

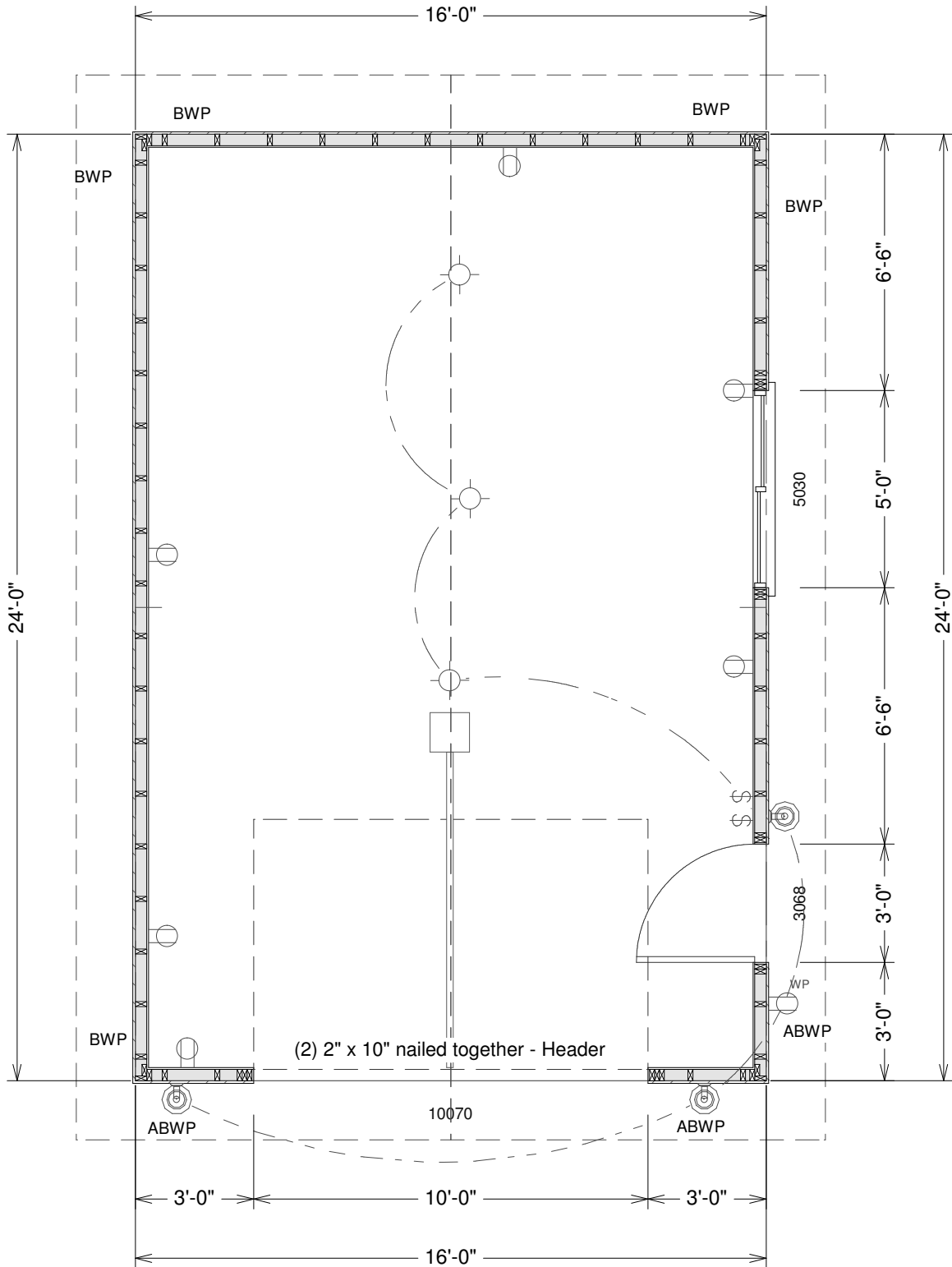
# Custom 16 X 24 Garage Plan

## Plan #g220

### By SDS-CAD Specialized Design Systems

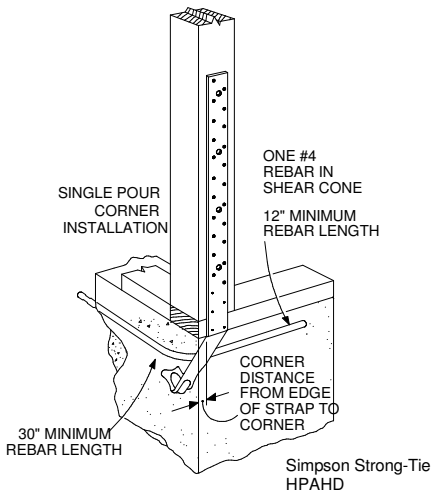
Page 1 Title Page  
 Page 2 Main Floor Plan  
 Page 3 Foundation Plan  
 Page 4 Elevation Views  
 Page 5 Framing and Details  
 Page 6 Typical Section  
 Page 7 Materials List

30 year dimensional shingles and sturdy panel siding running vertical with 8" on center groove. Nailing schedule is 6" on ends 12" on centers 6d nails. Trusses are engineered on 24" and framing is 2" x 4" on 16" centers. 9' ceiling height.

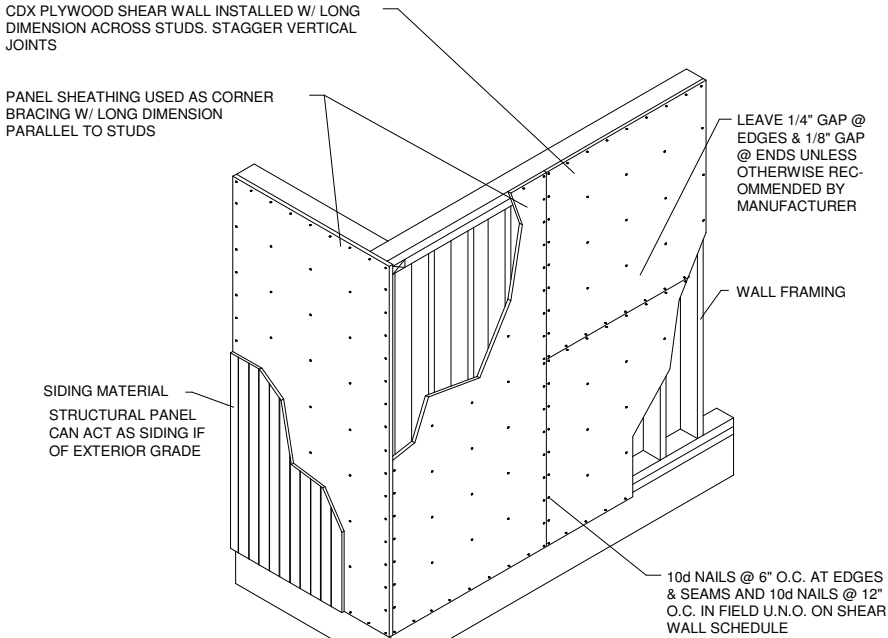


# GARAGE MAIN FLOOR PLAN

SCALE 1/4"=1'



HPAHD straps for all (ABWP) Alternate Braced Wall Panels  
See detail below for all (BWP) Braced Wall Panels



## TYPICAL BRACED WALL PANEL (BWP)

N.T.S.

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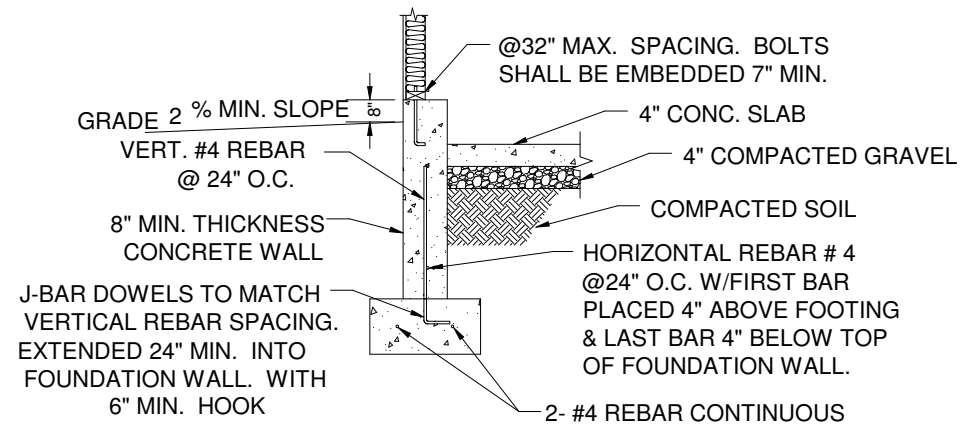
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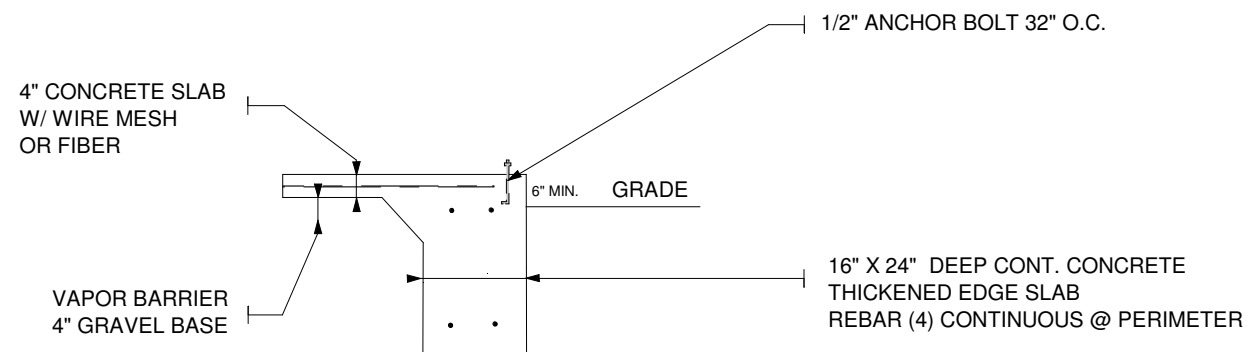
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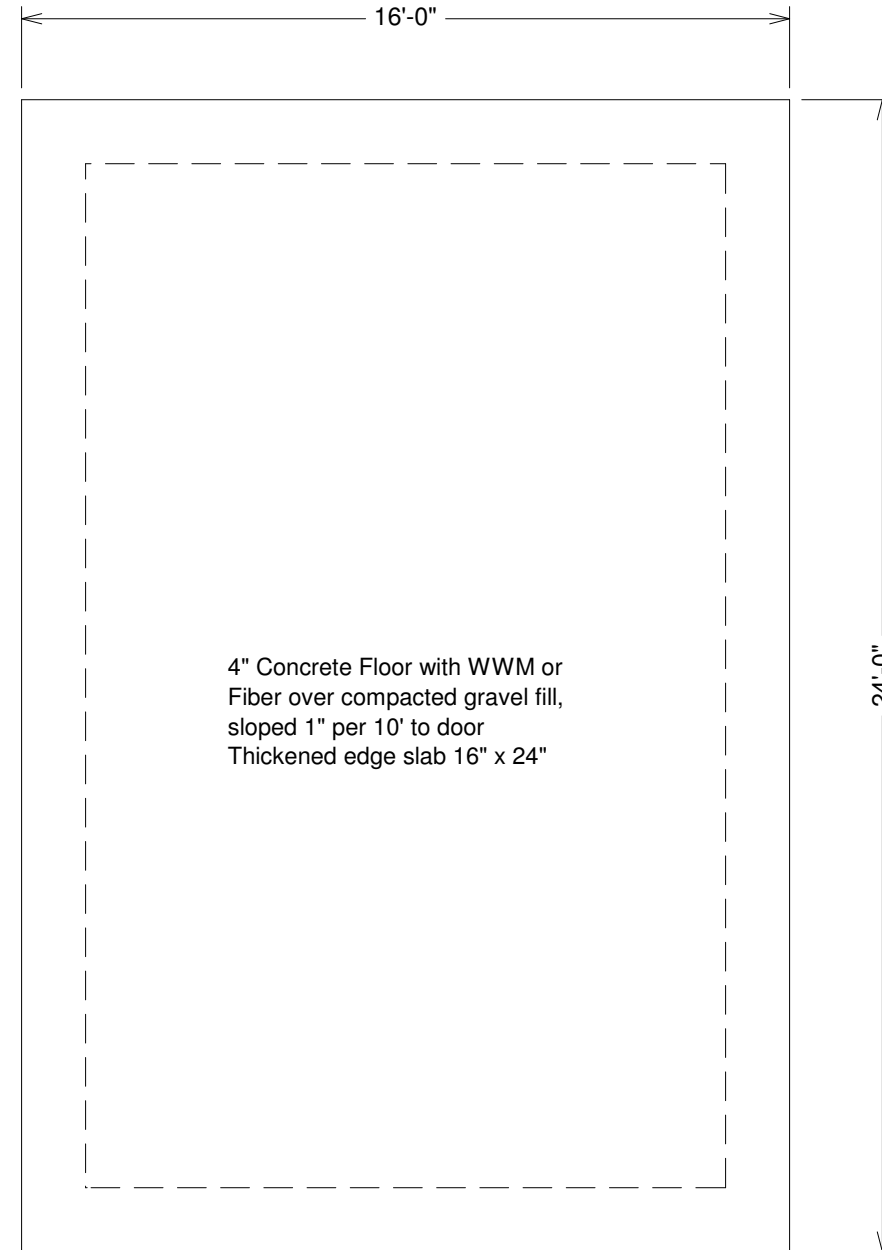


## Footing and concrete wall option

Bottom of footing to be a min of 24" below grade or as required by local code



## Monolithic slab foundation option



## FOUNDATION PLAN

SCALE 1/4"=1'

Concrete:

1. All slabs are to be 4" concrete over 4" gravel unless otherwise noted on the plans.
2. Concrete to be ACI 301-66, Type II cement, 2500 psi at 28 days, 5" maximum slump.
3. Reinforcing to be ASTM A615-Bars with  $F_y=60$  ksi lap 30 diameter minimum at splices or weld per ACI Std.
4. Concrete design based on  $F_c$  2000 psf,  $F_c$  2500 psi for quality only.
5. Anchor bolts shall be A-307 embedded 7" minimum into concrete or masonry grout.
6. All footings minimum 24" below final grade

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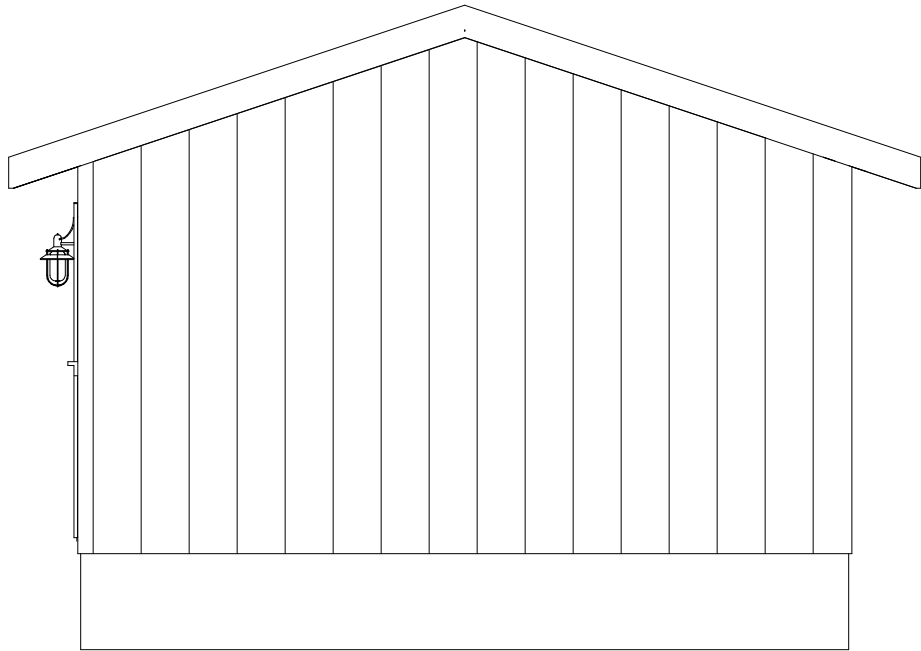
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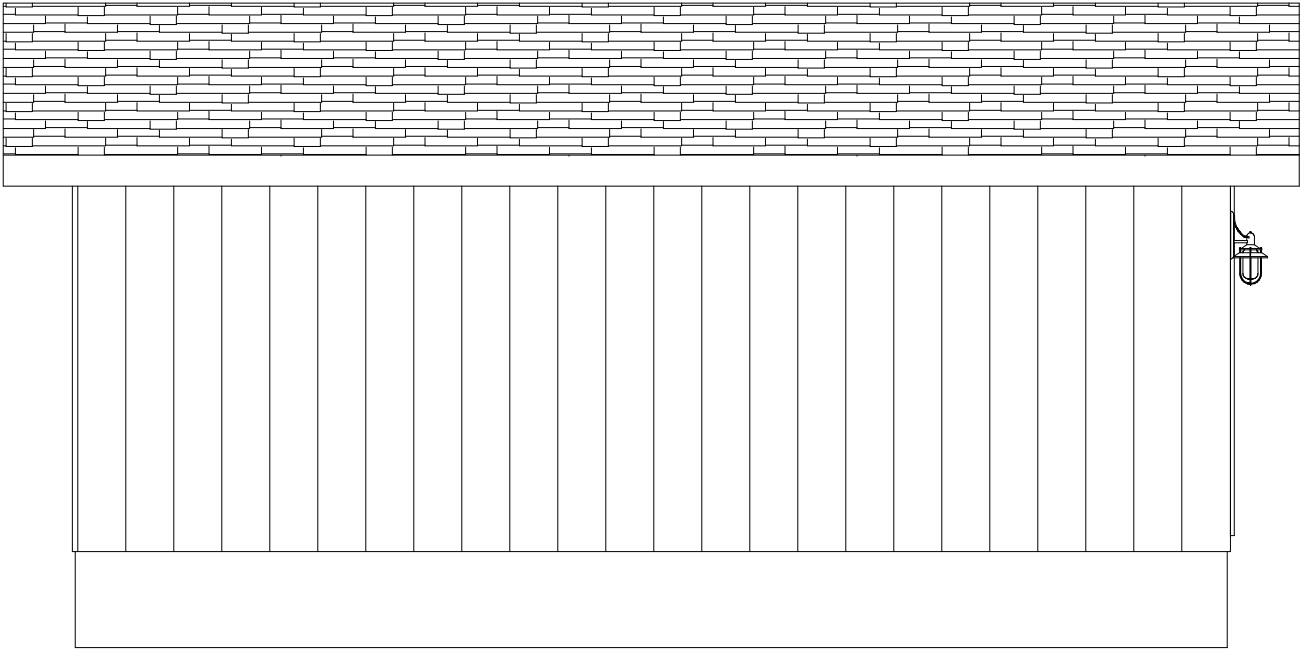
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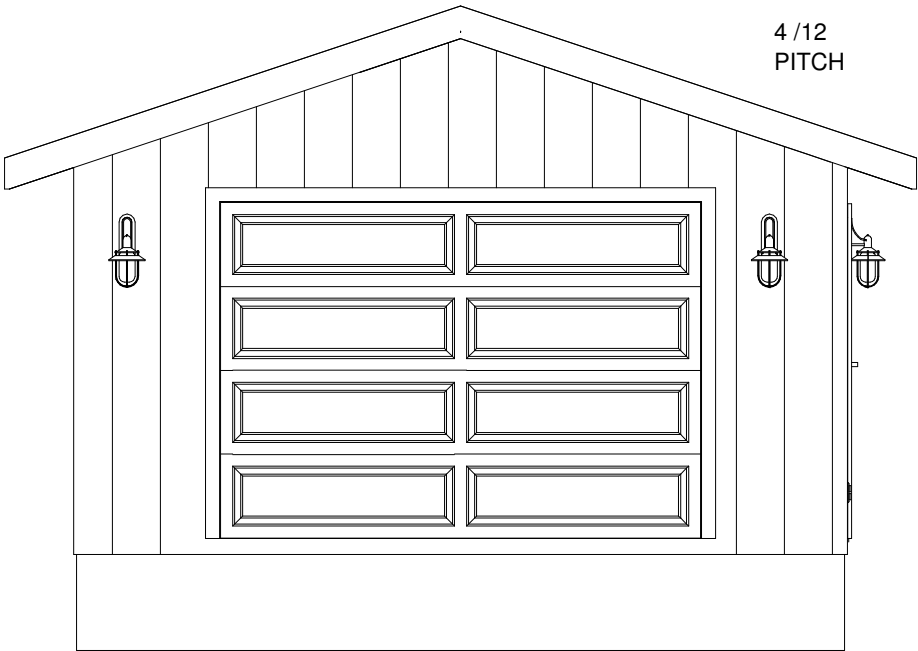
REAR ELEVATION

SCALE 1/4"=1'



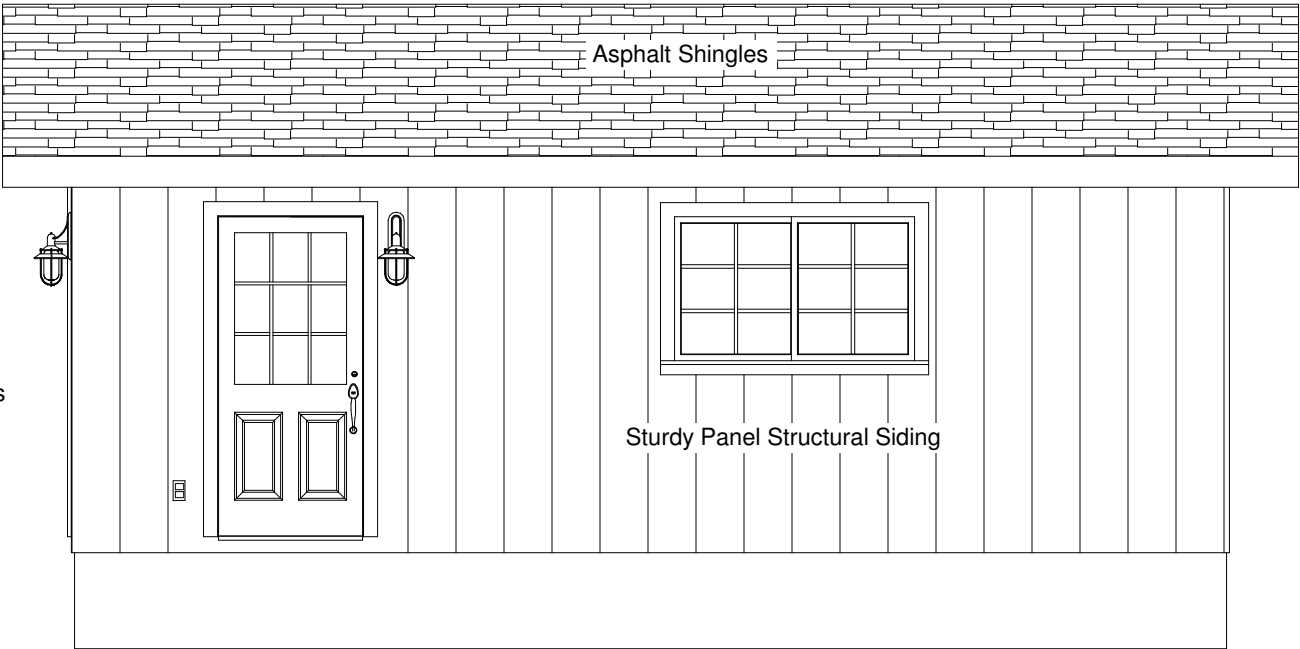
LEFT ELEVATION

SCALE 1/4"=1'



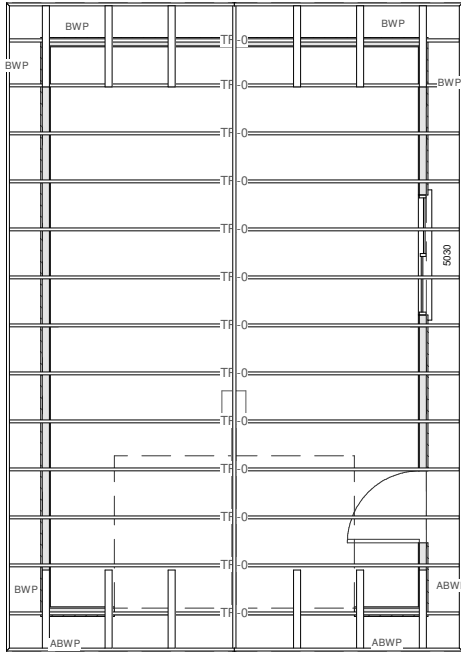
FRONT ELEVATION

SCALE 1/4"=1'

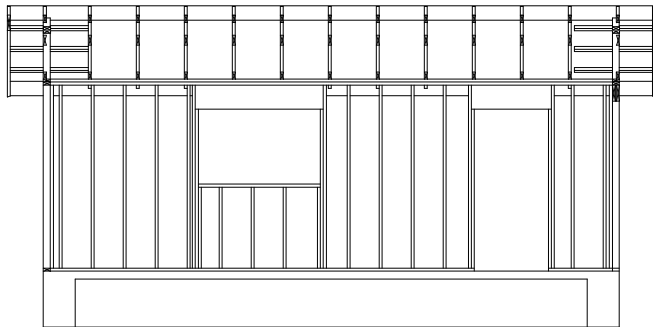
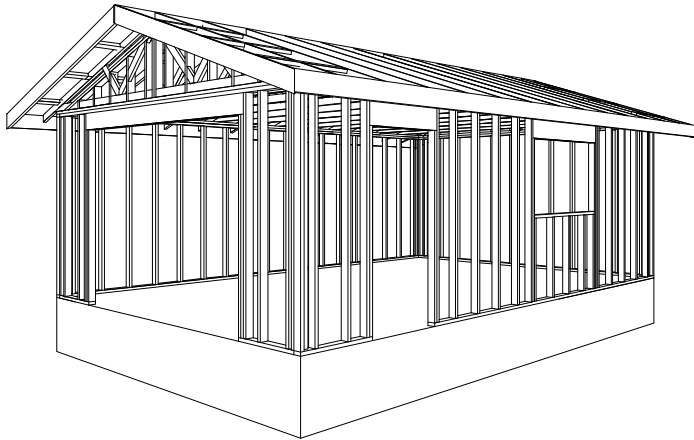


RIGHT ELEVATION

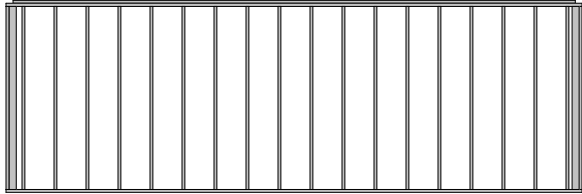
SCALE 1/4"=1'



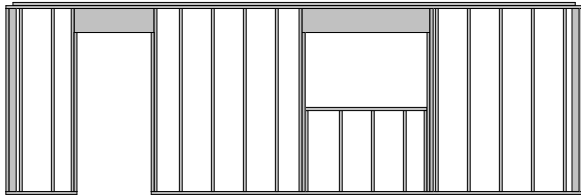
GARAGE ROOF  
PRE-ENGINEERED TRUSSES AS  
SUPPLIED BY TRUSS  
MANUFACTURER 24" o.c.



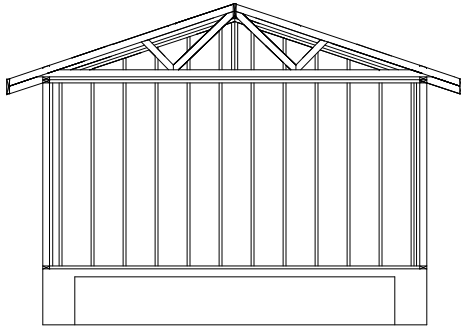
Cross Section



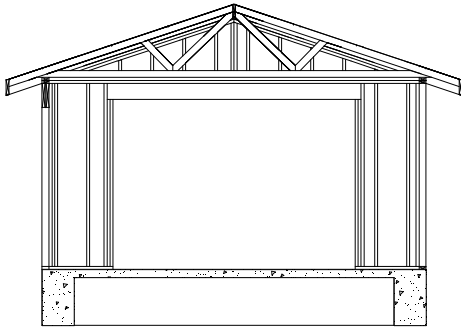
End Walls



9' Tall 2 x Walls



Back Wall



Front Wall

# WALL FRAMING SECTIONS

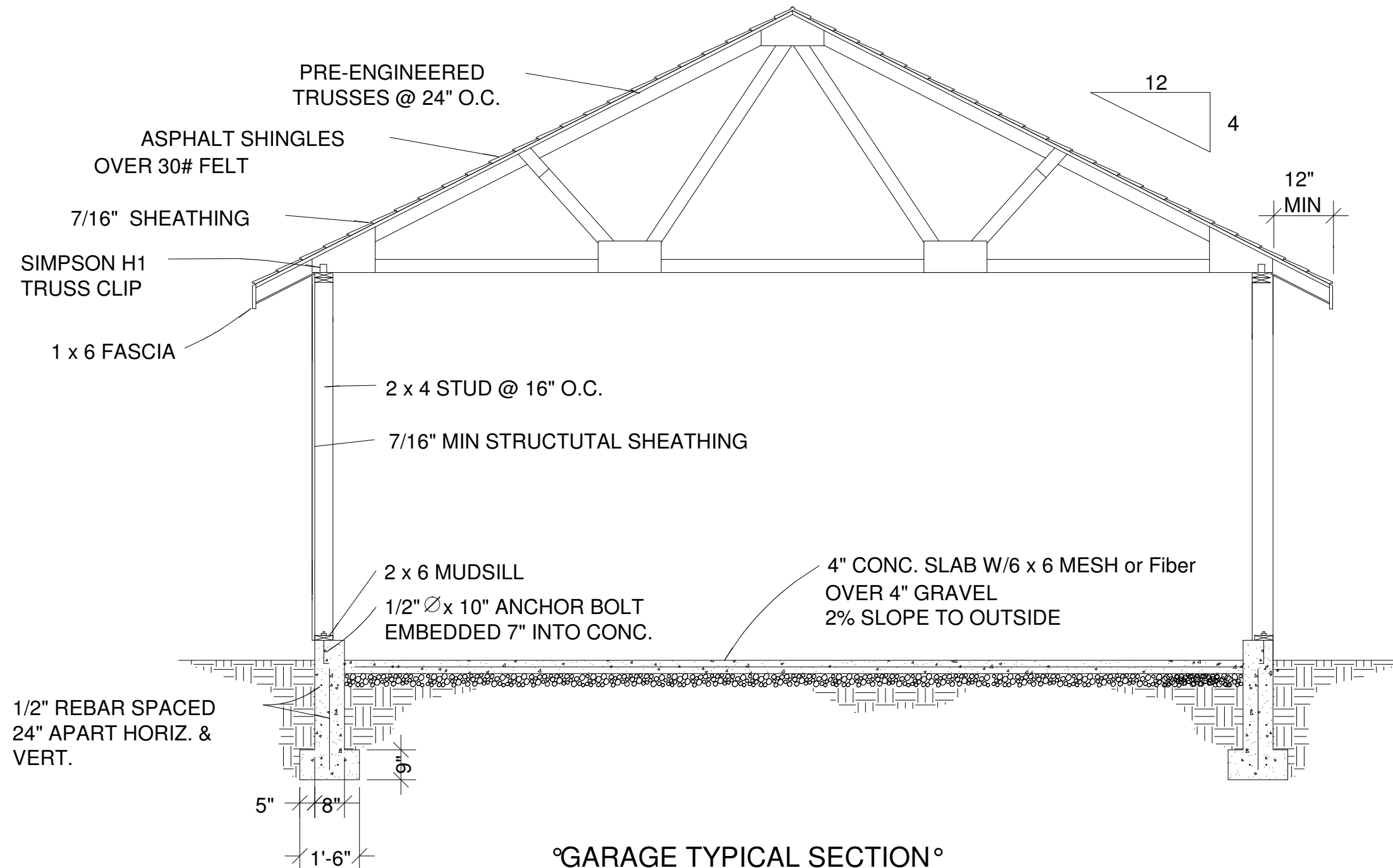
SCALE 1/8"=1'

## Roof Framing:

1. Fascia to be 2"x Douglas Fir.
2. For soffit size see details.
3. For spans and dimensions refer to floor plans.
4. Trusses are to be an approved truss design from the truss manufacture's engineer.
5. Use Simpson H-1 hurricane anchors at each truss or rafter to wall connection.
6. Solid blocking required between joists, rafters, and trusses over all bearing walls. Such blocking shall be 1 1/2" minimum thickness and full depth of joists, rafters, or trusses.
7. Minimum header sizes shall be according to the header size table unless otherwise noted.
8. Basis of design roof live/snow load of 37 psf, and roof dead load of 15 psf.
9. Plywood roof decking to be Min 1/2" thick, 24/0, CDX or 5/8 wafer.

## General framing: (Douglas Fir)

1. Minimum header sizes shall be according to the following table unless otherwise noted. Header sizes (single story construction)  
2'-0" to 4'-0" Span 2-2x4's  
4' + to 6'-0" Span 2-2x6's  
6' + to 8'-0" Span 2-2x8's  
8' + to 10'-0" Span 2-2x10's  
10' + to 12'-0" Span 2-2x12's or as noted on plan
2. Brace all exterior walls and cross-stud partitions at each end of building and at least every 25' of length by one of the following:
  - a. Simpson WB 126 wall bracing with 3-16d nails at each end and 1-8d nails at each stud.
  - b. Plywood sheathing of a minimum thickness of 7/16 inch.
3. Fire stopping:
  - a. Fireblock stud spaces over 10' in height, furred spaces, soffits, drop ceilings, cove ceilings, stair stringers at top and bottom of run, bearing walls and ceiling joist lines, etc. Firestopping shall consist of 2" nominal lumber.
  - b. Firestop openings around vents, pipes, ducts, chimneys, and fireplaces at ceiling and floor levels with approved noncombustible materials.
4. CDX plywood is not approved where exposed to weather, i.e., roof overhangs.
5. Exterior wall framing to be 2"x6" studs at 16" o.c. Interior wall, framing at non-bearing walls to be 2"x4" studs at 24" o.c. and at bearing walls 2"x4" studs at 16" o.c. with double top plate. Shear wall to be 7/16" Sheathing, see detail.
6. All stress grade lumber shall comply with WCLA specs and bear approval stamp on all pieces in place.
7. Framing lumber shall be Douglas Fir construction grade Fb 1450 or better unless otherwise noted.
8. Nailing to be per current U.B.C. unless otherwise noted.
9. All bearing partitions shall have double top plates.
10. Structural glued laminated timbers to be stamped by an approved agency.
11. Use redwood or pressure treated sole plates at all exterior walls.
- 12.



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Computer Generated Materials List for reference only and gives approximated materials as per the 3D CAD model									
General	GN1	1	96 high wall	Siding-4	79	0	ft	Subtotal:	
	GN2	1		heated ceiling area	400.00	0.00	sq ft		
	GN3	1		heated floor area	400.00	0.00	sq ft		
	GN4	1		heated wall area	483.00	0.00	sq ft		
	GN5	1		heated glass area	16.00	0.00	sq ft		
	GN6	1		heated door area	132.00	0.00	sq ft		
	GN7	2	38 13/16 high wall	Siding-4	38	0	ft		
Subfloor	SF1	1	8'x4'x3/4"	Sheet Plywood	12	0			
Framing	F1	1	2x4-16ft+	fir plate	240	0	ft	Subtotal:	
	F2	1	2x4"-91 1/2"	fir stud	58	0			
	F3	1	2x4-16ft+	fir stud stock	64	0	ft		
	F4	1	2x12-16ft+	header - lumber	15	0	ft		
	F5	1	2x8-16ft+	header - lumber	33	0	ft		
	F6	2	2x4-16ft+	fir plate	78	0	ft		
	F7	2	2x4-16ft+	fir stud stock	46	0	ft		
Siding	S1	1	96" wide	Sturdy Panel	63	0	ft	Subtotal:	
	S2	1		house wrap	653.00	0.00	sq ft		
	S3	2	96" wide	Sturdy Panel	8	0	ft		
Ext Trim	EX1	0	4" thick	- concrete grey	12.31	0.00	cu yd	Subtotal:	
	EX2	1	1x5-36"	door threshold	1	0			
	EX3	1	1x4-16ft+	ext. door casing	17	0	ft		
	EX4	1	5 in	ext. door jamb	17	0	ft		
	EX5	1	1x4-16ft+	garage door casing	31	0	ft		
	EX6	1	5 in	garage door jamb	31	0	ft		
	EX7	1	1x4-16ft+	exterior sill	5	0	ft		
	EX8	1	1x4-16ft+	ext. window casing	13	0	ft		
Roofing	R1	1	TR-0 273"	roof truss	11	0		Subtotal:	
	R2	1	2x8"-16'+	ridge board - lumber	23	0	ft		
	R3	1	2x8"-24'	rafters - lumber	2	0			
	R4	1	2x8"-14'	rafters - lumber	4	0			
	R5	1	2x4"-16'+	rafters - lumber	40	0	ft		
	R6	1		ridge cap	23	0	ft		
	R7	1		Roofing Dimensional Comp.	558.00	0.00	sq ft		
	R8	1	4x8' sheets	roof sheathing	18	0			
	R9	1	2x8"	gable fascia	48	0	ft		
	R10	1	2x8"	eave fascia	46	0	ft		
	R11	1		metal drip edge	94	0	ft		
Insulation	IN1	1	12x24x48" batts	ceiling insulation	50	0		Subtotal:	
	IN2	1	12x16x48" batts	floor insulation	75	0			
	IN3	1	4x16x93" batts	wall insulation	45	0			
Flooring	FL1	1	2 1/4" wide	Flooring Oak-Golden	2022	0	ft	Subtotal:	
Wall Brd	WB1	1	4'x8'x1/2"	Sheet Sheetrock	20	0		Subtotal:	
	WB2	1		Color Bone White	374.00	0.00	sq ft		
	WB3	1	4'x8'x3/4"	Sheet Sheetrock	12	0			
	WB4	2	4'x8'x1/2"	Sheet Sheetrock	2	0			
Windows	W1	1	48x48	right sliding	1	0		Subtotal:	
Doors	D1	1	36x80x1 3/4L	ext. 3068 19	1	0		Subtotal:	
	D2	1		handle: Lever (decorative)	1	0			
	D3	1		handle: Exterior Handle (ext.)	1	0			
	D4	1		lock: Dead Bolt (interior)	1	0			
	D5	1		lock: Dead Bolt (exterior)	1	0			
	D6	1		hinge: hidden	3	0			
	D7	1	192x84	garage 2-Panel Garge Door	1	0			
Int Trim	T1	1	1x4-16ft+	interior casing	31	0	ft	Subtotal:	
	T2	1	1x4-16ft+	window apron	5	0	ft		
	T3	1	1x4-16ft+	sill	5	0	ft		
	T4	1	1x6-16ft+	base molding	77	0	ft		
Fixtures	FX1	1	12W108D	Garage Door Opener	1	0		Subtotal:	
Electrical	E1	1	wall mount	Duplex	6	0		Subtotal:	
	E2	1	wall mount	Caged Lantern	3	0			
	E3	1	wall mount	Single Pole	2	0			
	E4	1	wall mount	Duplex (weatherproof) - color light	1	0			
	E5	1	ceiling mount	Half Dome Light - lighting grey	4	0			
Total:									

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