## Obtaining a permit for a Best Barns shed or garage kit

Do-it-Yourself kits from Best Barns are designed for use as storage buildings or garages only. Use for any other purposes is neither implied nor inferred.\*

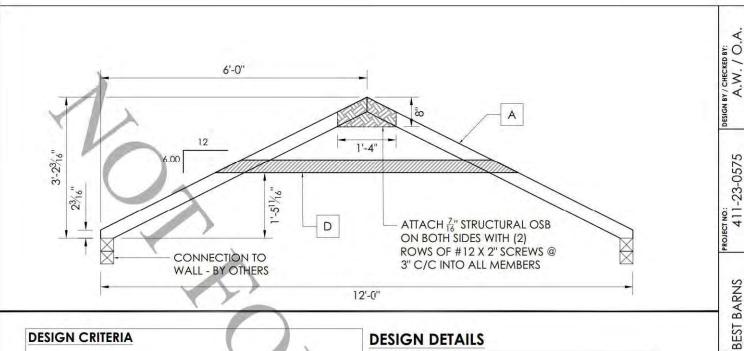
Building code offices and HOA's may require additional documents to obtain a permit. The homeowner's first step is to contact their local code office and ask what is needed for the size of building to be purchased.

Typically, the necessary documentation may include some or all of the following.

- o Elevations showing at least two sides of structure.
- o Site plan showing existing structures and proposed build site.
- o Engineered drawings for truss system indicating snow and wind load ratings.\*\*
- o Cross sections of wall framing and foundation.
- o Tie down locations for high wind load areas.\*\*\*

Permit requirements vary based on location. Some areas may not require a permit at all. The documents provided by Best Barns are intended to help the homeowner with the permit process but do not guarantee a permit will be issued. It is the homeowner's responsibility to determine if a permit is required and submit the necessary documentation.

- \*Any alteration to the construction of Best Barns sheds or garages may require the services of a civil engineer to meet local building codes. Best Barns cannot provide these additional services.
- \*\* Engineered truss drawings stamped for your individual state can be obtained upon request. Some models do not have wind and snow load ratings. A non refundable fee will be required to purchase stamped drawings. Contact us directly at 800-245-1577 for further details.
- \*\*\* Certain states such as Florida and California have stringent requirements for obtaining a permit. Depending on your location, a civil engineer's services may be required to provide necessary documents. These services are the homeowner's responsibility to obtain from an engineer within the state of build location and are not included in the purchase of a shed or garage kit.



## **DESIGN CRITERIA**

INTERNATIONAL BUILDING CODE (IBC 2015, IBC 2018, IBC 2021) DESIGN CRITERIA

DEAD LOAD (D):

2.5 PSF ROOF COLLATERAL DEAD LOAD

LIVE LOAD (Lr):

ROOF LIVE LOAD 20 PSF

SNOW LOAD (S):

GROUND SNOW LOAD 50 PSF SNOW LOAD IMPORTANCE FACTOR (Is) 1.0 EXPOSURE FACTOR (Ce) 1.0 THERMAL FACTOR (Ct) 1.2 GOVERNING ROOF SNOW LOAD 42 PSF

WIND (W):

ANALYSIS PROCEDURE: ASCE 7-10 / ASCE 7-16 BASIC WIND SPEED: 150 MPH **EXPOSURE CATEGORY:** C

### LOAD COMBINATIONS:

UNBALANCED SNOW LOAD

1.0 D 1.0 D + 1.0 L 1.0 D + 1.0 (Lr or S) 1.0 D + 0.75 L + 0.75 (Lr or S) 1.0 D + (0.6 W) 1.0 D + 0.75 (1.0 W) + 0.75 L + 0.75 (Lr or S)

## **DESIGN DETAILS**

A - TOP CHORD	2X4	
B - BOTTOM CHORD	-	
C - WEB		
D - COLLAR-TIE	2X4	
SPACING	24" C/C	
WOOD MATERIAL	SPF NO. 2	
MAX. UNBRACED LENGTH OF TOP CHORD	5'-1 <sup>5</sup> / <sub>16</sub> " L / 180 L / 240	
DEAD LOAD DEFLECTION		
LIVE LOAD DEFLECTION		
DEAD + LIVE LOAD DEFLECTION	L / 180	
UPLIFT REACTION AT CONN. TO WALL (LBF)	160	
LATERAL REACTION AT CONN. TO WALL (LBF)	817	
BEARING REACTION AT CONN. TO WALL (LBF)	561	

TIMBER TRUSS

STATE:
XX - XXXXX

04/25/2023

## **WOOD DESIGN NOTES:**

C <sub>D</sub> - LOAD DURATION FACTOR FOR WIND	1.6
C <sub>D</sub> - LOAD DURATION FACTOR FOR SNOW	1.15
C <sub>M</sub> - MOISTURE CONTENT	1.0
C <sub>1</sub> - TEMPERTATURE FACTOR	1.0

#### NOTES:

0.6 D + 1.0 W

- UNBALANCED SNOW LOADS HAVE BEEN CONSIDERED IN THE DESIGN. 1.
- WIND LOADING IS BASED ON 3-S GUST ULTIMATE WIND SPEED, EXPOSURE C, PER ASCE 7.

50 PSF

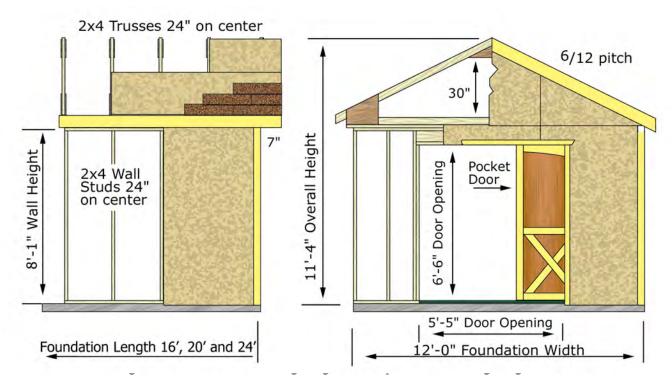
- LOADS ARE BASED ON RISK CATEGORY II.
- SEE ADDITIONAL SHEETS FOR MEMBER CHECKS.

REPORT DATE EXPIRES:	XX/XX/XXXX
STAMP DATE EXPIRES:	XX/XX/XXXX
DATE SIGNED:	XX/XX/XXXX



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

## SOUTH DAKOTA ELEVATION



**Wall Framing:** Constructed from 2x4 precut wall studs spaced 24" on center between top, bottom and tie plates.

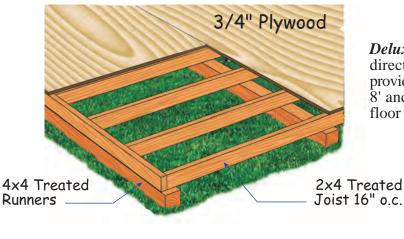
**Pocket Doors:** Pre-built 2x4 frame covered with LP 'Smart Panel' primed siding. White pine trim, not painted, installed over siding.

**Siding:** 7/16" OSB (Oriented Strand Board). Vinyl siding by others.

**Roof System:** 2x4 trusses spaced 24" on center, (40 psf ground snow load, 120 mph wind load). 7/16" OSB roof sheathing. *Shingles by owner*.

**Exterior Trim:** White pine trim for gable trim, door opening, and sidewall fascia.

**Hardware:** Nails for all framing, metal hurricane hangers for trusses. Heavy duty aluminum track, decorative door handles and lockable door latch.



**Deluxe Floor:** 4x4 treated runners can be installed directly on the grass. The runners elevate the floor providing air flow under the floor eliminating moisture. 8' and 10' wide floors have three runners, 12' wide floor have four. The floor covering is 3/4" plywood.

Best Barns model:						
ft. wide x _	ft. long					

Manufactured by: RBS Holdings, Inc. 205 Arlington Drive Greenville, PA 16125 phone: 800-245-1577 fax: 724-646-0772

## Common Foundation Cross Sections

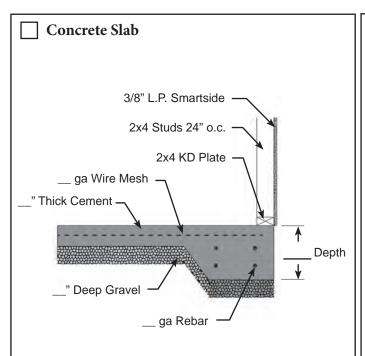
This document illustrates common foundation types which can be used for construction of Best Barns 12 ft. wide structures. Alteration may be necessary to conform to homeowners intended use and or permitting requirements.

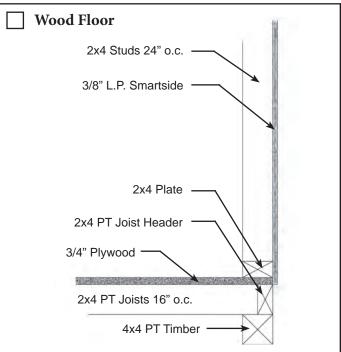
Drawings not to scale.

### **Instructions:**

Check appropriate foundation cross section and provide specifications as necessary.

Homeowner may also design and draw in space provided for custom foundation type.





☐ Homeowner Design

# Best Barns model:\_\_\_\_\_ft. wide x \_\_\_\_ft. long

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## Truss & Wall Cross Section

Top of wall inclusive of wall framing and truss cross sections.

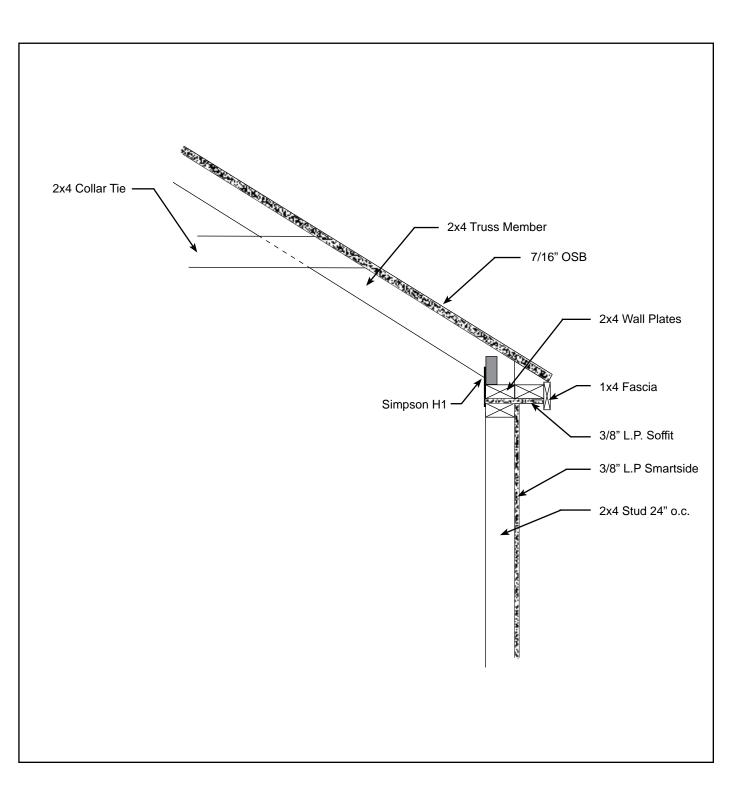
Drawing not to scale.

## **Instructions:**

Homeowner may provide additional information as appropriate.

### **Notes:**

Refer to installation manual for further detail.



Site Plan for:		

Manufactured by: RBS Holdings, Inc. 205 Arlington Drive Greenville, PA 16125 phone: 800-245-1577 fax: 724-646-0772

## **Instructions:**

Draw property line, existing structures and proposed placement of building.

Homeowner may also be required to show trees and shubs. Check with HOA or permit office for requirements.