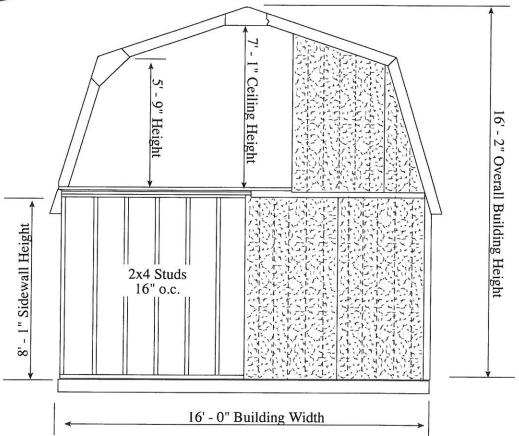


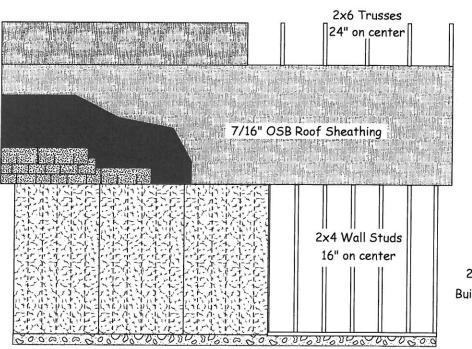
division of Reynolds Building Systems, Inc.

205 Arlington Drive, Greenville, PA 16125

Phone 724-646-0771

email richard@shedkitstore.com





20' thru 32' Building Lengths

**Best Barns** 

Model: the Richmond

Revised

March 13, 2012

not to scale



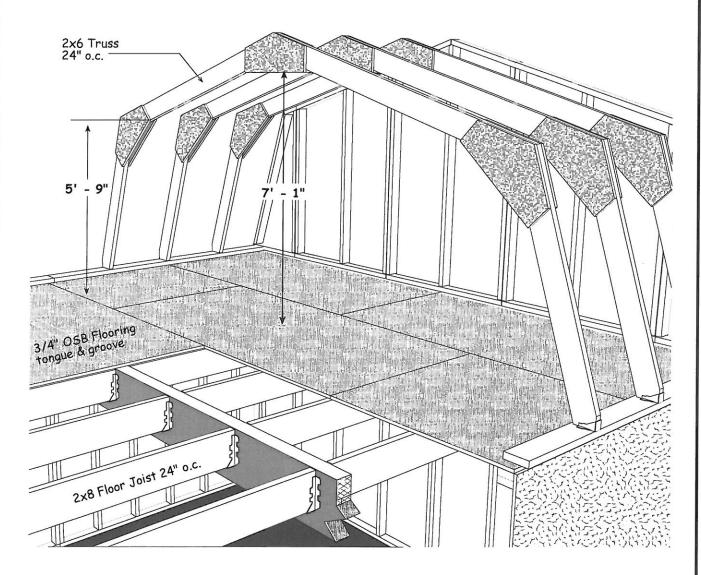
division of Reynolds Building Systems, Inc.

205 Arlington Drive, Greenville, PA 16125

Phone 724-646-0771

email richard@shedkitstore.com

## RICHMOND INTERIOR CROSS SECTION



## GENERAL SPECIFICATIONS

Foundation: By owner

Wall Framing: 16" o.c. wall studs, designed to meet the international building codes of BOCA, IBC-IRC-2006 Edition. Walls furnished with treated bottom plate.

**Exterior Siding:** Primed 3/8" Smart Panel 8" o.c. groove with 50 year warranty, 5 year labor replacement

**Roof System:** 2x6 trusses (30 psf flat ground snow load, 90 mph wind load). Covered with 7/16" OSB roof sheathing. *Shingles by owner*.

**Loft Floor:** 2x8 floor joist, 3-1/2" x 11-7/8" center beam, 3/4" OSB tongue & groove floor.

Exterior Trim: White pine trim for gable trim, corners, and barn doors.

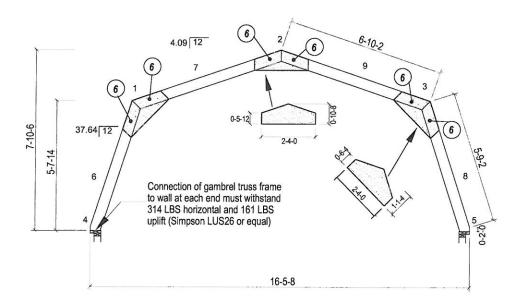
**Hardware:** Nails for all framing, metal hangers for floor joist & hurricane hangers for trusses.

Best Barns | Model: the Richmon | Revised March 13, 2012 | not to scale

Job	Truss	Truss Type	Qty	Ply	EZup Sheds, Reynolds Bldg Sys / Richmond
11-0200_RICHMOND	T1	ROOF TRUSS	1	1	Richmond Gambrel

Koehlinger Engineering, Bolivar, OH 44612, (KDH)

Tue Mar 22 13:46:33 2011 Page 1



APA Rated 23/32" Oriented Strand Board (OSB) gussets attached to both faces of the frame using sizes specified.



Quantity of 6d nails (0.113 x 2" long) to be staggered into EACH FACE of the truss member indicated.



LOADING(psf) TCLL 20.0 SNOW 30.0 (Pf) TCDL 12.0 BCLL 0.0 BCDL 2.0	SPACING 2-0-0 Plates Increase 1.25 Lumber Increase 1.25 Rep Stress Incr YES Code IBC2009/TPI2007	CSI TC 0.54 BC 0.00 WB 0.00 (Matrix)	DEFL Vert(LL) Vert(TL) Horz(TL)	in (loc) -0.23 2 -0.37 2 0.00	l/defl >836 >523 n/a	L/d 360 240 n/a	Weight: 46 lb
---	--	--	--	--	-------------------------------	--------------------------	---------------

LUMBER TOP CHORD 2 X 6 SYP No.2

BRACING TOP CHORD Structural wood sheathing directly applied or 6-0-0 oc

purlins.

BOT CHORD Rigid ceiling directly applied or 10-0-0 oc bracing.

4=672/0-5-8 (min. 0-2-5), 5=672/0-5-8 (min. 0-2-5) 4=314(LC 1), 5=-314(LC 1) 4=-161(LC 8), 5=-161(LC 9) REACTIONS(lb/size) Max Horz Max Uplift

FORCES(Ib) - Maximum Compression/Maximum Tension TOP CHORD 4-6=-722/224, 1-6=-613/239, 1-7=-468/248, 2-7=-331/270, 3-8=-613/239, 5-8=-722/224, 2-9=-331/270, 3-9=-468/248

NOTES

- Unbalanced roof live loads have been considered for this design.

  Wind: ASCE 7-05; 90mph; TCDL=6.0psf; BCDL=1.2psf; h=15ff; Cat. II; Exp C; enclosed; MWFRS (low-rise) gable end zone and C-C Exterior(2) 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

  TCLL: ASCE 7-05; Pr=20.0 psf (roof live load: Lumber DOL=1.25 Plate DOL=1.25); Pf=30.0 psf (flat roof snow: Lumber DOL=1.15 Plate DOL=1.15); Category II; Exp C; Partially Exp.; Ct=1.2

  Unbalanced snow loads have been considered for this design.

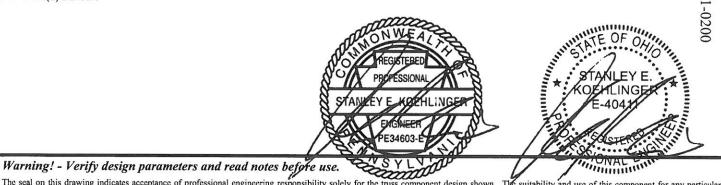
  The bottom chord dead load shown is sufficient only to cover the truss weight itself and does not allow for any additional load to be added to the bottom chord.

- The bottom chord dead load shown is sufficient only to cover the truss weight user and does not allow for any additional load to be added to the bottom chord.

  Bearing at joint(s) 4, 5 considers parallel to grain value using ANSI/TPI 1 angle to grain formula. Building designer should verify capacity of bearing surface.

  Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 161 lb uplift at joint 4 and 161 lb uplift at 7) joint 5.
  Non Standard bearing condition. Review required.
  This truss is designed in accordance with the 2009 International Building Code section 2306.1 and referenced standard ANSI/TPI 1.

LOAD CASE(S) Standard



The seal on this drawing indicates acceptance of professional engineering responsibility solely for the truss component design shown. The suitability and use of this component for any particular building design is the responsibility of the building designer - not the truss designer or truss engineer, per ANSI/TPI 1-2002. Section 2. building design is the responsibility of the building designer - not the truss designer or truss engineer, per ANSI/TPI 1-2002 Section 2.

A copy of this design shall be furnished to the erection contractor. This design is for an individual building component (a truss). It is based on specifications provided by the component manufacturer and performed in accordance with latest edition of TPI 1, IBC/IRC, and NDS design standards. No responsibility is assumed for the accuracy of information provided by the truss designer. The building designer shall review loading and truss configuration to ensure that this design meets or exceeds minimum loading required by applicable local building codes. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to ensure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult ANSI / TPI 1(National Design Standard for Metal Connected Wood Truss Construction) and BCSI 1-03 (Guide to Good Practice for Handling, Installation & Bracing of Metal Plate Connected Wood Trusses) from the Truss Plate Institute.