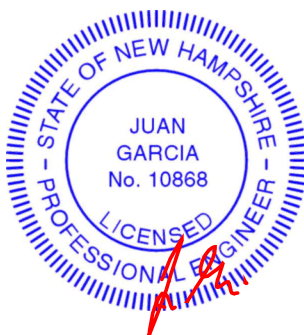


Re: 191780
Merry Sapphire

The truss drawing(s) referenced below have been prepared by MiTek USA, Inc. under my direct supervision based on the parameters provided by Chevrons R B R Inc. (USA).

Pages or sheets covered by this seal: U1348594 thru U1348600

My license renewal date for the state of New Hampshire is February 29, 2020.



May 23, 2019

Garcia, Juan

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.

100 Industrial Road
Bradford, ON L3Z 3G7

Job	Truss	Truss Type	Qty	Ply	Merry Sapphire	U1348595
191780	T01G	Roof Special Supported Gable	1	1	Job Reference (optional)	

- NOTES-**
- 8) Gable requires continuous bottom chord bearing.
 - 9) Truss to be fully sheathed from one face or securely braced against lateral movement (i.e. diagonal web).
 - 10) Gable studs spaced at 2-0-0 oc.
 - 11) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
 - 12) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
 - 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) 27, 43, 40, 39, 38, 35, 34, 33, 31, 30, 29, 28 except (jt=lb) 50=296, 45=113, 46=367, 47=122, 48=102, 49=226, 42=168, 37=196, 32=294.
 - 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

Job	Truss	Truss Type	Qty	Ply	Merry Sapphire	U1348596
191780	T01GS	GABLE	1	1		
Job Reference (optional)						

Structures R.B.R. Inc. (Can), Sts-Anges de Beauce, PQ - G0S 3E0,

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ID:MrhCoQaakWLMw4U4bagGBGzHXGE-z6oD2nUbM1aTwSVxHQFOD9rrtzXsDYfif1w06fzDi?_

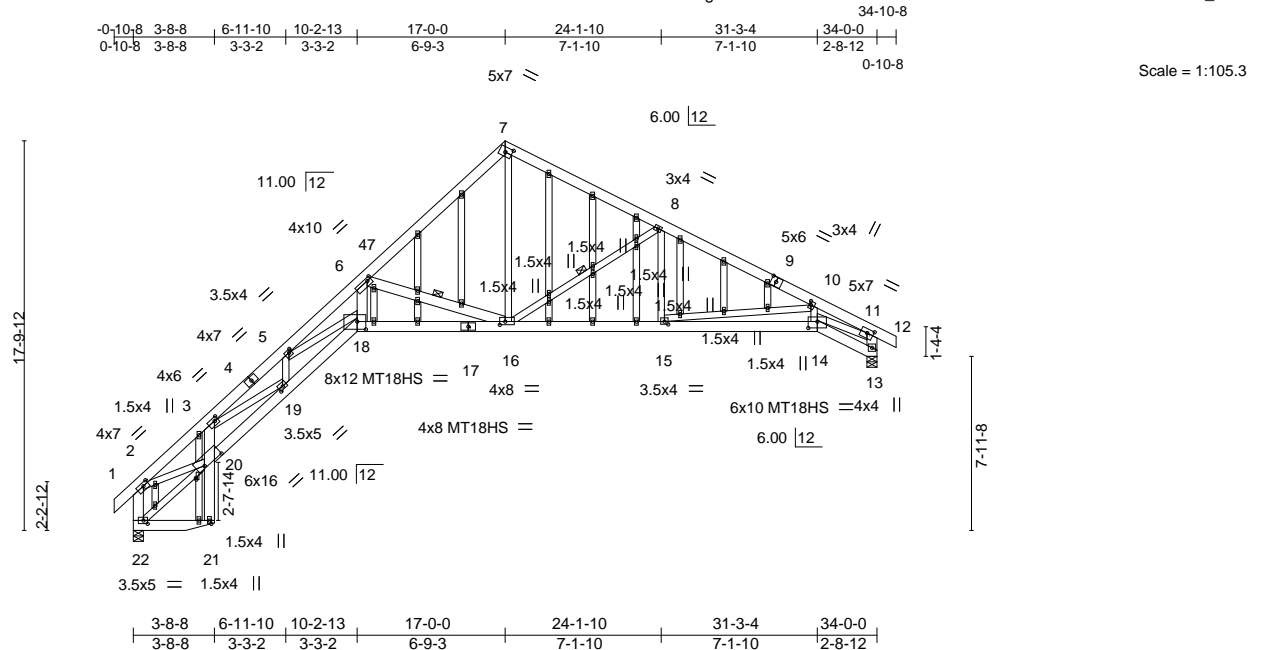


Plate Offsets (X,Y)--	[2:0-3-0,0-1-12], [3:0-2-0,0-1-12], [5:0-1-8,0-1-8], [6:0-2-4,0-1-8], [7:0-3-12,0-2-12], [9:0-2-12,0-2-8], [10:0-2-0,0-1-0], [11:0-3-8,0-2-4], [14:0-5-0,0-3-8], [15:0-2-0,0-1-8], [16:0-3-0,0-1-12], [18:0-4-12,0-4-4], [19:0-2-8,0-1-8], [20:0-1-12,0-0-11], [20:0-0-15,0-0-4], [20:0-11-8,0-1-4], [22:0-2-4,0-1-12]
-----------------------	--

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 61.6	1-4-0	TC 0.35	Vert(LL)	-0.56	18	>718	MT20	197/144
(Ground Snow=80.0)	Plate Grip DOL 1.15	BC 0.50	Vert(TL)	-0.77	18	>525	MT18HS	197/144
TCDL 7.0	Lumber DOL 1.15	WB 0.76	Horz(TL)	0.93	13	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.28	18	>999		
BCDL 8.0	Code IBC2009/TPI2007						Weight: 272 lb	FT = 15%

LUMBER-	BRACING-
TOP CHORD 2x6 SPF 2100F 1.8E	TOP CHORD Structural wood sheathing directly applied or 3-2-5 oc purlins, except end verticals.
BOT CHORD 2x6 SPF 2100F 1.8E	BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 2x4 SPF No.2 *Except*	WEBS 1 Row at midpt 6-16, 8-16
11-13,6-18,6-16,2-22: 2x6 SPF 1650F 1.5E	
OTHERS 2x4 SPF No.2	

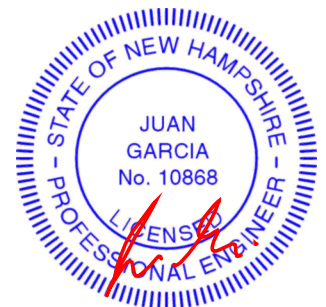
REACTIONS. (lb/size) 13=1814/0-5-8, 22=1814/0-5-8
Max Horz 22=373(LC 8)
Max Uplift 13=349(LC 9), 22=298(LC 8)

FORCES. (lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-3=-3454/1081, 3-5=-6463/1911, 5-6=-8149/2256, 6-7=-2538/578, 7-8=-2162/547,
8-10=-3009/598, 10-11=-3870/683, 11-13=-1807/339, 2-22=-1780/605
BOT CHORD 3-20=-1589/497, 19-20=-1487/3582, 18-19=-2057/6226, 16-18=-1571/5501,
15-16=-431/2618, 14-15=-565/3352, 13-14=-29/254
WEBS 3-19=-464/2127, 5-19=-971/229, 5-18=-196/1452, 6-18=-1391/4601, 6-16=-4025/1346,
7-16=-471/1891, 8-16=-1198/288, 10-15=-745/216, 11-14=-531/3117, 2-20=-708/2476,
20-22=-425/349

NOTES-

- 1) Wind: ASCE 7-05; 115mph; TCDL=4.2psf; BCDL=4.8psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; 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) TCDL: ASCE 7-05; Pg= 80.0 psf (ground snow); Pf=61.6 psf (flat roof snow); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 18.0 psf or 2.00 times flat roof load of 61.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

Continued on Page 2



May 23, 2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.

MiTek
100 Industrial Road
Bradford, ON, L3Z 3G7

Job	Truss	Truss Type	Qty	Ply	Merry Sapphire	U1348596
191780	T01GS	GABLE	1	1	Job Reference (optional)	

NOTES-
 14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

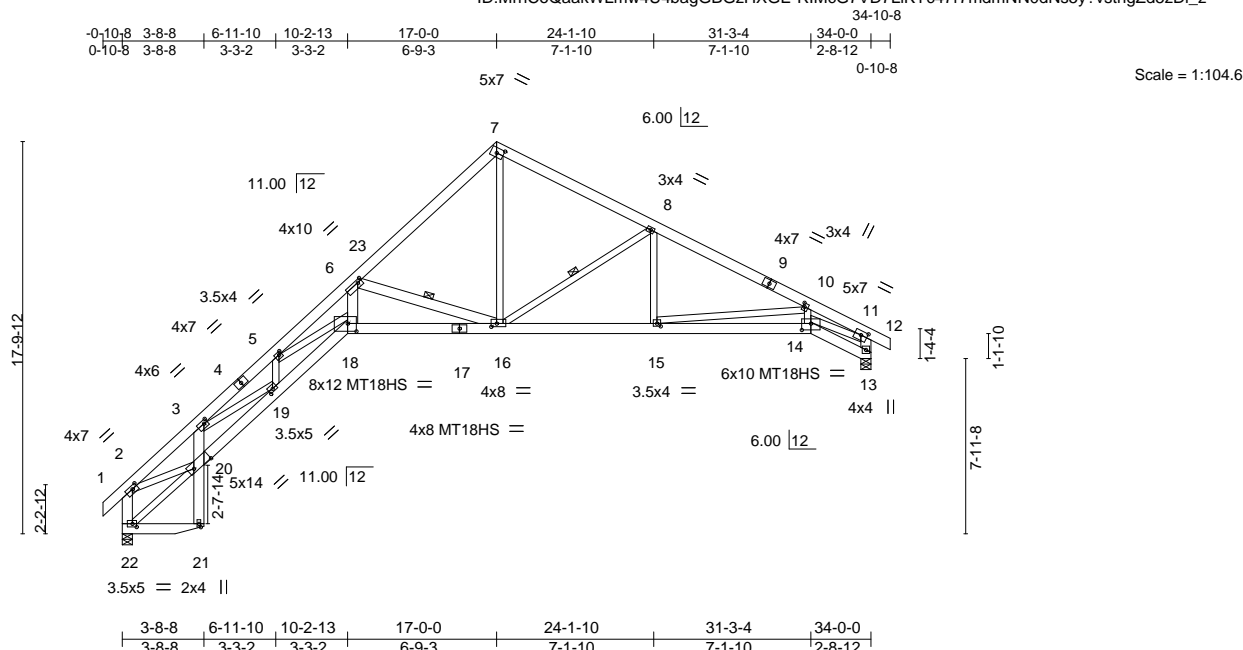
Job	Truss	Truss Type	Qty	Ply	Merry Sapphire	U1348597
191780	T02	ROOF SPECIAL	3	1		
Job Reference (optional)						

Structures R.B.R. Inc. (Can),

Sts-Anges de Beauce, PQ - G0S 3E0,

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Scale = 1:104.6

Plate Offsets (X,Y)--	[2:0-3-0,0-1-12], [3:0-2-0,0-1-12], [5:0-1-8,0-1-8], [6:0-2-4,0-1-8], [7:0-3-12,0-2-12], [10:0-2-0,0-1-0], [11:0-3-8,0-2-4], [14:0-5-0,0-3-8], [15:0-2-0,0-1-8], [16:0-3-0,0-1-12], [18:0-4-12,0-4-4], [19:0-2-8,0-1-8], [20:0-10-12,0-2-0], [22:0-2-4,0-1-12]
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LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 61.6	1-4-0	TC 0.35	Vert(LL)	-0.56	18	>718	MT20	197/144
(Ground Snow=80.0)	Plate Grip DOL 1.15	BC 0.50	Vert(TL)	-0.77	18	>525	MT18HS	197/144
TCDL 7.0	Lumber DOL 1.15	WB 0.76	Horz(TL)	0.93	13	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.28	18	>999		
BCDL 8.0	Code IBC2009/TPI2007						Weight: 227 lb	FT = 15%

LUMBER-

TOP CHORD 2x6 SPF 2100F 1.8E
 BOT CHORD 2x6 SPF 2100F 1.8E
 WEBS 2x4 SPF No.2 *Except*
 11-13,6-18,6-16,2-22: 2x6 SPF 1650F 1.5E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-2-5 oc purlins, except end verticals.
 BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
 WEBS 1 Row at midpt 6-16, 8-16

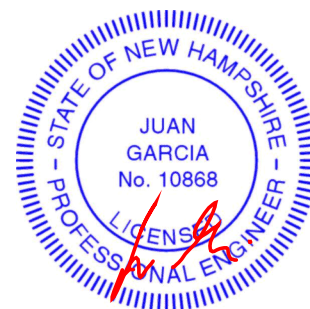
REACTIONS. (lb/size) 13=1814/0-5-8, 22=1814/0-5-8
 Max Horz 22=373(LC 8)
 Max Uplift 13=349(LC 9), 22=298(LC 8)

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

TOP CHORD 2-3=-3454/1081, 3-5=-6463/1911, 5-6=-8149/2256, 6-7=-2538/578, 7-8=-2162/547,
 8-10=-3009/598, 10-11=-3870/683, 11-13=-1807/339, 2-22=-1780/605
 BOT CHORD 3-20=-1589/497, 19-20=-1487/3582, 18-19=-2057/6226, 16-18=-1571/5501,
 15-16=-431/2618, 14-15=-565/3352, 13-14=-29/254
 WEBS 3-19=-464/2127, 5-19=-971/229, 5-18=-196/1452, 6-18=-1391/4601, 6-16=-4025/1346,
 7-16=-471/1891, 8-16=-1198/288, 10-15=-745/216, 11-14=-531/3117, 2-20=-708/2476,
 20-22=-425/349

NOTES-

- 1) Wind: ASCE 7-05; 115mph; TCDL=4.2psf; BCDL=4.8psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCDL: ASCE 7-05; Pg= 80.0 psf (ground snow); Pf=61.6 psf (flat roof snow); Category II; Exp B; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 18.0 psf or 2.00 times flat roof load of 61.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 6) All plates are MT20 plates unless otherwise indicated.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Bearing at joint(s) 13 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=349, 22=298.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



May 23, 2019

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100 Industrial Road
 Bradford, ON, L3Z 3G7

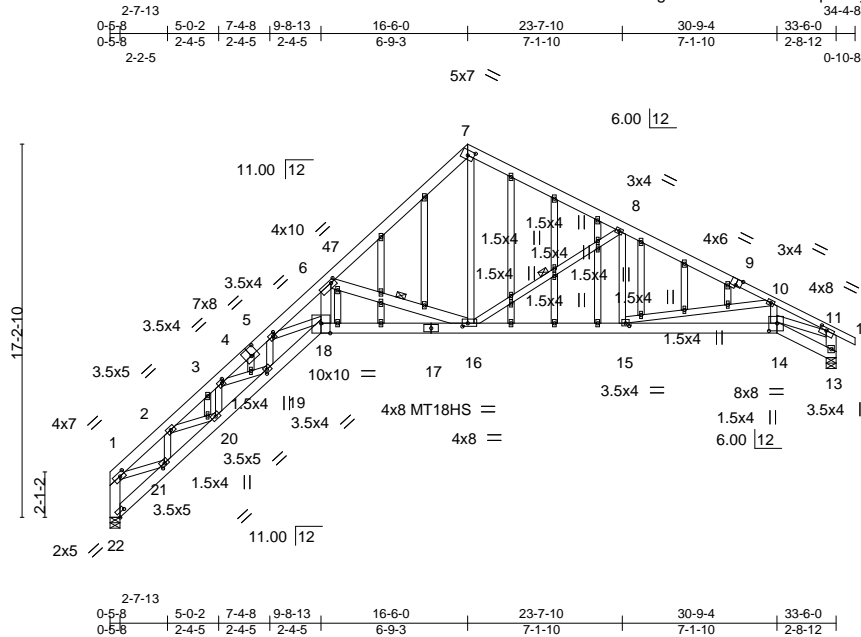
Job	Truss	Truss Type	Qty	Ply	Merry Sapphire	U1348598
191780	T02GS	GABLE	1	1		
Job Reference (optional)						

Structures R.B.R. Inc. (Can),

Sts-Anges de Beauce, PQ - G0S 3E0,

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ID:MrhCoQaakWLmw4U4bagGBGzHXGE-NhTMhpWTfyy2nvDWyYo5roTKCBYcQun9L79gi_zDi_x



Scale = 1:106.3

Plate Offsets (X,Y)-- [1:0-3-0,0-2-0], [3:0-1-8,0-1-12], [4:0-4-0,0-4-8], [5:0-1-8,0-1-12], [6:0-2-8,0-1-8], [7:0-3-8,0-2-12], [9:0-3-0,Edge], [11:0-3-8,0-1-8], [14:0-4-8,0-4-4], [15:0-2-0,0-1-8], [16:0-3-0,0-1-12], [18:0-5-0,Edge], [19:0-1-8,0-1-12], [21:0-2-8,0-1-8], [22:0-4-12,0-2-0]

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	l/defl	L/d	PLATES	GRIP
TCLL 61.6	1-4-0	TC 0.47	Vert(LL)	-0.49	18	>806	MT20	197/144
(Ground Snow=80.0)	Plate Grip DOL 1.15	BC 0.49	Vert(TL)	-0.67	16-18	>588	MT18HS	197/144
TCDL 7.0	Lumber DOL 1.15	WB 0.74	Horz(TL)	0.84	13	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.25	18	>999		
BCDL 8.0	Code IBC2009/TPI2007						Weight: 251 lb	FT = 15%

LUMBER-

TOP CHORD 2x6 SPF 2100F 1.8E *Except*
9-12: 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
11-13, 6-18, 1-22: 2x6 SPF 1650F 1.5E, 6-16: 2x6 SPF 2100F 1.8E
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-2 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 8-16

REACTIONS.

(lb/size) 13=1790/0-5-8, 22=1686/0-5-8
Max Horz 22=311(LC 8)
Max Uplift 13=344(LC 9), 22=252(LC 8)

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

TOP CHORD 1-2=-2746/835, 2-3=-4879/1470, 3-5=-6584/1887, 5-6=-7895/2144, 6-7=-2513/552,
7-8=-2102/524, 8-10=-2942/574, 10-11=-3566/611, 11-13=-1723/324, 1-22=-1679/527
BOT CHORD 21-22=-413/403, 20-21=-1146/2613, 19-20=-1694/4797, 18-19=-1972/6407,
16-18=-1500/5356, 15-16=-412/2564, 14-15=-505/3136
WEBS 2-21=-1454/441, 2-20=-407/1631, 3-20=-1259/339, 3-19=-224/1242, 5-19=-875/160,
5-18=-174/1142, 6-18=-1310/4452, 6-16=-3940/1293, 7-16=-444/1821, 8-16=-1183/289,
10-15=-581/172, 11-14=-492/3016, 1-21=-547/1913

NOTES-

- 1) Wind: ASCE 7-05; 115mph; TCDL=4.2psf; BCDL=4.8psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; 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) TCLL: ASCE 7-05; Pg= 80.0 psf (ground snow); Pf=61.6 psf (flat roof snow); Category II; Exp B; Partially Exp.; Ct=1.10
- 4) Unbalanced snow loads have been considered for this design.
- 5) This truss has been designed for greater of min roof live load of 18.0 psf or 2.00 times flat roof load of 61.6 psf on overhangs non-concurrent with other live loads.
- 6) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 7) All plates are MT20 plates unless otherwise indicated.
- 8) All plates are 2x4 MT20 unless otherwise indicated.
- 9) Gable studs spaced at 2-0-0 oc.
- 10) This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- 11) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 12) Bearing at joint(s) 13, 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 13) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb)

Continued on Page 2.



May 23, 2019

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100 Industrial Road
Bradford, ON, L3Z 3G7

Job	Truss	Truss Type	Qty	Ply	Merry Sapphire	U1348598
191780	T02GS	GABLE	1	1	Job Reference (optional)	

NOTES-

14) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.

Job	Truss	Truss Type	Qty	Ply	Merry Sapphire	U1348599
191780	T03	ROOF SPECIAL	11	1		

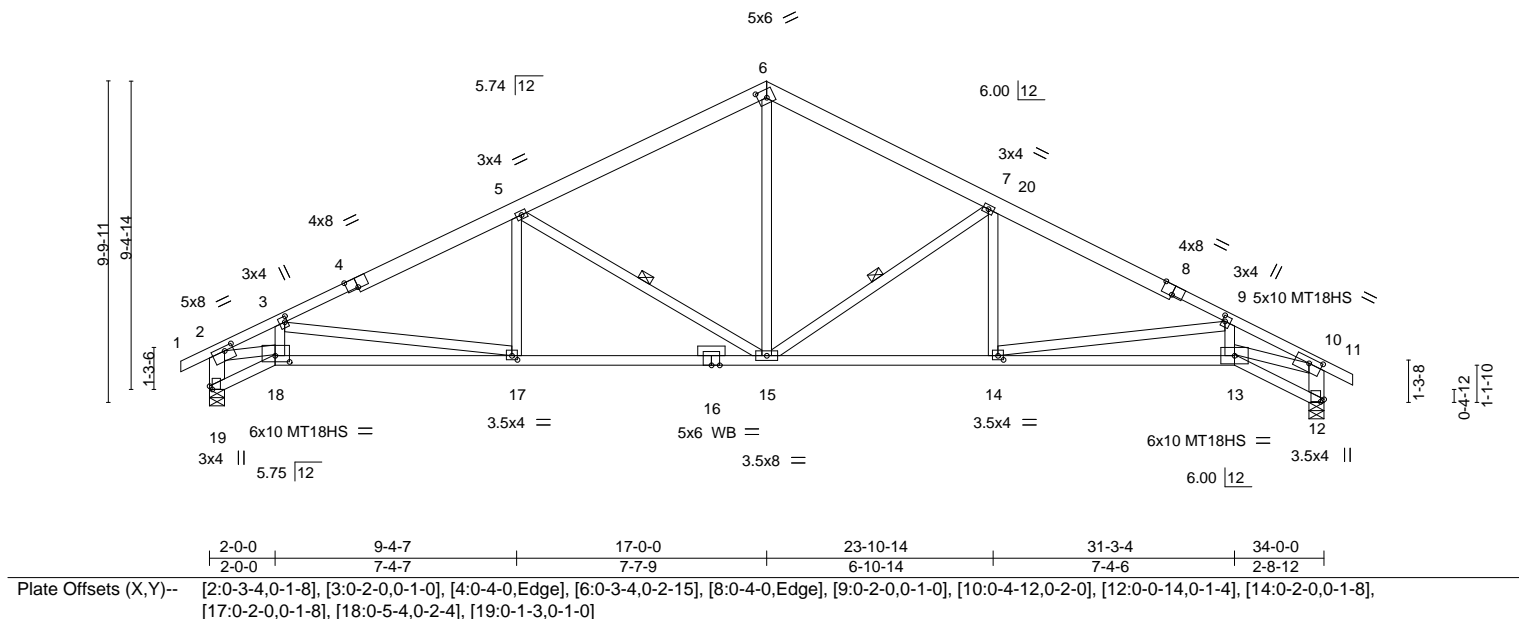
Structures R.B.R. Inc. (Can), Sts-Anges de Beauce, PQ - G0S 3E0,

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ID:MrhCoQaakWLMw4U4bagGBGzHXGE-rt1ku9X5QG4vP3oiWGJKO??ODanR9l8lafuEEQzDi_w

0-10-8 2-0-0 9-4-7 17-0-0 23-10-14 31-3-4 34-0-0 34-10-8
0-10-8 2-0-0 7-4-7 7-7-9 6-10-14 7-4-6 2-8-12 0-10-8

Scale = 1:70.3



LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 61.6	2-0-0	TC 0.90	Vert(LL)	-0.32	14	>999	MT20	197/144
(Ground Snow=80.0)	Plate Grip DOL 1.15	BC 0.90	Vert(TL)	-0.50	13-14	>797	MT18HS	197/144
TCDL 7.0	Lumber DOL 1.15	WB 0.92	Horz(TL)	0.42	12	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.11	15	>999		
BCDL 8.0	Code IBC2009/TPI2007						Weight: 169 lb	FT = 15%

LUMBER-

TOP CHORD 2x6 SPF 1650F 1.5E *Except*
1-4: 2x4 SPF 1650F 1.5E, 8-11: 2x4 SPF 2100F 1.8E
BOT CHORD 2x4 SPF No.2 *Except*
16-18,13-16: 2x4 SPF 1650F 1.5E
WEBS 2x4 SPF No.2 *Except*
2-19,10-12: 2x6 SPF 1650F 1.5E, 10-13: 2x4 SPF 1650F 1.5E
OTHERS 2x4 SPF No.2

BRACING-

TOP CHORD Structural wood sheathing directly applied, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 5-15, 7-15

REACTIONS.

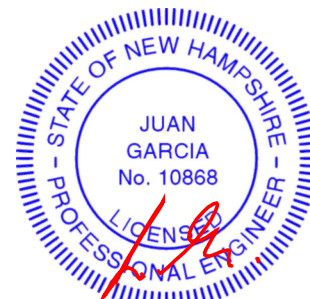
(lb/size) 19=2721/0-5-8, 12=2721/0-5-8
Max Horz 19=175(LC 7)
Max Uplift 19=529(LC 8), 12=530(LC 9)

FORCES.

(lb) - Max. Comp./Max. Ten. - All forces 250 (lb) or less except when shown.
TOP CHORD 2-19=2666/554, 2-3=4084/810, 3-5=4431/794, 5-6=3179/603, 6-7=3193/629,
7-9=4441/764, 9-10=5517/936, 10-12=2699/511
BOT CHORD 17-18=804/3746, 15-17=650/3854, 14-15=472/3865, 13-14=746/4843
WEBS 2-18=720/3756, 3-18=700/223, 3-17=59/311, 5-17=0/289, 5-15=1747/444,
6-15=304/1694, 7-15=1815/435, 7-14=0/335, 9-14=993/290, 10-13=768/4785

NOTES-

- 1) Wind: ASCE 7-05; 115mph; TCDL=4.2psf; BCDL=4.8psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-05; Pg= 80.0 psf (ground snow); Pf=61.6 psf (flat roof snow); Category II; Exp B; Partially Exp.; Ct=1.10
- 3) Unbalanced snow loads have been considered for this design.
- 4) This truss has been designed for greater of min roof live load of 18.3 psf or 2.00 times flat roof load of 61.6 psf on overhangs non-concurrent with other live loads.
- 5) This truss has been designed for basic load combinations, which include cases with reductions for multiple concurrent live loads.
- 6) All plates are MT20 plates unless otherwise indicated.
- 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 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Bearing at joint(s) 19, 12 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 19=529, 12=530.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



May 23,2019

WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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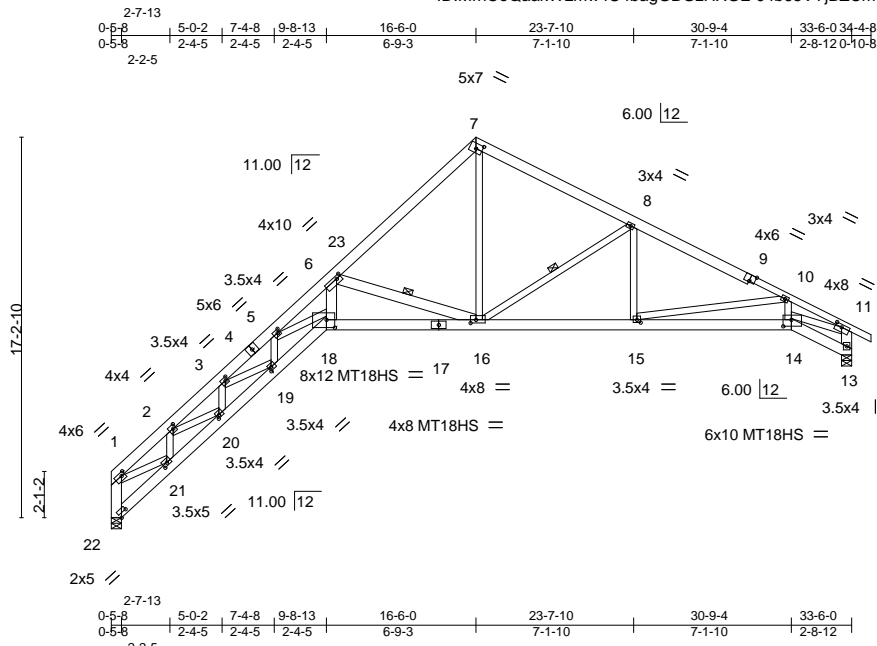
Job	Truss	Truss Type	Qty	Ply	Merry Sapphire	U1348600
191780	T04	ROOF SPECIAL	3	1		

Structures R.B.R. Inc. (Can),

Sts-Anges de Beauce, PQ - G0S 3E0,

8.240 s May 13 2019 MiTek Industries, Inc. Thu May 23 06:43:00 2019 Page 1

ID:MrhCoQaakWlMw4U4bagGBGzHXGE-J4b65VYjBZCm1DNU4zqZwDYgh_EDuoGRoJenmszDi_v



Scale = 1:104.3

Plate Offsets (X,Y)--	[1:0-2-0,0-1-12], [2:0-1-8,0-2-0], [3:0-1-8,0-1-12], [5:0-1-8,0-1-12], [6:0-2-8,0-1-8], [7:0-3-8,0-2-12], [9:0-3-0,Edge], [11:0-3-8,0-1-8], [14:0-4-8,0-3-8], [15:0-2-0,0-1-8], [16:0-3-0,0-1-12], [18:0-4-8,0-4-4], [19:0-1-8,0-1-12], [20:0-1-8,0-1-8], [21:0-2-8,0-1-8], [22:0-4-12,0-2-0]
-----------------------	---

LOADING (psf)	SPACING-	CSI.	DEFL.	in (loc)	I/defl	L/d	PLATES	GRIP
TCLL 61.6	1-4-0	TC 0.47	Vert(LL)	-0.48	18	>823	MT20	197/144
(Ground Snow=80.0)	Plate Grip DOL 1.15	BC 0.48	Vert(TL)	-0.66	16-18	>599	MT18HS	197/144
TCDL 7.0	Lumber DOL 1.15	WB 0.74	Horz(TL)	0.82	13	n/a		
BCLL 0.0 *	Rep Stress Incr YES	Matrix-S	Wind(LL)	0.24	18	>999		
BCDL 8.0	Code IBC2009/TPI2007						Weight: 211 lb	FT = 15%

LUMBER-

TOP CHORD 2x6 SPF 2100F 1.8E *Except*
9-12: 2x4 SPF 1650F 1.5E
BOT CHORD 2x6 SPF 2100F 1.8E
WEBS 2x4 SPF No.2 *Except*
11-13,6-18,1-22: 2x6 SPF 1650F 1.5E, 6-16: 2x6 SPF 2100F 1.8E

BRACING-

TOP CHORD Structural wood sheathing directly applied or 3-3-10 oc purlins, except end verticals.
BOT CHORD Rigid ceiling directly applied or 6-0-0 oc bracing.
WEBS 1 Row at midpt 6-16, 8-16

REACTIONS. (lb/size) 13=1790/0-5-8, 22=1686/0-5-8
Max Horz 22=311(LC 8)
Max Uplift 13=-344(LC 9), 22=-252(LC 8)

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

TOP CHORD 1-2=-2745/835, 2-3=-4880/1470, 3-5=-6579/1886, 5-6=-7748/2103, 6-7=-2517/553,
7-8=-2105/525, 8-10=-2941/574, 10-11=-3567/611, 11-13=-1724/324, 1-22=-1678/527
BOT CHORD 21-22=-413/403, 20-21=-1146/2614, 19-20=-1693/4795, 18-19=-1957/6356,
16-18=-1477/5271, 15-16=-412/2563, 14-15=-506/3137
WEBS 2-21=-1455/441, 2-20=-407/1631, 3-20=-1254/338, 3-19=-223/1239, 5-19=-805/138,
5-18=-144/1037, 6-18=-1272/4318, 6-16=-3850/1267, 7-16=-446/1826, 8-16=-1180/289,
10-15=-583/172, 11-14=-492/3017, 1-21=-546/1913

NOTES-

- 1) Wind: ASCE 7-05; 115mph; TCDL=4.2psf; BCDL=4.8psf; h=25ft; Cat. II; Exp B; Enclosed; MWFRS (low-rise) gable end zone; cantilever left and right exposed; end vertical left and right exposed; Lumber DOL=1.60 plate grip DOL=1.60
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- 8) * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 tall by 2-0-0 wide will fit between the bottom chord and any other members.
- 9) Bearing at joint(s) 13, 22 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 10) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 100 lb uplift at joint(s) except (jt=lb) 13=344, 22=252.
- 11) Warning: Additional permanent and stability bracing for truss system (not part of this component design) is always required.



May 23,2019



WARNING - Verify design parameters and READ NOTES ON THIS AND INCLUDED MITEK REFERENCE PAGE MII-7473 rev. 10/03/2015 BEFORE USE.

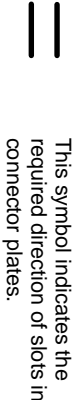
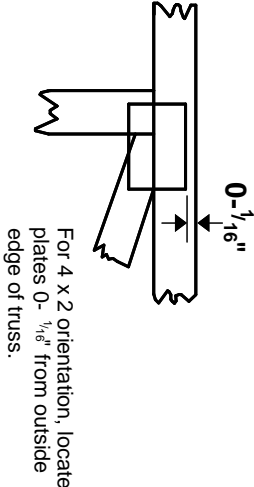
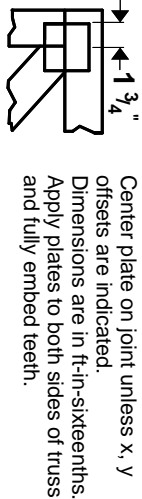
Design valid for use only with MiTek® connectors. This design is based only upon parameters shown, and is for an individual building component, not a truss system. Before use, the building designer must verify the applicability of design parameters and properly incorporate this design into the overall building design. Bracing indicated is to prevent buckling of individual truss web and/or chord members only. Additional temporary and permanent bracing is always required for stability and to prevent collapse with possible personal injury and property damage. For general guidance regarding the fabrication, storage, delivery, erection and bracing of trusses and truss systems, see **ANSI/TPI1 Quality Criteria, DSB-89 and BCSI Building Component Safety Information** available from Truss Plate Institute, 218 N. Lee Street, Suite 312, Alexandria, VA 22314.



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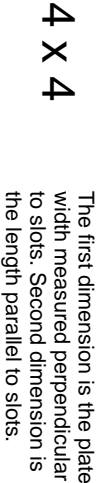
Symbols

PLATE LOCATION AND ORIENTATION

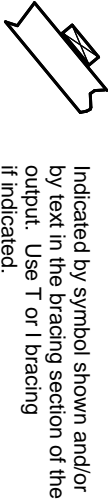


* Plate location details available in **MiTek 20/20** software or upon request.

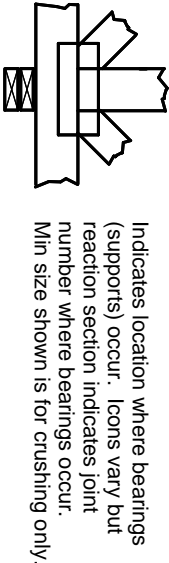
PLATE SIZE



LATERAL BRACING LOCATION

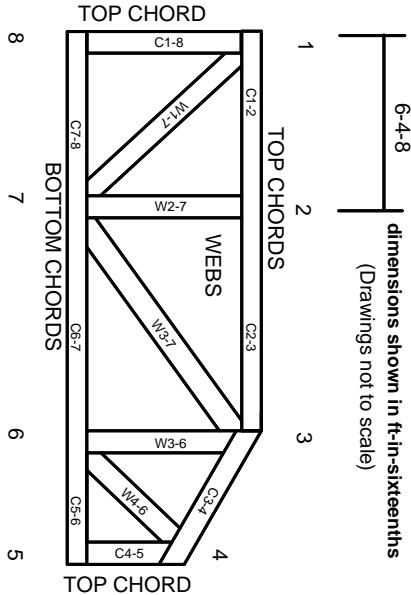


BEARING



Industry Standards:
ANSI/TP1: 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/TP1 section 6.3 These truss designs rely on lumber values established by others.

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MiTek Engineering Reference Sheet: MII-7473 rev. 10/03/2015



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 ware at joint locations are regulated by ANSI/TP1 1.
7. Design assumes trusses will be suitably protected from the environment in accord with ANSI/TP1 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/TP1 1 Quality Criteria.