

Products				
PlotID	Length	Product	Plies	Net Qty
DB13	13-00-00	1-3/4X11-7/8 LP-LVL 2900Fb-2.0E	2	2
FB7	8-00-00	1-3/4X14 LP-LVL 2900Fb-2.0E	2	2
FB4	4-00-00	1-3/4X14 LP-LVL 2900Fb-2.0E	2	2

Connector Summary		
Qty	Manuf	Product
2	Simpson	LUS410

Truss Connector Total List		
Manuf	Product	Qty
Simpson	LUS410	2

EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING.
SHEATHING IS FLUSH TO FACE OF FOUNDATION

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY

These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult "Bracing of Wood Trusses" available from the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53179.

SHOP DRAWING APPROVAL

THIS LAYOUT IS THE SOLE SOURCE FOR FABRICATION OF TRUSSES AND VOIDS ALL PREVIOUS ARCHITECTURAL OR OTHER TRUSS LAYOUTS. REVIEW AND APPROVAL OF THIS LAYOUT MUST BE RECEIVED BEFORE ANY TRUSSES WILL BE BUILT. VERIFY ALL CONDITIONS TO INSURE AGAINST CHANGES THAT WILL RESULT IN EXTRA CHARGES TO YOU.

APPROVED BY: _____ DATE: _____
REVIEWED BY: _____



Carolina Structural Systems
Roof Trusses • Floor Trusses • EWP
Carolina Structural Systems
P.O. Box 157, Ether, NC 27247
225 Frame Shop Rd., Star, NC 27356
910-491-9004

Job #:	GHBTAF BUTTERCUP A	Plan:	FLOOR GARAGE RIGHT
Customer:	GARMAN HOMES	Date:	2/1/2023
Site Address:		Sales Rep:	RW
City, ST, ZIP:		Designer:	JSP
		Roof Area:	1606.8 SF

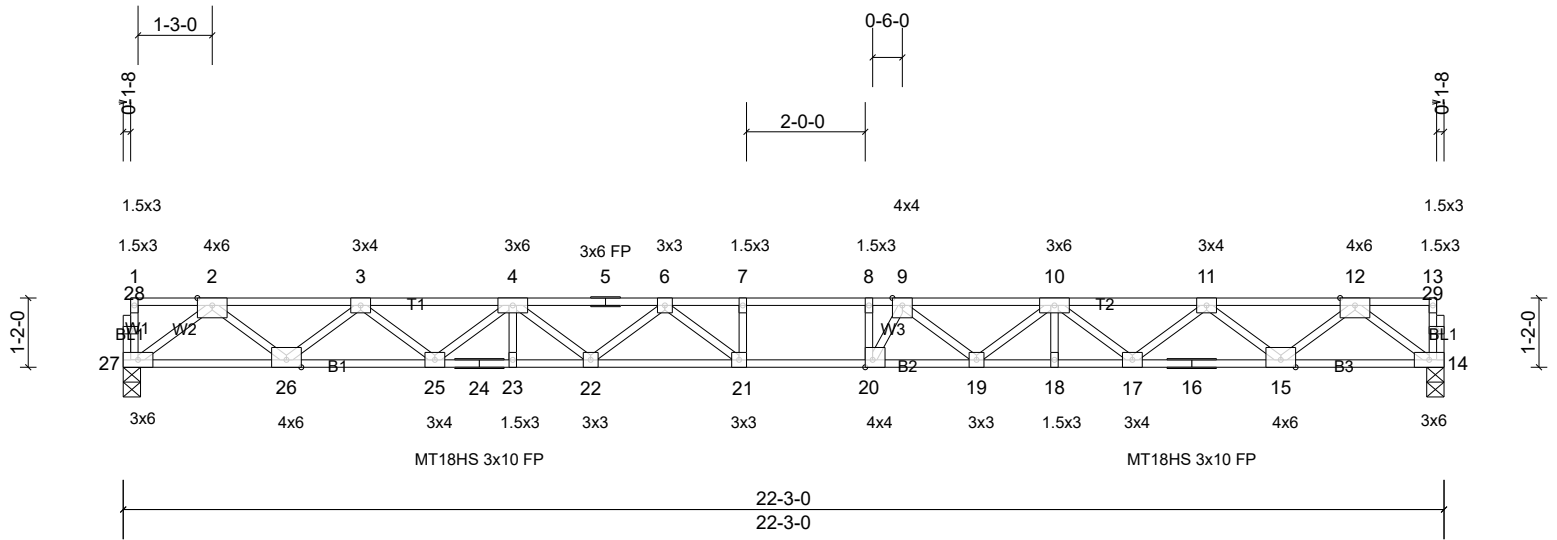
Job	Truss	Truss Type	Qty	Ply	Garman Homes - Buttercup A & B
GHBUTA	F201	Floor	25	1	Job Reference (optional)

Carolina Structural Systems, Star, NC 27356, user

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Page: 1

ID:6hrZbee3eAlhDJ_EAqc0V1zFPt8-q_oSmFzKnzqKVP71zK2f7ssKCPmUXVsYmkFzReyJL_1



Scale = 1:38.8

Plate Offsets (X, Y): [20:0-1-8,Edge]

Loading	(psf)	Spacing	1-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.31	21	>838	480	MT18HS	244/190	
TCDL	10.0	Lumber DOL	1.00	BC	Vert(CT)	-0.43	21	>608	240	MT20	244/190	
BCLL	0.0	Rep Stress Incr	YES	WB	Horz(CT)	0.07	14	n/a	n/a			
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S								
											Weight: 112 lb	FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP DSS(flat)
 BOT CHORD 2x4 SP No.1(flat) *Except* B3:2x4 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 (lb/size) 14=602/0-3-8, (min. 0-1-8),
 27=602/0-3-8, (min. 0-1-8)

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

TOP CHORD 2-3=-1324/0, 3-4=-2262/0, 4-5=-2890/0,
 5-6=-2890/0, 6-7=-3162/0, 7-8=-3162/0,
 8-9=-3162/0, 9-10=-2885/0, 10-11=-2262/0,
 11-12=-1324/0
 BOT CHORD 26-27=0/761, 25-26=0/1870, 24-25=0/2657,
 23-24=0/2657, 22-23=0/2657, 21-22=0/3090,
 20-21=0/3162, 19-20=0/3096, 18-19=0/2659,
 17-18=0/2659, 16-17=0/1870, 15-16=0/1870,
 14-15=0/761
 WEBS 12-14=-953/0, 2-27=-953/0, 12-15=0/733,
 2-26=0/733, 11-15=-711/0, 3-26=-711/0,
 11-17=0/510, 3-25=0/510, 10-17=-507/0,
 4-25=-504/0, 10-19=0/288, 4-22=0/298,
 9-19=-327/0, 6-22=-273/0, 6-21=-140/341,
 8-20=-289/96, 9-20=-156/415

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are MT20 plates unless otherwise indicated.
- 3) All plates are 1.5x3 MT20 unless otherwise indicated.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Required 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

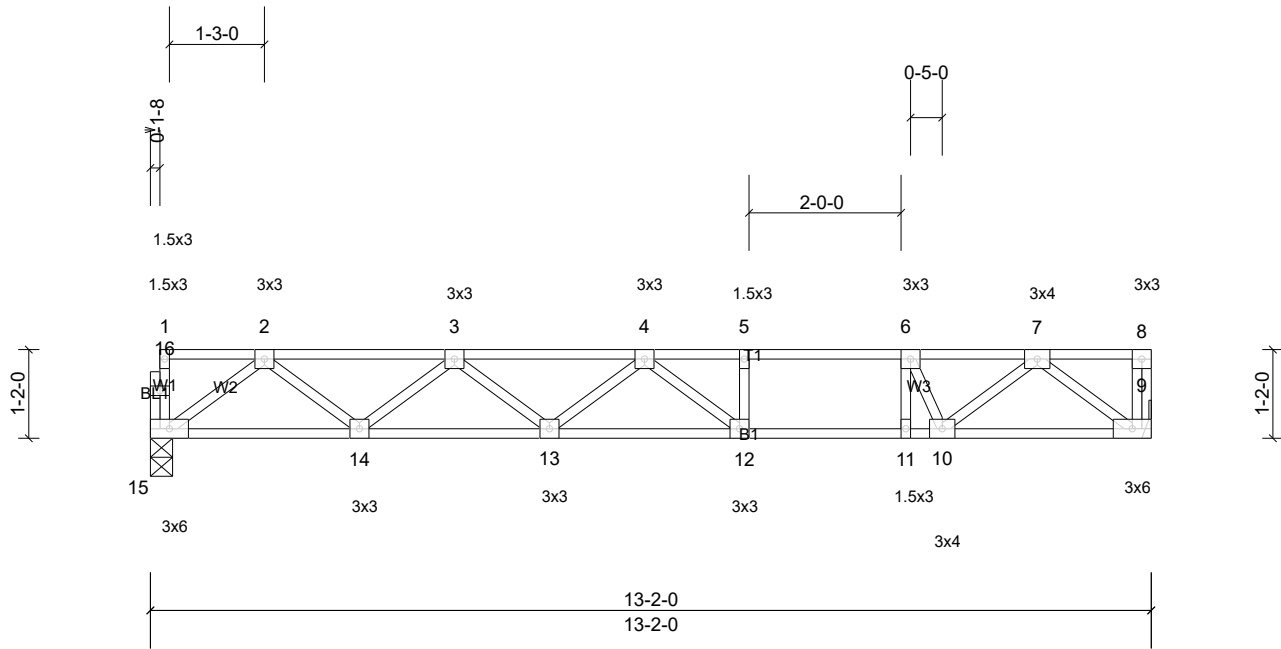
Job	Truss	Truss Type	Qty	Ply	Garman Homes - Buttercup A & B
GHBUTA	F202	Floor	2	1	Job Reference (optional)

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Page: 1

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Scale = 1:30.3

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.81	Vert(LL)	-0.19	12-13	>833	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.97	Vert(CT)	-0.25	12-13	>610	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.33	Horz(CT)	0.02	9	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 67 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 2-2-0 oc bracing: 11-12.

REACTIONS (lb/size) 9=568/ Mechanical, (min. 0-1-8),
 15=563/0-3-8, (min. 0-1-8)

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

TOP CHORD 2-3=-1109/0, 3-4=-1687/0, 4-5=-1527/0,
 5-6=-1527/0, 6-7=-1190/0

BOT CHORD 14-15=0/690, 13-14=0/1519, 12-13=0/1761,
 11-12=0/1527, 10-11=0/1527, 9-10=0/650

WEBS 7-9=-816/0, 2-15=-864/0, 2-14=0/546,
 3-14=-534/0, 4-12=-365/57, 6-11=0/468,
 7-10=0/703, 6-10=-835/0

NOTES

- 1) Unbalanced floor live loads have been considered for this design.
- 2) All plates are 3x3 MT20 unless otherwise indicated.
- 3) Refer to girder(s) for truss to truss connections.
- 4) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSI/TPI 1.
- 5) Recommend 2x6 strongbacks, on edge, spaced at 10-00-00 oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.
- 6) CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

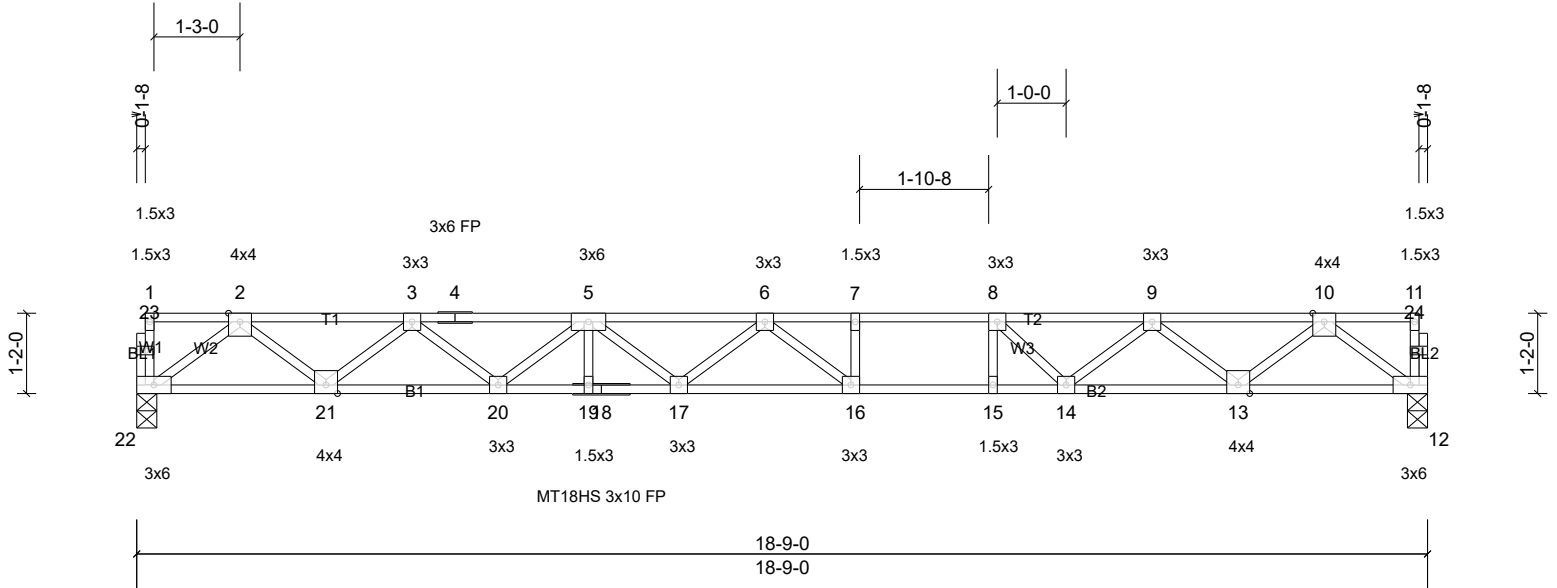
Job GHBUTA	Truss F203	Truss Type Floor	Qty 3	Ply 1	Garman Homes - Buttercup A & B Job Reference (optional)
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Page: 1

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Scale = 1:33.5

Loading	(psf)	Spacing	1-7-3	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP
TCLL	40.0	Plate Grip DOL	1.00	TC	0.75	Vert(LL)	-0.33	16-17	>667	480	MT18HS 244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.94	Vert(CT)	-0.46	16-17	>483	240	MT20 244/190
BCLL	0.0	Rep Stress Incr	YES	WB	0.44	Horz(CT)	0.06	12	n/a	n/a	
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 94 lb FT = 20%F, 11%E

LUMBER

TOP CHORD 2x4 SP No.2(flat) *Except* T2:2x4 SP No.1 (flat)
 BOT CHORD 2x4 SP No.2(flat) *Except* B2:2x4 SP DSS (flat)
 WEBS 2x4 SP No.3(flat)
 OTHERS 2x4 SP No.3(flat) *Except* BL2:2x4 SP No.2 (flat)

BRACING

TOP CHORD Structural wood sheathing directly applied or 5-6-13 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing, Except:
 2-2-0 oc bracing: 19-20,17-19.

REACTIONS (lb/size) 12=808/0-3-8, (min. 0-1-8),
 22=808/0-3-8, (min. 0-1-8)

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

TOP CHORD 2-3=-1731/0, 3-4=-2862/0, 4-5=-2862/0,
 5-6=-3508/0, 6-7=-3402/0, 7-8=-3402/0,
 8-9=-2878/0, 9-10=-1729/0
 BOT CHORD 21-22=0/1015, 20-21=0/2422, 19-20=0/3296,
 18-19=0/3296, 17-18=0/3296, 16-17=0/3608,
 15-16=0/3402, 14-15=0/3402, 13-14=0/2394,
 12-13=0/1024
 WEBS 10-12=-1282/0, 2-22=-1271/0, 10-13=0/918,
 2-21=0/933, 9-13=-866/0, 3-21=-899/0,
 9-14=0/653, 3-20=0/574, 5-20=-553/0,
 8-15=-3/313, 8-14=-833/0, 5-17=0/272,
 6-16=-445/200

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.

LOAD CASE(S) Standard

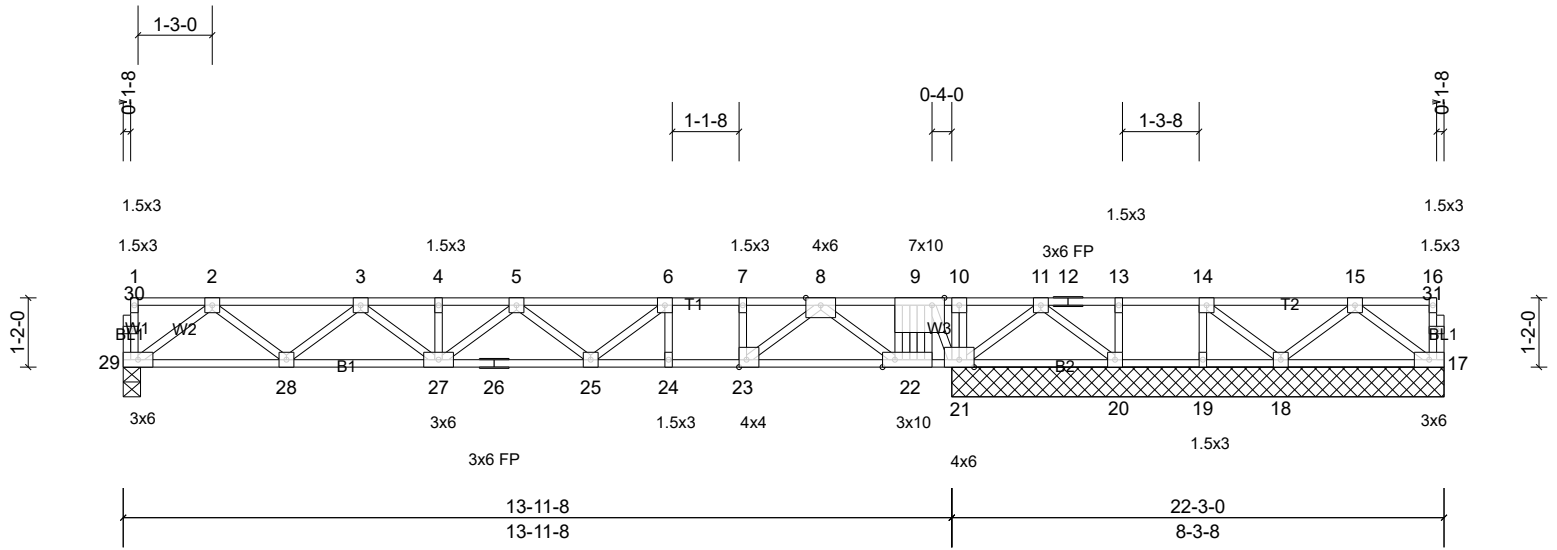
Job	Truss	Truss Type	Qty	Ply	Garman Homes - Buttercup A & B
GHBUTA	F205	Floor Girder	1	1	Job Reference (optional)

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Page: 1

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Scale = 1:38.8

Plate Offsets (X, Y): [9:0-2-8,Edge], [22:0-2-8,Edge], [23:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL	40.0	Plate Grip DOL	1.00	TC	0.87	Vert(LL)	-0.16	24-25	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.22	24-25	>754	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.02	21	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S								
											Weight: 121 lb	FT = 20%F, 11%E

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* B2:2x4 SP No.1 (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.2(flat)

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

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

REACTIONS All bearings 8-3-8, except 29=0-3-8
(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) except 20=-261 (LC 1)
Max Grav All reactions 250 (lb) or less at joint (s) 17, 18, 20 except 19=258 (LC 1), 21=1470 (LC 1), 29=666 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1297/0, 3-4=-1901/0, 4-5=-1901/0, 5-6=-1778/0, 6-7=-1284/0, 7-8=-1284/0, 8-9=0/659, 9-10=0/1267, 10-11=0/1269
BOT CHORD 28-29=0/819, 27-28=0/1736, 26-27=0/2036, 25-26=0/2036, 24-25=0/1284, 23-24=0/1284, 22-23=0/379, 21-22=-710/0, 20-21=-600/0
WEBS 2-29=-1025/0, 2-28=0/622, 3-28=-571/0, 11-21=-844/0, 15-18=-253/0, 11-20=0/600, 9-22=0/611, 8-22=-1262/0, 8-23=0/1155, 5-25=-363/0, 9-21=-949/0, 6-25=0/671, 6-24=-376/0, 7-23=-416/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 3x3 MT20 unless otherwise indicated.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 260 lb uplift at joint 20.
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.

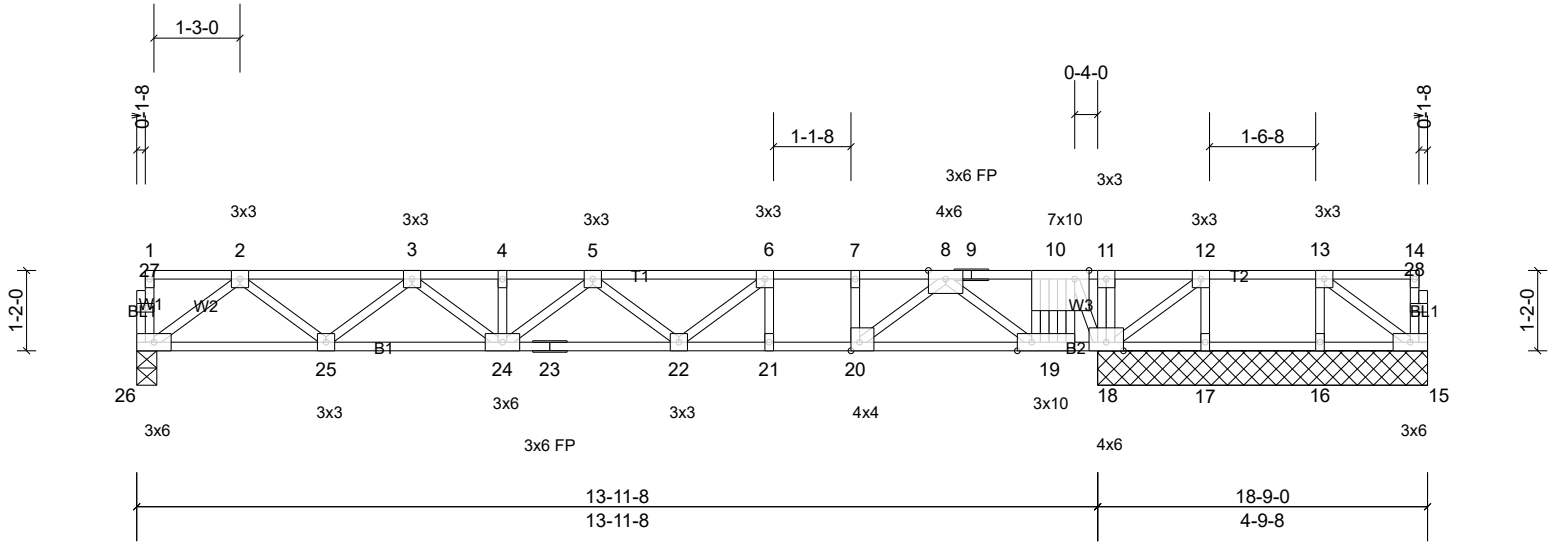
Job	Truss	Truss Type	Qty	Ply	Garman Homes - Buttercup A & B
GHBUTA	F206	Floor Girder	1	1	Job Reference (optional)

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Page: 1

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Scale = 1:33.5

Plate Offsets (X, Y): [10:0-2-8,Edge], [19:0-2-8,Edge], [20:0-1-8,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP		
TCLL	40.0	Plate Grip DOL	1.00	TC	0.86	Vert(LL)	-0.16	21-22	>999	480	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.96	Vert(CT)	-0.22	21-22	>752	240		
BCLL	0.0	Rep Stress Incr	YES	WB	0.55	Horz(CT)	0.02	18	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S								
										Weight: 103 lb	FT = 20%F, 11%E	

LUMBER
TOP CHORD 2x4 SP No.2(flat)
BOT CHORD 2x4 SP No.2(flat) *Except* B2:2x4 SP No.1 (flat)
WEBS 2x4 SP No.3(flat)
OTHERS 2x4 SP No.2(flat)

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

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

REACTIONS All bearings 4-9-8, except 26=0-3-8
(lb) - Max Uplift All uplift 100 (lb) or less at joint(s) except 15=-173 (LC 1), 17=-508 (LC 1)
Max Grav All reactions 250 (lb) or less at joint (s) 15, 17 except 16=422 (LC 1), 18=1611 (LC 1), 26=670 (LC 1)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-1308/0, 3-4=-1924/0, 4-5=-1924/0, 5-6=-1813/0, 6-7=-1327/0, 7-8=-1327/0, 8-9=0/601, 9-10=0/601, 10-11=0/1199, 11-12=0/1201, 12-13=0/313
BOT CHORD 25-26=0/825, 24-25=0/1753, 23-24=0/2064, 22-23=0/2064, 21-22=0/1327, 20-21=0/1327, 19-20=0/431, 18-19=-651/0, 17-18=-313/0, 16-17=-313/0, 15-16=-313/0
WEBS 2-26=-1033/0, 2-25=0/629, 3-25=-579/0, 13-15=0/390, 12-18=-1103/0, 12-17=0/498, 13-16=-398/0, 10-19=0/601, 10-18=-933/0, 8-19=-1254/0, 8-20=0/1145, 5-22=-356/0, 6-22=0/662, 6-21=-373/0, 7-20=-412/0

NOTES
1) Unbalanced floor live loads have been considered for this design.
2) All plates are 1.5x3 MT20 unless otherwise indicated.
3) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 172 lb uplift at joint 15 and 507 lb uplift at joint 17.
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.

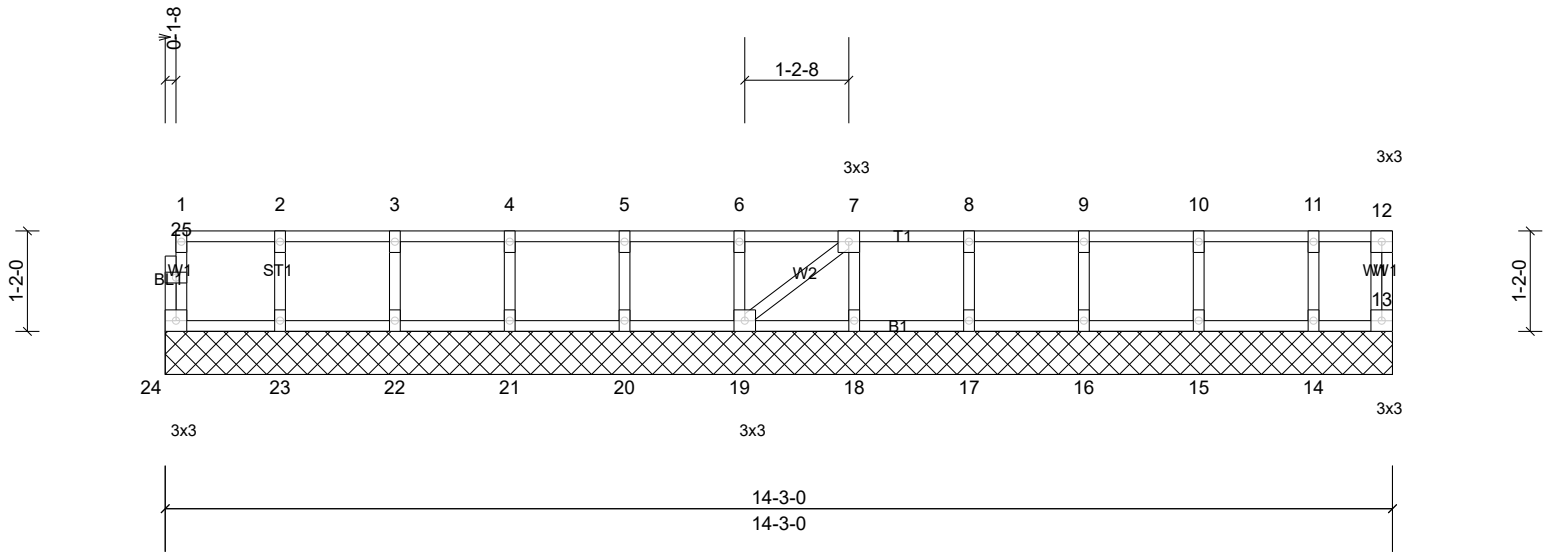
Job GHBUTA	Truss K201	Truss Type Floor Supported Gable	Qty 1	Ply 1	Garman Homes - Buttercup A & B Job Reference (optional)
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Page: 1

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Scale = 1:26.8

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	0.07	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	NO	WB	0.03	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 63 lb	FT = 20%F, 11%E

LUMBER

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

BRACING

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

REACTIONS All bearings 14-3-0.

(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24

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

NOTES

- All plates are 1.5x3 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1-4-0 oc.
- 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.
- 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.
- CAUTION, Do not erect truss backwards.

LOAD CASE(S) Standard

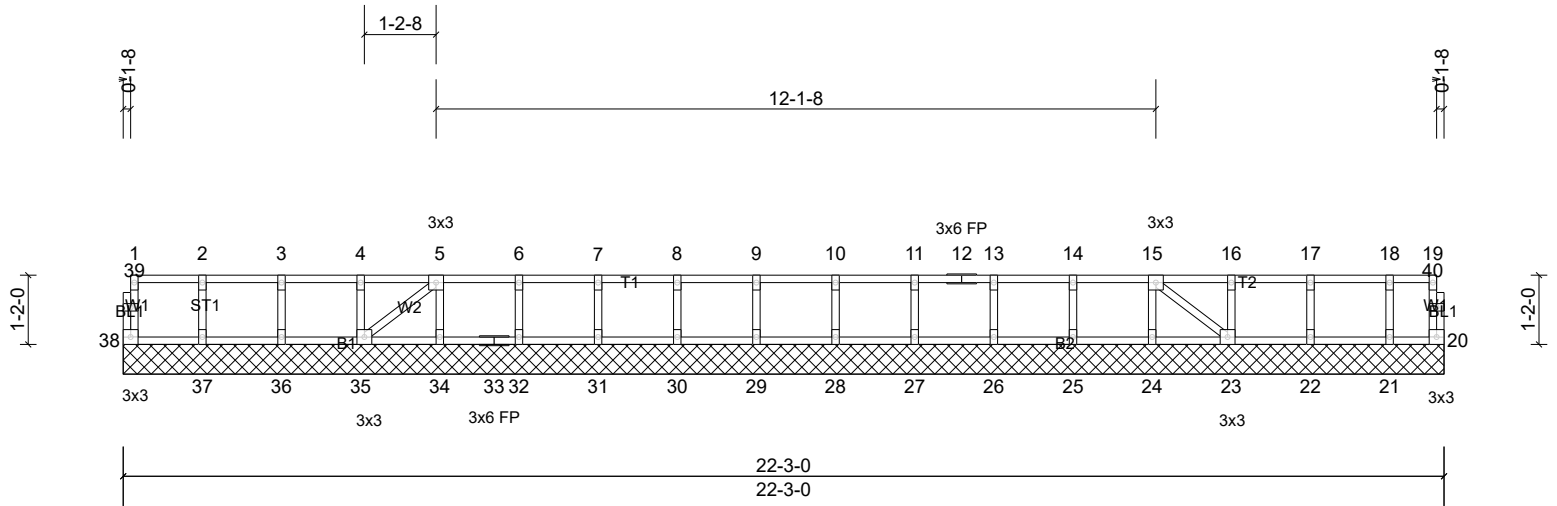
Job	Truss	Truss Type	Qty	Ply	Garman Homes - Buttercup A & B
GHBUTA	K203	Floor Supported Gable	1	1	Job Reference (optional)

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Run: 8.42 S Feb 10 2021 Print: 8.420 S Feb 10 2021 MiTek Industries, Inc. Mon Nov 14 11:44:47

Page: 1

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Scale = 1:38.8

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	l/defl	L/d	PLATES	GRIP	
TCLL	40.0	Plate Grip DOL	1.00	TC	0.08	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.00	BC	0.01	Vert(TL)	n/a	-	n/a	999		
BCLL	0.0	Rep Stress Incr	YES	WB	0.03	Horiz(TL)	n/a	-	n/a	n/a		
BCDL	5.0	Code	IRC2015/TPI2014	Matrix-S							Weight: 97 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" oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 10'-0" oc bracing.

REACTIONS All bearings 22'-3"-0.

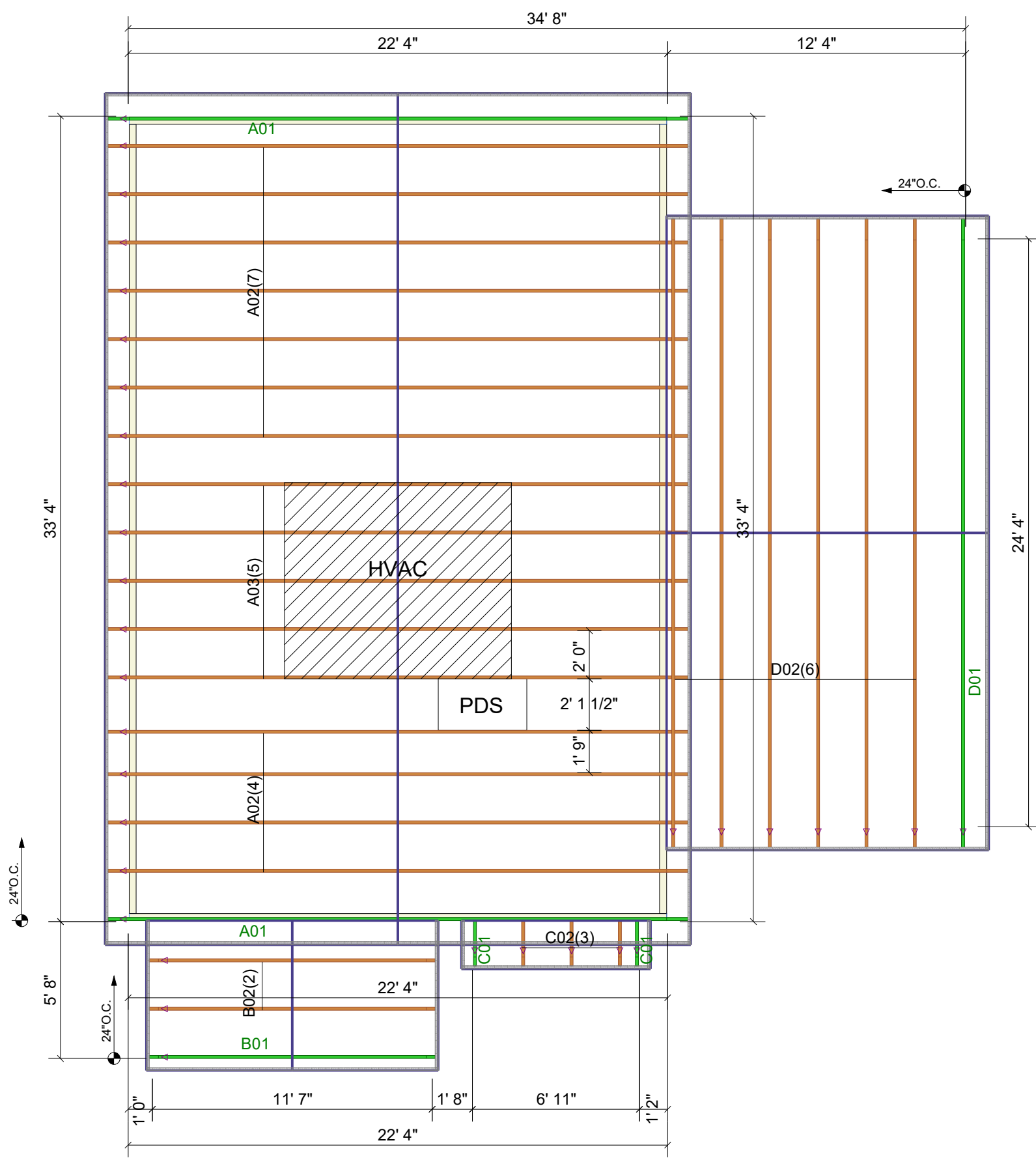
(lb) - Max Grav All reactions 250 (lb) or less at joint (s) 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 34, 35, 36, 37, 38

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

NOTES

- All plates are 1.5x3 MT20 unless otherwise indicated.
- Gable requires continuous bottom chord bearing.
- Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
- Gable studs spaced at 1'-4" oc.
- 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.
- Recommend 2x6 strongbacks, on edge, spaced at 10'-0" oc and fastened to each truss with 3-10d (0.131" X 3") nails. Strongbacks to be attached to walls at their outer ends or restrained by other means.

LOAD CASE(S) Standard



Truss Connector Total List		
Manuf	Product	Qty
	H2.5A	49

EXTERIOR DIMENSIONS ARE TO FACE OF SHEATHING.
SHEATHING IS FLUSH TO FACE OF FOUNDATION

THIS IS A TRUSS PLACEMENT DIAGRAM ONLY

These trusses are designed as individual building components to be incorporated into the building design at the specification of the building designer. See individual design sheets for each truss design identified on the placement drawing. The building designer is responsible for temporary and permanent bracing of the roof and floor system and for the overall structure. The design of the truss support structure including headers, beams, walls, and columns is the responsibility of the building designer. For general guidance regarding bracing, consult "Bracing of Wood Trusses" available from the Truss Plate Institute, 583 D'Onofrio Drive, Madison, WI 53179.

SHOP DRAWING APPROVAL

THIS LAYOUT IS THE SOLE SOURCE FOR FABRICATION OF TRUSSES AND VOIDS ALL PREVIOUS ARCHITECTURAL OR OTHER TRUSS LAYOUTS. REVIEW AND APPROVAL OF THIS LAYOUT MUST BE RECEIVED BEFORE ANY TRUSSES WILL BE BUILT. VERIFY ALL CONDITIONS TO INSURE AGAINST CHANGES THAT WILL RESULT IN EXTRA CHARGES TO YOU.

APPROVED BY: _____
 REVIEWED BY: _____
 DATE: _____



Carolina Structural Systems
 Roof Trusses • Floor Trusses • EWP
Carolina Structural Systems
 P.O. Box 157, Ether, NC 27247
 225 Frame Shop Rd., Star, NC 27356
 910-491-9004

Plan: ROOF GARAGE RIGHT	Roof Area: 1603.44 SF
Date: 10/6/2022	
Sales Rep: RW	
Designer: JSP	

Job #: GHBTAR BUTTERCUP A	
Customer: GARMAN HOMES	
Site Address:	
City, ST, ZIP:	

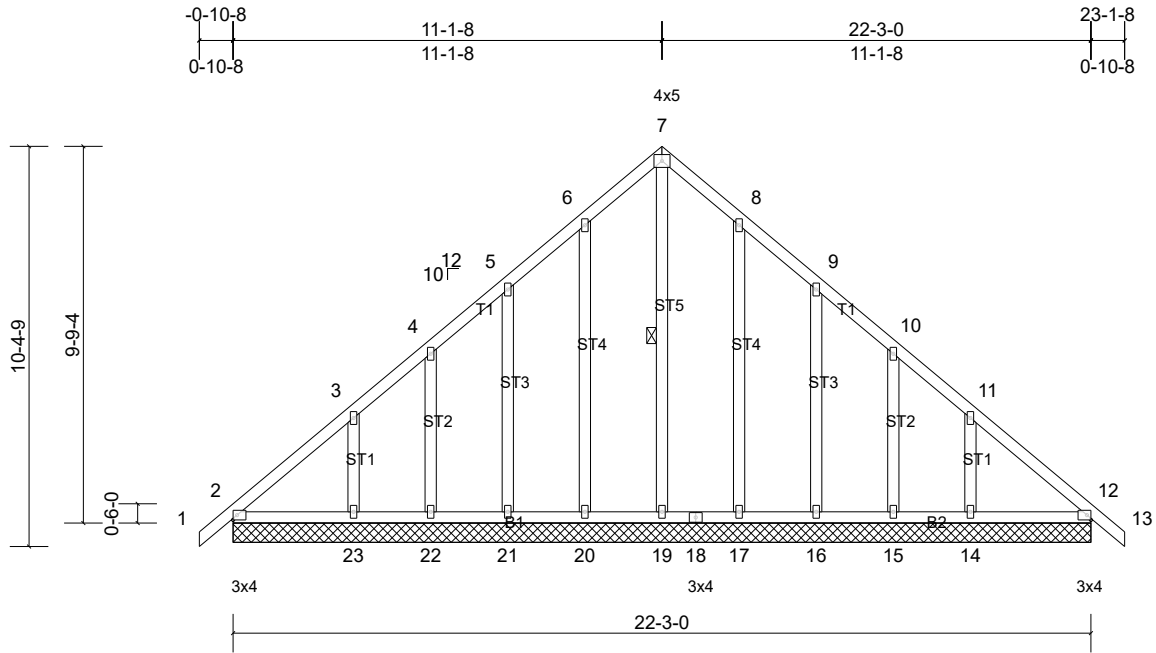
Job GHBUTA	Truss A01	Truss Type Common Supported Gable	Qty 2	Ply 1	Garman Homes - Buttercup A & B Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Page: 1

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Scale = 1:59.8

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.17	Horz(CT)	0.01	12	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 154 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.
WEBS 1 Row at midpt 7-19

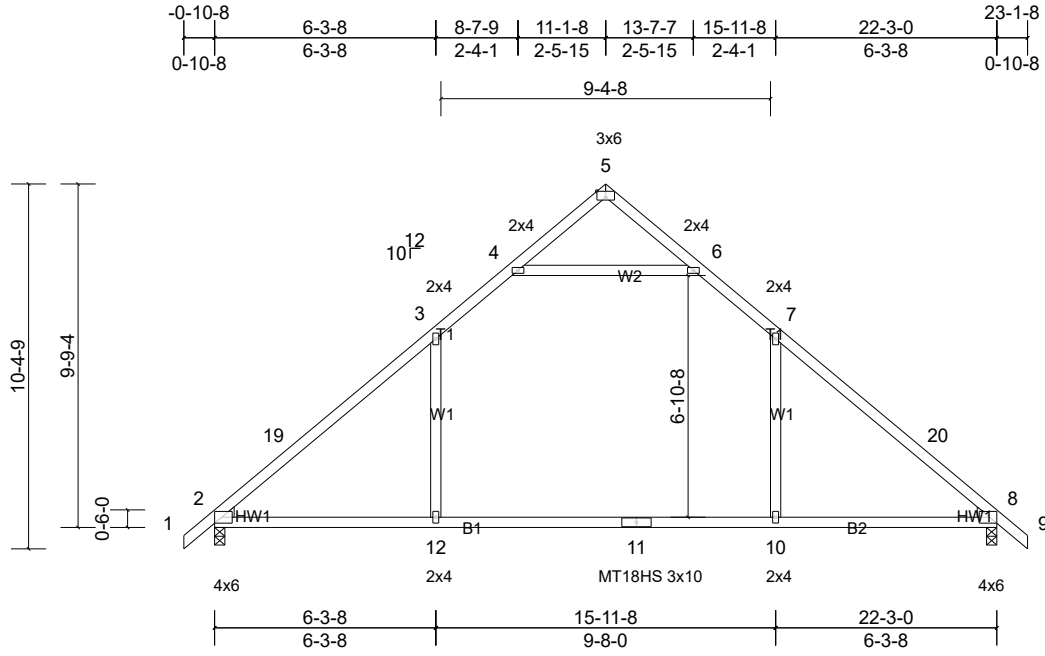
REACTIONS All bearings 22-3-0.
(lb) - Max Horiz 2=-188 (LC 10), 24=-188 (LC 10)
Max Uplift All uplift 100 (lb) or less at joint(s)
2, 14, 15, 16, 17, 20, 21, 22, 23, 24
Max Grav All reactions 250 (lb) or less at joint
(s) 2, 15, 16, 17, 20, 21, 22, 24
except 14=310 (LC 1), 19=406 (LC
1), 23=276 (LC 17)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250
(lb) or less except when shown.
TOP CHORD 2-3=-107/357, 3-4=-65/301, 4-5=-45/297,
5-6=-95/282, 6-7=-146/257, 7-8=-146/257,
8-9=-95/254, 9-10=-33/255, 11-12=-70/282
WEBS 7-19=-365/73

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust)
Vasd=95mph; TC DL=6.0psf; BC DL=6.0psf; h=29ft;
B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Corner (3) -0-10-8 to
2-1-8, Exterior (2) 2-1-8 to 11-1-8, Corner (3) 11-1-8 to
14-1-8, Exterior (2) 14-1-8 to 23-1-8 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) 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 100 lb uplift at joint
(s) 2, 20, 21, 22, 23, 17, 16, 15, 14, 2.
 - 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.
- LOAD CASE(S)** Standard

Job	Truss	Truss Type	Qty	Ply	Garman Homes - Buttercup A & B
GHBUTA	A02	Common	11	1	Job Reference (optional)



Scale = 1:65.5

Plate Offsets (X, Y): [2:Edge,0-0-0], [5:0-3-0,Edge]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.51	10-12	>521	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.82	10-12	>324	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.03	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							
										Weight: 105 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP DSS
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3
 WEDGE Left: 2x4 SP No.3
 Right: 2x4 SP No.3

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

REACTIONS (lb/size) 2=943/0-3-8, (min. 0-1-8),
 8=943/0-3-8, (min. 0-1-8)
 Max Horiz 2=188 (LC 11)
 Max Uplift 2=-62 (LC 12), 8=-62 (LC 12)
 Max Grav 2=989 (LC 17), 8=989 (LC 18)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250
 (lb) or less except when shown.
 TOP CHORD 2-19=-1262/28, 3-19=-1087/55,
 3-4=-801/135, 6-7=-801/135, 7-20=-1087/55,
 8-20=-1262/28
 BOT CHORD 2-12=-57/871, 11-12=0/871, 10-11=0/871,
 8-10=0/871
 WEBS 3-12=0/430, 7-10=0/430, 4-6=-1067/192

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust)
 Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=29ft;
 B=45ft; L=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 11-1-8, Exterior (2) 11-1-8 to
 13-10-3, Interior (1) 13-10-3 to 23-1-8 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) All plates are MT20 plates unless otherwise indicated.
 - 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, with BCDL = 10.0psf.

- 6) Provide mechanical connection (by others) of truss to
 bearing plate capable of withstanding 62 lb uplift at joint
 2 and 62 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

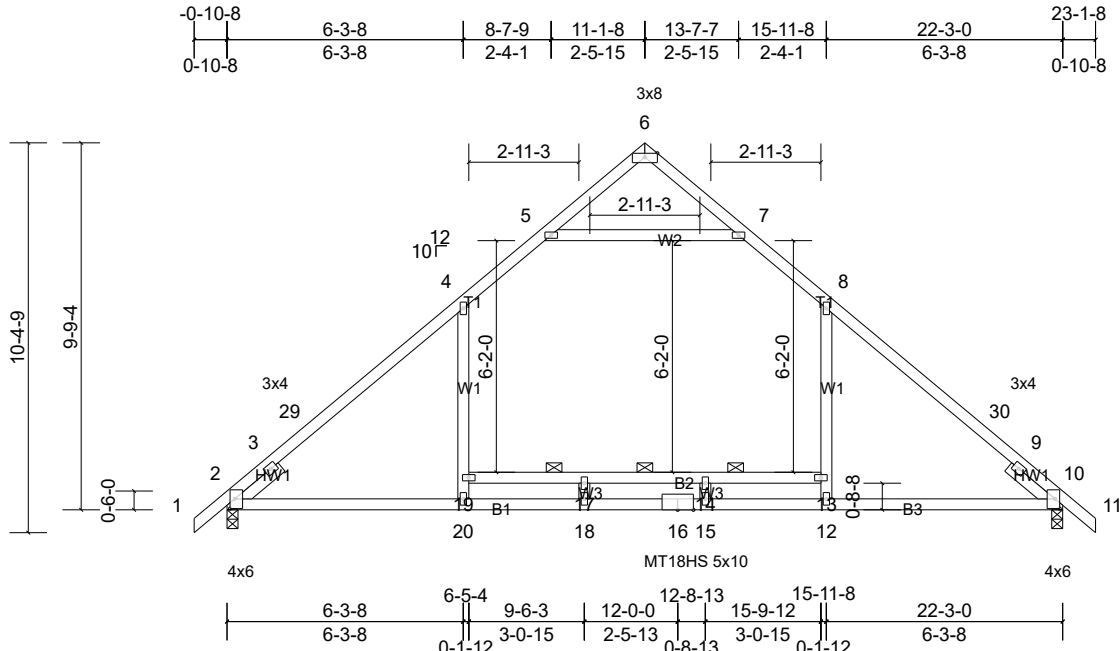
Job GHBUTA	Truss A03	Truss Type Common	Qty 5	Ply 1	Garman Homes - Buttercup A & B Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Page: 1

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Scale = 1:61.3

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

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	Vert(LL)	-0.72	15-18	>368	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-1.13	15-18	>233	180	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	NO	WB	Horz(CT)	0.05	2	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							
										Weight: 123 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP DSS
 BOT CHORD 2x4 SP DSS *Except* B2:2x4 SP No.2
 WEBS 2x4 SP No.3
 SLIDER Left 2x4 SP No.2 -- 1-6-0, Right 2x4 SP No.2 -- 1-6-0

BRACING
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied. Except: 6-0-0 oc bracing: 13-19

REACTIONS (lb/size) 2=1036/0-3-8, (min. 0-1-8), 10=1036/0-3-8, (min. 0-1-8)
 Max Horiz 2=-188 (LC 10)
 Max Uplift 2=-8 (LC 12), 10=-8 (LC 12)
 Max Grav 2=1209 (LC 19), 10=1228 (LC 18)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-288/0, 3-29=-1592/0, 4-29=-1445/0, 4-5=-959/85, 5-6=0/302, 6-7=0/302, 7-8=-960/85, 8-30=-1445/0, 9-30=-1592/0
 BOT CHORD 2-20=0/1107, 18-20=0/1284, 16-18=0/1284, 15-16=0/1284, 12-15=0/1284, 10-12=0/1107
 WEBS 19-20=0/585, 4-19=0/762, 12-13=0/585, 8-13=0/762, 5-7=-1372/89

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=29ft; 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 11-1-8, Exterior (2) 11-1-8 to 13-10-3, Interior (1) 13-10-3 to 23-1-8 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
 - All plates are MT20 plates unless otherwise indicated.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.

- * 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.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 8 lb uplift at joint 2 and 8 lb uplift at joint 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.
- 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

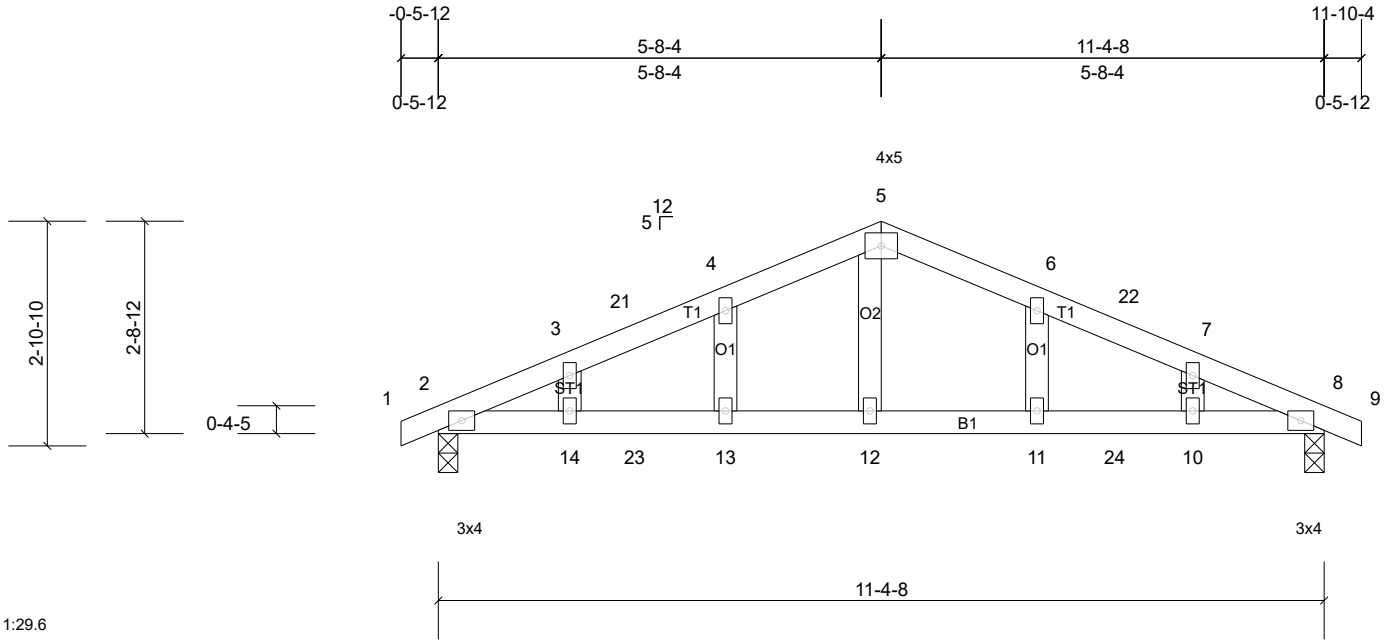
Job	Truss	Truss Type	Qty	Ply	Garman Homes - Buttercup A & B
GHBUTA	B01	Common Structural Gable	1	1	Job Reference (optional)

Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

Run: 8.62 S Oct 13 2022 Print: 8.620 S Oct 13 2022 MiTek Industries, Inc. Tue Jan 03 09:04:48

Page: 1

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Scale = 1:29.6

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	0.07	10-11	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.09	10-11	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.01	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS						Weight: 46 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 (lb/size) 2=484/0-3-0, (min. 0-1-8),
 8=484/0-3-0, (min. 0-1-8)
 Max Horiz 2=-29 (LC 10)
 Max Uplift 2=-134 (LC 12), 8=-134 (LC 12)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-3=-730/619, 3-21=-715/630,
 4-21=-701/636, 4-5=-698/656, 5-6=-678/642,
 6-22=-683/627, 7-22=-701/621, 7-8=-714/608
 BOT CHORD 2-14=-514/650, 14-23=-514/650,
 13-23=-514/650, 12-13=-514/650,
 11-12=-497/635, 11-24=-497/635,
 10-24=-497/635, 8-10=-497/635
 WEBS 5-12=-277/255

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=29ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -0-5-12 to 2-6-4, Exterior (2) 2-6-4 to 5-8-4, Corner (3) 5-8-4 to 8-8-4, Exterior (2) 8-8-4 to 11-10-4 zone; cantilever 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
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - * 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.

- Provide mechanical connection (by others) of truss to bearing plate at joint(s) 2.
 - Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 134 lb uplift at joint 2 and 134 lb uplift at joint 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.
 - 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

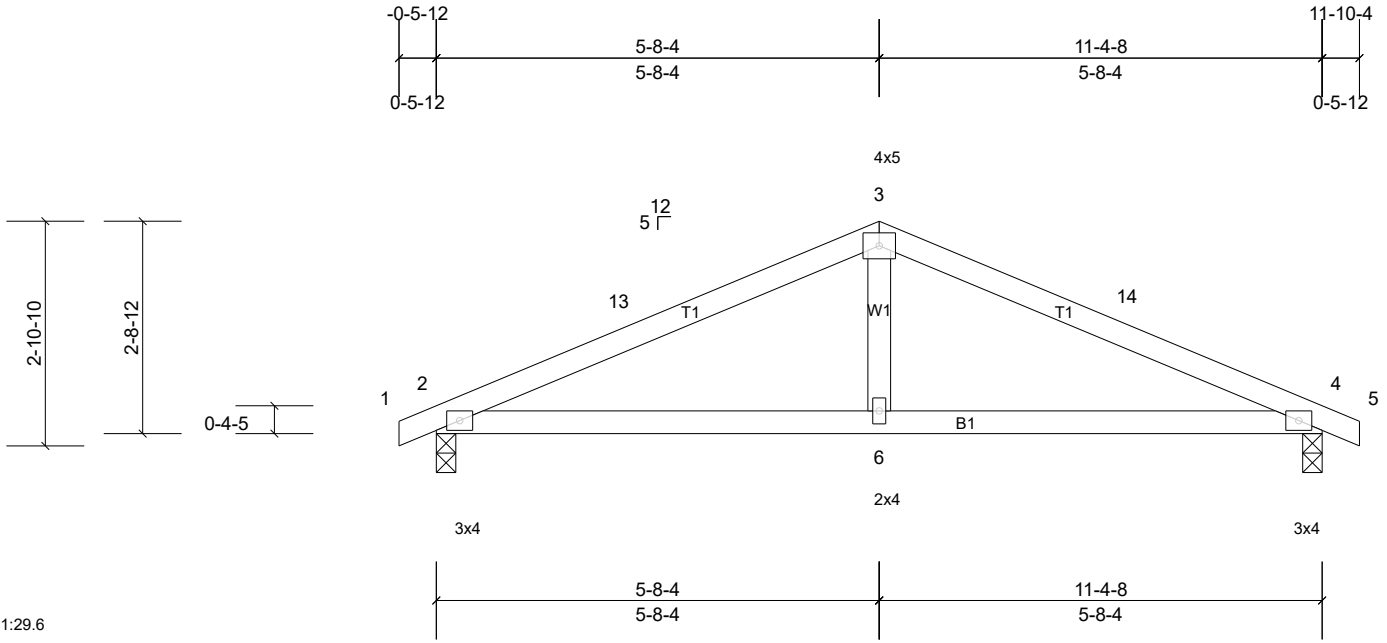
Job	Truss	Truss Type	Qty	Ply	Garman Homes - Buttercup A & B
GHBUTA	B02	Common	2	1	Job Reference (optional)

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Run: 8.62 S Oct 13 2022 Print: 8.620 S Oct 13 2022 MiTek Industries, Inc. Tue Jan 03 09:04:48

Page: 1

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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	Vert(LL)	0.05	6-9	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.07	6-12	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.01	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS						Weight: 40 lb	FT = 20%

LUMBER **LOAD CASE(S)** Standard

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

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

REACTIONS (lb/size) 2=484/0-3-0, (min. 0-1-8),
 4=484/0-3-0, (min. 0-1-8)
 Max Horiz 2=29 (LC 11)
 Max Uplift 2=-134 (LC 12), 4=-134 (LC 12)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250
 (lb) or less except when shown.
 TOP CHORD 2-13=-719/463, 3-13=-681/479,
 3-14=-681/483, 4-14=-719/467
 BOT CHORD 2-6=-384/629, 4-6=-384/629
 WEBS 3-6=-212/256

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust)
 Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=29ft;
 B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
 MWFRS (directional) and C-C Exterior (2) -0-5-12 to
 2-6-4, Interior (1) 2-6-4 to 5-8-4, Exterior (2) 5-8-4 to
 8-8-4, Interior (1) 8-8-4 to 11-10-4 zone; cantilever 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
 - 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 134 lb uplift at joint
 2 and 134 lb uplift at joint 4.
 - 6) This truss is designed in accordance with the 2015
 International Residential Code sections R502.11.1 and
 R802.10.2 and referenced standard ANSI/TPI 1.
 - 7) 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.

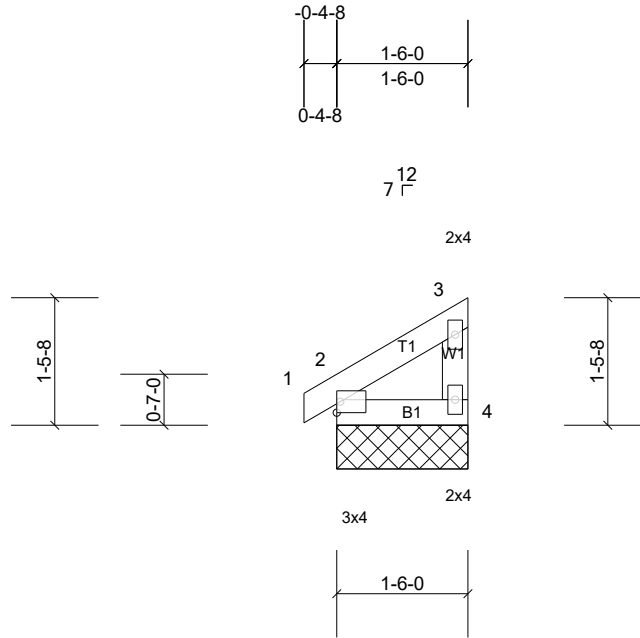
Job	Truss	Truss Type	Qty	Ply	Garman Homes - Buttercup A & B
GHBUTA	C01	Monopitch Supported Gable	2	1	Job Reference (optional)

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Run: 8.62 S Oct 13 2022 Print: 8.620 S Oct 13 2022 MiTek Industries, Inc. Tue Jan 03 09:04:48

Page: 1

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Scale = 1:26.3

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	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MP							Weight: 7 lb	FT = 20%

LUMBER **LOAD CASE(S)** Standard

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

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 (lb/size) 2=80/1-6-0, (min. 0-1-8),
 4=51/1-6-0, (min. 0-1-8),
 5=80/1-6-0, (min. 0-1-8)
 Max Horiz 2=34 (LC 11), 5=34 (LC 11)
 Max Uplift 2=-4 (LC 13), 4=-9 (LC 9), 5=-4 (LC 13)
 Max Grav 2=80 (LC 1), 4=54 (LC 17), 5=80 (LC 1)

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

- NOTES**
- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=29ft; B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (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
 - 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 4 lb uplift at joint 2, 9 lb uplift at joint 4 and 4 lb uplift at joint 2.
 - 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.

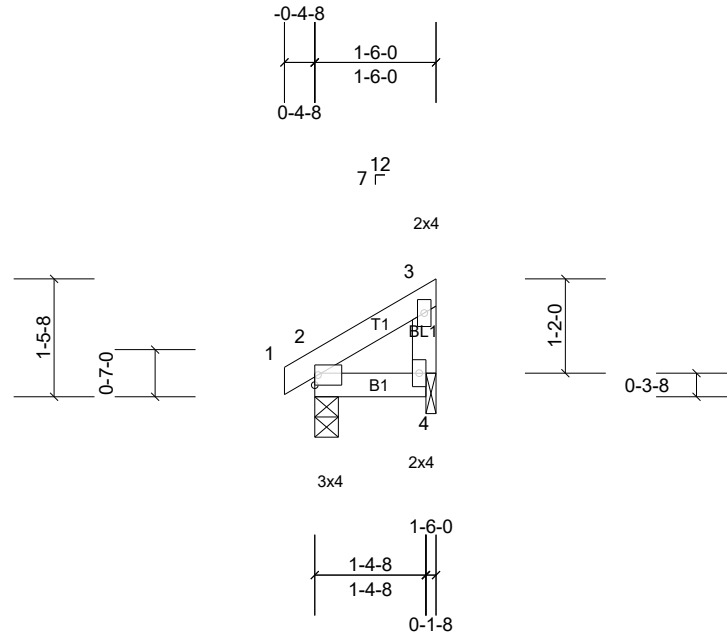
Job GHBUTA	Truss C02	Truss Type Monopitch	Qty 3	Ply 1	Garman Homes - Buttercup A & B Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

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Page: 1

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Scale = 1:28.5

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	0.02	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.02	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.00	Horz(CT)	n/a	-	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-MR							Weight: 7 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 1-6-0 oc purlins.
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

REACTIONS (lb/size) 2=80/0-3-8, (min. 0-1-8),
 4=51/0-1-8, (min. 0-1-8)
 Max Horiz 2=52 (LC 12)
 Max Uplift 4=21 (LC 12)
 Max Grav 2=80 (LC 1), 4=59 (LC 17)

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

NOTES

- 1) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=29ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Exterior (2) 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) 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 21 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

Job GHBUTA	Truss D01	Truss Type Common Supported Gable	Qty 1	Ply 1	Garman Homes - Buttercup A & B Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, Jeremy Phillips

Run: 8.62 S Oct 13 2022 Print: 8.620 S Oct 13 2022 MiTek Industries, Inc. Tue Jan 03 09:04:49

Page: 1

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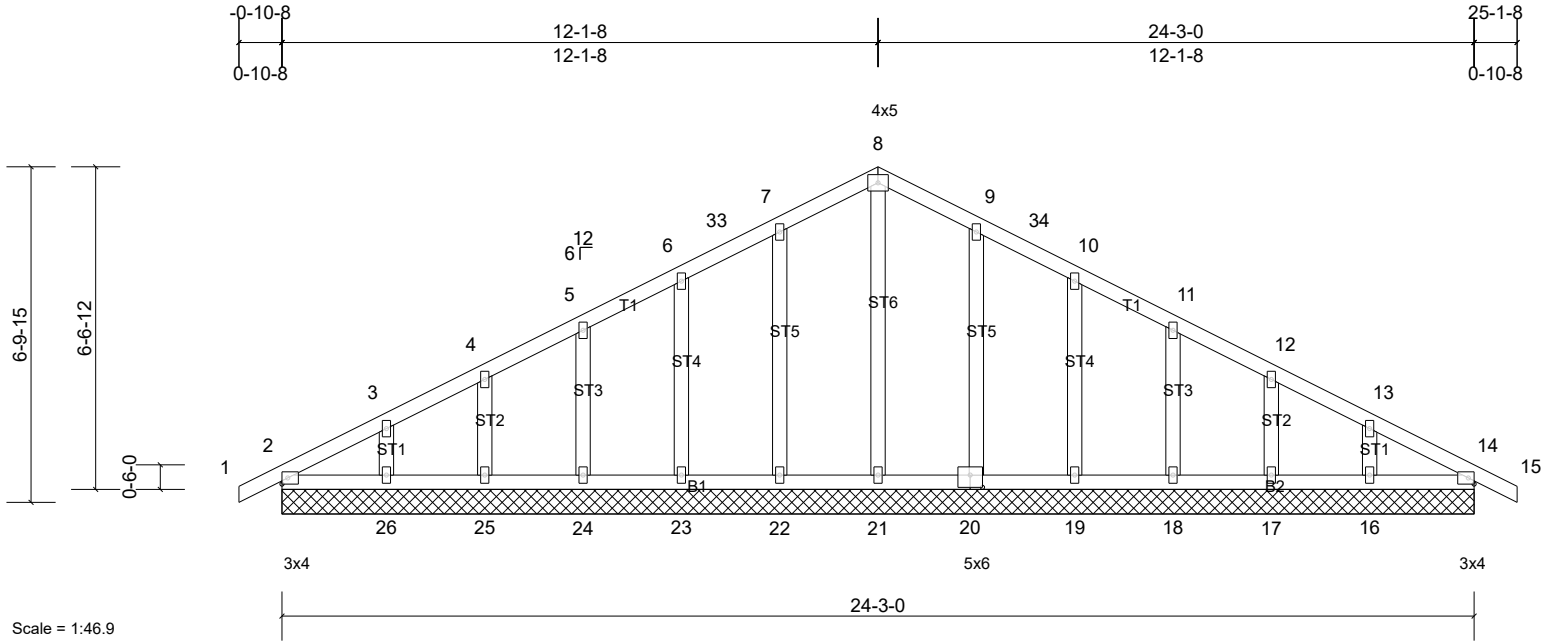


Plate Offsets (X, Y): [20:0-3-0, 0-3-0]

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	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.00	17	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS						Weight: 133 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 All bearings 24-3-0.
 (lb) - Max Horiz 2=96 (LC 11), 27=96 (LC 11)
 Max Uplift All uplift 100 (lb) or less at joint(s)
 2, 16, 17, 18, 19, 20, 22, 23, 24,
 25, 26, 27
 Max Grav All reactions 250 (lb) or less at joint
 (s) 2, 17, 18, 19, 20, 22, 23, 24, 25,
 26, 27 except 16=291 (LC 1),
 21=296 (LC 1)

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

WEBS 8-21=-258/0

- NOTES**
- Unbalanced roof live loads have been considered for this design.
 - Wind: ASCE 7-10; Vult=120mph (3-second gust)
 Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=29ft;
 B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed;
 MWFRS (directional) and C-C Corner (3) -0-10-8 to
 2-1-8, Exterior (2) 2-1-8 to 12-1-8, Corner (3) 12-1-8 to
 15-1-8, Exterior (2) 15-1-8 to 25-1-8 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
 - 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.
 - All plates are 2x4 MT20 unless otherwise indicated.
 - Gable requires continuous bottom chord bearing.
 - Gable studs spaced at 2-0-0 oc.
 - This truss has been designed for a 10.0 psf bottom
 chord live load nonconcurrent with any other live loads.
 - * 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.

- Provide mechanical connection (by others) of truss to
 bearing plate capable of withstanding 100 lb uplift at joint
 (s) 2, 22, 23, 24, 25, 26, 20, 19, 18, 17, 16, 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.
- 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

Job GHBUTA	Truss D02	Truss Type Common	Qty 6	Ply 1	Garman Homes - Buttercup A & B Job Reference (optional)
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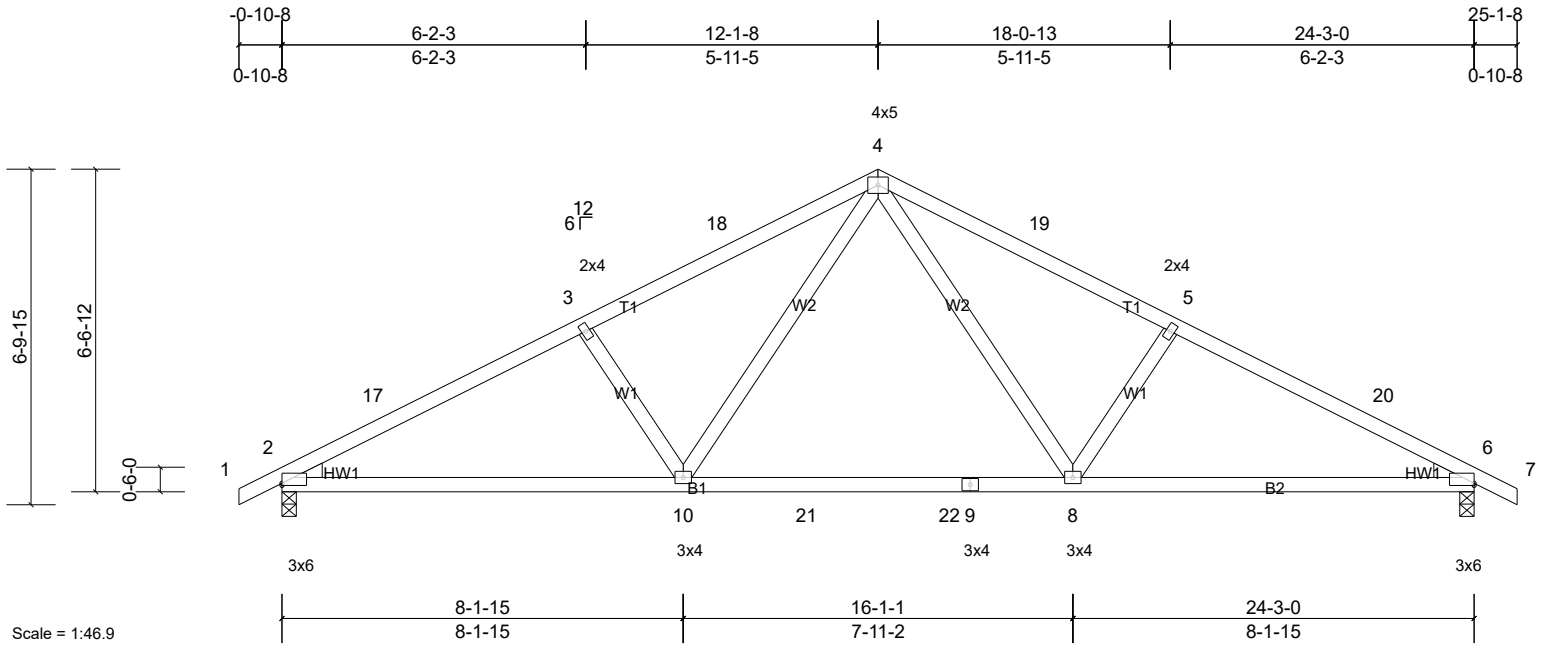


Plate Offsets (X, Y): [2:Edge,0-0-9], [6:Edge,0-0-9]

Loading	(psf)	Spacing	2-0-0	CSI	DEFL	in (loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	Vert(LL)	-0.17	8-10	>999	240	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.27	8-10	>999	180		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.04	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							
										Weight: 113 lb	FT = 20%

LUMBER
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.2
WEBS 2x4 SP No.3
WEDGE Left: 2x4 SP No.3
Right: 2x4 SP No.3

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

REACTIONS (lb/size) 2=1023/0-3-8, (min. 0-1-8),
6=1023/0-3-8, (min. 0-1-8)
Max Horiz 2=-96 (LC 10)
Max Uplift 2=-65 (LC 12), 6=-65 (LC 12)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-17=-1648/90, 3-17=-1572/119,
3-18=-1457/123, 4-18=-1372/139,
4-19=-1372/139, 5-19=-1457/123,
5-20=-1572/119, 6-20=-1648/90
BOT CHORD 2-10=-52/1406, 10-21=0/948, 21-22=0/948,
9-22=0/948, 8-9=0/948, 6-8=-37/1406
WEBS 4-8=-7/560, 5-8=-350/121, 4-10=-7/560,
3-10=-350/121

- NOTES**
- 1) Unbalanced roof live loads have been considered for this design.
 - 2) Wind: ASCE 7-10; Vult=120mph (3-second gust) Vasd=95mph; TCDL=6.0psf; BCDL=6.0psf; h=29ft; B=45ft; L=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 12-1-8, Exterior (2) 12-1-8 to 15-1-8, Interior (1) 15-1-8 to 25-1-8 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, with BCDL = 10.0psf.
 - 5) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 65 lb uplift at joint 2 and 65 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.
- 7) 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