

## 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.

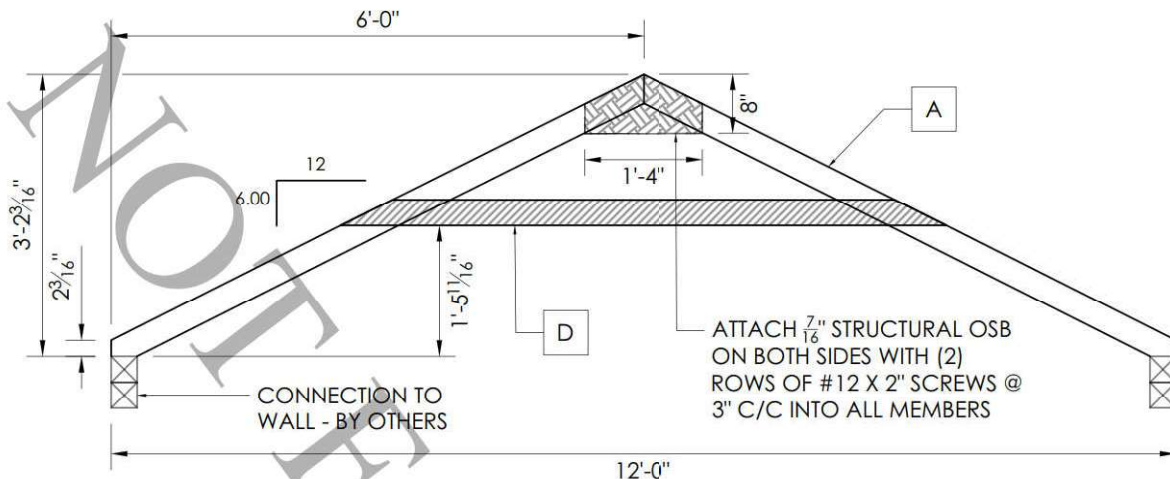
- o Elevations showing at least two sides of structure.
- o Site plan showing existing structures and proposed build site.
- o Engineered drawings for truss system indicating snow and wind load ratings.\*\*
- o Cross sections of wall framing and foundation.
- o Tie down locations for high wind load areas.\*\*\*

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):

ROOF COLLATERAL DEAD LOAD 2.5 PSF

### 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

UNBALANCED SNOW LOAD 50 PSF

### WIND (W):

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

### LOAD COMBINATIONS:

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)  
0.6 D + 1.0 W

### NOTES:

- UNBALANCED SNOW LOADS HAVE BEEN CONSIDERED IN THE DESIGN.
- WIND LOADING IS BASED ON 3-S GUST ULTIMATE WIND SPEED, EXPOSURE C, PER ASCE 7.
- LOADS ARE BASED ON RISK CATEGORY II.
- SEE ADDITIONAL SHEETS FOR MEMBER CHECKS.

## 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 5/16"
DEAD LOAD DEFLECTION	L / 180
LIVE LOAD DEFLECTION	L / 240
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

## 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>t</sub> - TEMPERATURE FACTOR	1.0

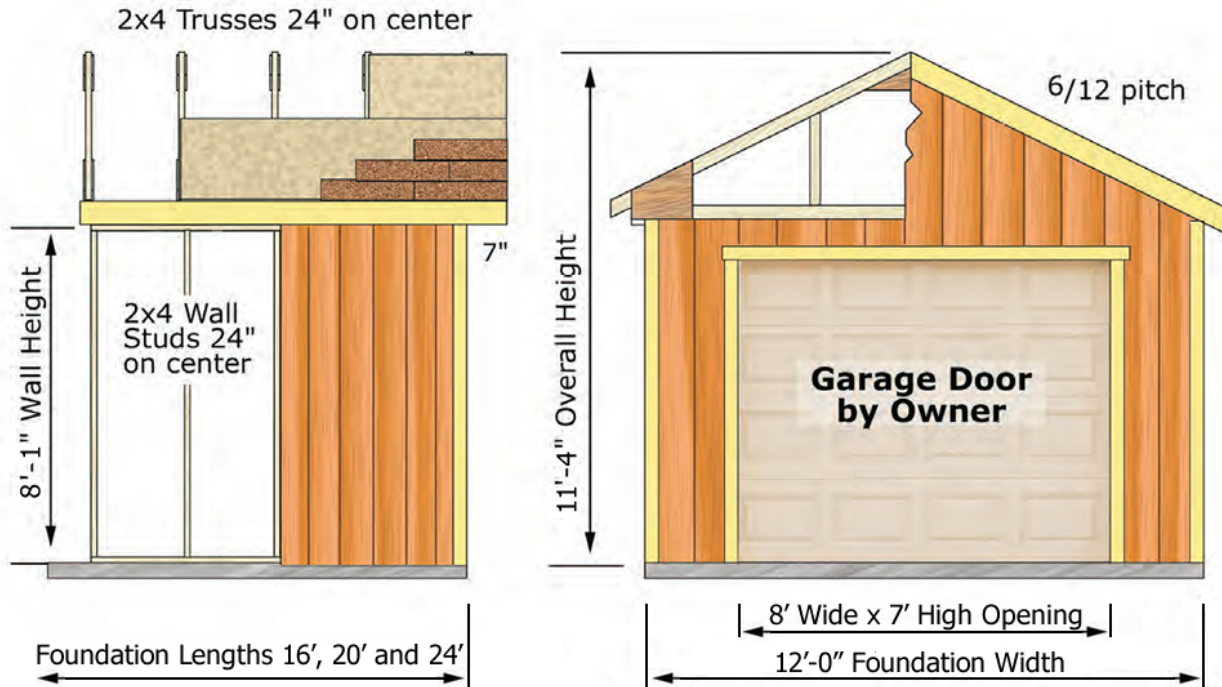
REPORT DATE EXPIRES: XX/XX/XXXX  
STAMP DATE EXPIRES: XX/XX/XXXX  
DATE SIGNED: XX/XX/XXXX

DESIGN BY / CHECKED BY: A.W. / O.A.  
PROJECT NO.: 411-23-0575  
CLIENT: BEST BARNS  
TITLE: TIMBER TRUSS  
STATE: XX - XXXXX  
DATE: 04/25/2023



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).

## SIERRA ELEVATION



**Foundation:** Sold optionally

**Wall Framing:** 2x4 Construction with 24" on center stud spacing, single bottom plate and top plate with 2x4 tie plates.

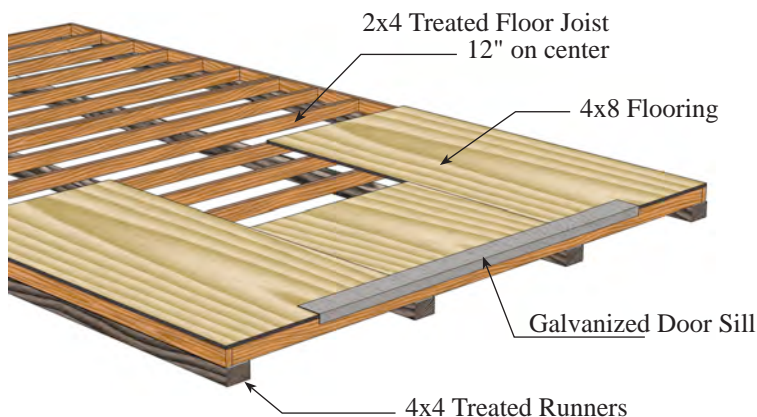
**Siding:** Louisiana-Pacific 'SmartPanel' 8" o.c. groove, primed ready to paint.

**Roof System:** 2x4 trusses spaced 24" on center, (see engineered truss drawing for load ratings). 7/16" OSB roof sheathing. *Shingles by owner.*

**Exterior Trim:** White pine trim for corners, door, gable trim and front and back fascia. Primed ready to paint.

**Garage Door:** By owner.

**Hardware:** Nails for framing, metal hurricane hangers for trusses.



### Optional Sturdy-built Floor System:

2x4 treated floor joist spaced 12" on center covered with 3/4" plywood, *not treated*, installed over 4x4 treated runners. Galvanized door sill and nails are included. Material is not pre-cut.

* 12'x16' Foundation Size	12'-0" x 16'-0"
12'x20' Foundation Size	12'-0" x 20'-0"
12'x24' Foundation Size	12'-0" x 24'-0"

**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.

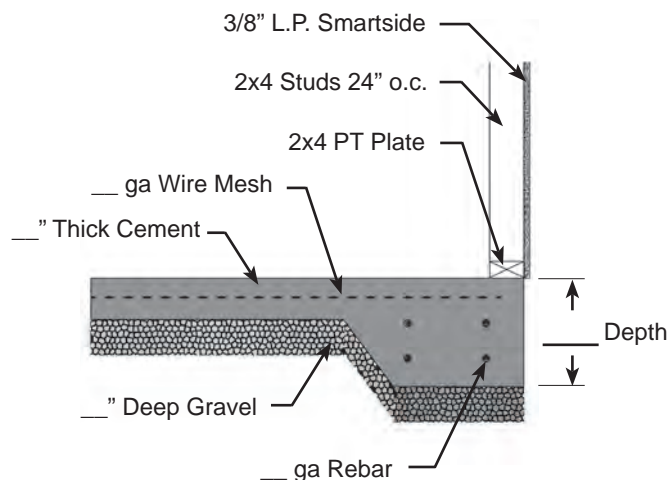
Drawings not to scale.

### Instructions:

Check appropriate foundation cross section and provide specifications as necessary.

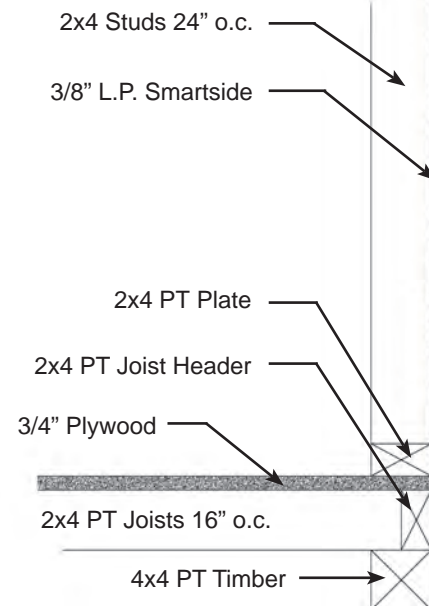
Homeowner may also design and draw in space provided for custom foundation type.

### ☐ Concrete Slab



### ☐ Homeowner Design

### ☐ Wood Floor



**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

### Truss & Wall Cross Section

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

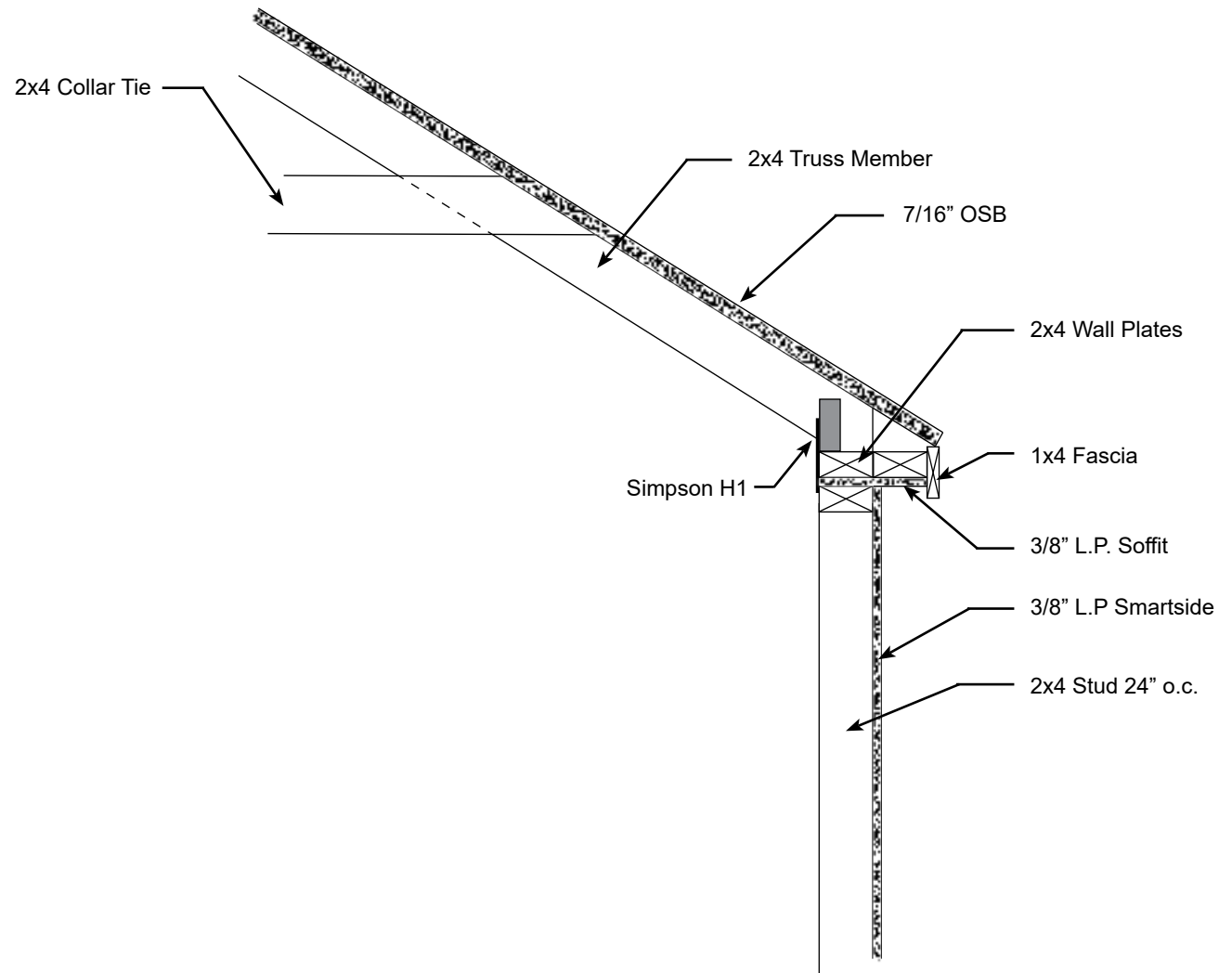
Drawing not to scale.

#### 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 shrubs. Check with HOA or permit office for requirements.