STRUCTURAL NOTES

Design Criteria: Jurisdiction: DESIGN LOADS: Ground Snow Wind Speed (Exp C) 115 MPH Soil Bearing Pressure 1500 PSF Seismic Design Loft Live Load Roof Live Load

LUMBER:

6x PT Posts 4x6 PT Posts Purlins & Framing Rafters 6x Beams 6x PT Beams GL Beams

TREATED LUMBER

All lumber with ground contact shall be pressure treated, Any end cut on pressure treated posts shall be treated: Posts: .60 PCF Retention

2012 IBC

5 PSF

40 PSF

20 PSF

Hem-Fir #2

Hem-Fir #2 SPF #2

Doug-Fir #1

Hem-Fir #2

DF 24F-V4

Laminated Veneer Lumber

Α

Caldwell County BD

Skirtboards: .40 PCF Retention

CONCRETE

Compressive strength (f'c)= 2500 PSI @ 28 days. All footings shall bear on undisturbed native firm soil with minimum bearing capacity of 1500 PSF and lateral bearing capacity of 150 PCF. Builder to verify soil condition prior to construction. All fasteners in contact with pressure treated lumber shall be hot dipped galvanized.

WALLS

Use CS16 strap at every 6' on inside of 2x6 T&G siding. Bottom 2 boards pressure treated on exterior walls, 1 pressure treated board on interior walls. SPECIAL INSPECTIONS

Required special inspections, listed below, are to be performed by a competent third party under direct contract of the owner. a) None required

Contact Person:

Operations - Barn Pros Inc. 14567 169 DR SE Monroe, WA 98272 1-866-844-2276

ABBREVIATIONS

AB BLK BLKG BD BOT BLDG CB CLG CONC DIA DIM EL FRT FLR FTG FBO FUR GYP BD HT M MANF NIC NTS PREFAB PREFIN PSF PT RAD REQ'D RFG R.O. SIM SF SH SL STD STL TEMP T&G T.O. TJ TYP UNF UON VIF	Anchor Bolt Block Blocking Board Bottom Building Carriage Bolt Ceiling Concrete Continue/Continuous Diameter Dimension Elevation Fire Retardant Floor/ Flooring Footing Finished by others Furred/ Furring Gypsum Dry Wall Height Meter Manufacturer Not In Contract Not to Scale Prefabricated Prefinished LBF/Ft^2 Pressure Treated Radius Required Roofing Rough Opening Similar Square Feet Single Hung Sliding Standard Steel Tempered Glazing Tongue & Groove Top of Top of Joist Typical Unfinished Unless Otherwise Noted Vapor Barrier Verify in Field
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GENERAL NOTES

Contractor shall verify all dimensions and job site conditions before commencing work and shall report any discrepancies to the engineer

The design, adequacy, and safety of erection bracing, shoring, temporary supports, etc is the sole responsibility of the contractor and has not been considered by the engineer. The contractor is responsible for the stability of the structure prior to the completion of all shear walls, roof, and floor diaphragms and finish materials

Prior to beginning any work, the contractor shall verify that all required permits/approvals have been obtained. No construction or fabrication of any item shall begin until the contractor has received all plans and other documentation from all permitting/ regulatory agencies. Failure to follow this procedure shall cause the contractor to assume full responsibility for any subsequent modification of work as mandated by such regulatory authority

without written approval from Barn Pros or the Engineer of Record shall cause the contractor to assume full responsibility for such changes

Where it is obvious that a drawing illustrates only a part of a given work of a number of items, the remainder shall be deemed repetitive and so constructed

Barn Pros isn't responsible for providing (including but not limited to) Venting, Flashing, Insulation, Vycor, Drywall or any other items that aren't explicitly included in your contract

Barn Pros is not responsible for designing the following but not limited to: Electrical, Plumbing, or HVAC Plans

conform to the applicable requirements of the Building Code

These documents represent the desired result of construction. The methods of such construction and the associated risks involved shall be the sole photos must be provided before replacement responsibility of the contractor

The contractor shall follow sizes as indicated in the construction documents and shall follow detail drawings in preference to general drawings. DO NOT SCALE DRAWINGS. Use written dimensions. Where no dimension is provided consult the engineer for clarification before proceeding with work

General Notes shall not substitute for specifications. Conflicts between the two shall be brought to Barn Pros attention or the stricter criteria should be used

Barn Pros Inc. and Eclipse Engineering holds no liability for unauthorized changes made to the construction documents that result in damages made by the owner, a contractor, or a building official, etc. Unauthorized changes are to include construction at a location other than listeo

<u>Excavation:</u>

Excavate to solid, undisturbed bearing as shown or noted, save topsoil for backfill

All wall and column footings shall bear on natural, undisturbed inorganic earth. All Footings shall be 12" minimum below existing grade

Earth under all footings shall be dry and frost free No water shall be allowed to accumulate in excavations. Remove any water to prevent softening of foundation bottoms, undercutting footings, and/or soil changes detrimental to the

stability of subgrades and foundations

<u>Backfill:</u>

Do Not complete backfill against foundation until framing is in place

Backfill should not contain rocks or debris larger than 2" in diameter

All site fill and backfill shall be placed in 8" layers and compacted to 90% density after each layer

Foundation:

The building is supported on 1 or more of the following: piers, isolated thickened grade beams, and/or footings

All rebar shall have a minimum cover below grade 3" where poured against earth, and 2" where formed against earth

All rebar shall be continuous in all footings, foundation walls, and at all corners with all rebar lapped a minimum of 18"

No Brick or porous material shall be used to support reinforcing off the ground

Carpentry & Wood:

All sawn lumber shall be stamped with grade work of a certain lumber grading agency. Moisture content shall not exceed 19%

Other APA rated structural panels conforming to NER-108 and product standard, and with the same Any deviation in construction from these drawings exposure durability classification, nominal thickness may be substituted for plywood

> Framing Anchors: Simpson or approved equal install as per manufacturers recommendations.

> For nailing not shown on these drawings, use nail schedule, Table 23-11-B-1. Structural members shall not be cut for pipes, ducts, etc., unless specifically noted, detailed or approved in writing by the engineer.

Wood stud walls shall be 2x6 @ 16" O.C. unless otherwise noted on plans. Plate anchor bolts shall be 5/8" Diameter placed not to exceed 4' O.C. unless otherwise noted. Anchor Bolts shall be placed at all jambs, corners, intersections, and wall ends. All bottom plates shall have a minimum of 2 anchor bolts. All bottom plates or sills on concrete slabs, and on All materials, workmanship, and construction shall concrete shall be pressure treated and stamped by an approved agency.

> Barn Pros reserves first right of replacement on any warped, twisted, generally defective or missing structural materials. For defective framing members material will be sent. Inventory of the materials is expected to be completed within 3 business days of delivery. Any shortages from the Shipping List are expected to be brought to our attention at that time. Material request beyond 2 weeks will be evaluated on an individual basis and material supplied at barn pros discretion

Lay plywood sheathing in full sheets whenever possible

Where shear wall construction is indicated, provide sheathing to the grade and thickness indicated on drawings. Provide blocking at panel edges as designated on these drawings

If trusses used, the roof truss supplier is responsible for structural design and detail of the trusses to fit the building dimensions and details as shown in the drawings

<u>Miscellaneous:</u>

Guard Rails shall be at least 36" high. Guard rails and hand rails shall have intermediate rails such that a 4" DIA object cannot pass through

Engineer of Record:

Eclipse Engineering 113 W Main Street, Suite B Missoula, MT 59802

INFORMATION AND NOTES

Sheet Name	Sheet Number	Sheet Discipline
COVER & GENERAL NOTES	0	GENERAL

ARCHITECTURAL D	RAWINGS	
	Sheet	
Sheet Name	Number	Sheet Discipline
EXTERIOR ELEVATIONS	A1.0	ARCHITECTURAL
EXTERIOR ELEVATIONS	A1.1	ARCHITECTURAL
1ST FLOOR PLAN	A2.0	ARCHITECTURAL
2ND FLOOR PLAN	A2.1	ARCHITECTURAL

STRUCTURAL I	DRAWINGS	
Sheet Name	Sheet Number	Sheet Discipline
FOUNDATION PLAN	S1.0	STRUCTURAL
LOFT FRAMING PLAN	S1.1	STRUCTURAL
LOWER ROOF FRAMING PLAN	S1.2	STRUCTURAL
UPPER ROOF FRAMING PLAN	S1.3	STRUCTURAL
SECTION & ISOMETRIC VIEWS	S2.0	STRUCTURAL
STRUCTURAL DETAILS	S3.0	STRUCTURAL
STRUCTURAL DETAILS	S3.1	STRUCTURAL













l	Count	Rough Width	Rough Height	Comments
<i>i</i> th/	2	12' - 0"	9' - 0"	
r	1	3' - 2"	6' - 10 1/2"	
y Door	1	3' - 2"	6' - 10 1/2"	Fire-Rated
	24			By Owner
	1			By Owner

			Wind	ow Sch	edule		
Mark		Descrip	otion	Count	Rough Width	Rough Height	
A	3' x 3'-6	" SH Wi	indow	4	3' - 0"	3' - 6"	Color: Desert Sand
В	4' x 4' S	L Windo	W	24	4' - 0"	4' - 0"	Color: Desert Sand
			Barn I	Pros Ite	ms		
		Mark		Туре		Count	
		AA	Standard C	upola 5	-12 pitch	3	

Doors, Hayloft Doors, and Track Backer on Breezeway Door, if necessary 1x8 trim for Lower Corners 1x10 Fascia is standard but can be affected by purlin size. Final size not availiable until the conclusion of engineering Bottom (2) boards of DF T&G to be Pressure Treated if there is ground contact Bottom (1) board PT on interior walls

sheathing but refer to your specific model for verification

Exterior Notes
1/4" = 1'-0"

Roofing Material to be provided by owner. On most models Barn Pros provides

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> These drawings have been prepared for, and use is restricted to, the original project and job site. The publication of these drawings is expressly limited to the original project. Any reuse or reproduction in whole or part is prohibited. Ownership and title of these documents, and the information contained within, shall remain property of Barn Pros Inc. Visual contact with these drawing shall constitute prima facie evidence of the acceptance of these restrictions



EXTERIOR ELEVATIONS

Drawn by: BC OPERATIONS Approved by:

A1.0

VF 227 ÷ , ⊢



	Count	Rough Width	Rough Height	Comments
				Comments
	2	12' - 0"	9' - 0"	
ith				
r	1	3' - 2"	6' - 10 1/2"	
' Door	1	3' - 2"	6' - 10 1/2"	Fire-Rated
	24			By Owner
	1			By Owner
	-		-	

			Wind	low Sch	edule		
Mark		Descrip	otion	Count	Rough Width	Rough Height	
A	3' x 3'-6	" SH Wi	ndow	4	3' - 0"	3' - 6"	Color: Desert Sand
В	4' x 4' S	L Windo	W	24	4' - 0"	4' - 0"	Color: Desert Sand
		Mark	Barn	Pros Ite Type	ms	Count	
			<u> </u>		40 14 1	0.000	



Door	Sched	ule		
on	Count	Rough Width	Rough Height	Comments
with	2	12' - 0"	9' - 0"	
or	1	3' - 2"	6' - 10 1/2"	
try Door	1	3' - 2"	6' - 10 1/2"	Fire-Rated
	24			By Owner
	1			By Owner

	Wi	ndow Sch	edule		
Mark	Description	Count	Rough Width		Comments
A	3' x 3'-6" SH Window	4	3' - 0"	3' - 6"	Color: Desert Sand
В	4' x 4' SL Window	24	4' - 0"	4' - 0"	Color: Desert Sand



Door	Sched	ule		
on	Count	Rough Width	Rough Height	Comments
with	2	12' - 0"	9' - 0"	
or	1	3' - 2"	6' - 10 1/2"	
try Door	1	3' - 2"	6' - 10 1/2"	Fire-Rated
	24			By Owner
	1			By Owner

	Window Schedule					
Mark	Description	Count	Rough Width	Rough Height	Comments	
A	3' x 3'-6" SH Window	4	3' - 0"	3' - 6"	Color: Desert Sand	
В	4' x 4' SL Window	24	4' - 0"	4' - 0"	Color: Desert Sand	





1 FOUNDATION PLAN 1/4" = 1'-0"





¹ LOFT FRAMING PLAN 1/4" = 1'-0"

LOFT FRAMING SCHEDULE				
Mark	Туре	Comments	Level	
B12	6x10x12' DF Beam		LOFT	
BLKG	2x10x12' Blocking		LOFT	
DB12	6x10x12' DF Deck Beam		LOFT	
GLB	5-1/8"x10-1/2"x12' Glulam Beam		LOFT	
H12	2x10x12' Header		LOFT	
H14	2x10x14' Header		LOFT	
J12	2x10x12' Joist	@ 16" O.C.	LOFT	
J14	2x10x14' Joist	@ 16" O.C.	LOFT	
L12	2x10x12' PT Ledger		LOFT	
L14	2x10x14' PT Ledger		LOFT	
PTB12	6x14x12' PT Beam		LOFT	
PTJ12	2x10x12' PT Joist	@ 16" O.C.	LOFT	
RJ8	2x10x8' Rim Joist		LOFT	
RJ12	2x10x12' Rim Joist		LOFT	



	ROOF FRAMING SCHEDULE	E		
Mark	Туре	Comments	Level	
314	6x10x14' DF Beam		ROOF	
CF	2x8x2' Cupola Framing		ROOF	(4
DFR12	6x8x12' DF Rafter	@ 48" O.C.	ROOF	_
EP12	2x8x12' Edge Purlin		ROOF	
_E4	2x8x4' Ledger Extension		ROOF	
OHR	2x8x4' Overhang Rafter		ROOF	
DP2	2x8x2' Outlook Purlin	@ 24" O.C.	ROOF	
DP4	2x8x4' Outlook Purlin	@ 24" O.C.	ROOF	
P14	2x8x14' Purlin	@ 24" O.C.	ROOF	
ЪС	2x6x19" Purlin Cleat		ROOF	
ЪС	2x8x19" Purlin Cleat		ROOF	
٦1	1-3/4"x11-7/8" x 20 ' LVL Rafter (5/12)		ROOF	
R14	2x10x16' Rafter	@ 24" O.C.	ROOF	
RJ24	2x8x24' Rim Joist		ROOF	
RP14	2x8x14' Ridge Purlin		ROOF	(3
RP16	2x8x16' Ridge Purlin		ROOF	
SB12	6x8x12' DF Shed Beam		ROOF	
SB14	6x8x14' DF Shed Beam		ROOF	
SF/BLKG	2x8x4' Subfascia & Blocking		ROOF	
SF/BLKG	2x8x12' Subfascia & Blocking		ROOF	
SF/BLKG	2x8x24' Subfascia & Blocking		ROOF	
SF/BLKG	2x10x12' Subfascia & Blocking		ROOF	
SF/BLKG	2x10x14' Subfascia & Blocking		ROOF	
SF/BLKG	2x10x16' Rafter		ROOF	
SL	1-3/4"x11-7/8" x12' LVL Shed Ledger		ROOF	
	· •			







1 UPPER ROOF FRAMING PLAN 1/4" = 1'-0"

s	F/BLKG	SF/BLKG	 dk.dk	SF/BLKG	 d£.d£	
		EP12	₩0 0 1 1 0	EP12		
+						
	_P14	P14		P14		
	P14	P14		P14		
	-P14	P14		P14		
	P14	P14		P14		
		544				
		P14		P14		
	P14	P14		P14		
	-P14	P14		P14		
		P14	4			
		F 14	S3.0	P14		
	P14	P14 P14		P14		
	RP14	RP14		RP14		3
	₩ ' ₩					
	P14 91 91 91 91 91 91 91 91 91 91 91 91 91	P14 P14		P14		
5	P14	P14		P14		
S3.0						
	P14	P14		P14	<u></u>	
	P14	P14		P14		
		P14		P14		
	P14	P14		P14		
	P14	P14		P14		
		F 14				
		P14		P14		
	P14	P14		P14		
	EP12	EP12		EP12		
2 <u>2</u> S3.0 00						
S	F/BLKG	SF/BLKG		SF/BLKG	<u>_</u>	\$
	12' - 0''	12' - 0''	3	12' - 0''		12

	ROOF FRAMING SCHEDULE	:	
		1	
Mark	Туре	Comments	Level
B14	6x10x14' DF Beam		ROOF
CF	2x8x2' Cupola Framing		ROOF
DFR12	6x8x12' DF Rafter	@ 48" O.C.	ROOF
EP12	2x8x12' Edge Purlin		ROOF
LE4	2x8x4' Ledger Extension		ROOF
OHR	2x8x4' Overhang Rafter		ROOF
OP2	2x8x2' Outlook Purlin	@ 24" O.C.	ROOF
OP4	2x8x4' Outlook Purlin	@ 24" O.C.	ROOF
P14	2x8x14' Purlin	@ 24" O.C.	ROOF
PC	2x6x19" Purlin Cleat		ROOF
PC	2x8x19" Purlin Cleat		ROOF
R1	1-3/4"x11-7/8" x 20 ' LVL Rafter (5/12)		ROOF
R14	2x10x16' Rafter	@ 24" O.C.	ROOF
RJ24	2x8x24' Rim Joist		ROOF
RP14	2x8x14' Ridge Purlin		ROOF
RP16	2x8x16' Ridge Purlin		ROOF
SB12	6x8x12' DF Shed Beam		ROOF
SB14	6x8x14' DF Shed Beam		ROOF
SF/BLKG	2x8x4' Subfascia & Blocking		ROOF
SF/BLKG	2x8x12' Subfascia & Blocking		ROOF
SF/BLKG	2x8x24' Subfascia & Blocking		ROOF
SF/BLKG	2x10x12' Subfascia & Blocking		ROOF
SF/BLKG	2x10x14' Subfascia & Blocking		ROOF
SF/BLKG	2x10x16' Rafter		ROOF
SL	1-3/4"x11-7/8" x12' LVL Shed Ledger		ROOF







1 BUILDING SECTION 1/4" = 1'-0"



Mark	Туре	Comme
B14	6x10x14' DF Beam	
CF	2x8x2' Cupola Framing	
DFR12	6x8x12' DF Rafter	@ 48" O.
EP12	2x8x12' Edge Purlin	
LE4	2x8x4' Ledger Extension	
OHR	2x8x4' Overhang Rafter	
OP2	2x8x2' Outlook Purlin	@ 24" O.
OP4	2x8x4' Outlook Purlin	@ 24" O.
P14	2x8x14' Purlin	@ 24" O.
PC	2x6x19" Purlin Cleat	
PC	2x8x19" Purlin Cleat	
R1	1-3/4"x11-7/8" x 20 ' LVL Rafter (5/12)	
R14	2x10x16' Rafter	@ 24" O.
RJ24	2x8x24' Rim Joist	
RP14	2x8x14' Ridge Purlin	
RP16	2x8x16' Ridge Purlin	
SB12	6x8x12' DF Shed Beam	
SB14	6x8x14' DF Shed Beam	
SF/BLKG	2x8x4' Subfascia & Blocking	
SF/BLKG	2x8x12' Subfascia & Blocking	
SF/BLKG	2x8x24' Subfascia & Blocking	
SF/BLKG	2x10x12' Subfascia & Blocking	
SF/BLKG	2x10x14' Subfascia & Blocking	
SF/BLKG	2x10x16' Rafter	
SL	1-3/4"x11-7/8" x12' LVL Shed Ledger	







PT POST PER PLAN

BETWEEN

3/4" = 1'-0"





S3.