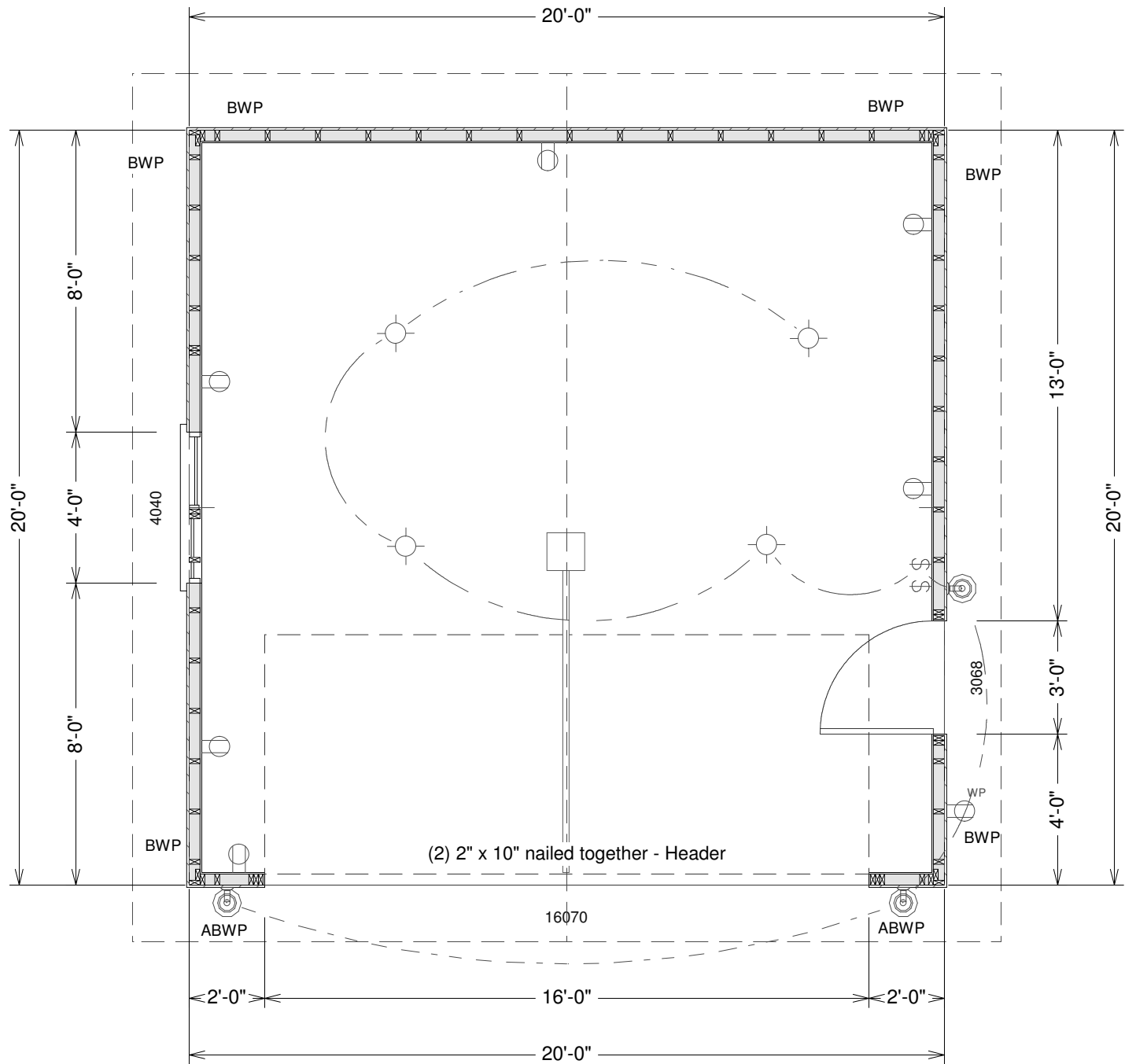


# Custom 20 x 20 Garage Plan Plan #g214 By SDS-CAD Specialized Design Systems

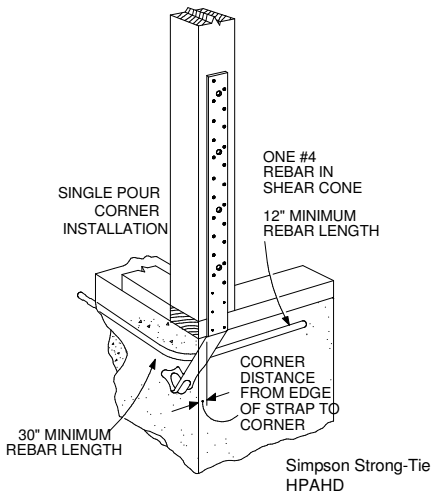
Page 1 Title Page  
Page 2 Main Floor Plan  
Page 3 Foundation Plan  
Page 4 Elevation Views  
Page 5 Framing and Details  
Page 6 Typical Section  
Page 7 Materials List

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.

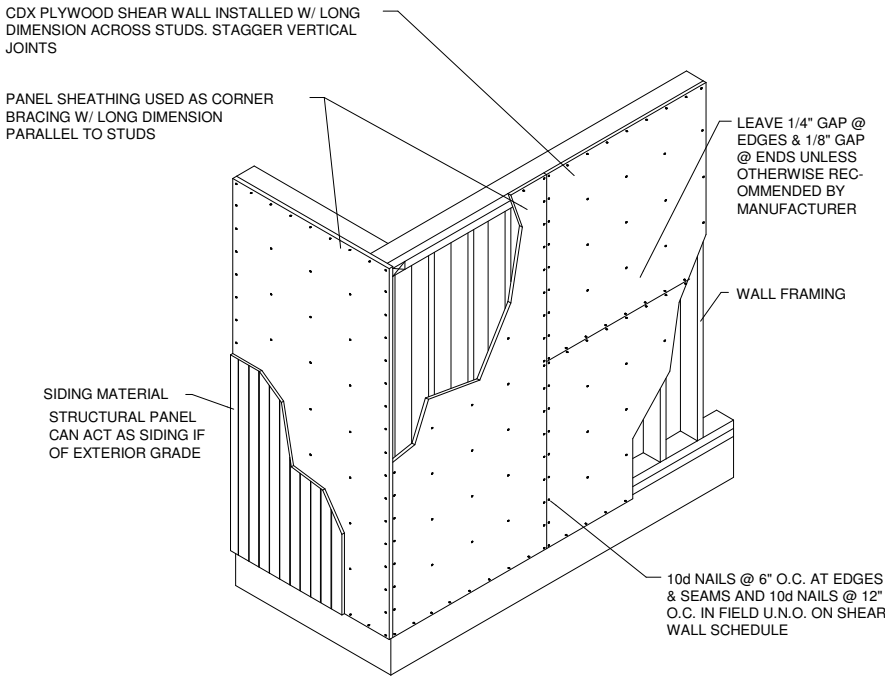


# GARAGE MAIN FLOOR PLAN

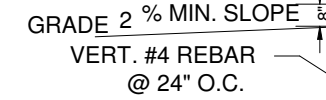
SCALE 1/4"=1'



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.



4" CONCRETE SLAB  
W/ WIRE MESH  
OR FIBER

VAPOR BARRIER  
4" GRAVEL BASE

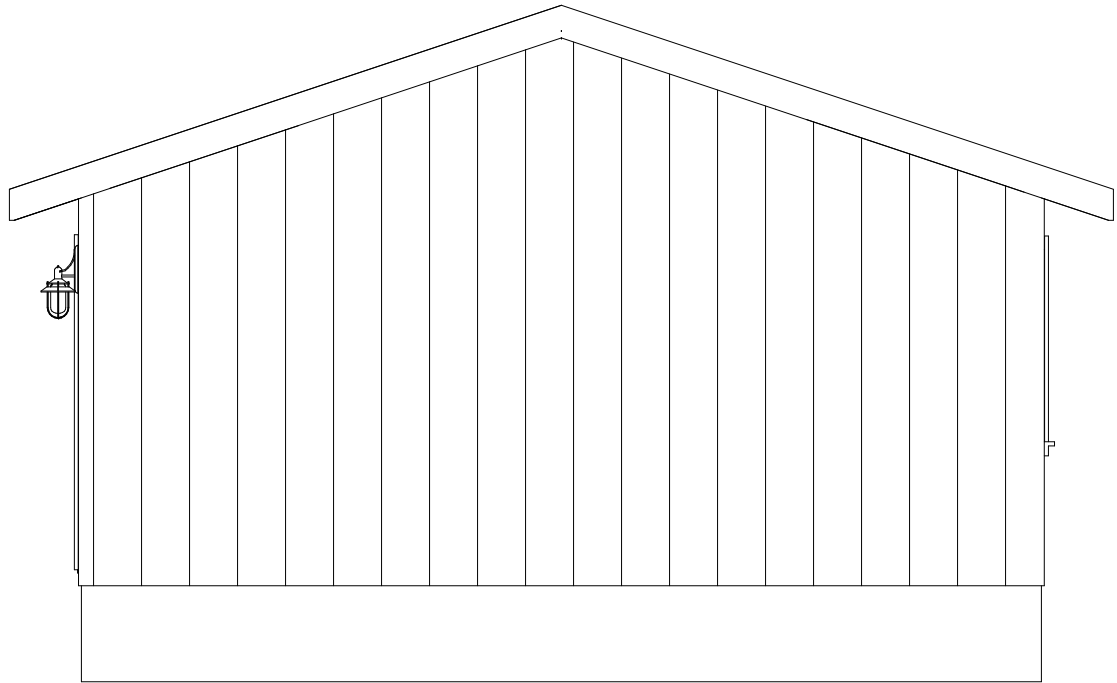
1/2" ANCHOR BOLT 32" O.C.

6" MIN. GRADE

16" X 24" DEEP CONT. CONCRETE  
THICKENED EDGE SLAB  
REBAR (4) CONTINUOUS @ PERIMETER

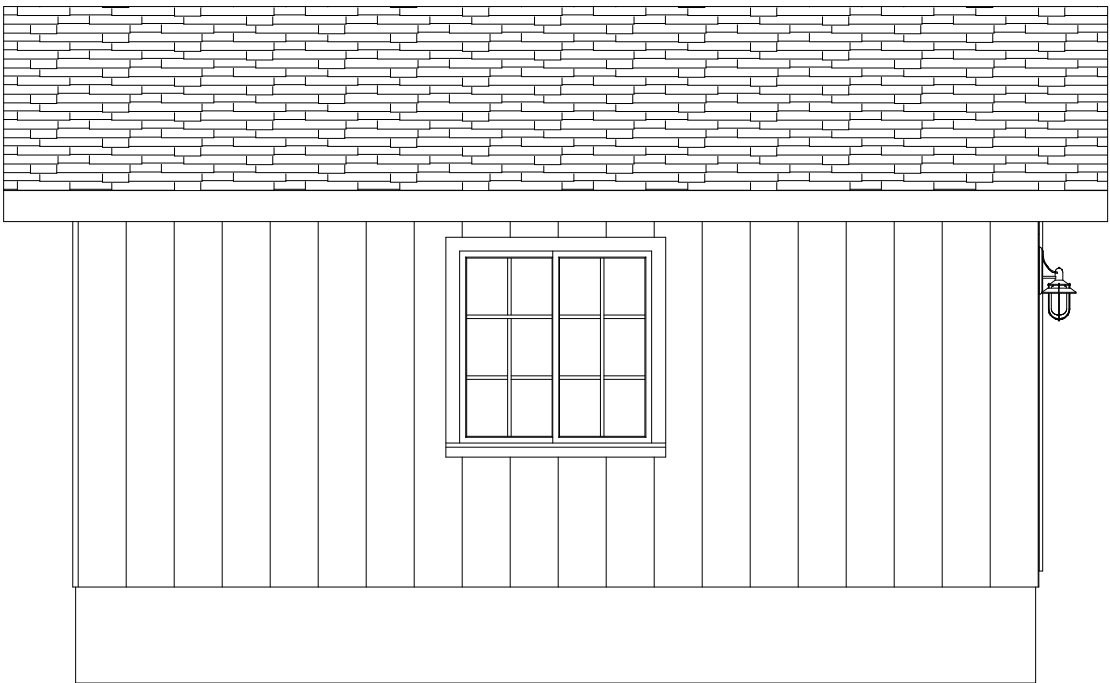
20'-0"

4" Concrete Floor with WWM or  
Fiber over compacted gravel fill,  
sloped 1" per 10' to door  
Thickened edge slab 16" x 24"



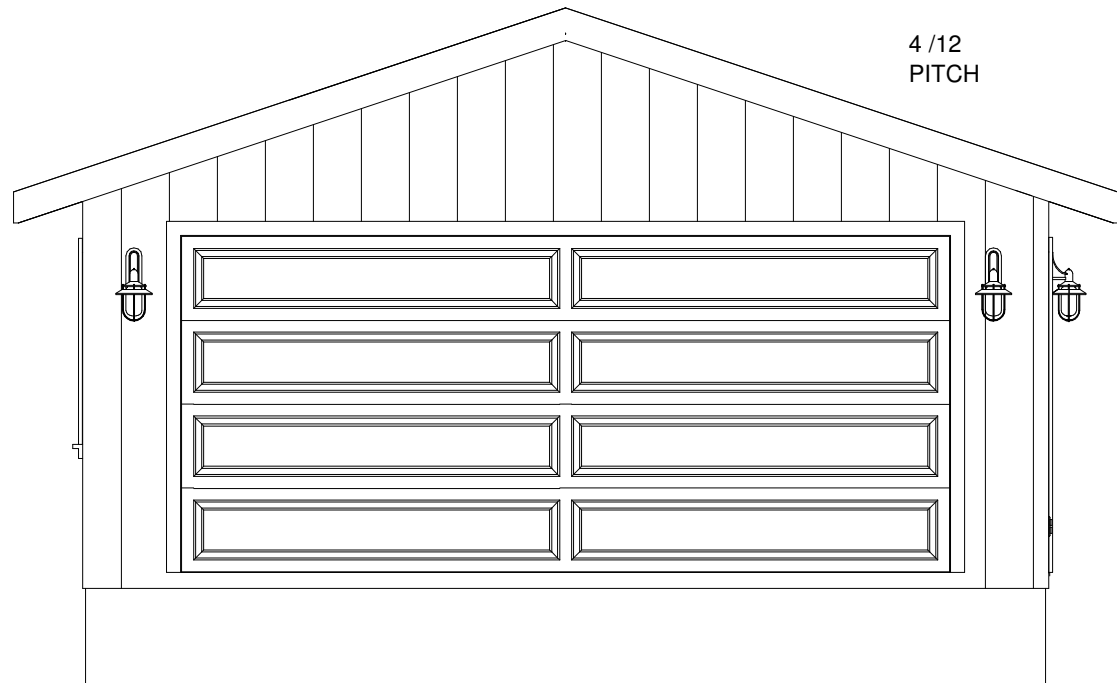
REAR ELEVATION

SCALE 1/4"=1'



LEFT ELEVATION

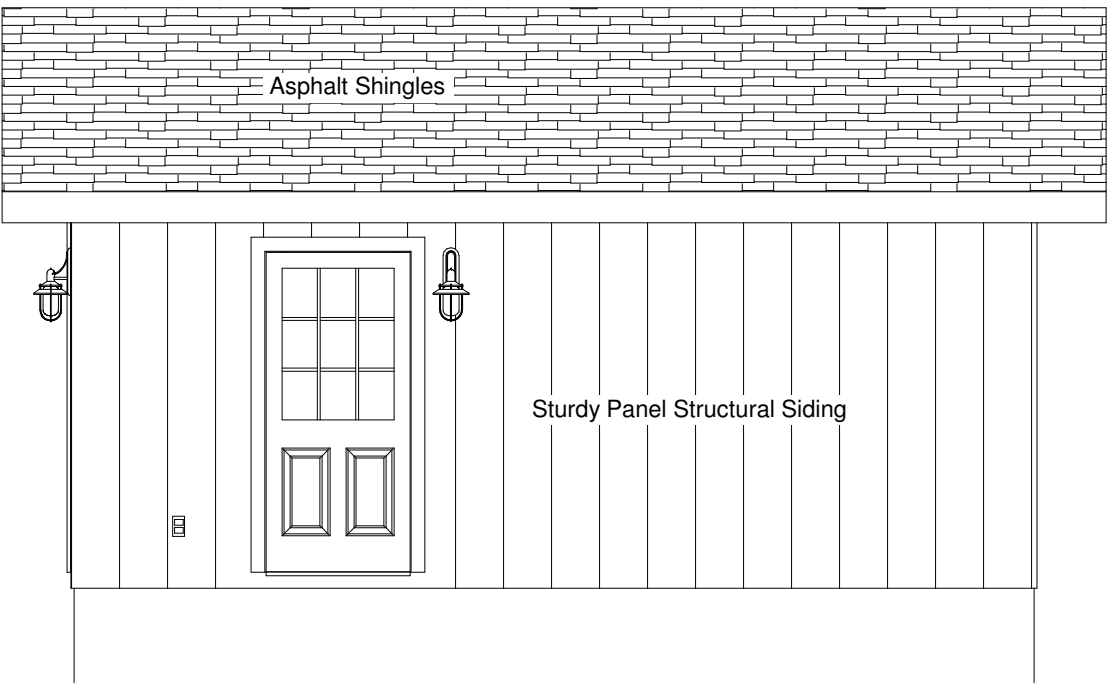
SCALE 1/4"=1'



FRONT ELEVATION

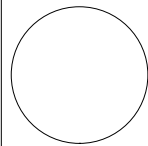
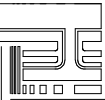
SCALE 1/4"=1'

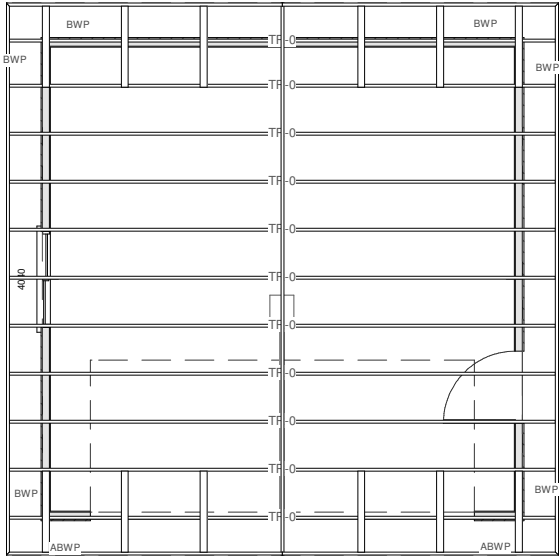
9' Tall 2 x Walls



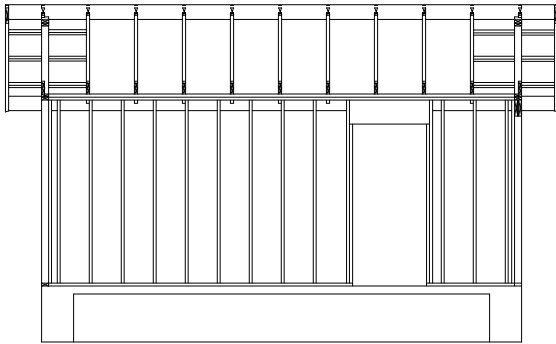
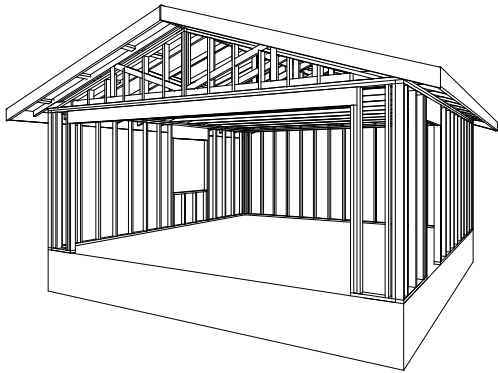
RIGHT ELEVATION

SCALE 1/4"=1'

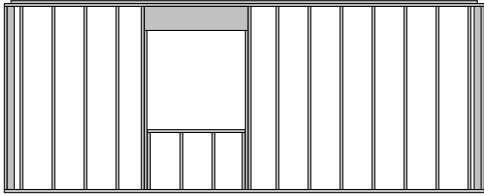




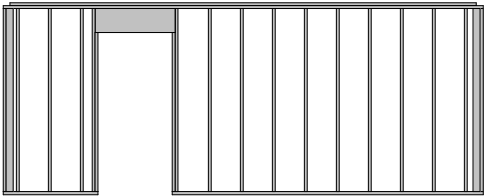
GARAGE ROOF  
PRE-ENGINEERED TRUSSES AS  
SUPPLIED BY TRUSS  
MANUFACTURER 24" o.c.



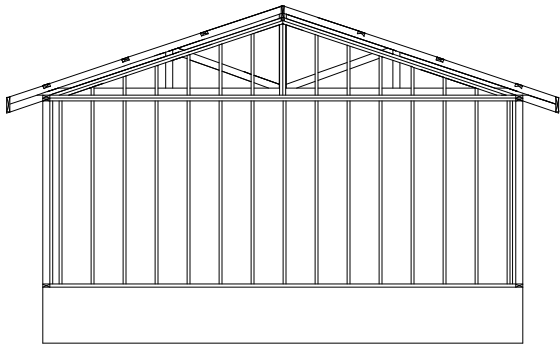
Cross Section



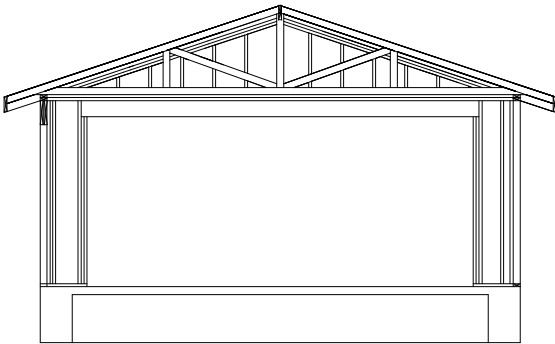
End Walls



9' Tall 2 x Walls



Back Wall



Front Wall

# WALL FRAMING SECTIONS

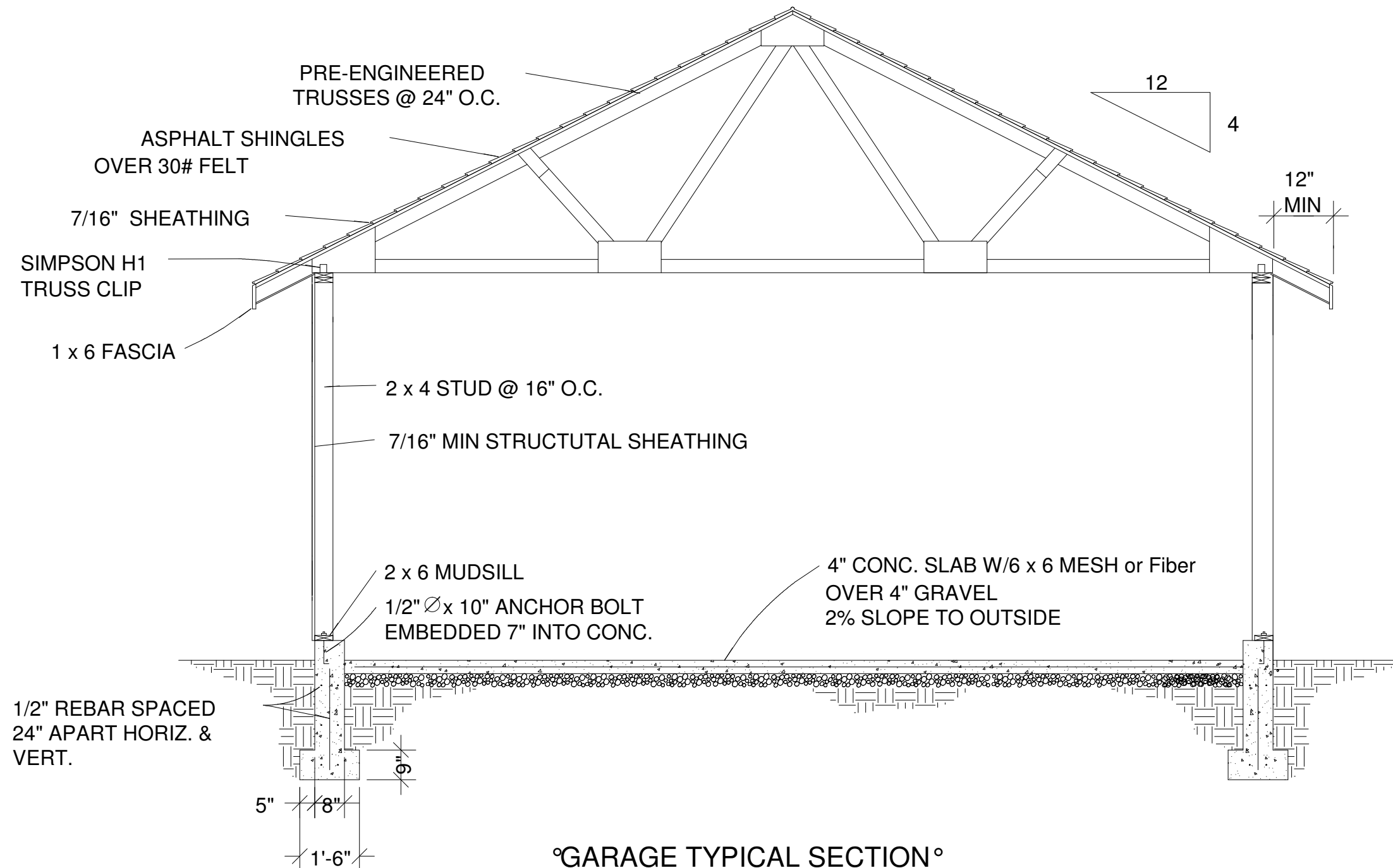
SCALE 1/8"=1'

## 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.



Residential Design

SDS-CAD  
Specialized Design Systems

Garage for

CLIENT  
DATE  
DRAWN BY  
CHECKED BY  
DATE  
REVISIONS

JOB NO.

SHEET NO.  
6  
OF  
7

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