

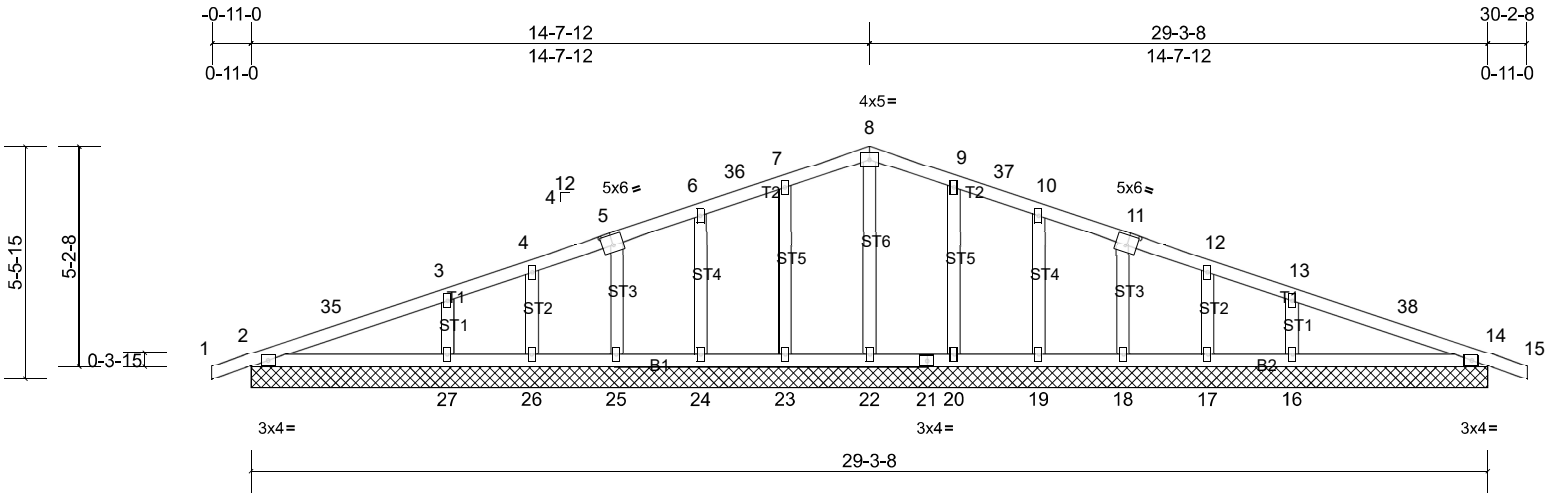
Job Q2300326	Truss A01	Truss Type Common Supported Gable	Qty 2	Ply 1	Value Build Homes - Morse 23-86-9 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, JSH

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ID:p73tioYqLU3mc4TETmmcVzdnkq-QSBfn7QXuYu16q?Dg50AcKHhVETVRE7H46NqUzd3_0



Scale = 1:54.6

Plate Offsets (X, Y): [5:0-3-0,0-3-0], [11:0-3-0,0-3-0]

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	0.19	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.17	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.05	Horz(CT)	0.00	17	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS								
											Weight: 139 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 29-3-8.
 (lb) - Max Horiz 2=-49 (LC 10), 28=-49 (LC 10)
 Max Uplift All uplift 100 (lb) or less at joint(s)
 2, 14, 16, 17, 18, 19, 20, 23, 24,
 25, 26, 27, 28, 32
 Max Grav All reactions 250 (lb) or less at joint
 (s) 2, 14, 17, 18, 19, 20, 22, 23, 24,
 25, 26, 28, 32 except 16=373 (LC
 22), 27=373 (LC 21)

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

- 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=29ft; eave=2ft; Cat. II; Exp B; Enclosed; MWFRS (directional) and C-C Corner (3) -0-11-0 to 2-1-0, Exterior (2) 2-1-0 to 14-7-12, Corner (3) 14-7-12 to 17-7-12, Exterior (2) 17-7-12 to 30-2-8 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, 23, 24, 25, 26, 27, 20, 19, 18, 17, 16, 14, 2, 14.
- 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

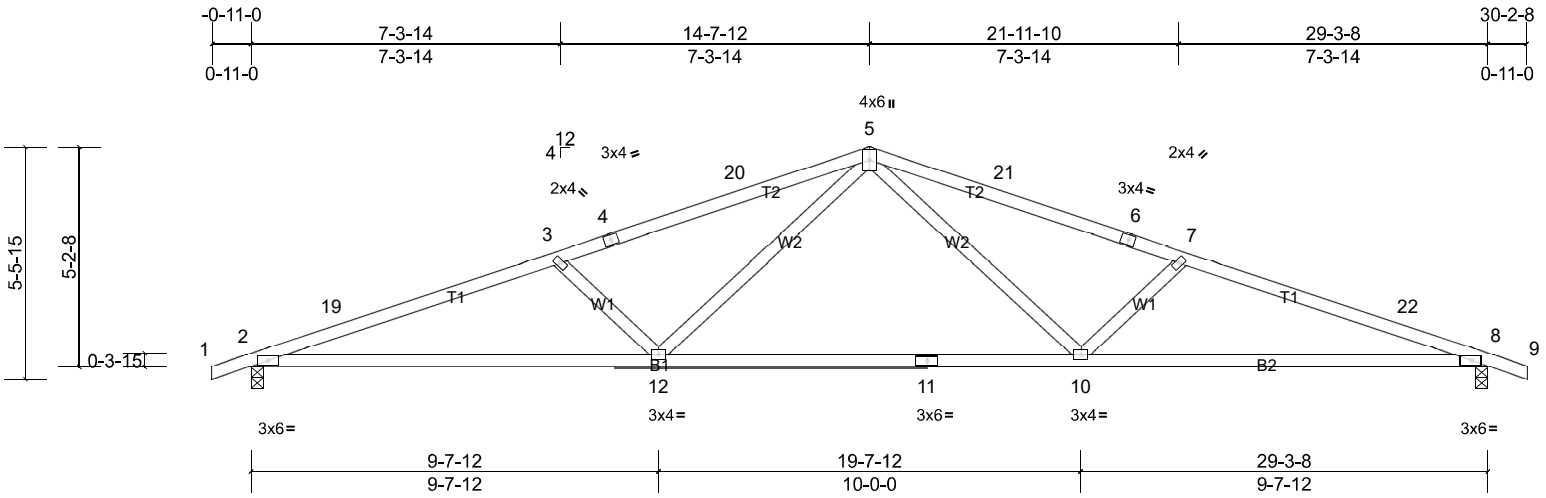
Job	Truss	Truss Type	Qty	Ply	Value Build Homes - Morse 23-86-9
Q2300326	A02	Common	8	1	Job Reference (optional)

Carolina Structural Systems, Star, NC 27356, JSH

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Scale = 1:54.6

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	0.61	Vert(LL)	-0.20	10-12	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.48	10-12	>737	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.09	8	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.11	12-15	>999	240	Weight: 123 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3

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

REACTIONS (lb/size) 2=1227/0-3-8, (min. 0-1-8),
 8=1227/0-3-8, (min. 0-1-8)
 Max Horiz 2=49 (LC 11)
 Max Uplift 2=-31 (LC 12), 8=-31 (LC 12)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-19=-2889/142, 3-19=-2858/164,
 3-4=-2549/108, 4-20=-2474/119,
 5-20=-2465/133, 5-21=-2465/133,
 6-21=-2474/119, 6-7=-2549/108,
 7-22=-2858/164, 8-22=-2889/142
 BOT CHORD 2-12=-96/2711, 11-12=-32/1763,
 10-11=-32/1763, 8-10=-104/2711
 WEBS 5-10=0/840, 7-10=-532/135, 5-12=0/840,
 3-12=-532/135

- 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=29ft; eave=4ft; Cat. II; Exp B; Enclosed;
 MWFRS (directional) and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 14-7-12, Exterior (2) 14-7-12 to 17-7-12, Interior (1) 17-7-12 to 30-2-8 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 31 lb uplift at joint 2 and 31 lb uplift at joint 8.

- 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

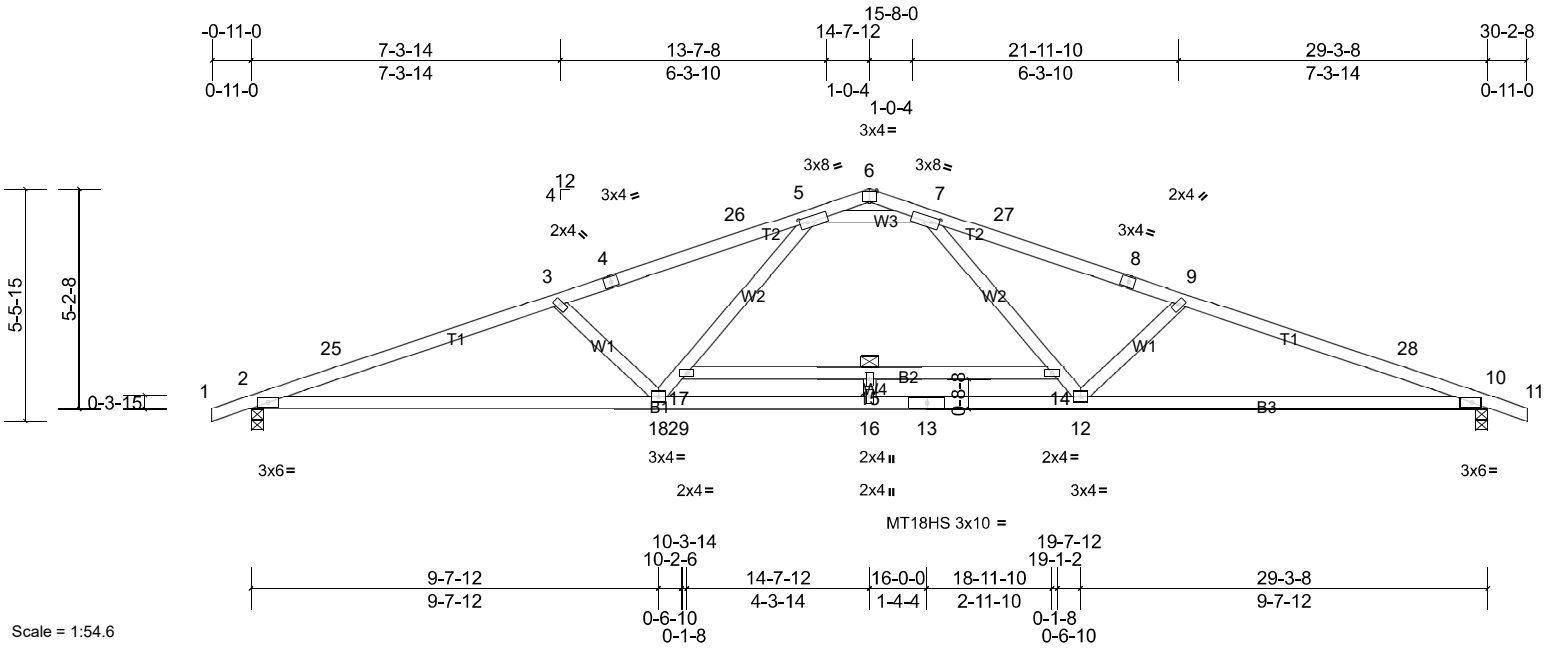
Job Q2300326	Truss A03	Truss Type Common	Qty 3	Ply 1	Value Build Homes - Morse 23-86-9 Job Reference (optional)
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Scale = 1:54.6

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

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	0.68	Vert(LL)	-0.37	14-15	>955	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.91	Vert(CT)	-0.79	14-15	>444	240	MT18HS	244/190
BCLL	0.0*	Rep Stress Incr	YES	WB	0.59	Horz(CT)	0.10	10	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.11	18-21	>999	240		
										Weight: 137 lb	FT = 20%	

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

BRACING
 TOP CHORD Structural wood sheathing directly applied.
 BOT CHORD Rigid ceiling directly applied. Except:
 6-0-0 oc bracing: 14-17

REACTIONS (lb/size) 2=1317/0-3-8, (min. 0-1-9),
 10=1317/0-3-8, (min. 0-1-9)
 Max Horiz 2=-49 (LC 10)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 2-25=-3162/0, 3-25=-3126/0, 3-4=-2844/0,
 4-26=-2779/0, 5-26=-2760/0, 7-27=-2760/0,
 8-27=-2779/0, 8-9=-2844/0, 9-28=-3126/0,
 10-28=-3162/0
 BOT CHORD 2-18=0/2966, 18-29=0/2180, 16-29=0/2180,
 13-16=0/2180, 12-13=0/2180, 10-12=0/2966
 WEBS 9-12=-530/122, 3-18=-530/122,
 5-7=-2059/98, 17-18=0/773, 5-17=0/859,
 7-14=0/957, 12-14=0/777

- 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=25ft;
 B=45ft; L=29ft; eave=4ft; Cat. II; Exp B; Enclosed;
 MWFRS (directional) and C-C Exterior (2) 0-11-0 to 2-1-0, Interior (1) 2-1-0 to 14-7-12, Exterior (2) 14-7-12 to 17-7-12, Interior (1) 17-7-12 to 30-2-8 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.
 - 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.

- 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

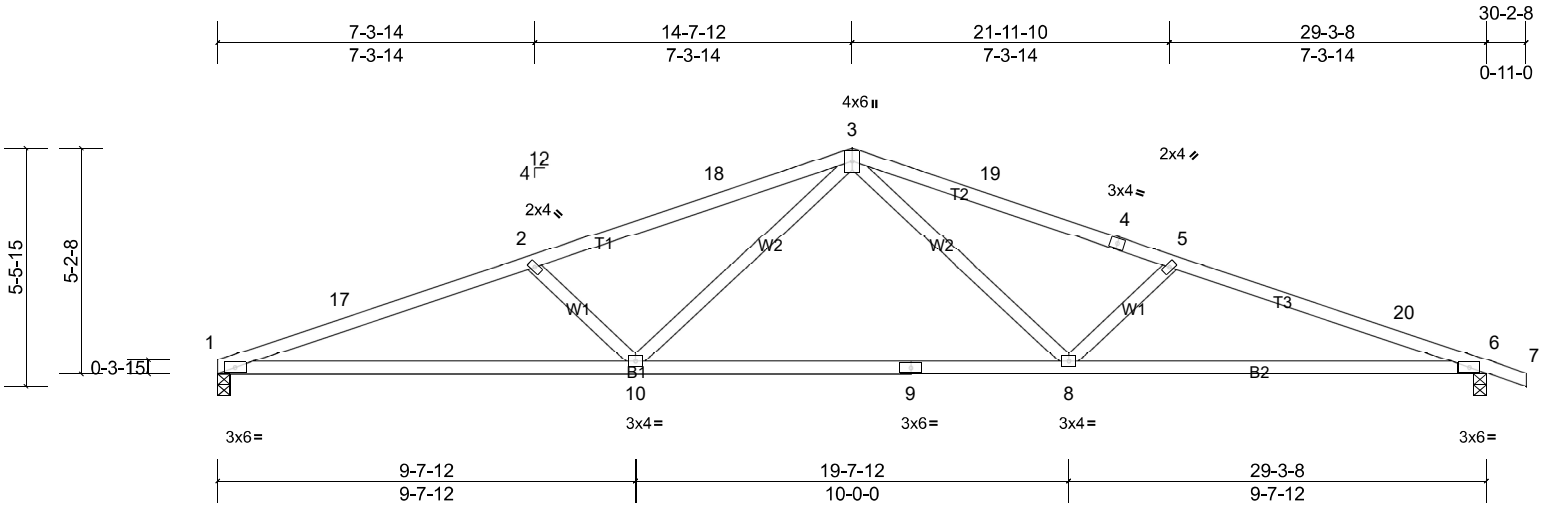
Job	Truss	Truss Type	Qty	Ply	Value Build Homes - Morse 23-86-9
Q2300326	A05	Common	1	1	Job Reference (optional)

Carolina Structural Systems, Star, NC 27356, JSH

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Scale = 1:53.2

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	0.62	Vert(LL)	-0.20	8-10	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.75	Vert(CT)	-0.48	8-10	>737	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.35	Horz(CT)	0.09	6	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS		Wind(LL)	0.11	10-13	>999	240	Weight: 121 lb	FT = 20%

LUMBER
 TOP CHORD 2x4 SP No.2
 BOT CHORD 2x4 SP No.1
 WEBS 2x4 SP No.3

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

REACTIONS (lb/size) 1=1171/0-3-8, (min. 0-1-8),
 6=1228/0-3-8, (min. 0-1-8)
 Max Horiz 1=-50 (LC 10)
 Max Uplift 1=-8 (LC 12), 6=-32 (LC 12)

FORCES (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
 TOP CHORD 1-17=-2898/162, 2-17=-2867/178,
 2-18=-2556/133, 3-18=-2472/147,
 3-19=-2467/136, 4-19=-2476/124,
 4-5=-2552/111, 5-20=-2860/169,
 6-20=-2892/147
 BOT CHORD 1-10=-108/2720, 9-10=-37/1765,
 8-9=-37/1765, 6-8=-109/2714
 WEBS 3-8=0/840, 5-8=-532/135, 3-10=0/846,
 2-10=-535/135

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=29ft; eave=4ft; Cat. II; Exp B; Enclosed;
 MWFRS (directional) and C-C Exterior (2) 0-0-0 to 3-0-0,
 Interior (1) 3-0-0 to 14-7-12, Exterior (2) 14-7-12 to
 17-7-12, Interior (1) 17-7-12 to 30-2-8 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 8 lb uplift at joint 1
 and 32 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

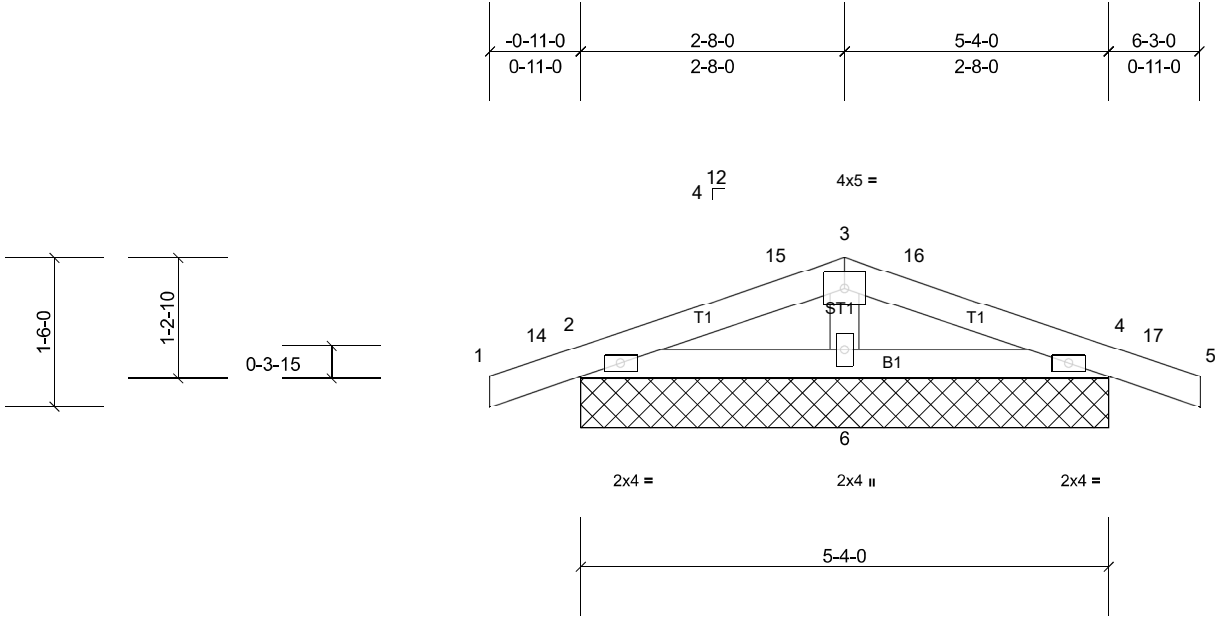
Job	Truss	Truss Type	Qty	Ply	Value Build Homes - Morse 23-86-9
Q2300326	B01	Common Supported Gable	1	1	Job Reference (optional)

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Scale = 1:23.3

Loading	(psf)	Spacing	1-11-4	CSI	DEFL	in	(loc)	I/defl	L/d	PLATES	GRIP	
TCLL (roof)	20.0	Plate Grip DOL	1.00	TC	0.14	Vert(LL)	n/a	-	n/a	999	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	0.14	Vert(CT)	n/a	-	n/a	999		
BCLL	0.0*	Rep Stress Incr	YES	WB	0.10	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS							Weight: 20 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 5-4-0.

(lb) - Max Horiz 2=10 (LC 11), 7=10 (LC 11)
 Max Uplift All uplift 100 (lb) or less at joint(s)
 2, 4, 6, 7, 13
 Max Grav All reactions 250 (lb) or less at joint
 (s) 2, 4, 7, 13 except 6=520 (LC 1)

FORCES

(lb) - Max. Comp./Max. Ten. - All forces 250
 (lb) or less except when shown.
 TOP CHORD 2-15=-406/445, 3-15=-401/450,
 3-16=-397/458, 4-16=-401/445
 BOT CHORD 2-6=-422/449, 4-6=-422/449
 WEBS 3-6=-379/337

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=25ft;
 B=45ft; L=24ft; eave=2ft; Cat. II; Exp B; Enclosed;
 MWFRS (directional) and C-C Corner (3) -0-11-0 to
 2-1-0, Exterior (2) 2-1-0 to 2-8-0, Corner (3) 2-8-0 to
 5-8-0, Exterior (2) 5-8-0 to 6-3-0 zone; cantilever left and
 right exposed; end vertical left and right exposed; C-C
 for members and forces & MWFRS for reactions shown;
 Lumber DOL=1.60 plate grip DOL=1.60
- 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.
- 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, 4, 6, 2, 4.
- Beveled plate or shim required to provide full bearing
 surface with truss chord at joint(s) 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.
- 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

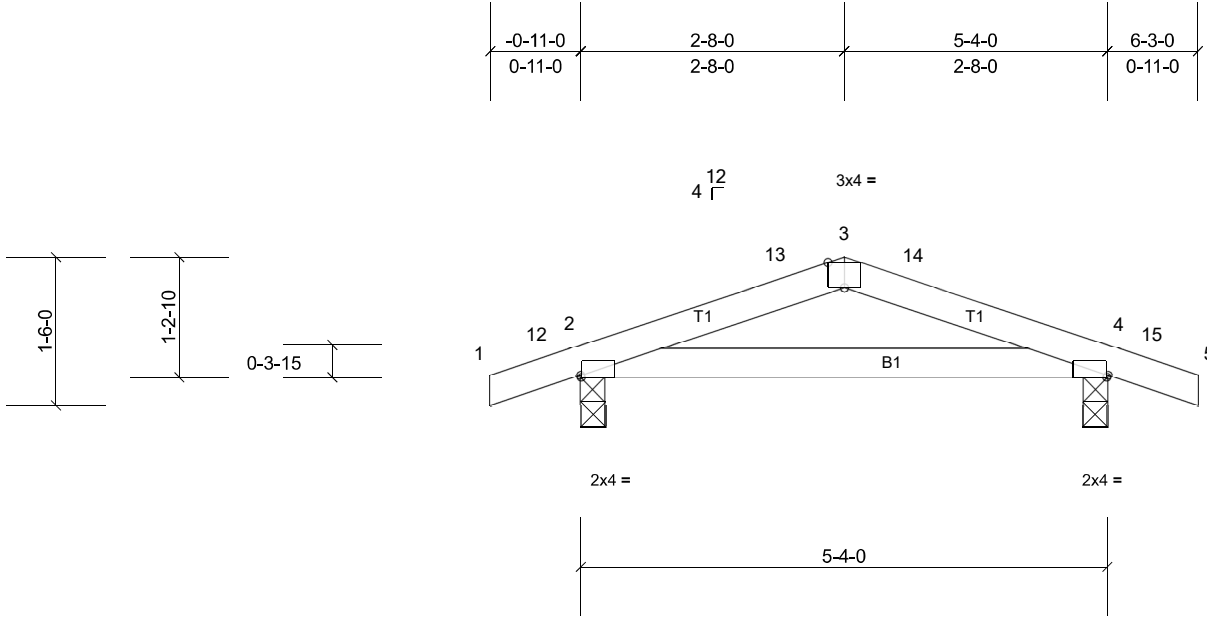
Job Q2300326	Truss B02	Truss Type Common	Qty 2	Ply 1	Value Build Homes - Morse 23-86-9 Job Reference (optional)
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Carolina Structural Systems, Star, NC 27356, JSH

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Scale = 1:23.3

Plate Offsets (X, Y): [2:0-0-2,Edge], [3:0-2-0,Edge], [4:0-0-2,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)	-0.01	8-11	>999	360	MT20	244/190
TCDL	10.0	Lumber DOL	1.15	BC	Vert(CT)	-0.02	8-11	>999	240		
BCLL	0.0*	Rep Stress Incr	YES	WB	Horz(CT)	0.00	4	n/a	n/a		
BCDL	10.0	Code	IRC2015/TPI2014	Matrix-AS	Wind(LL)	0.02	8-11	>999	240	Weight: 19 lb	FT = 20%

LUMBER

TOP CHORD 2x4 SP No.2

BOT CHORD 2x4 SP No.2

BRACING

TOP CHORD Structural wood sheathing directly applied.

BOT CHORD Rigid ceiling directly applied.

REACTIONS (lb/size) 2=268/0-3-0, (min. 0-1-8),
4=268/0-3-0, (min. 0-1-8)

Max Horiz 2=11 (LC 11)

Max Uplift 2=-70 (LC 12), 4=-70 (LC 12)

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

TOP CHORD 2-13=-265/198, 4-14=-265/198

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=25ft;
B=45ft; L=24ft; eave=4ft; Cat. II; Exp B; Enclosed;
MWFRS (directional) and C-C Exterior (2) -0-11-0 to 2-1-0, Interior (1) 2-1-0 to 2-8-0, Exterior (2) 2-8-0 to 5-8-0, Interior (1) 5-8-0 to 6-3-0 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
- 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 70 lb uplift at joint 2 and 70 lb uplift at joint 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.
- 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