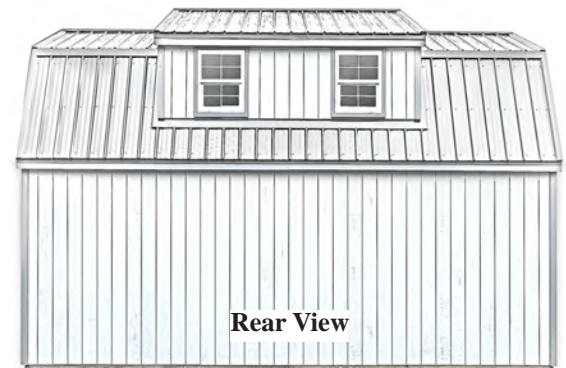
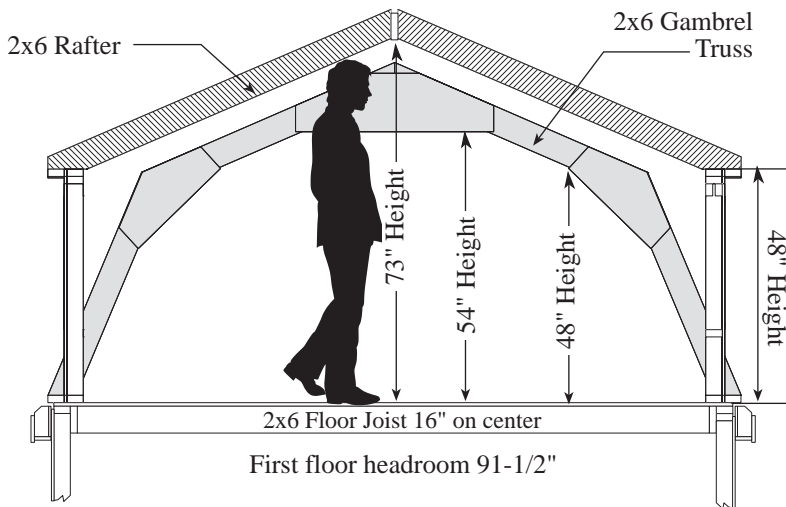
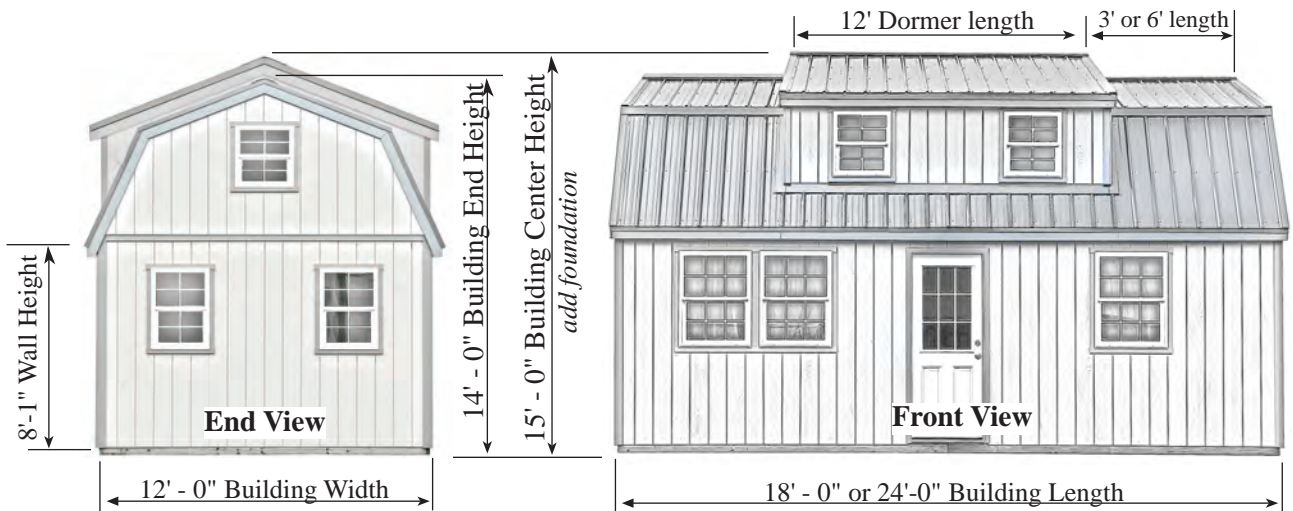




# Sentry Buildings

Before you order our kit or begin construction, obtain a building permit. If additional documents are required contact [questions@barnkits.com](mailto:questions@barnkits.com).

## Lakewood Elevation



**Foundation:** By owner. Optional wood floor available, *see specifications next page*.

**Wall Framing:** Constructed from 2x4 pre-cut wall studs spaced 24" on center between top and bottom plates. 2x4 tie plates are included. 2x4 bottom plate is treated.

**Siding:** Louisiana-Pacific 'Smart Panel' with 50 year warranty, 5 year labor replacement. Siding is pre-cut for the roof gables and dormer walls. Siding is primed, finish paint by owner.

**Loft Flooring:** 2x6 Floor joist spaced 16" on center covered with 5/8" plywood. A 12'x10' loft area for 12'x18' building. A 12'x14' loft is included for 12'x24' building.

**Roof System:** 2x6 trusses spaced 24" on center, (40 psf ground snow load, 170 mph peak gust with 134 mph wind load) covered with 5/8" plywood roof sheathing. *Optional metal roof kit available. Shingles by owner.*

**Windows:** Six insulated, single hung windows with tilt in sash and screens are included for the upper dormer and roof gables. White finish with white pine trim are included. Lower windows and doors by owner.

**Exterior Trim:** Primed white pine trim for corners, and gable trim with 10 year warranty.

**Hardware:** Nails, truss and joist hangers and necessary screws are included.

Job PER17639	Truss R1	Truss Type KINGPOST	Qty 1	Ply 1	Job Reference (optional)
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ID:TSuGMcCaRw2upHY2mnCZuQzMD0Y-wDTfbF8TFvscuAZNVaWszAVQaFIUkpl9XGjbeOzMBB7  
8.020 s Aug 1 2016 MiTek Industries, Inc. Fri Apr 28 12:41:10 2017 Page 1

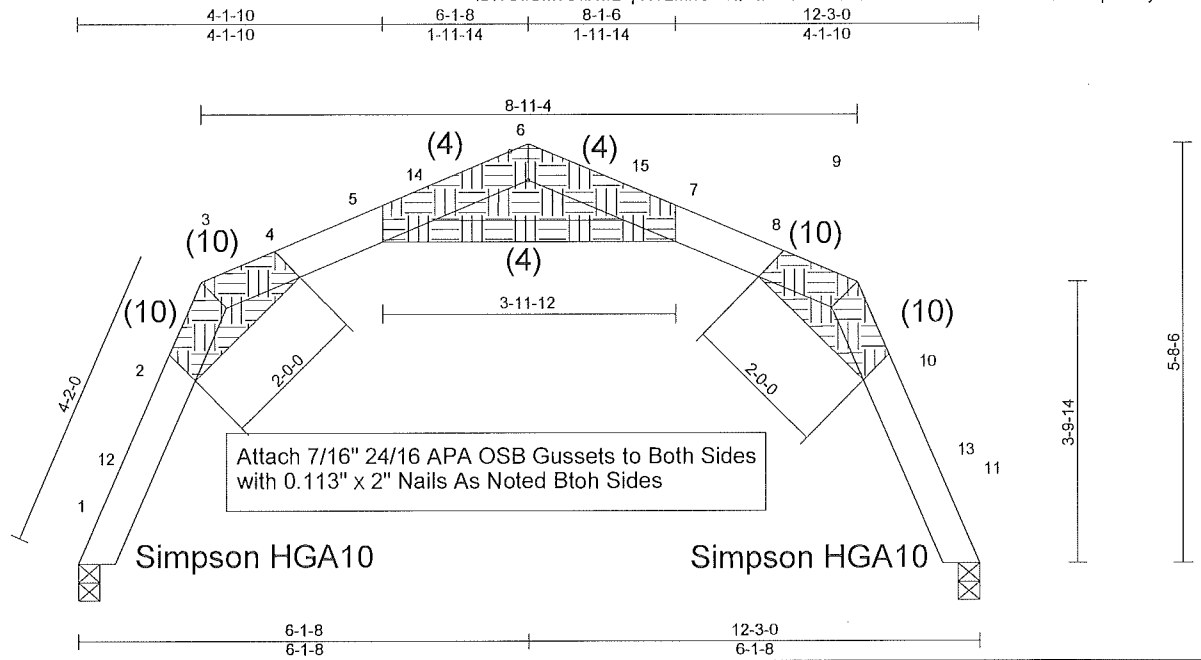


Plate Offsets (X,Y)-- [3:0-2-3,Edge], [6:0-3-0,Edge], [9:0-2-3,Edge]

<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.8 (Ground Snow=40.0)	2-0-0	TC 0.27	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.00	Vert(LL) 0.07 8 >999 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.12	Vert(CT) -0.07 8 >999 180		
BCDL 10.0	Rep Stress Incr YES	Matrix-P	Horz(CT) 0.00 n/a n/a		
	Code IRC2015/TPI2014			Weight: 41 lb	FT = 20%

**LUMBER-**  
TOP CHORD 2x6 SPF No.2  
WEBS 2x4 SPF No.2

**BRACING-**  
TOP CHORD  
BOT CHORD

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

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

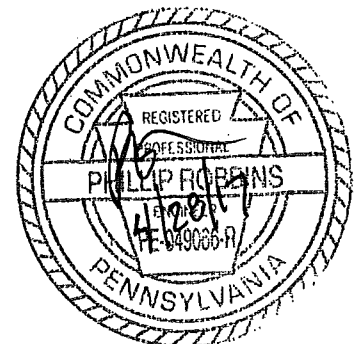
**REACTIONS.** (lb/size) 1=488/0-3-8 (min. 0-3-4), 11=488/0-3-8 (min. 0-3-4)  
Max Horz 1=300(LC 22), 11=-300(LC 21)  
Max Uplift 1=-290(LC 14), 11=-290(LC 14)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
**TOP CHORD** 1-12=-536/455, 2-12=-462/460, 2-3=-701/680, 9-10=-701/680, 10-13=-462/460, 11-13=-536/455, 3-4=-706/696,  
4-5=-356/496, 5-14=-358/175, 6-14=-340/181, 6-15=-340/181, 7-15=-358/175, 7-8=-356/496, 8-9=-706/696  
**WEBS** 2-4=-1028/704, 5-7=-242/351, 8-10=-1028/704

**NOTES-**

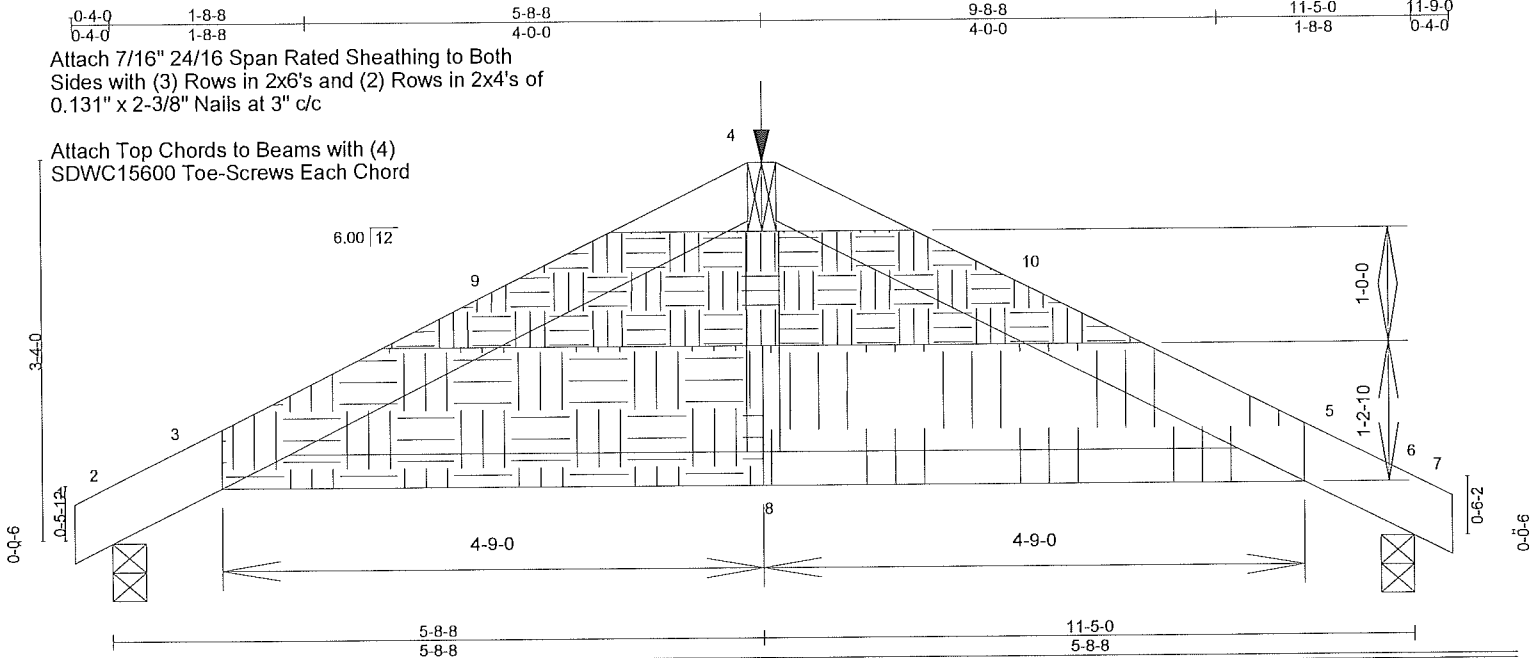
- 1) Wind: ASCE 7-10; Vult=170mph (3-second gust) Vasd=134mph; TCDL=6.0psf; BCDL=6.0psf; h=15ft; B=45ft; L=24ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (directional) and C-C Exterior(2) 0-1-12 to 4-9-15, Interior(1) 4-9-15 to 6-1-8, Exterior(2) 6-1-8 to 12-1-4 zone; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60
- 2) TCLL: ASCE 7-10; Pg= 40.0 psf (ground snow); Pf=30.8 psf (flat roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
- 3) Unbalanced snow loads have been considered for this design.
- 4) \* 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.
- 5) Bearing at joint(s) 1, 11 considers parallel to grain value using ANSITPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.
- 6) Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 290 lb uplift at joint 1 and 290 lb uplift at joint 11.
- 7) Non Standard bearing condition. Review required.
- 8) This truss is designed in accordance with the 2015 International Residential Code sections R502.11.1 and R802.10.2 and referenced standard ANSITPI 1.

**LOAD CASE(S)** Standard



Job	Truss	Truss Type	Qty	Ply	Job Reference (optional)
PER17234 DORMER RIDGE B-MT1AGIR		HOWE	1	1	

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 ID: SIEkw60UJRvpLVvjKxc5iCy9QFv-9w\_kwN3GJd9QwE0ImcITHhc5J6Y8S8EkS9mllizicR6



Attach 7/16" 24/16 Span Rated Sheathing to Both Sides with (3) Rows in 2x6's and (2) Rows in 2x4's of 0.131" x 2-3/8" Nails at 3" c/c

Attach Top Chords to Beams with (4) SDWC15600 Toe-Screws Each Chord

<b>LOADING (psf)</b>	<b>SPACING-</b>	<b>CSI.</b>	<b>DEFL.</b>	<b>PLATES</b>	<b>GRIP</b>
TCLL 30.8 (Ground Snow=40.0)	2-0-0	TC 0.79	in (loc) l/defl L/d	MT20	197/144
TCDL 10.0	Plate Grip DOL 1.15	BC 0.00	Vert(LL) 0.23 4-5 >574 240		
BCLL 0.0 *	Lumber DOL 1.15	WB 0.65	Vert(CT) -0.21 4-5 >632 180		
BCDL 10.0	Rep Stress Incr NO	Matrix-P	Horz(CT) -0.12 6 n/a n/a	Weight: 46 lb	FT = 20%
	Code IRC2015/TPI2014				

**LUMBER-**  
 TOP CHORD 2x6 SP No.1  
 WEBS 2x4 SPF No.2

**BRACING-**  
 TOP CHORD Structural wood sheathing directly applied or 3-6-8 oc purlins.  
 BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.  
 JOINTS 1 Brace at Jt(s) 8

MiTek recommends that Stabilizers and required cross bracing be installed during truss erection, in accordance with Stabilizer Installation guide.

**REACTIONS.** (lb/size) 2=1178/0-3-8 (min. 0-1-8), 6=1178/0-3-8 (min. 0-1-8)  
 Max Horz 2=-130(LC 8)  
 Max Uplift 2=-1098(LC 10), 6=-1098(LC 10)

**FORCES.** (lb) - Maximum Compression/Maximum Tension  
 TOP CHORD 1-2=0/17, 2-3=-520/498, 3-9=-2264/1999, 4-9=-2184/2017, 4-10=-2184/2017, 5-10=-2264/1999, 5-6=-507/498,  
 6-7=0/17  
 WEBS 3-8=-1686/2025, 5-8=-1686/2025, 4-8=-62/52

- NOTES-**
- 1) Wind: ASCE 7-10; Vult=170mph (3-second gust) Vasd=134mph; TCDL=6.0psf; BCDL=6.0psf; h=35ft; B=45ft; L=11ft; eave=4ft; Cat. II; Exp C; enclosed; MWFRS (directional); Lumber DOL=1.60 plate grip DOL=1.60
  - 2) TCLL: ASCE 7-10; Pg= 40.0 psf (ground snow); Pf=30.8 psf (flat roof snow); Category II; Exp C; Partially Exp.; Ct=1.1
  - 3) Unbalanced snow loads have been considered for this design.
  - 4) \* 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.
  - 5) Two RT3A USP connectors recommended to connect truss to bearing walls due to UPLIFT at jt(s) 2 and 6. This connection is for uplift only and does not consider lateral forces.
  - 6) Beveled plate or shim required to provide full bearing surface with truss chord at joint(s) 2, 6.
  - 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) Hanger(s) or other connection device(s) shall be provided sufficient to support concentrated load(s) 1370 lb down and 1256 lb up at 5-8-8 on top chord. The design/selection of such connection device(s) is the responsibility of others.
  - 9) In the LOAD CASE(S) section, loads applied to the face of the truss are noted as front (F) or back (B).

**LOAD CASE(S)** Standard  
 1) Dead + Snow (balanced): Lumber Increase=1.15, Plate Increase=1.15  
 Uniform Loads (plf)  
 Vert: 1-4=-82, 4-7=-82  
 Concentrated Loads (lb)  
 Vert: 4=-1370(F)

