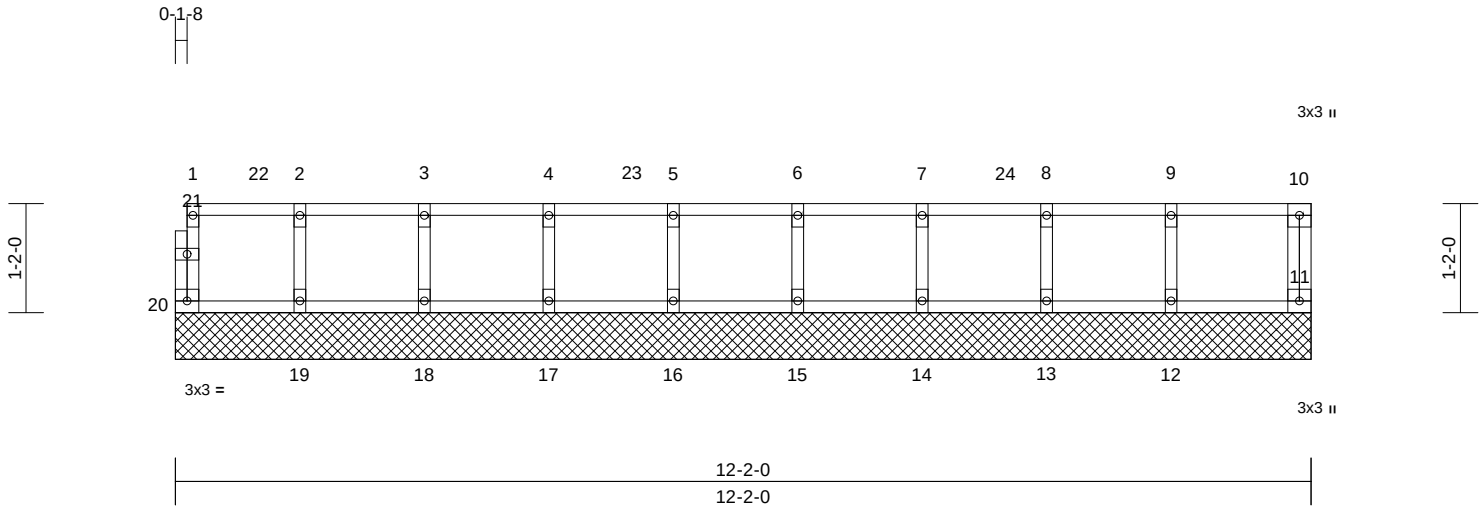

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.10	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.02	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.04	Horiz(TL)	0.00	11	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							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.2(flat)
OTHERS 2x4 SP No.3(flat) *Except* 20-21:2x4 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 All bearings 12-2-0.
(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 11, 12, 13, 14, 15, 16, 17, 18, 19, 20

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

NOTES

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

1) Dead + Floor Live (balanced): Lumber Increase=1.00, Plate Increase=1.00
Uniform Loads (lb/ft)
Vert: 11-20=-10, 1-10=-100
Concentrated Loads (lb)
Vert: 3=-42, 6=-42, 9=-42, 22=-45, 23=-42, 24=-42

January 11,2023

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	K207	Floor Supported Gable	1	1	I56098814 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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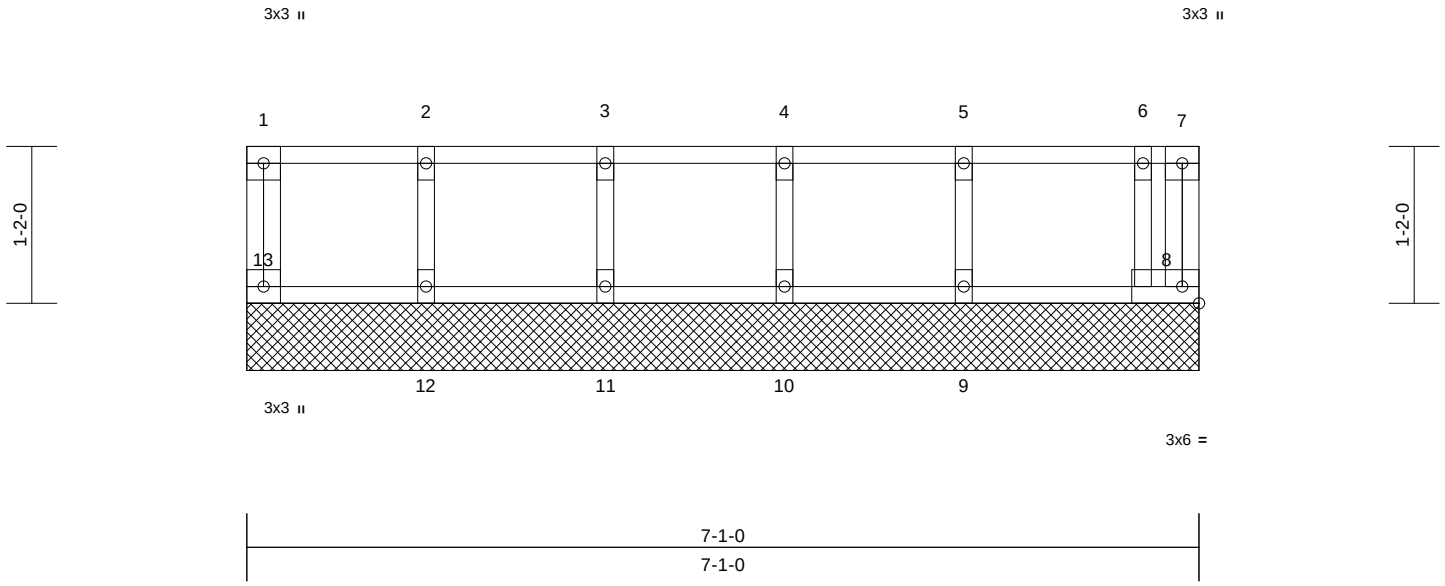

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.09	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.03	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.02	Horiz(TL)	0.00	8	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-R							Weight: 33 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.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) 8=7-1-0, 9=7-1-0, 10=7-1-0, 11=7-1-0, 12=7-1-0, 13=7-1-0
Max Grav 8=94 (LC 1), 9=160 (LC 1), 10=142 (LC 1), 11=151 (LC 1), 12=133 (LC 1), 13=70 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD 1-13=-60/0, 7-8=0/7, 1-2=-17/0, 2-3=-17/0, 3-4=-17/0, 4-5=-17/0, 5-6=-17/0, 6-7=-1/0
BOT CHORD 12-13=0/17, 11-12=0/17, 10-11=0/17, 9-10=0/17, 8-9=0/17
WEBS 2-12=-125/0, 3-11=-136/0, 4-10=-130/0, 5-9=-143/0, 6-8=-98/0

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) 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

January 11,2023

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A MiTek Affiliate
818 Soundside Road
Edenton, NC 27932

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	L01	Monopitch	4	1	I56098815 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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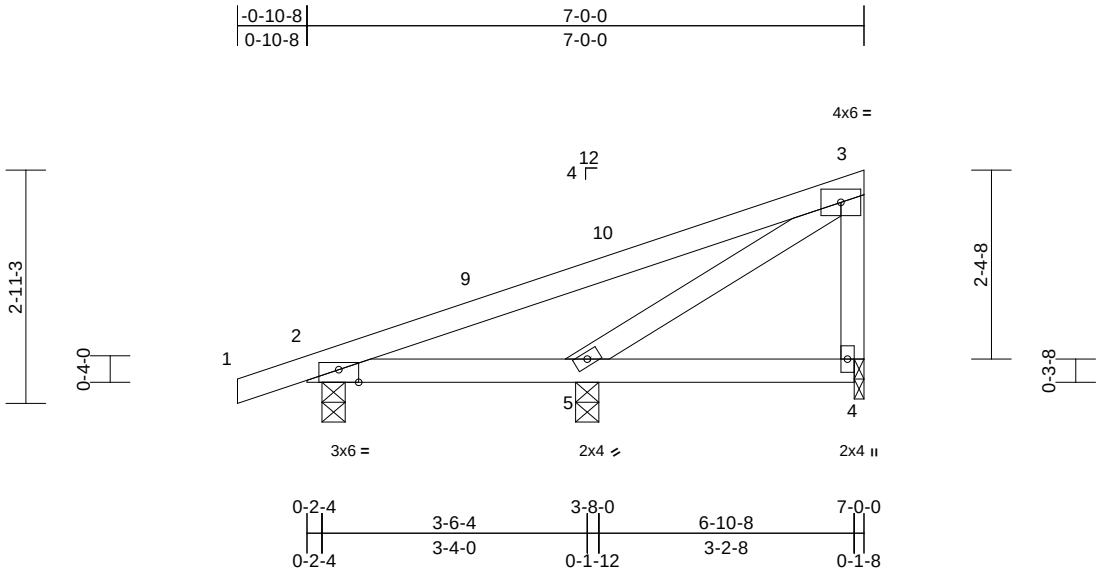


Scale = 1:29

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

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.45	Vert(LL)	-0.02	5-8	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.60	Vert(CT)	-0.04	5-8	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.02	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.02	5-8	>999	240	Weight: 32 lb	FT = 20%

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

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 4=0-1-8, 5=0-3-8
Max Horiz 2=72 (LC 11)
Max Uplift 2=-62 (LC 12), 4=-12 (LC 12), 5=-7 (LC 12)
Max Grav 2=220 (LC 1), 4=170 (LC 1), 5=211 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-94/40, 3-4=-162/115
BOT CHORD 2-5=-82/66, 4-5=-35/38
WEBS 3-5=-49/37

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
3) * 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.
4) Bearing at joint(s) 4 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
5) Provide mechanical connection (by others) of truss to bearing plate at joint(s) 4.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 62 lb uplift at joint 2, 7 lb uplift at joint 5 and 12 lb uplift at joint 4.
7) 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.
8) 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.

LOAD CASE(S) Standard

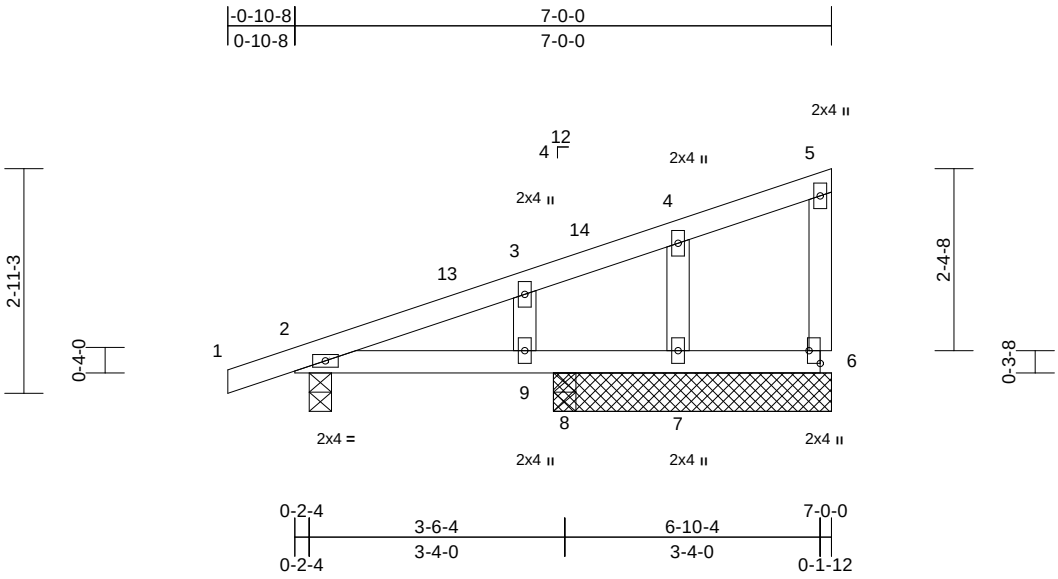
January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA	I56098816
GHWISAR WUA	L02	Monopitch Structural Gable	1	1	Job Reference (optional)	

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:22 ID:N?k34ddwbnm5IG1aqSq1CcyokDl-RfC?PsB70Hq3NSgPqnL8w3uITXbGKWrCDoi7J4zJC?f



Scale = 1:30.1

Plate Offsets (X, Y): [6:Edge,0-1-12]

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	0.09	Vert(LL)	0.00	9-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	-0.01	9-12	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.03	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.01	9-12	>999	240	Weight: 29 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=0-3-8, 6=3-7-8, 7=3-7-8, 8=0-3-8
Max Horiz 2=72 (LC 11)
Max Uplift 2=-44 (LC 12), 6=-2 (LC 9), 8=-52 (LC 12)
Max Grav 2=179 (LC 1), 6=64 (LC 1), 7=107 (LC 1), 8=251 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/17, 2-3=-104/70, 3-4=-75/51, 4-5=-41/36, 5-6=-41/35
BOT CHORD 2-9=-55/43, 8-9=-35/38, 7-8=-35/38, 6-7=-35/38
WEBS 4-7=-130/85, 3-9=-152/71

NOTES

1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) -0-10-8 to 2-1-8, Interior (1) 2-1-8 to 6-10-4 zone; cantilever left and right exposed ; end vertical left and right exposed; porch left exposed;C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
2) 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.
3) Gable studs spaced at 2-0-0 oc.
4) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
5) * 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.
6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 2 lb uplift at joint 6, 44 lb uplift at joint 2 and 52 lb uplift at joint 8.
7) 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.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	P01	Piggyback	1	1	I56098817 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:23 Page: 1
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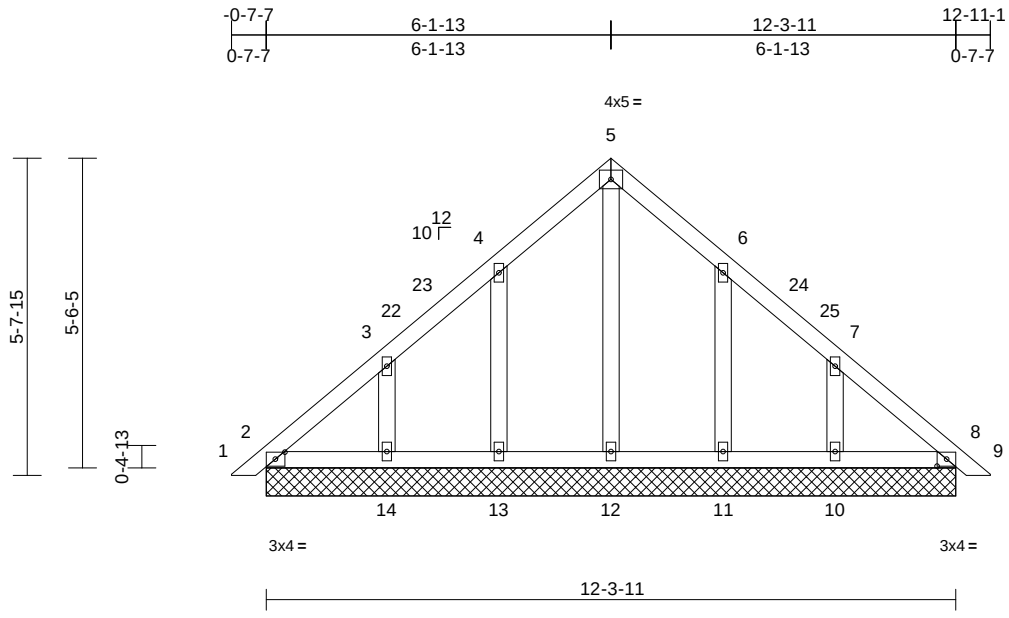

Scale = 1:41.1

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

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 67 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=12-3-11, 8=12-3-11, 10=12-3-11, 11=12-3-11, 12=12-3-11, 13=12-3-11, 14=12-3-11, 15=12-3-11, 19=12-3-11
Max Horiz 2=-98 (LC 10), 15=-98 (LC 10)
Max Uplift 10=-43 (LC 12), 11=-31 (LC 12), 13=-31 (LC 12), 14=-43 (LC 12)
Max Grav 2=122 (LC 18), 8=116 (LC 1), 10=192 (LC 18), 11=162 (LC 18), 12=119 (LC 1), 13=162 (LC 17), 14=193 (LC 17), 15=122 (LC 18), 19=116 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-89/71, 3-4=-91/45, 4-5=-102/90, 5-6=-102/92, 6-7=-70/36, 7-8=-67/50, 8-9=0/15
BOT CHORD 2-14=-53/79, 13-14=-53/79, 12-13=-53/79, 11-12=-53/79, 10-11=-53/79, 8-10=-53/79
WEBS 5-12=-77/21, 4-13=-128/83, 3-14=-144/86, 6-11=-127/83, 7-10=-144/86

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 6-9-9, Exterior (2) 6-9-9 to 9-9-9, Interior (1) 9-9-9 to 13-4-3 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 31 lb uplift at joint 13, 43 lb uplift at joint 14, 31 lb uplift at joint 11 and 43 lb uplift at joint 10.
10) 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.
11) 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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	P02	Piggyback	8	1	I56098818 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:23 Page: 1
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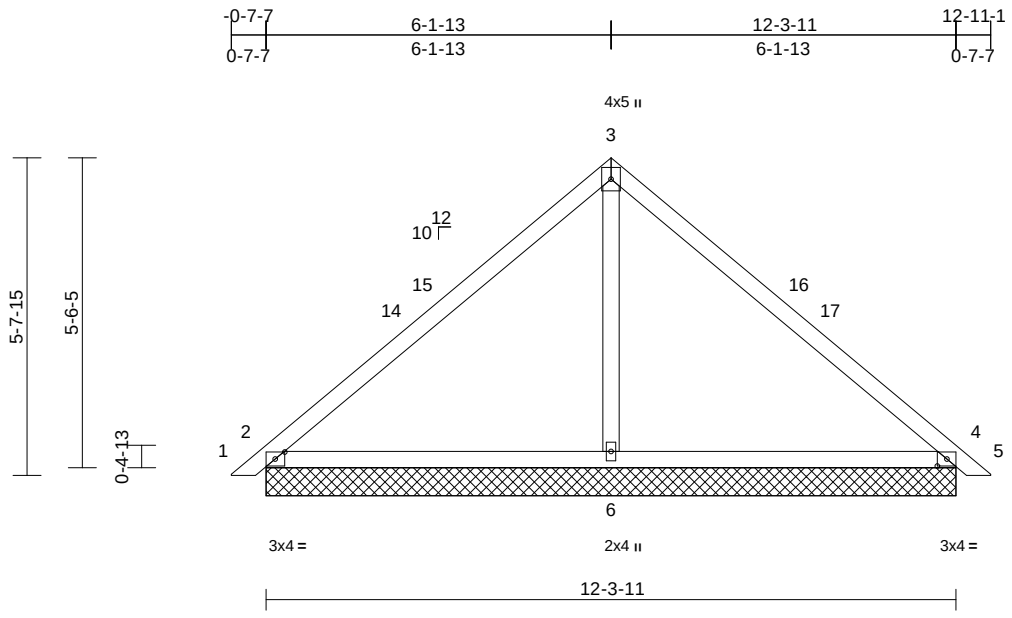

Scale = 1:41.1

Plate Offsets (X, Y): [2:0-2-1,0-1-8], [4:0-2-1,0-1-8]

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	0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 52 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=12-3-11, 4=12-3-11, 6=12-3-11, 7=12-3-11, 11=12-3-11
Max Horiz 2=98 (LC 11), 7=98 (LC 11)
Max Uplift 2=-42 (LC 12), 4=-42 (LC 12), 7=-42 (LC 12), 11=-42 (LC 12)
Max Grav 2=343 (LC 1), 4=343 (LC 1), 6=348 (LC 1), 7=343 (LC 1), 11=343 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-286/112, 3-4=-286/114, 4-5=0/15
BOT CHORD 2-6=-31/153, 4-6=-33/153
WEBS 3-6=-149/0

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 6-9-9, Exterior (2) 6-9-9 to 9-9-9, Interior (1) 9-9-9 to 13-4-3 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 6-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 2, 42 lb uplift at joint 4, 42 lb uplift at joint 2 and 42 lb uplift at joint 4.
9) 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.
10) 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.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	P03	Roof Special Girder	1	2	I56098819 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:23 Page: 1
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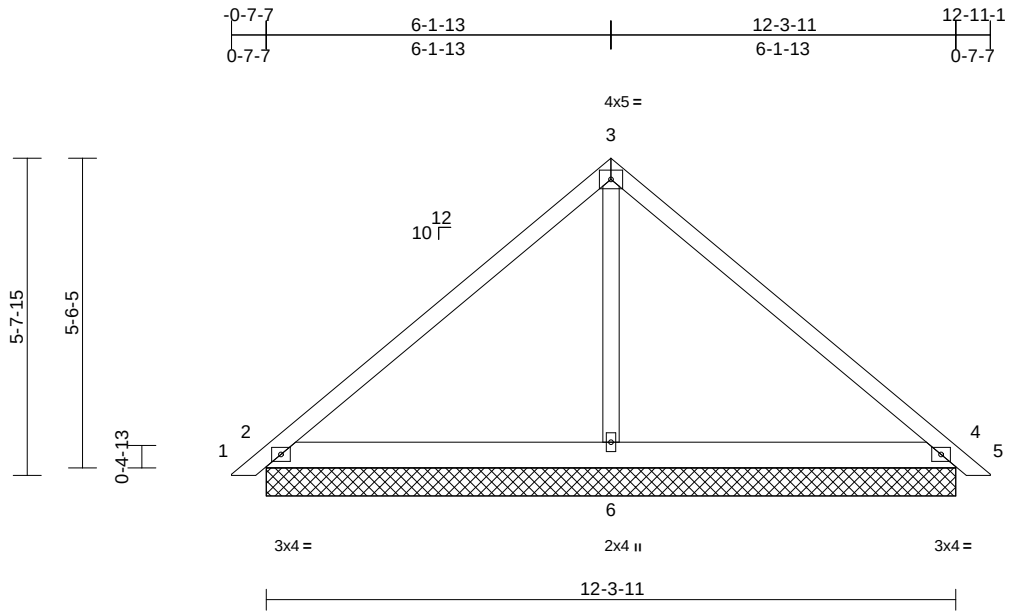

Scale = 1:41.1

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	0.24	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.15	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.11	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 124 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3

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

REACTIONS (size) 2=12-3-11, 4=12-3-11, 6=12-3-11, 9=12-3-11
Max Horiz 2=-98 (LC 6), 9=-98 (LC 6)
Max Uplift 2=-1 (LC 8), 4=-143 (LC 17), 6=-27 (LC 8), 9=-1 (LC 8)
Max Grav 2=3 (LC 17), 4=139 (LC 18), 6=1033 (LC 1), 9=3 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-177/483, 3-4=-175/451, 4-5=0/15
BOT CHORD 2-6=-282/90, 4-6=-282/90
WEBS 3-6=-767/61

NOTES
1) 2-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) 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.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 6-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 1 lb uplift at joint 2, 143 lb uplift at joint 4, 27 lb uplift at joint 6 and 1 lb uplift at joint 2.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	P04	Roof Special Girder	1	3	I56098820 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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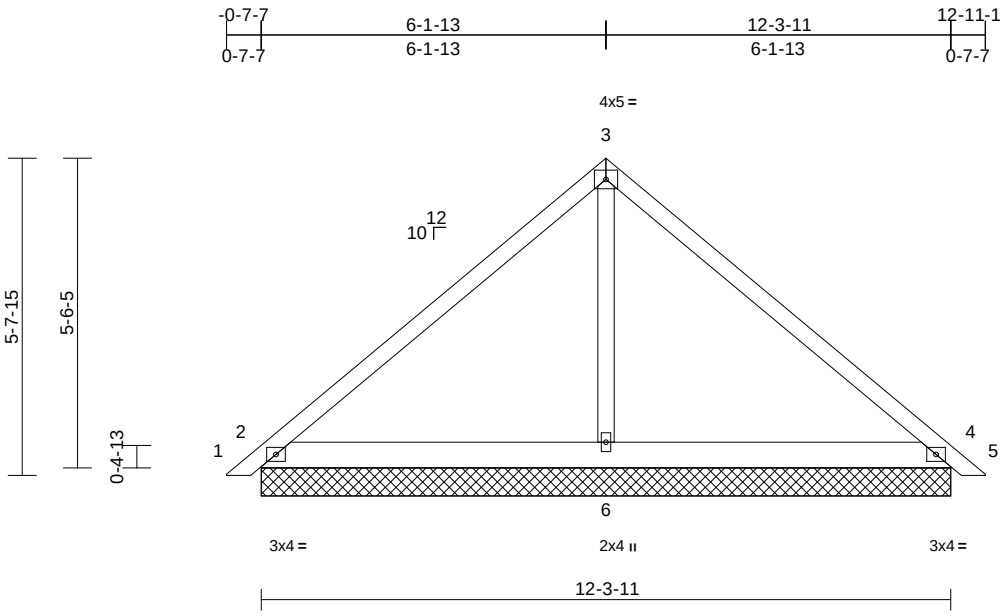

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.16	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	NO	WB	0.06	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 186 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x6 SP No.2
OTHERS 2x4 SP No.3

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

REACTIONS (size) 2=12-3-11, 4=12-3-11, 6=12-3-11, 9=12-3-11
Max Horiz 2=98 (LC 7), 9=98 (LC 7)
Max Uplift 4=-142 (LC 17), 6=-27 (LC 8)
Max Grav 2=2 (LC 17), 4=139 (LC 18), 6=1033 (LC 1), 9=2 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-173/488, 3-4=-172/456, 4-5=0/15
BOT CHORD 2-6=-280/86, 4-6=-280/86
WEBS 3-6=-766/61

NOTES
1) 3-ply truss to be connected together as follows:
Top chords connected with 10d (0.131"x3") nails as follows: 2x4 - 1 row at 0-9-0 oc.
Bottom chords connected with 10d (0.131"x3") nails as follows: 2x6 - 2 rows staggered at 0-9-0 oc.
2) All loads are considered equally applied to all plies, except if noted as front (F) or back (B) face in the LOAD CASE(S) section. Ply to ply connections have been provided to distribute only loads noted as (F) or (B), unless otherwise indicated.
3) Unbalanced roof live loads have been considered for this design.
4) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional); cantilever left and right exposed ; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
5) 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.
6) Gable requires continuous bottom chord bearing.
7) Gable studs spaced at 6-0-0 oc.
8) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
9) * 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.
10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 142 lb uplift at joint 4 and 27 lb uplift at joint 6.
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) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	P05	Piggyback	4	1	I56098821 Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247, Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:24 Page: 1
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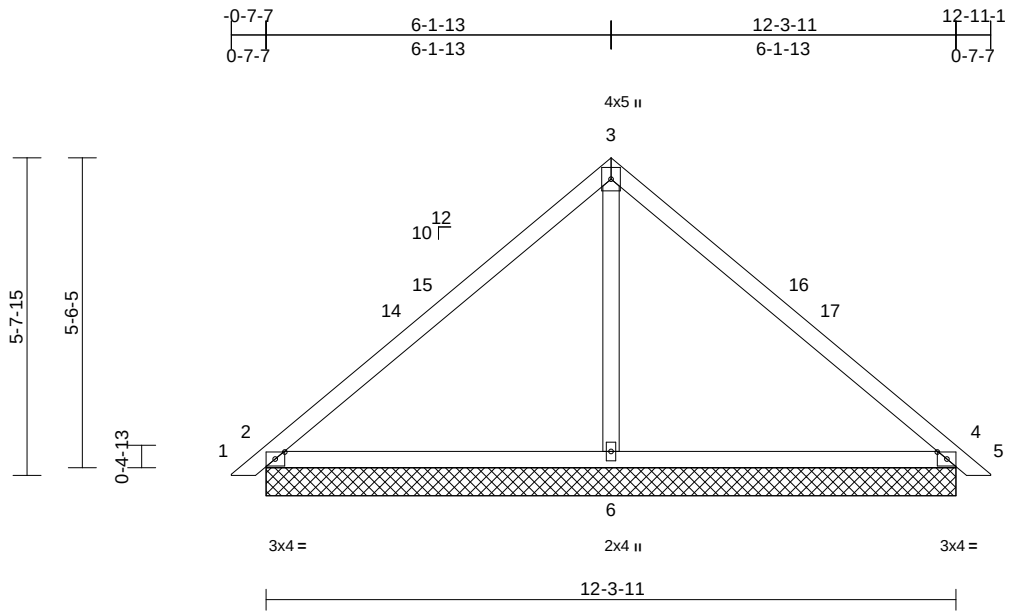


Scale = 1:41.1

Plate Offsets (X, Y): [2:0-2-1,0-1-8], [4:0-2-1,0-1-8]

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	0.39	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.36	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.08	Horz(CT)	0.00	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 52 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

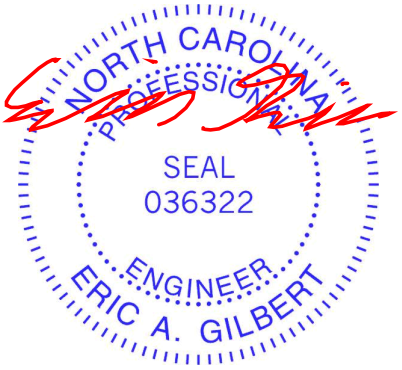
BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=12-3-11, 4=12-3-11, 6=12-3-11, 7=12-3-11, 11=12-3-11
Max Horiz 2=-98 (LC 10), 7=-98 (LC 10)
Max Uplift 2=-42 (LC 12), 4=-42 (LC 12), 7=-42 (LC 12), 11=-42 (LC 12)
Max Grav 2=343 (LC 1), 4=343 (LC 1), 6=348 (LC 1), 7=343 (LC 1), 11=343 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-286/112, 3-4=-286/114, 4-5=0/15
BOT CHORD 2-6=-31/153, 4-6=-33/153
WEBS 3-6=-149/0

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 6-9-9, Exterior (2) 6-9-9 to 9-9-9, Interior (1) 9-9-9 to 13-4-3 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) Gable requires continuous bottom chord bearing.
5) Gable studs spaced at 6-0-0 oc.
6) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
7) * 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.
8) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 2, 42 lb uplift at joint 4, 42 lb uplift at joint 2 and 42 lb uplift at joint 4.
9) 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.
10) 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.
11) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard



January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	P06	Piggyback	1	1	I56098822
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:24 Page: 1
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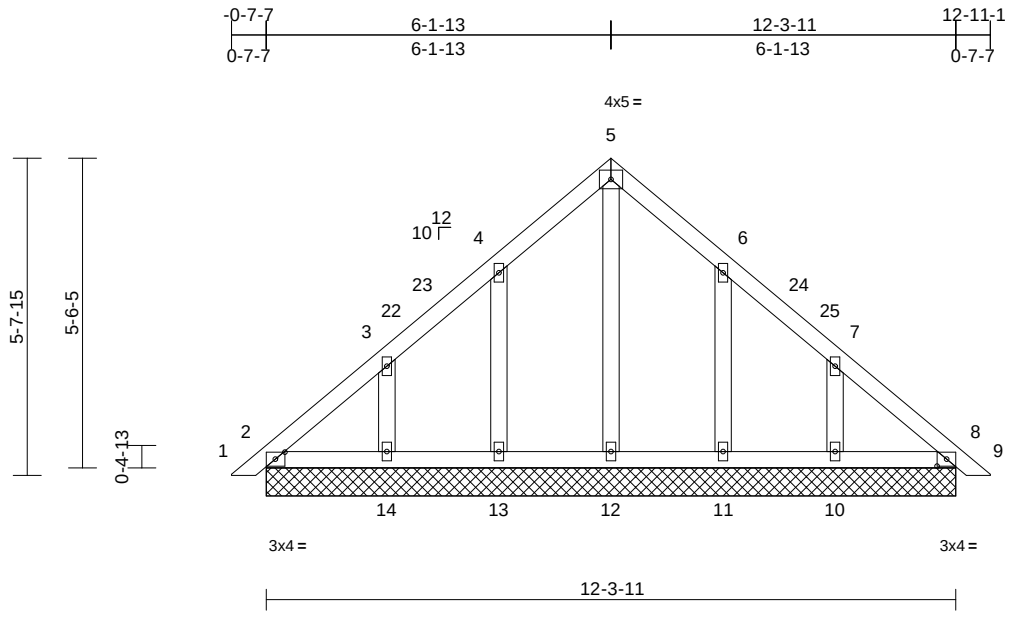

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Plate Offsets (X, Y): [2:0-2-1,0-1-8], [8:0-2-1,0-1-8]

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	0.05	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.04	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.04	Horz(CT)	0.00	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 67 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 2=12-3-11, 8=12-3-11, 10=12-3-11, 11=12-3-11, 12=12-3-11, 13=12-3-11, 14=12-3-11, 15=12-3-11, 19=12-3-11
Max Horiz 2=-98 (LC 10), 15=-98 (LC 10)
Max Uplift 10=-43 (LC 12), 11=-31 (LC 12), 13=-31 (LC 12), 14=-43 (LC 12)
Max Grav 2=122 (LC 18), 8=116 (LC 1), 10=192 (LC 18), 11=162 (LC 18), 12=119 (LC 1), 13=162 (LC 17), 14=193 (LC 17), 15=122 (LC 18), 19=116 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=0/15, 2-3=-89/71, 3-4=-91/45, 4-5=-102/90, 5-6=-102/92, 6-7=-70/36, 7-8=-67/50, 8-9=0/15
BOT CHORD 2-14=-53/79, 13-14=-53/79, 12-13=-53/79, 11-12=-53/79, 10-11=-53/79, 8-10=-53/79
WEBS 5-12=-77/21, 4-13=-128/83, 3-14=-144/86, 6-11=-127/83, 7-10=-144/86

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=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-2-14 to 3-2-14, Interior (1) 3-2-14 to 6-9-9, Exterior (2) 6-9-9 to 9-9-9, Interior (1) 9-9-9 to 13-4-3 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 31 lb uplift at joint 13, 43 lb uplift at joint 14, 31 lb uplift at joint 11 and 43 lb uplift at joint 10.
10) 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.
11) 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.
12) See Standard Industry Piggyback Truss Connection Detail for Connection to base truss as applicable, or consult qualified building designer.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V01	Valley	1	1	I56098823
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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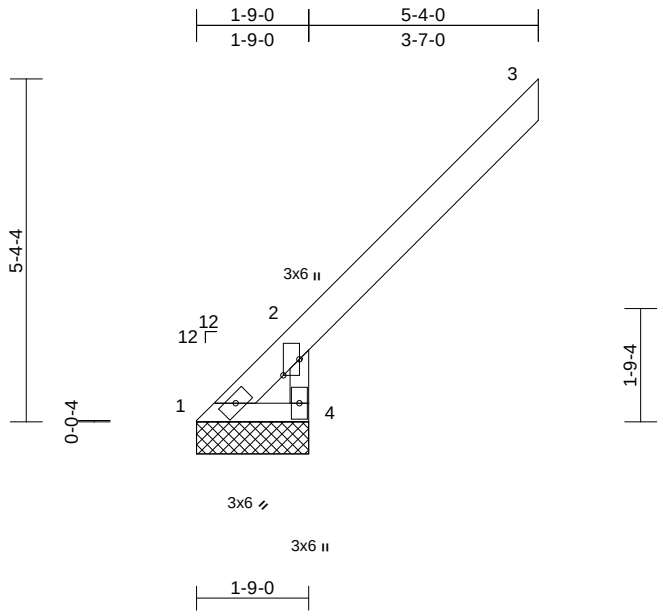

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Plate Offsets (X, Y): [2:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.50	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 21 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-9-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=1-9-0, 4=1-9-0
Max Horiz 1=148 (LC 12)
Max Uplift 1=-221 (LC 17), 4=-478 (LC 12)
Max Grav 1=384 (LC 12), 4=548 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-739/480, 2-3=-158/0, 2-4=-734/929
BOT CHORD 1-4=-186/321

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 5-4-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 221 lb uplift at joint 1 and 478 lb uplift at joint 4.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V02	Valley	1	1	I56098824
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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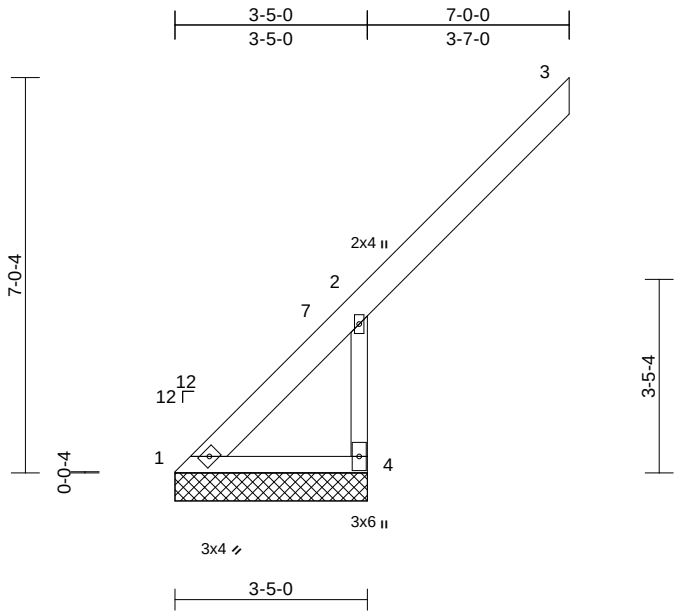

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.50	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 31 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-5-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-5-0, 4=3-5-0
Max Horiz 1=160 (LC 9)
Max Uplift 1=-36 (LC 10), 4=-359 (LC 12)
Max Grav 1=264 (LC 12), 4=482 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-521/376, 2-3=-158/0, 2-4=-573/611
BOT CHORD 1-4=-65/192

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-4 to 3-3-8, Interior (1) 3-3-8 to 7-0-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 6-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 36 lb uplift at joint 1 and 359 lb uplift at joint 4.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V03	Valley	1	1	I56098825
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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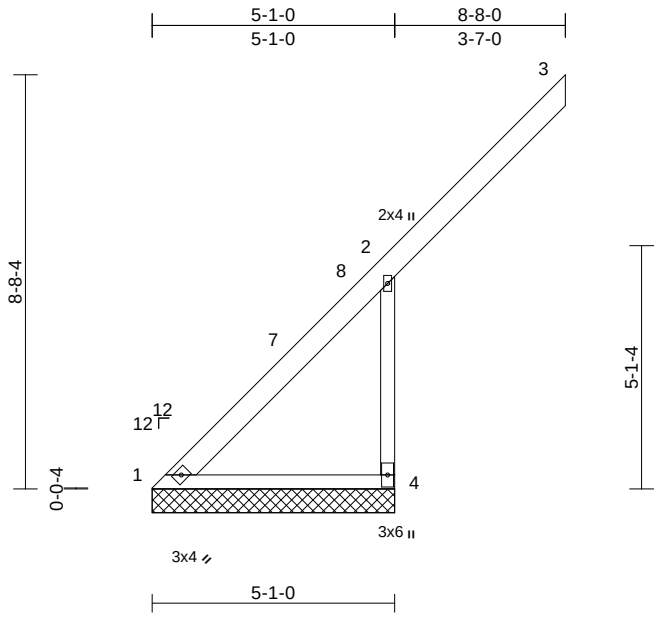

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.51	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 41 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-1-4 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-1-0, 4=5-1-0
Max Horiz 1=247 (LC 9)
Max Uplift 4=-324 (LC 12)
Max Grav 1=252 (LC 9), 4=526 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-428/405, 2-3=-158/0, 2-4=-592/527
BOT CHORD 1-4=-70/139

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 8-8-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 6-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 324 lb uplift at joint 4.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V04	Valley	1	1	I56098826
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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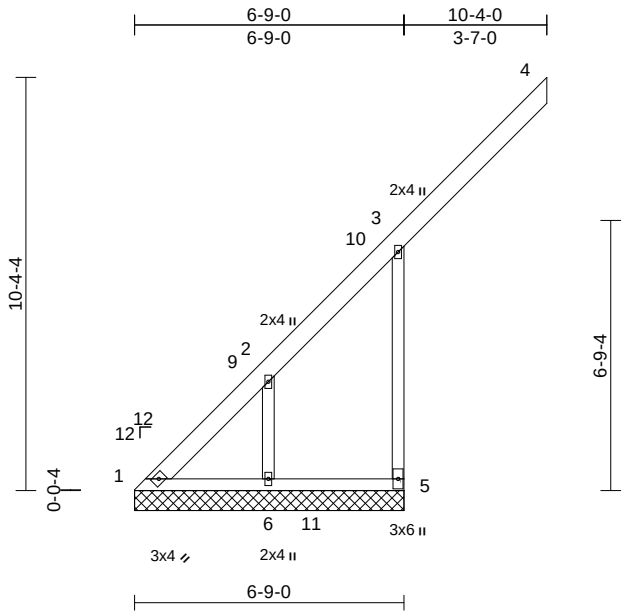

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.72	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.12	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 56 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied.

REACTIONS (size) 1=6-9-0, 5=6-9-0, 6=6-9-0
Max Horiz 1=297 (LC 9)
Max Uplift 1=-9 (LC 10), 5=-371 (LC 12)
Max Grav 1=202 (LC 9), 5=538 (LC 17), 6=192 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-436/410, 2-3=-422/418, 3-4=-158/0, 3-5=-593/546
BOT CHORD 1-6=-105/162, 5-6=-93/101
WEBS 2-6=-382/20

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 10-4-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 6-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 9 lb uplift at joint 1 and 371 lb uplift at joint 5.
8) 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.
9) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V05	Valley	1	1	I56098827
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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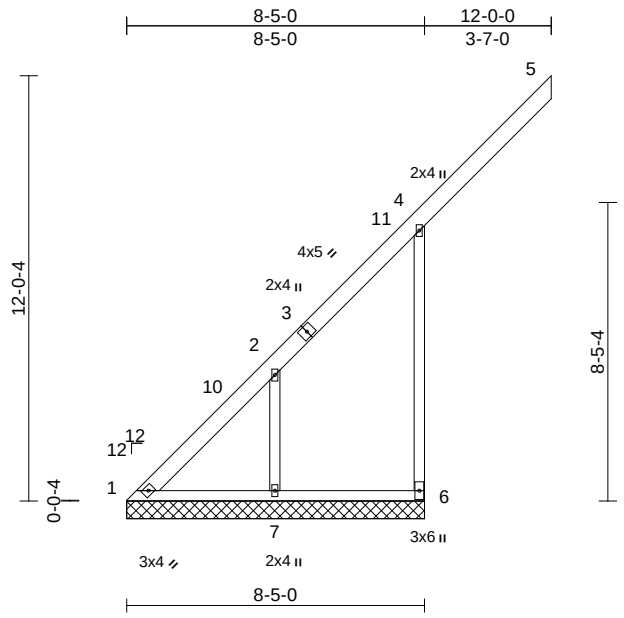

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.83	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 67 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.3

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) 1=8-5-0, 6=8-5-0, 7=8-5-0
Max Horiz 1=346 (LC 9)
Max Uplift 1=-15 (LC 10), 6=-346 (LC 9)
Max Grav 1=243 (LC 9), 6=552 (LC 17), 7=362 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-506/496, 2-4=-429/427, 4-5=-158/0, 4-6=-591/475
BOT CHORD 1-7=-119/191, 6-7=-115/125
WEBS 2-7=-437/67

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 12-0-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 6-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 346 lb uplift at joint 6 and 15 lb uplift at joint 1.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V06	Valley	1	1	I56098828
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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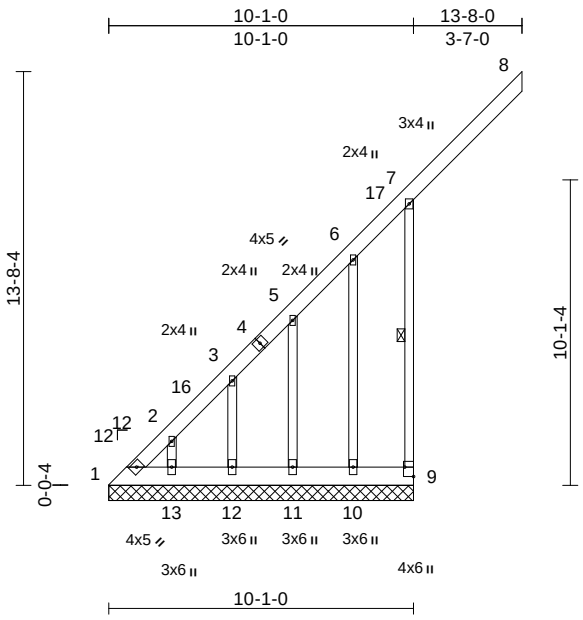

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Plate Offsets (X, Y): [9:Edge,0-3-8]

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	0.60	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	0.35	Horz(CT)	0.00	9	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 111 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x8 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.3

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.
WEBS 1 Row at midpt 7-9

REACTIONS (size) 1=10-1-0, 9=10-1-0, 10=10-1-0, 11=10-1-0, 12=10-1-0, 13=10-1-0
Max Horiz 1=394 (LC 9)
Max Uplift 1=-86 (LC 10), 9=-429 (LC 9), 10=-68 (LC 1), 11=-41 (LC 12), 12=-78 (LC 12)
Max Grav 1=283 (LC 9), 9=537 (LC 17), 10=177 (LC 12), 11=183 (LC 17), 12=174 (LC 17), 13=182 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-612/588, 2-3=-571/545, 3-5=-485/461, 5-6=-406/385, 6-7=-406/435, 7-8=-158/0, 7-9=-586/645
BOT CHORD 1-13=-167/187, 12-13=-131/150, 11-12=-132/151, 10-11=-132/151, 9-10=-133/150
WEBS 6-10=-359/115, 5-11=-159/109, 3-12=-159/106, 2-13=-121/62

NOTES

1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 13-8-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 429 lb uplift at joint 9, 86 lb uplift at joint 1, 68 lb uplift at joint 10, 41 lb uplift at joint 11 and 78 lb uplift at joint 12.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V07	Valley	1	1	I56098829
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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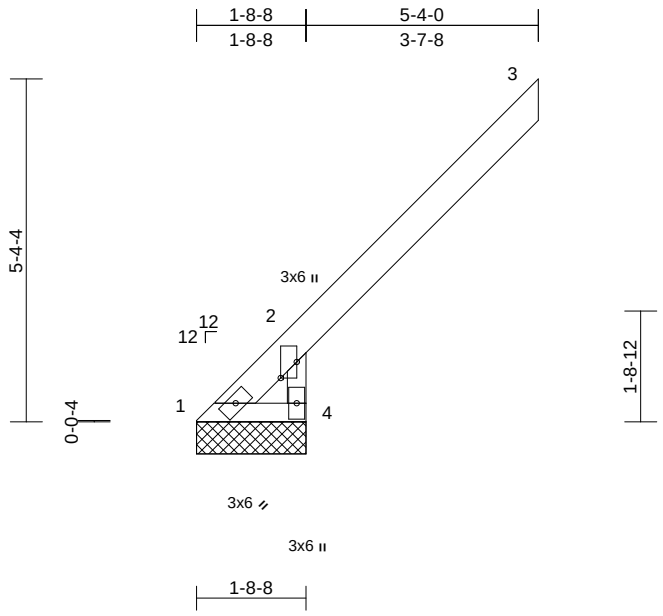

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Plate Offsets (X, Y): [2:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.22	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 20 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 1-8-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=1-8-8, 4=1-8-8
Max Horiz 1=149 (LC 12)
Max Uplift 1=-235 (LC 17), 4=-493 (LC 12)
Max Grav 1=398 (LC 12), 4=562 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-764/497, 2-3=-160/0, 2-4=-760/967
BOT CHORD 1-4=-197/334

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 0-0-4 to 3-0-4, Interior (1) 3-0-4 to 5-4-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 2-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 235 lb uplift at joint 1 and 493 lb uplift at joint 4.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V08	Valley	1	1	I56098830
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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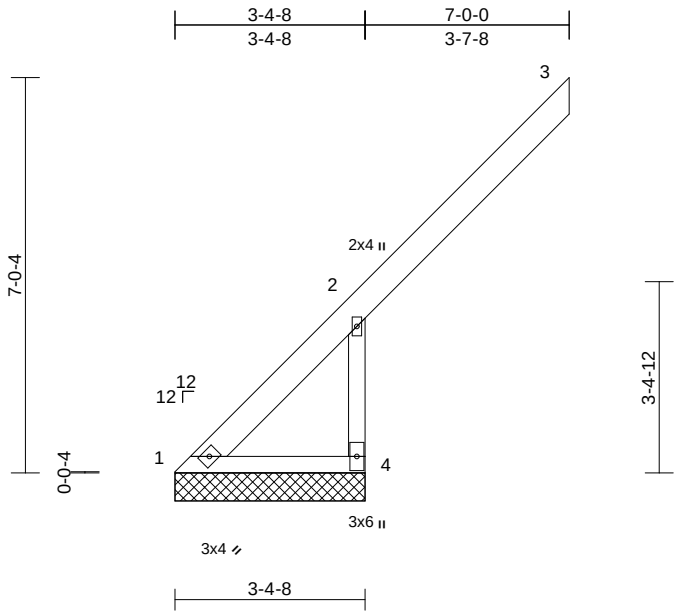

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.20	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 31 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 3-4-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=3-4-8, 4=3-4-8
Max Horiz 1=160 (LC 9)
Max Uplift 1=-42 (LC 17), 4=-366 (LC 12)
Max Grav 1=270 (LC 12), 4=488 (LC 1)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-518/396, 2-3=-160/0, 2-4=-590/613
BOT CHORD 1-4=-70/209

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) 0-0-4 to 3-3-0, Exterior (2) 3-3-0 to 7-0-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 6-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 42 lb uplift at joint 1 and 366 lb uplift at joint 4.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V09	Valley	1	1	I56098831
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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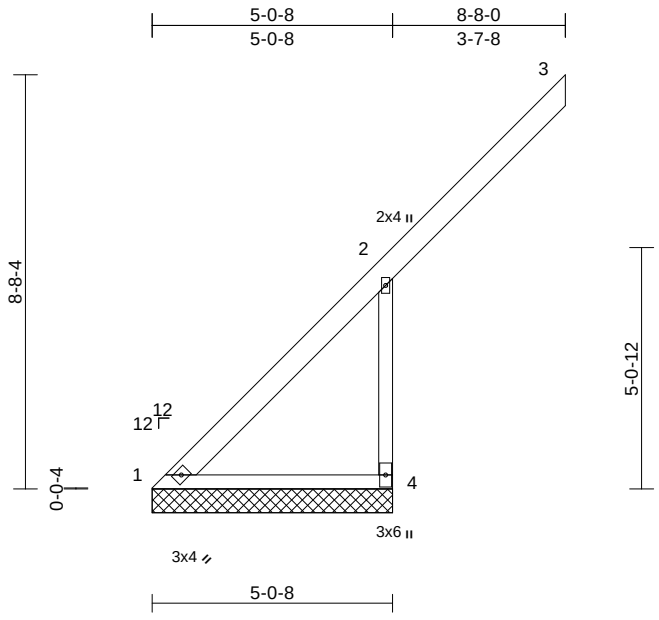

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.52	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.19	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 41 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3

BRACING
TOP CHORD Structural wood sheathing directly applied or 5-0-12 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (size) 1=5-0-8, 4=5-0-8
Max Horiz 1=247 (LC 9)
Max Uplift 4=-329 (LC 12)
Max Grav 1=255 (LC 9), 4=529 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-421/431, 2-3=-160/0, 2-4=-614/534
BOT CHORD 1-4=-69/150

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) 0-0-4 to 3-0-4, Exterior (2) 3-0-4 to 8-8-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 6-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 329 lb uplift at joint 4.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V10	Valley	1	1	I56098832
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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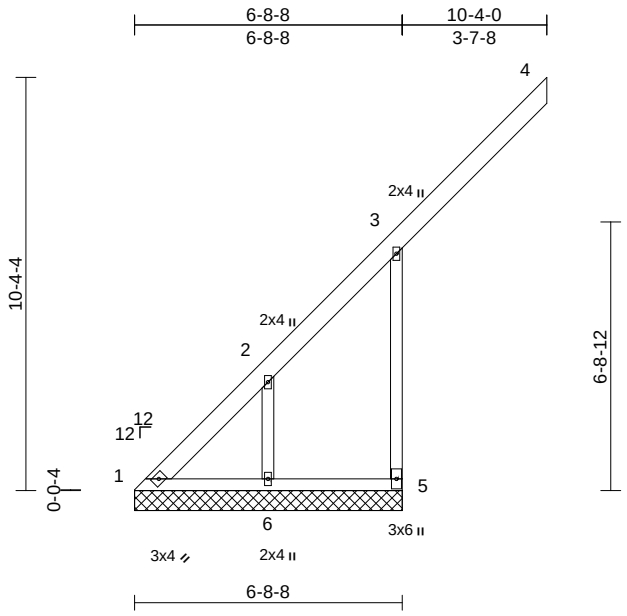

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Loading	(psf)	Spacing	2-0-0	CSI		DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.85	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.10	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.07	Horz(CT)	0.00	5	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 56 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
OTHERS 2x4 SP No.3

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) 1=6-8-8, 5=6-8-8, 6=6-8-8
Max Horiz 1=297 (LC 9)
Max Uplift 1=-8 (LC 10), 5=-379 (LC 12)
Max Grav 1=203 (LC 18), 5=505 (LC 17), 6=182 (LC 3)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-467/438, 2-3=-432/453, 3-4=-160/0, 3-5=-623/552
BOT CHORD 1-6=-114/184, 5-6=-93/122
WEBS 2-6=-384/22

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) 0-0-4 to 3-0-4, Exterior (2) 3-0-4 to 10-4-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 6-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 1 and 379 lb uplift at joint 5.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V11	Valley	1	1	I56098833
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

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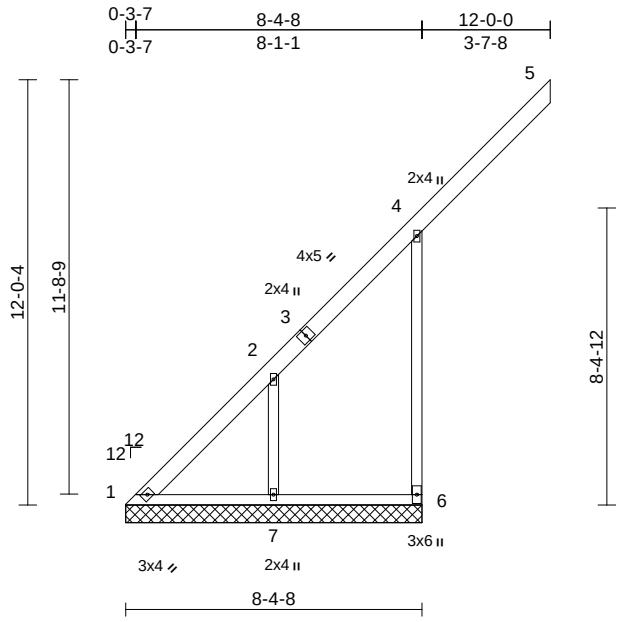

Scale = 1:65.1

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	0.99	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.21	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.12	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 67 lb	FT = 20%

LUMBER
TOP CHORD 2x6 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.2
OTHERS 2x4 SP No.3

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) 1=8-4-8, 6=8-4-8, 7=8-4-8
Max Horiz 1=346 (LC 9)
Max Uplift 1=-15 (LC 10), 6=-351 (LC 9)
Max Grav 1=243 (LC 9), 6=557 (LC 17), 7=355 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-2=-547/524, 2-4=-439/465, 4-5=-160/0, 4-6=-621/479
BOT CHORD 1-7=-129/213, 6-7=-114/149
WEBS 2-7=-437/110

NOTES
1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) 0-0-4 to 3-0-4, Exterior (2) 3-0-4 to 12-0-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 6-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 351 lb uplift at joint 6 and 15 lb uplift at joint 1.
8) 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.

LOAD CASE(S) Standard

January 11,2023

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

Job	Truss	Truss Type	Qty	Ply	Garman Homes-Wisteria A & B WUA
GHWISAR WUA	V12	Valley	1	1	I56098834
					Job Reference (optional)

Carolina Structural Systems (Star, NC)), Ether, NC - 27247,

Run: 8.63 S Nov 19 2022 Print: 8.630 S Nov 19 2022 MiTek Industries, Inc. Wed Jan 11 15:35:28 Page: 1
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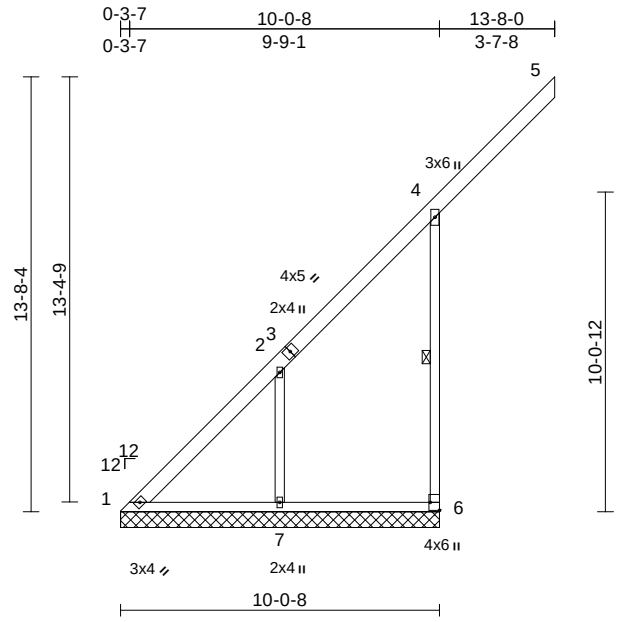

Scale = 1:72.5

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

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	0.73	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.30	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.00	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MS							Weight: 79 lb	FT = 20%

LUMBER

TOP CHORD	2x6 SP No.2
BOT CHORD	2x4 SP No.2
WEBS	2x4 SP No.2
OTHERS	2x4 SP No.3

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.
WEBS	1 Row at midpt 4-6

REACTIONS (size) 1=10-0-8, 6=10-0-8, 7=10-0-8
Max Horiz 1=396 (LC 9)
Max Uplift 1=-24 (LC 10), 6=-339 (LC 9)
Max Grav 1=291 (LC 9), 6=575 (LC 17), 7=491 (LC 17)

FORCES (lb) - Maximum Compression/Maximum Tension

TOP CHORD	1-2=-639/630, 2-4=-447/464, 4-5=-160/0, 4-6=-596/463
BOT CHORD	1-7=-133/224, 6-7=-126/174
WEBS	2-7=-438/223

NOTES

1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=25ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) 0-0-4 to 3-0-4, Exterior (2) 3-0-4 to 13-8-4 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
2) 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.
3) Gable requires continuous bottom chord bearing.
4) Gable studs spaced at 6-0-0 oc.
5) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
6) * 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, with BCDL = 10.0psf.
7) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 339 lb uplift at joint 6 and 24 lb uplift at joint 1.
8) 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.

LOAD CASE(S) Standard

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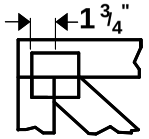
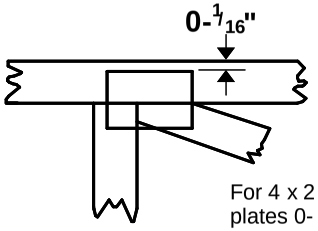
Symbols

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.

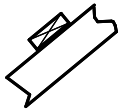
*** Plate location details available in MiTek 20/20 software or upon request.**

PLATE SIZE

4 x 4

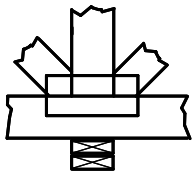
The first dimension is the plate width measured perpendicular to slots. Second dimension is the length parallel to slots.

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

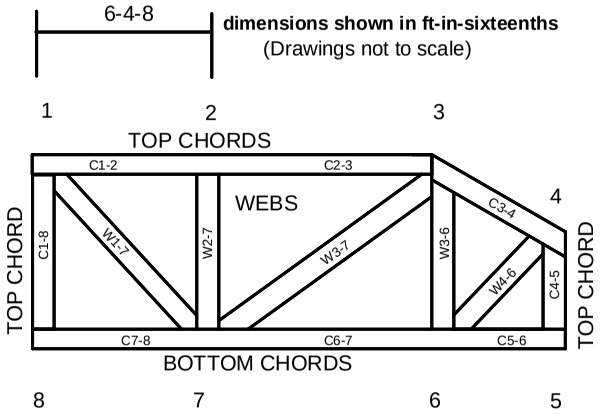


Indicates location where bearings (supports) occur. Icons vary but reaction section indicates joint number where bearings occur. Min size shown is for crushing only.

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 BY TRENCO
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MiTek Engineering Reference Sheet: MII-7473 rev. 5/19/2020

General Safety Notes

Failure to Follow Could Cause Property Damage or Personal Injury

1. Additional stability bracing for truss system, e.g. diagonal or X-bracing, is always required. See BCSI.
2. Truss bracing must be designed by an engineer. For wide truss spacing, individual lateral braces themselves may require bracing, or alternative Tor I bracing should be considered.
3. Never exceed the design loading shown and never stack materials on inadequately braced trusses.
4. Provide copies of this truss design to the building designer, erection supervisor, property owner and all other interested parties.
5. Cut members to bear tightly against each other.
6. Place plates on each face of truss at each joint and embed fully. Knots and wane at joint locations are regulated by ANSI/TPI 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TPI 1.
8. Unless otherwise noted, moisture content of lumber shall not exceed 19% at time of fabrication.
9. Unless expressly noted, this design is not applicable for use with fire retardant, preservative treated, or green lumber.
10. Camber is a non-structural consideration and is the responsibility of truss fabricator. General practice is to camber for dead load deflection.
11. Plate type, size, orientation and location dimensions indicated are minimum plating requirements.
12. Lumber used shall be of the species and size, and in all respects, equal to or better than that specified.
13. Top chords must be sheathed or purlins provided at spacing indicated on design.
14. Bottom chords require lateral bracing at 10 ft. spacing, or less, if no ceiling is installed, unless otherwise noted.
15. Connections not shown are the responsibility of others.
16. Do not cut or alter truss member or plate without prior approval of an engineer.
17. Install and load vertically unless indicated otherwise.
18. Use of green or treated lumber may pose unacceptable environmental, health or performance risks. Consult with project engineer before use.
19. Review all portions of this design (front, back, words and pictures) before use. Reviewing pictures alone is not sufficient.
20. Design assumes manufacture in accordance with ANSI/TPI 1 Quality Criteria.
21. The design does not take into account any dynamic or other loads other than those expressly stated.