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Custom 22 x 38 - 14' Hip Garage Plan
Plan #g272
By SDS-CAD Specialized Design Systems

To the best of my knowledge these plans are drawn to comply with owner's and/ or builder's specifications and any changes made on them after prints are made will be done at the owner's and / or builder's expence and responsibility. The contractor shall verify all dimensions and enclosed drawing. SDSCAD is not liable for errors once construction has begun. While every affort has been made in the preparation of this plan to avoid mistakes, the maker can not guarantee against human error. The contractor of the job must check all dimensions and other details prior to construction and be solely responsible thereafter. All calculations and member sizing should be verified for your building by a certified building official.

GARAGE MAIN FLOOR PLAN

SCALE 1/4"=1'

BUILDING CONTRACTOR/HOME OWNER
TO REVIEW AND VERIFY ALL DIMENSIONS,
SPECS, AND CONNECTIONS BEFORE
CONSTRUCTION BEGINS. GARAGE TO BE
BUILT AS PER IRC 2006 OR CURRENT LOCAL CODE

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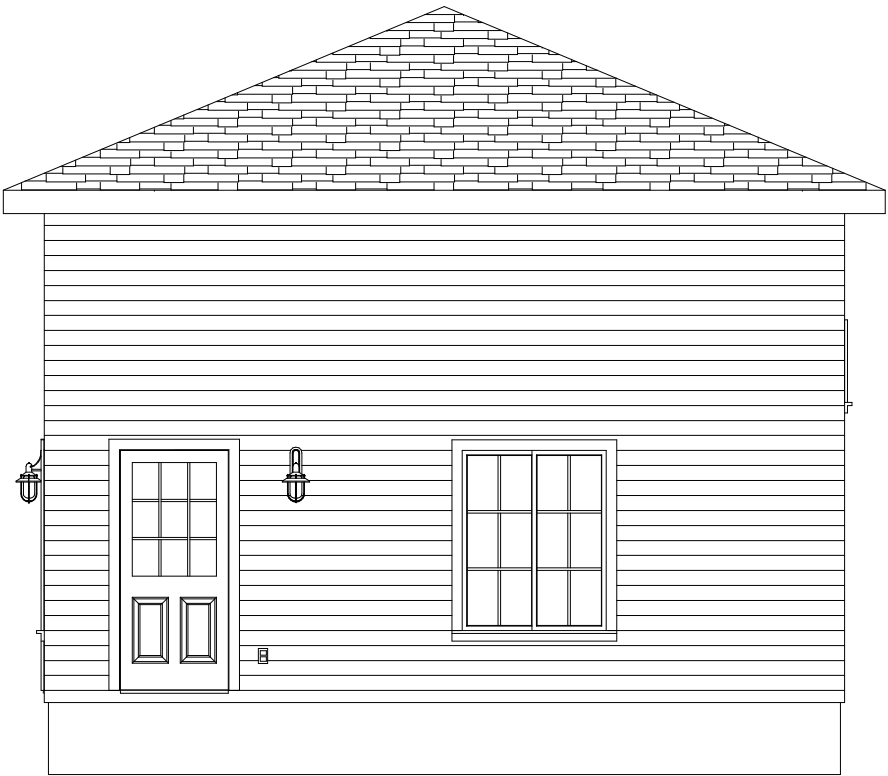
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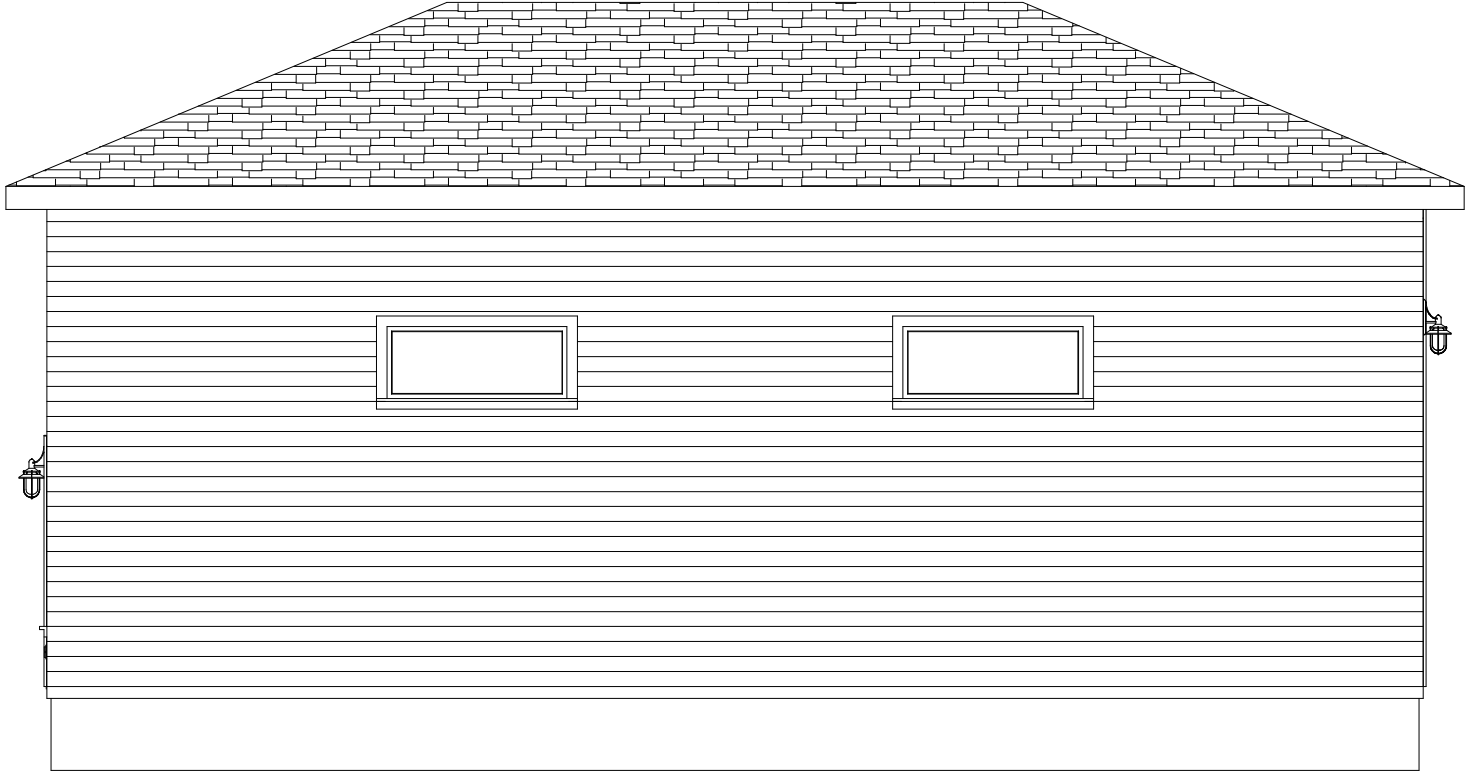
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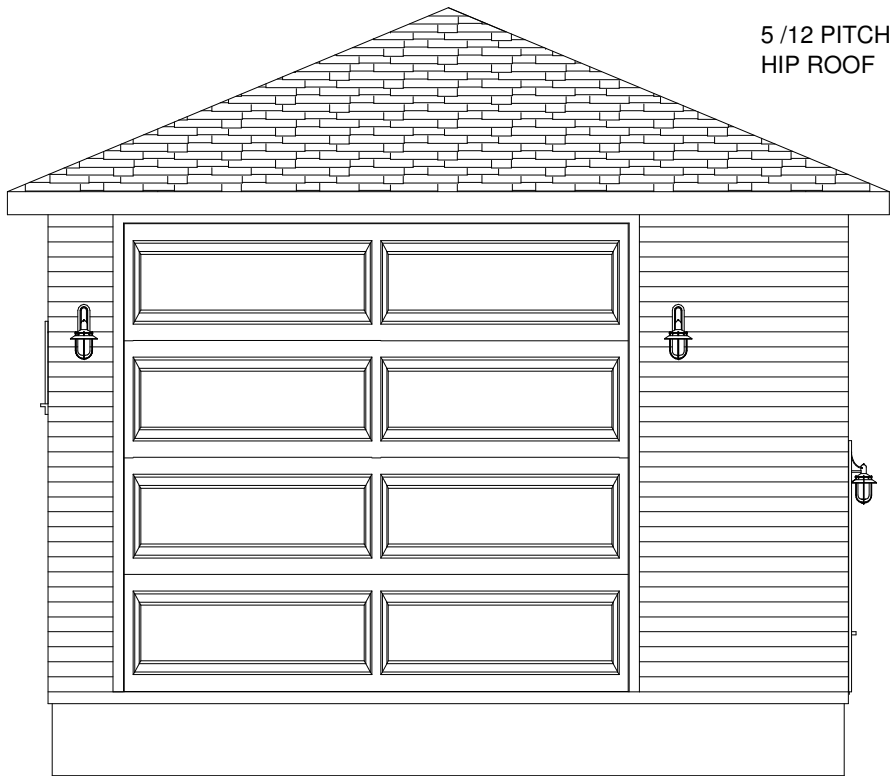
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REAR ELEVATION



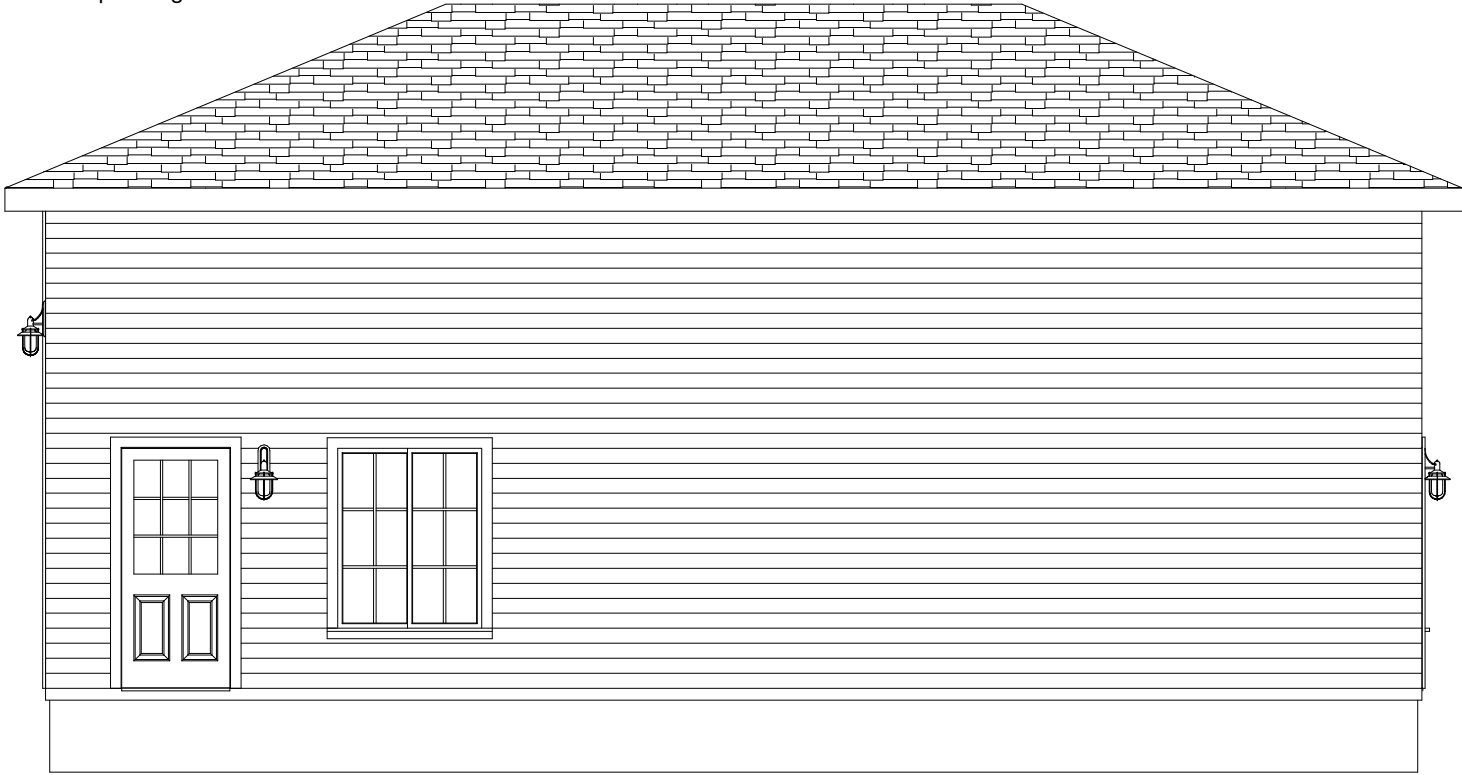
LEFT ELEVATION



FRONT ELEVATION

SCALE
3/16"=1'

14' Tall 2 x 6 Walls
Asphalt Shingles
Horizontal Lap Siding



RIGHT ELEVATION

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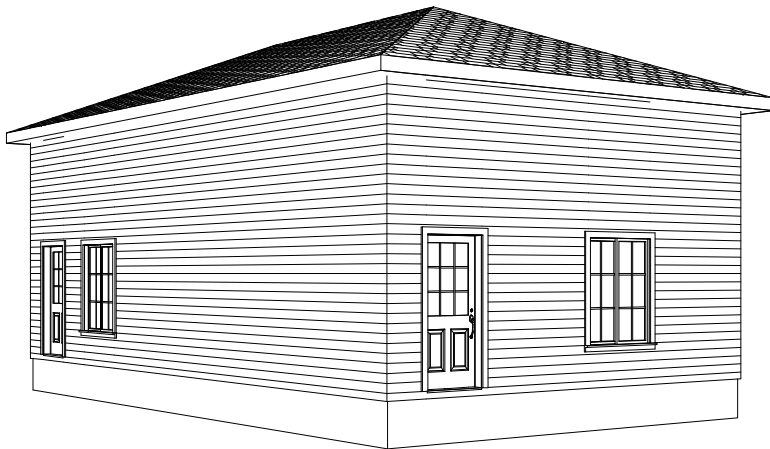
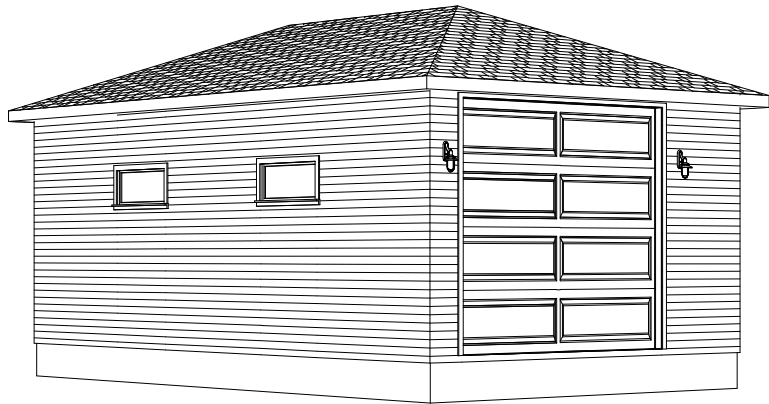
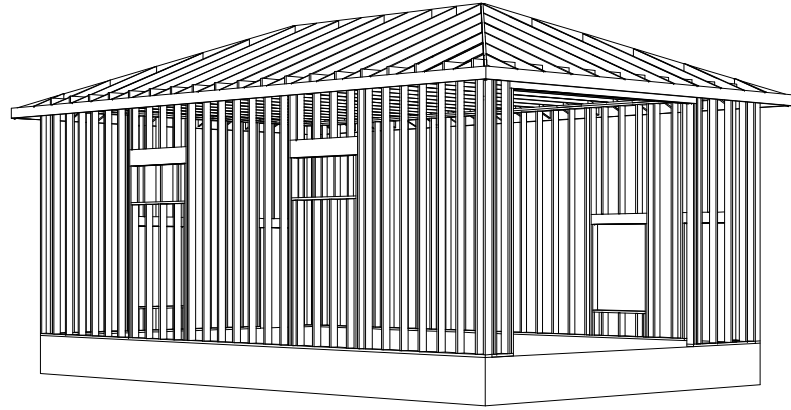
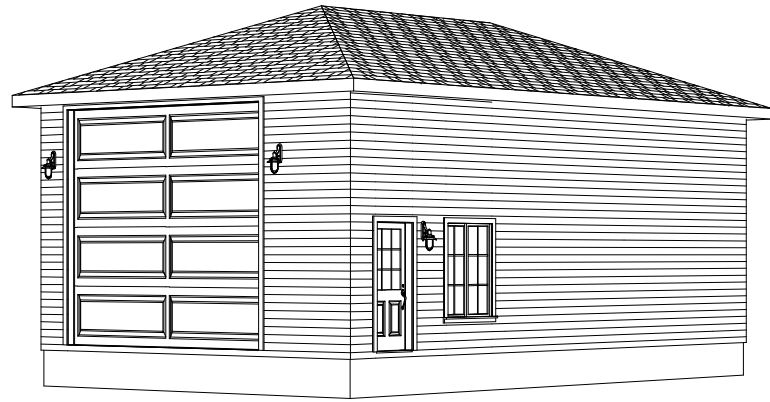
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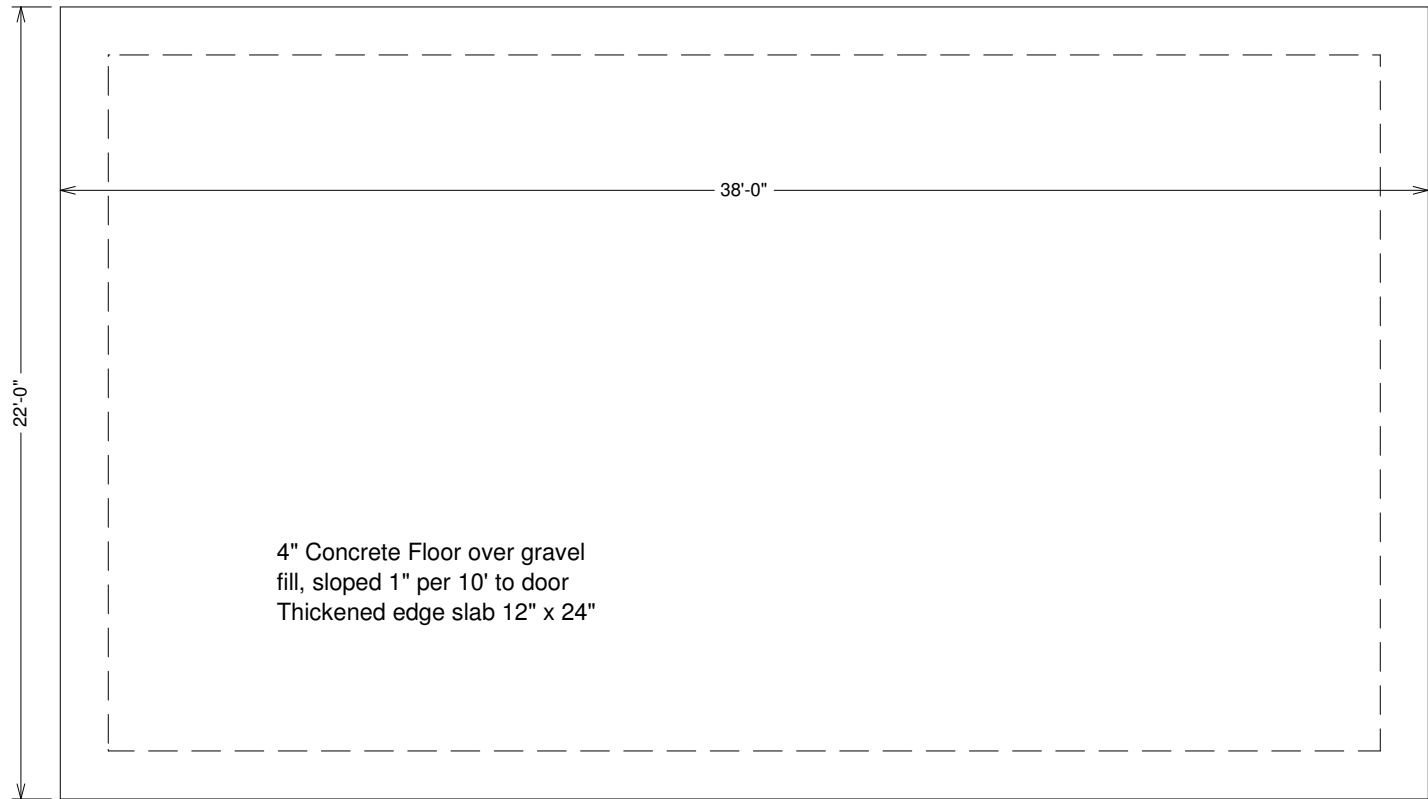
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PICTORIAL VIEWS

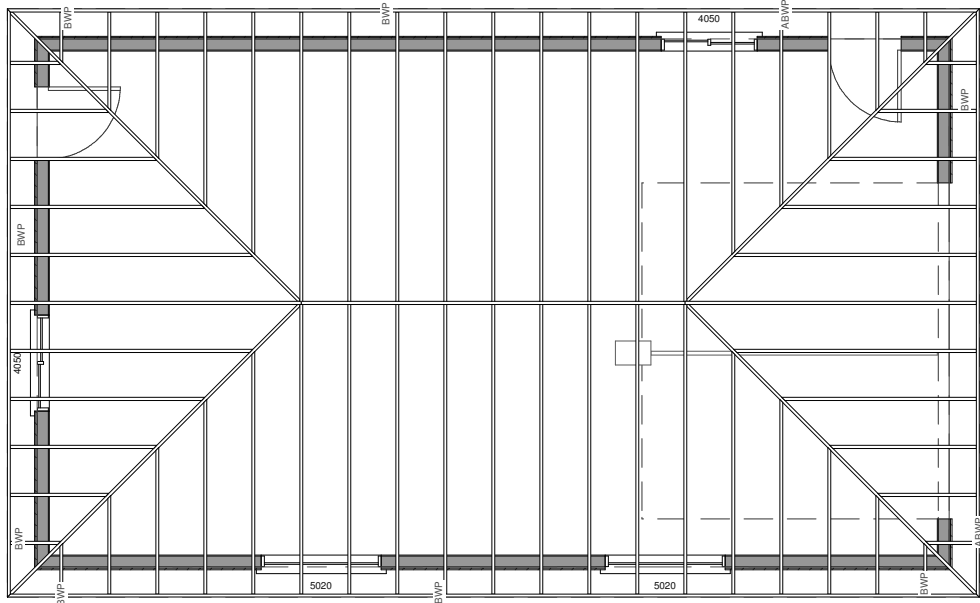


FOUNDATION PLAN

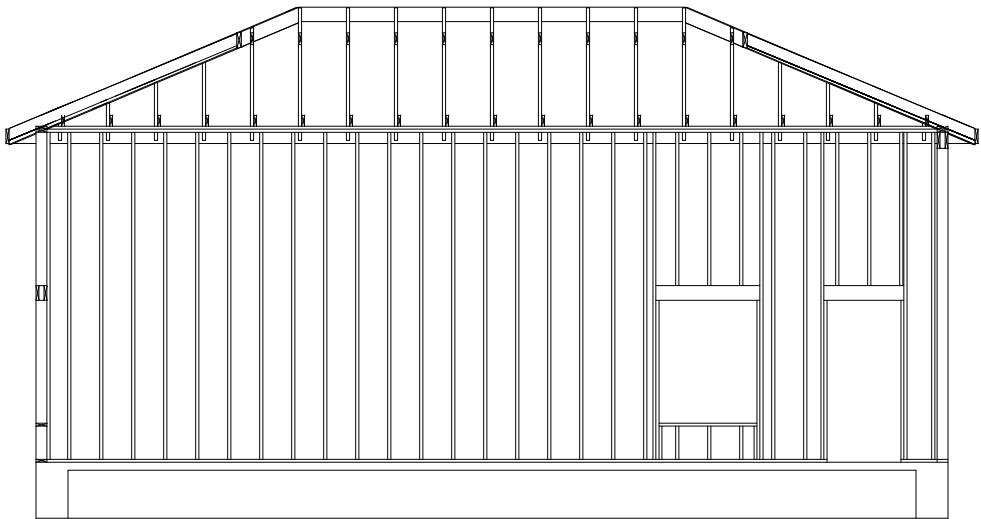
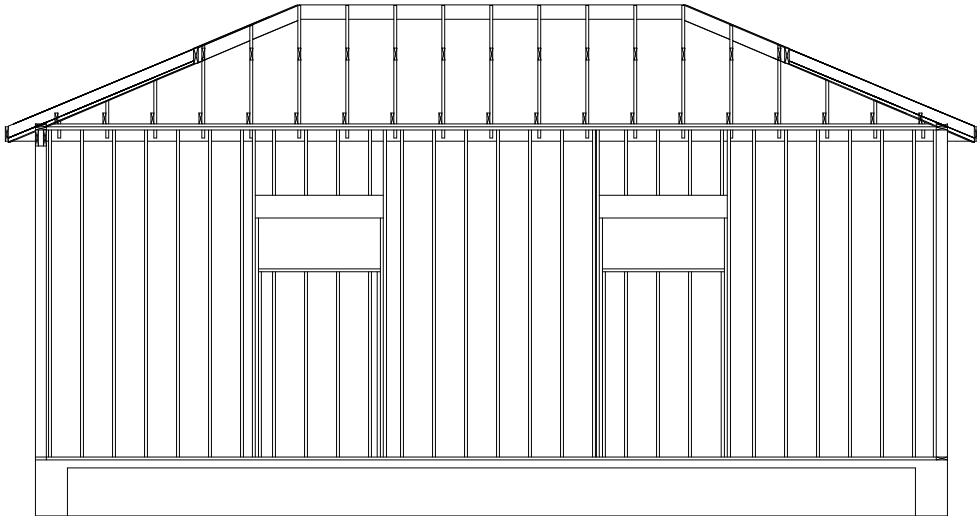
SCALE 3/16"=1'

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



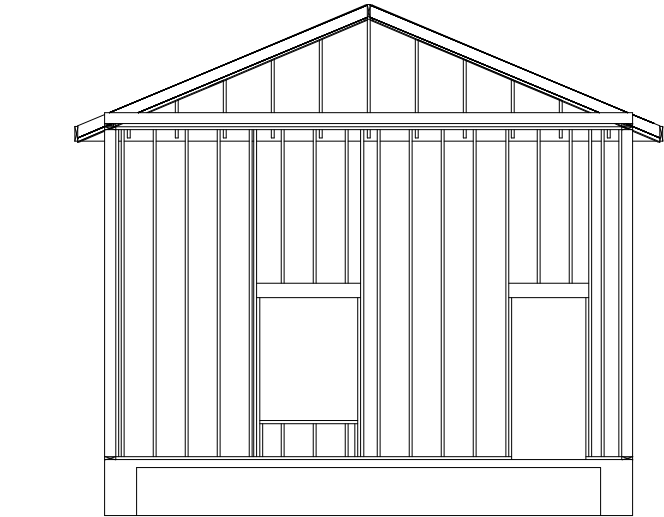
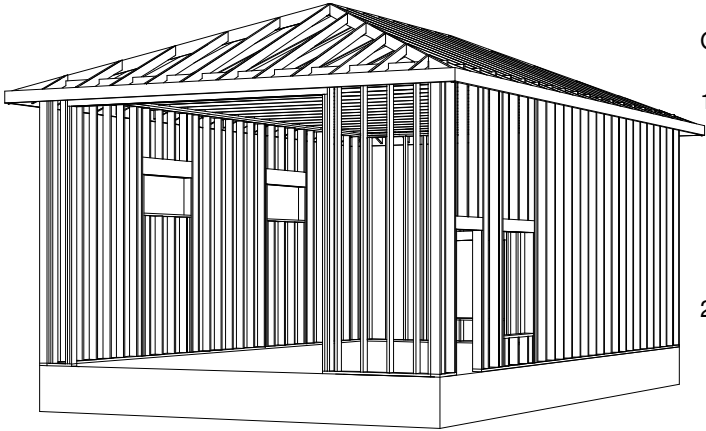
GARAGE ROOF PRE-ENGINEERED TRUSSES AS SUPPLIED BY TRUSS MANUFACTURER 24" o.c.



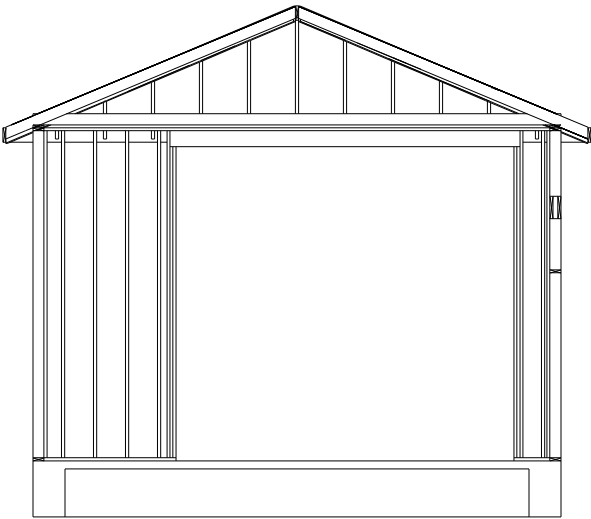
Cross Section

WALL FRAMING SECTIONS

SCALE 1/8"=1'



14' Tall 2 x 6 Walls Back Wall



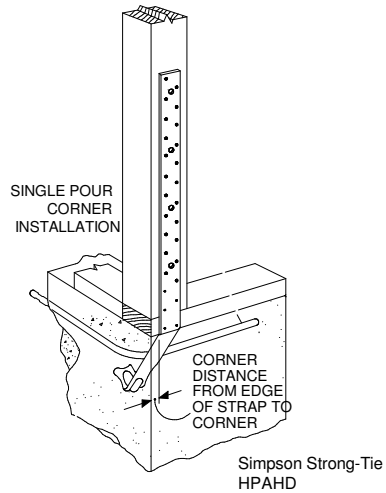
Front Wall

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.
6. Shear wall to be 7/16" Sheathing, see detail.
7. All stress grade lumber shall comply with WCLA specs and bear approval stamp on all pieces in place.
8. Framing lumber shall be Douglas Fir construction grade Fb 1450 or better unless otherwise noted.
9. Nailing to be per current U.B.C. unless otherwise noted.
10. All bearing partitions shall have double top plates.
11. Structural glued laminated timbers to be stamped by an approved agency.
12. Use redwood or pressure treated sole plates at all exterior walls.

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.



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

TYPICAL ALTERNATE BRACED WALL PANEL (ABWP)

NOTE: TYPICAL DETAILS FOR BASIC CONSTRUCTION PURPOSES AND BUILDING REQUIREMENTS. GARAGES TO BE BUILT AS PER LOCAL CODE REQUIREMENTS

CDX PLYWOOD SHEAR WALL INSTALLED W/ LONG DIMENSION ACROSS STUDS. STAGGER VERTICAL JOINTS

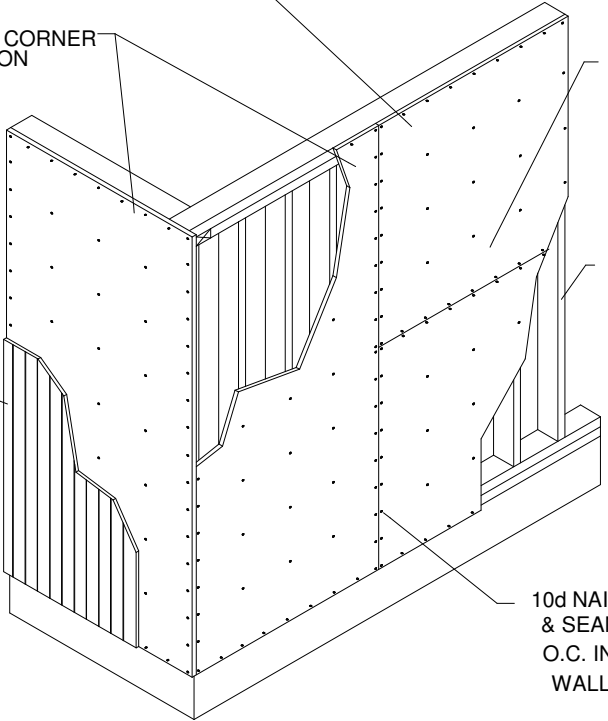
PANEL SHEATHING USED AS CORNER BRACING W/ LONG DIMENSION PARALLEL TO STUDS

LEAVE 1/4" GAP @ EDGES & 1/8" GAP @ ENDS UNLESS OTHERWISE RECOMMENDED BY MANUFACTURER

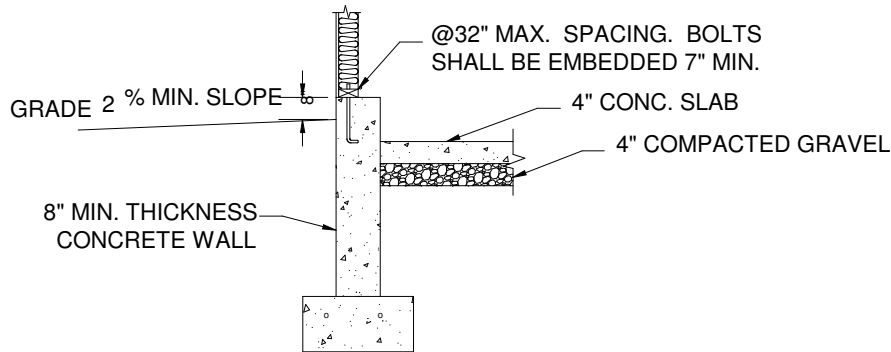
WALL FRAMING

SIDING MATERIAL STRUCTURAL PANEL CAN ACT AS SIDING IF OF EXTERIOR GRADE

10d NAILS @ 6" O.C. AT EDGES & SEAMS AND 10d NAILS @ 12" O.C. IN FIELD U.N.O. ON SHEAR WALL SCHEDULE

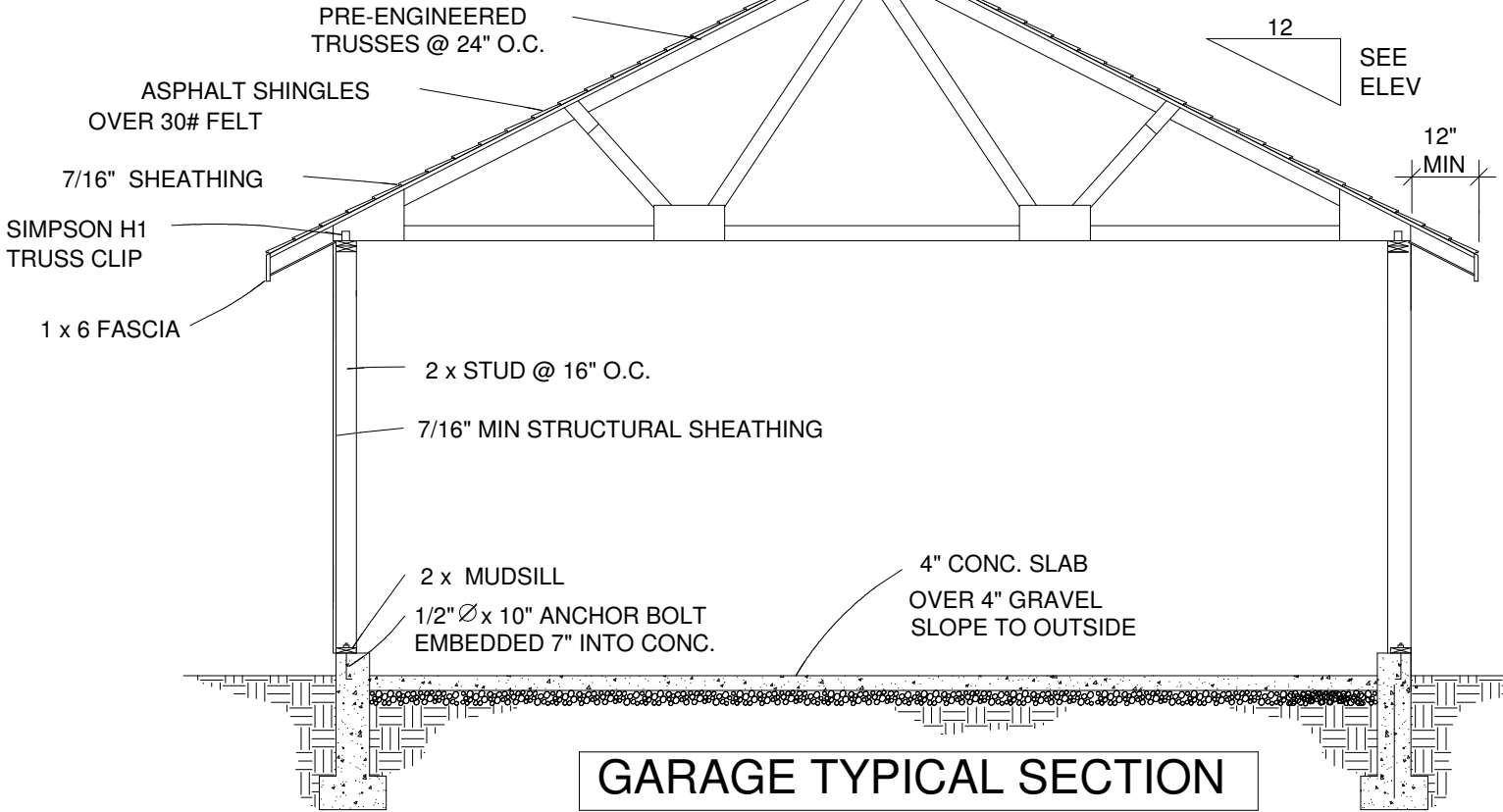


TYPICAL BRACED WALL PANEL (BWP)

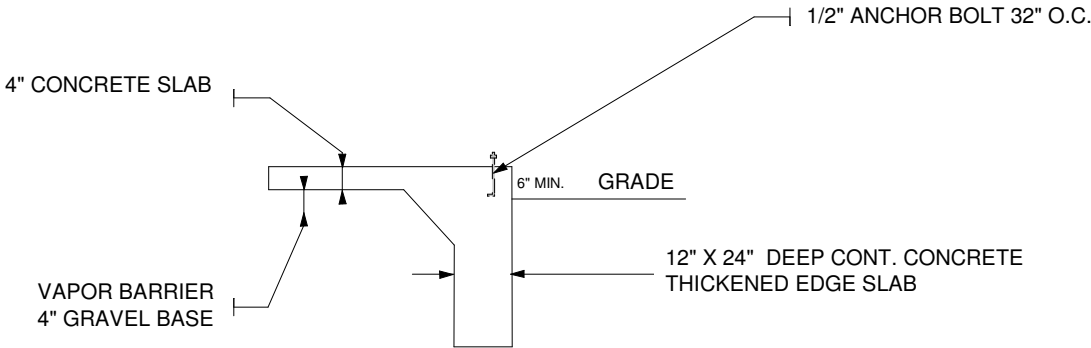


Footing and concrete wall option

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



GARAGE TYPICAL SECTION



Monolithic slab foundation option

General				168 high wall	Siding-6	118	0	ft	
GN1	1				heated ceiling area	836.00	0.00	sq ft	
GN2	1				heated floor area	836.00	0.00	sq ft	
GN3	1								Subtotal:
Foundation									
FO1	1			836 sq ft	concrete slab	10.32	0.00	cu yd	
FO2	1			836 sq ft	steel mesh for slab	836.00	0.00	sq ft	
FO3	1			1/2x6"	foam sill seal	120	0	ft	
FO4	1				foundation bolts	21	0		
FO5	1			16x20"h	concrete footing	9.44	0.00	cu yd	
FO6	1			no. 4	rebar (footing)	233	0	ft	
Subfloor									Subtotal:
SF1	1			2x6"-22'	ceiling joists - lumber	19	0		
Framing									
F1	1			2x6-16ft+	fir plate	373	0	ft	
F2	1			2x6"-163 1/2"	fir stud	81	0		
F3	1			2x6"-76 3/4"	fir stud	5	0		
F4	1			2x7-16ft+	header - lumber	31	0	ft	
F5	1			2x6-16ft+	fir stud stock	304	0	ft	
F6	1			2x8-16ft+	header - lumber	29	0	ft	
F7	1			2x11-16ft+	header - lumber	21	0	ft	
									Subtotal:
Siding									
S1	1			7" wide	Siding Wood White	3350	0	ft	
S2	1			4'x8'x5/8"	Sheet Plywood-hrz	53	0		
S3	1				house wrap	1677.00	0.00	sq ft	
Ext Trim									Subtotal:
EX1	0			4" thick	- concrete grey	21.65	0.00	cu yd	
EX2	1			1x4-16ft+	exterior sill	20	0	ft	
EX3	1			1x4-16ft+	ext. window casing	51	0	ft	
EX4	1			1x4-16ft+	ext. door casing	35	0	ft	
EX5	1			1x7-36"	door threshold	2	0		
EX6	1			7 in	ext. door jamb	35	0	ft	
EX7	1			1x4-16ft+	garage door casing	41	0	ft	
EX8	1			7 in	garage door jamb	41	0	ft	
									Subtotal:
Roofing									
R1	1			2x8"-18'	ridge board - lumber	4	0		
R2	1			2x8"-16'	ridge board - lumber	1	0		
R3	1			2x6"-14'	rafters - lumber	20	0		
R4	1			2x6"-12'	rafters - lumber	8	0		
R5	1			2x6"-10'	rafters - lumber	8	0		
R6	1			2x6"-16'+	rafters - lumber	110	0	ft	
R7	1			2x8"-42'	rafters - lumber	2	0		
R8	1			2x8"-26'	rafters - lumber	2	0		
R9	1				ridge cap	16	0	ft	
R10	1				hip ridge cap	72	0	ft	
R11	1				Roofing Dimensional Comp.	1075.00	0.00	sq ft	
R12	1			4x8' sheets	roof sheathing	34	0		
R13	1			2x8"	eave fascia	130	0	ft	
R14	1				metal drip edge	130	0	ft	
									Subtotal:
Insulation									
IN1	1			12x24x48" batts	ceiling insulation	104	0		
IN2	1			12x16x48" batts	floor insulation	156	0		
									Subtotal:
Wall Brd									
WB1	1			4'x8'x1/2"	Sheet Sheetrock	52	0		
WB2	1				Color Bone White	777.00	0.00	sq ft	
WB3	1			4'x8'x3/4"	Sheet Sheetrock	24	0		
									Subtotal:
Windows									
W1	1			48x60	right sliding	2	0		
W2	1			60x24	fixed glass	2	0		
									Subtotal:
Doors									
D1	1			36x80x1 3/4L	ext. 3068 19	2	0		
D2	1				handle: Lever (decorative)	2	0		
D3	1				handle: Exterior Handle (ext.)	2	0		
D4	1				lock: Dead Bolt (interior)	2	0		
D5	1				lock: Dead Bolt (exterior)	2	0		
D6	1				hinge: hidden	6	0		
D7	1			168x156	garage 2-Panel Garge Door	1	0		
									Subtotal:
Int Trim									
T1	1			1x4-16ft+	window apron	20	0	ft	
T2	1			1x4-16ft+	sill	20	0	ft	
T3	1			1x4-16ft+	interior casing	86	0	ft	
									Subtotal:
Fixtures									
FX1	1			12W161D	Garage Door Opener	1	0		
Electrical									
E1	1			wall mount	Three Way	4	0		
E2	1			wall mount	Duplex	11	0		
E3	1			wall mount	Caged Lantern	4	0		
E4	1			wall mount	Duplex (weatherproof) - color light gra	1	0		
E5	1			ceiling mount	Half Dome Light - lighting grey	3	0		
									Subtotal:
									Total:

Computer Generated Materials List
for reference only and gives
approximated
materials as per the 3D CAD model

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