

GROSS FLOOR AREA: 720 SQ. FT.
 GRADE TO RIDGE HEIGHT: 13' - 2"

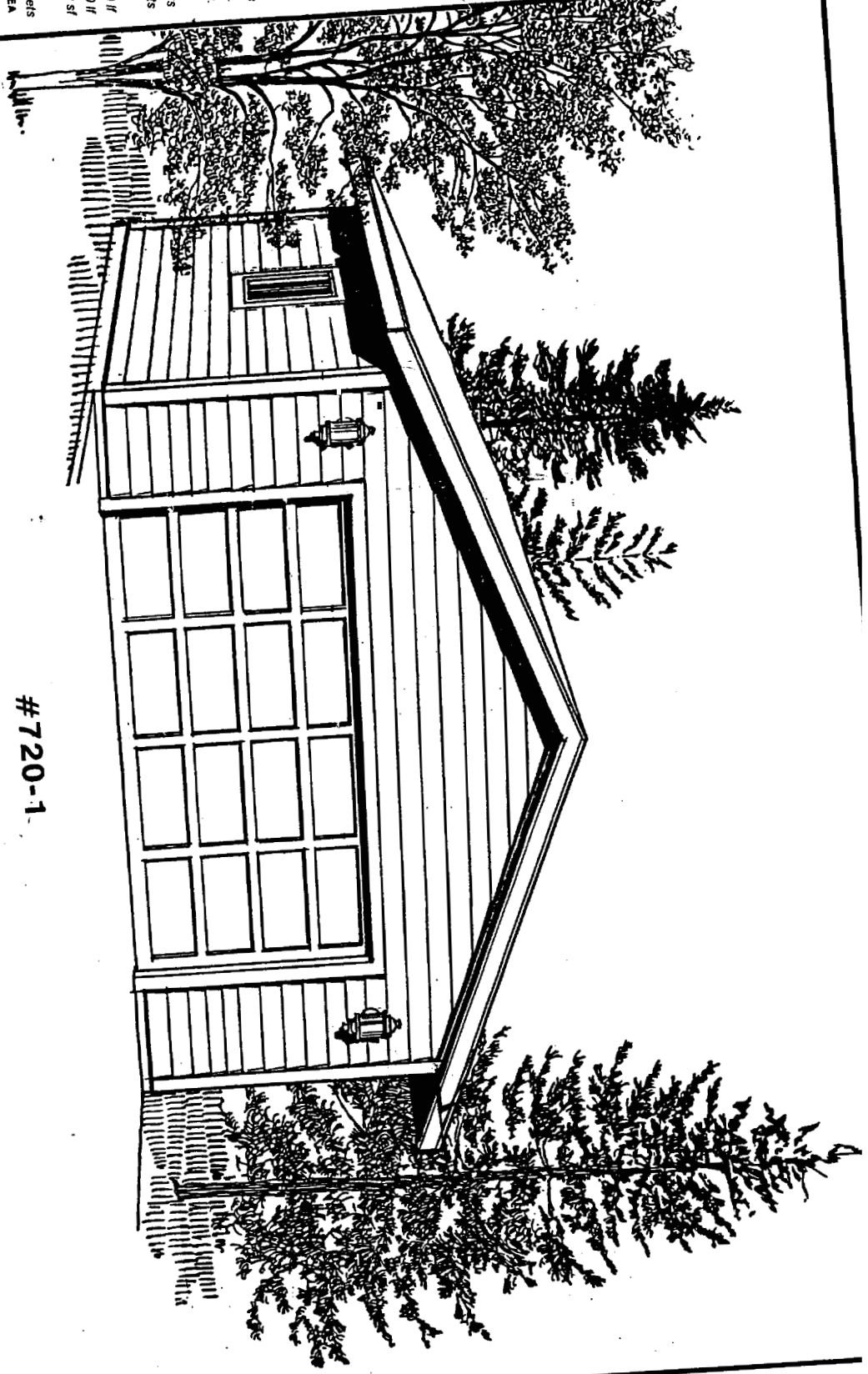
Building Materials List for Plan #720-1

~ Local building code approved substitutions may be made to this list ~
 Variations in construction methods and materials can require modification
 of this list. Every attempt is made for greatest accuracy, but typographical
 or human error is possible. Quantities verification by the materials supplier
 is recommended before materials package is finalized and/or shipped.

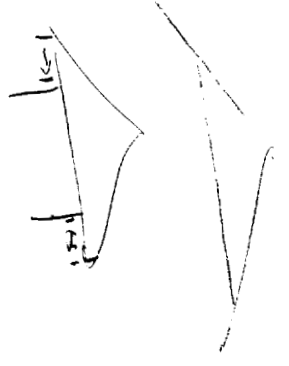
Item	Quantity	Unit	Notes
Concrete & Reinforcements For Monolithic Slab/Footing			
Poured-in-place concrete	20' lengths	(min) 14 cy	
#4 Reinforcing Steel Bar ASTM A-615 grade 40	382 sf	19 pcs.	
W/6 x 6 - w/1 x 1 4 wire mesh	127 lf, 4' roll		
Concrete & Reinforcements For Stemwall/Footing Foundation			
Poured-in-place concrete	20' lengths	(min) 14 cy	
#4 Reinforcing Steel Bar ASTM A-615 grade 40	641 sf	32 pcs.	
W/6 x 6 - w/1 x 1 4 wire mesh	160 lf, 4' roll		
Rough Framing			
2 x 4 x 92-1/2' HF/DF "stud" wall framing	88 pcs		
2 x 4 x 92-1/2' HF/DF No. 2 for plates and lookouts	264 lf		
2 x 4 x 92-1/2' HF/DF No. 2 pressure-treated nudsill	108 lf		
2 x 4 x 10 DF No. 1 header	10' length	1 pcs.	
2 x 4 x 22-1/2" with screened vent holes	30 pcs		
2 x 4 x 22-1/2" span, incl. (2) end trusses	16 pcs.		
Sheathing Materials			
15/32" 5-ply C-D APA plywood ext. glue P 1 24/0 Roof	4 x 8 sheet	28 sheets	
(for optional siding boards) 7/16" o.s.b. wall sheathing	4 x 8 sheet	31 sheets	
Vapor Barrier			
Roof 15# bituminous felt paper in 36" wide roll	400 lf		
Floor 006" black polyethylene membrane	350 lf		
Siding Materials			
7/16" o.s.b. textured (or 5/8" T-1-11 plywood) panel siding 4 x 8 sheet	31 sheets		
(optional) 8" textured o.s.b. siding boards with 1" lap	828 sf		
Cedar Trim: 1 x 4	8' length	13 pcs.	
Cedar Trim: 1 x 3	10' length	2 pcs.	
Cedar Fascia: 1 x 8	8' length	4 pcs.	
Cedar Rakeboard: 2 x 6	8' length	8 pcs.	
	16' length	4 pcs.	
Roofing Materials			
Composition Roofing Shingles	899 sf		
Ridgevent material	32 lf		
Windows and Doors			
4030 sliding window assemblies	2 ea		
3088 exterior door assembly	1 ea.		
16" - 0" x 7'-0" sectional garage door assembly	1 ea.		
Metal Parts			
Anchor bolts: 1/2" dia x 10" ASTM A-307/A-325 (type X w/ hex nuts	29 pcs.		
Flat washer: 2" x 2" square x 3/16" thick	28 pcs.		
Simpson H1 clips (or equal)	4 pcs.		
Simpson STD10 hold-down straps (or equal)	50 lbs		
16d sinker nails @ 50 lbs. / box	20 lbs.		
8d common nails @ 145 lbs. / lb	10 lbs.		
Roofing nails @ 210 nails / lb	48 lf		
Z-flashing strip for panel siding	(applied)		
Drip flashing for window/door heads	(applied)		

~ Note: To advise corrections, please call Behm Design @ 1-800-210-6776 ~

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#720-1



BUILDING CODE COMPLIANCE
 Complies with the requirements of the
 IRC, IRC, UBC & CABO BUILDING CODES
 as required by the Building Official.

PARAMETERS:
 80 mph Wind (UBC)
 <100 mph Wind (IBC & IRC)
 Wind Exposure 'B'
 Seismic Zone 3 (UBC)
 Seismic Zones A, B & C (IBC & IRC)
 25# /sq. ft. Snow Load
OCCUPANCY CLASSIFICATION: "U" & "U1"

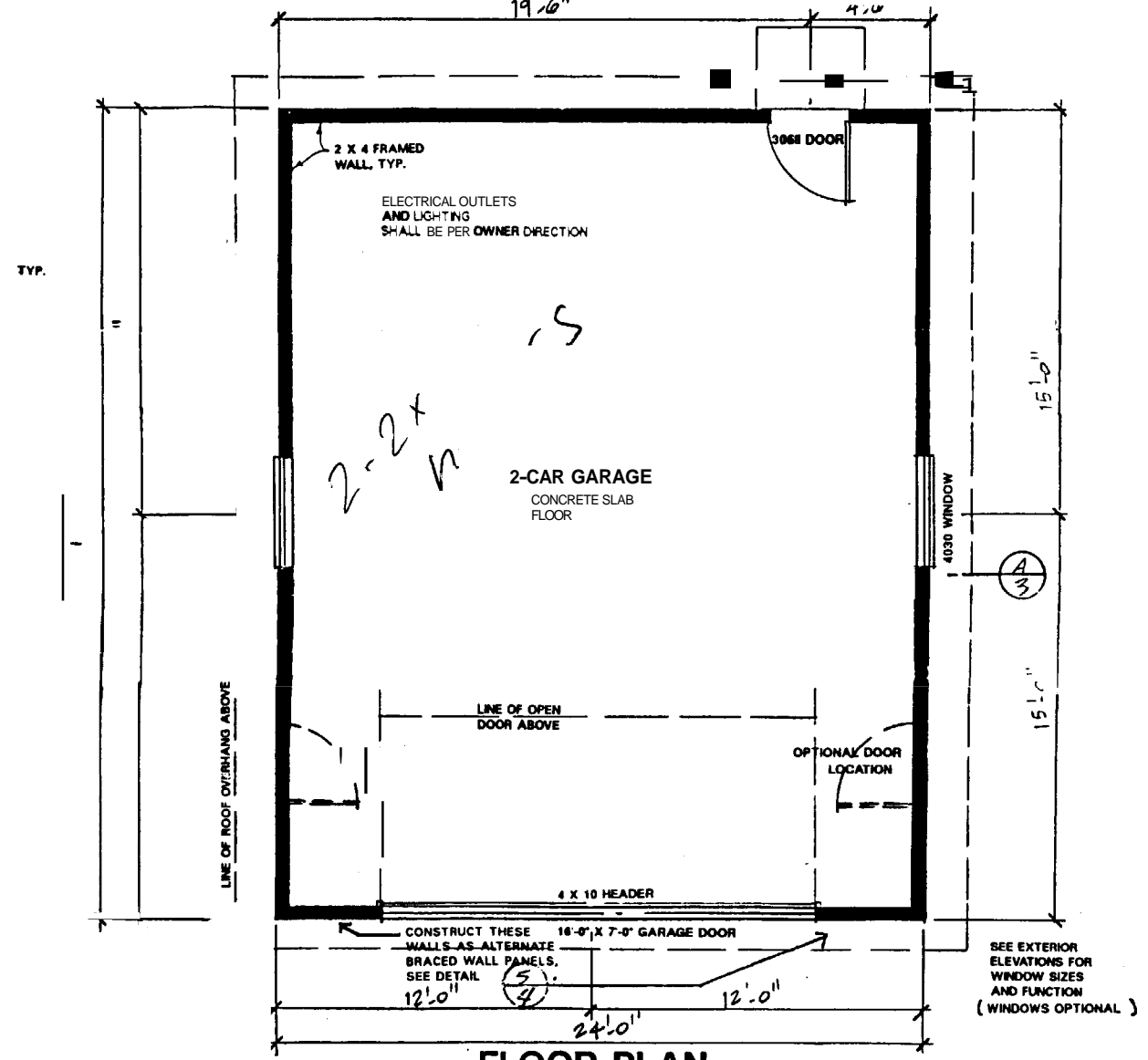
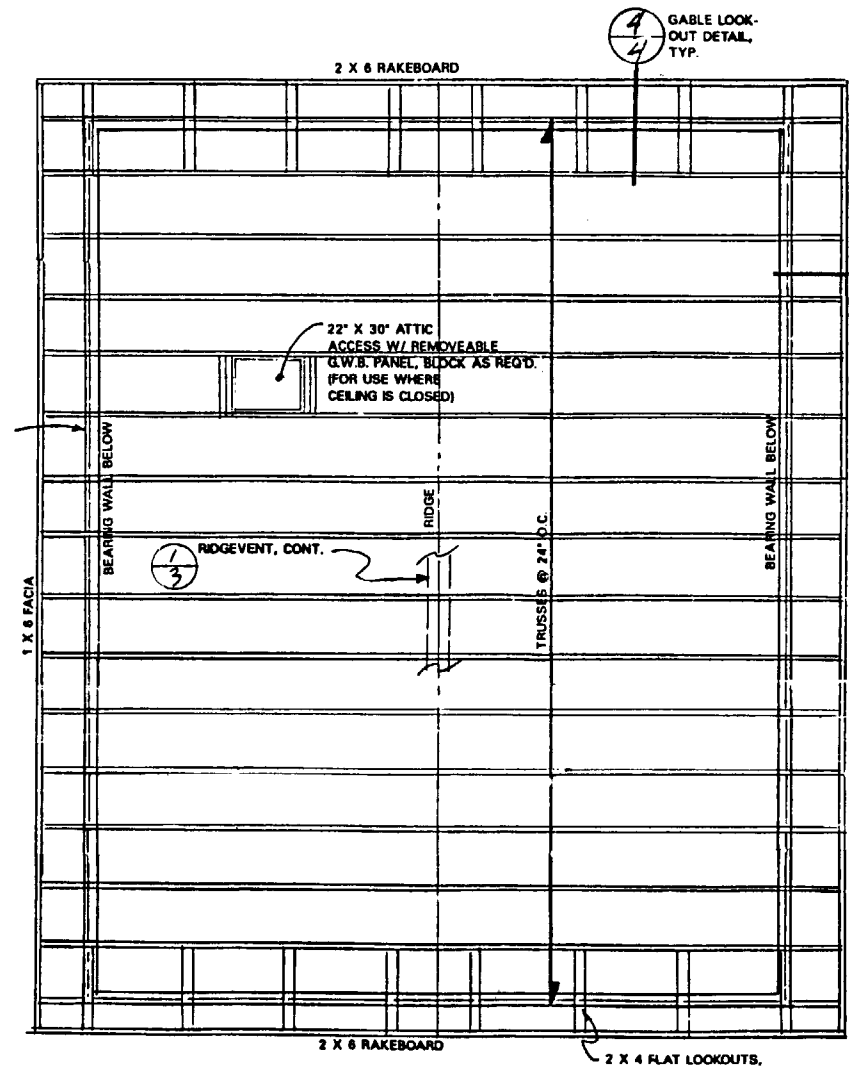
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DESIGN	✓
DRAWN	✓
DATE	01

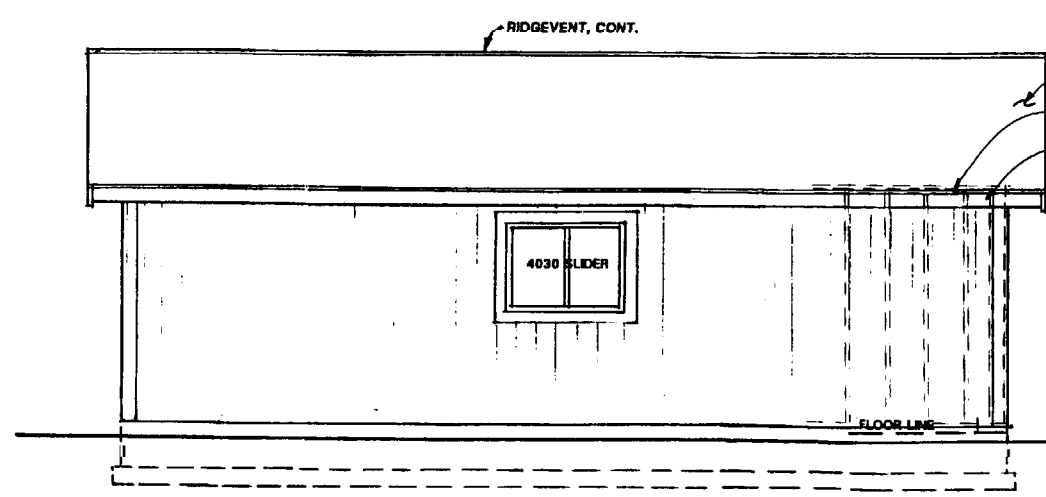
PLAN NO.	720-1
SHEET CONTENTS	
MATERIALS LIST	
PROJECT ILLUSTRATION	
PROJECT DATA	
SHEET	1
OF 6	



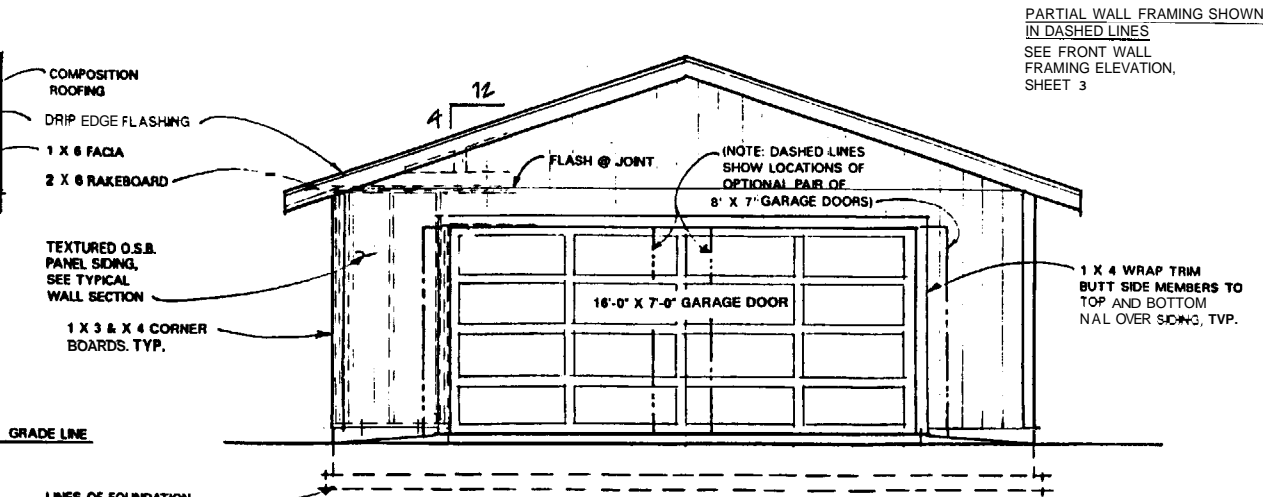
FLOOR PLAN
SCALE: 1/4" = 1'-0"

NAIL SIDING PANELS OR SHEATHING W/
6d @ 8" OC, EDGES AND @ 12" OC, FIELD,
AND USE ALTERNATE BRACED WALL PANELS
(ABWP) WHERE SHOWN

NOTE:
BUILDING DEPTH MAY BE ADJUSTED TO ALTERNATE DIMENSION AS NOTED.
MATERIALS LIST QUANTITIES ARE BASED ON THE ORIGINAL DEPTH
DIMENSION SHOWN. ALTERNATE DEPTH WILL REQUIRE QUANTITIES REVISION.



LEFT SIDE ELEVATION
SCALE: 1/4" = 1'-0"
(RIGHT SIDE SIMILAR)



FRONT ELEVATION
SCALE: 1/4" = 1'-0"

PARTIAL WALL FRAMING SHOWN
IN DASHED LINES
SEE FRONT WALL
FRAMING ELEVATION,
SHEET 3

720-1

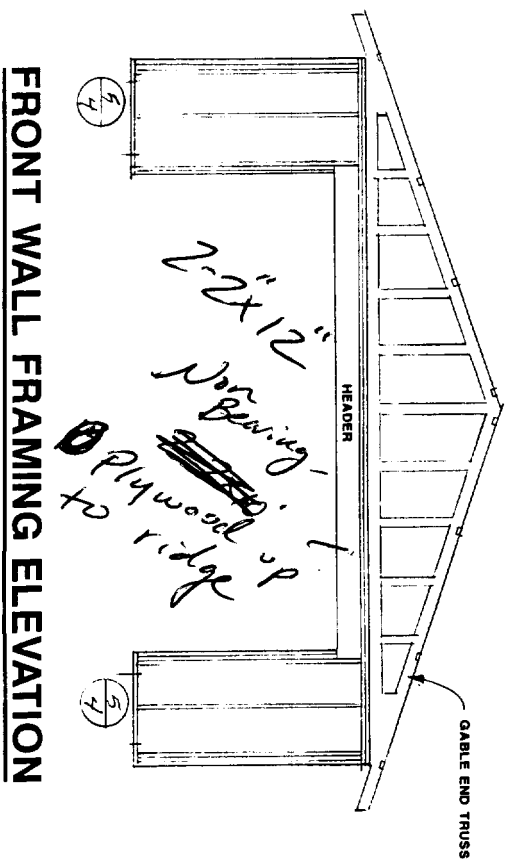
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FLOOR PLAN
ROOF FRAMING PLAN
FRONT ELEVATION

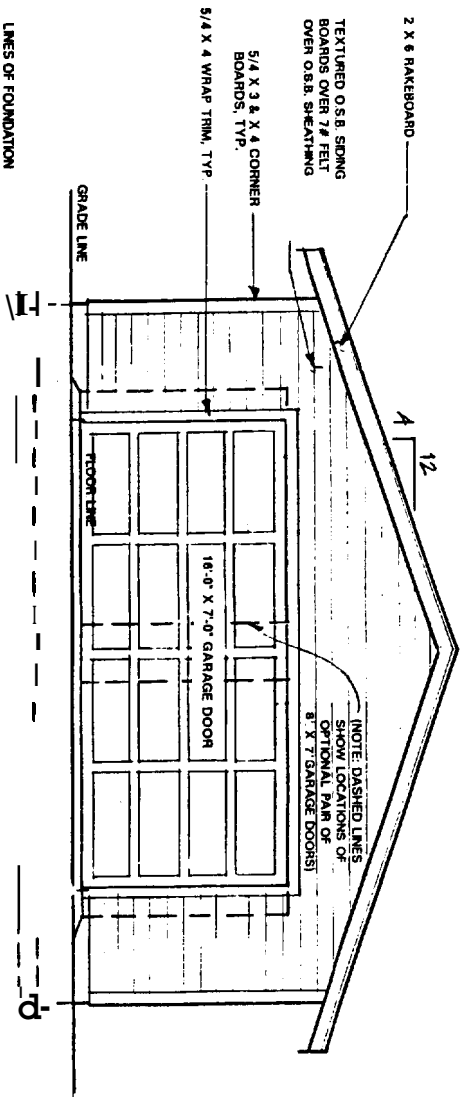
SHEET

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OF 6

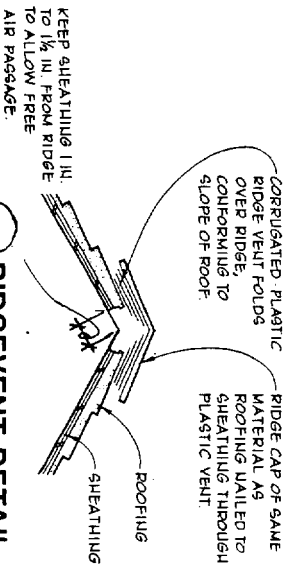


FRONT WALL FRAMING ELEVATION

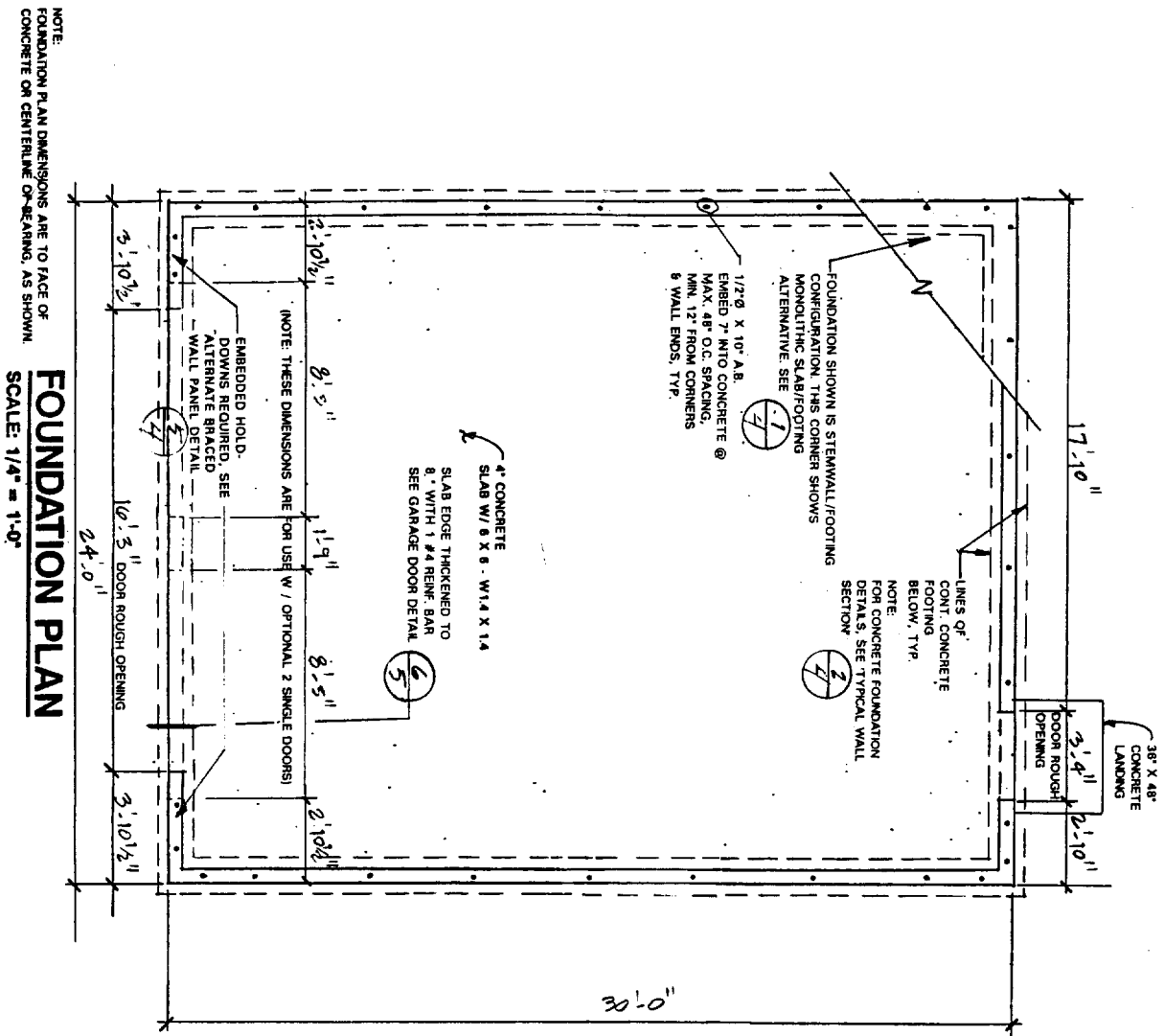


FRONT ELEVATION
SCALE: 1/4" = 1'-0"

NOTE:
NOTES AND MATERIAL
INDICATIONS SHOWN ARE
TYPICAL FOR EXTERIOR
BUILDING EXTERIOR,
AS APPLICABLE.

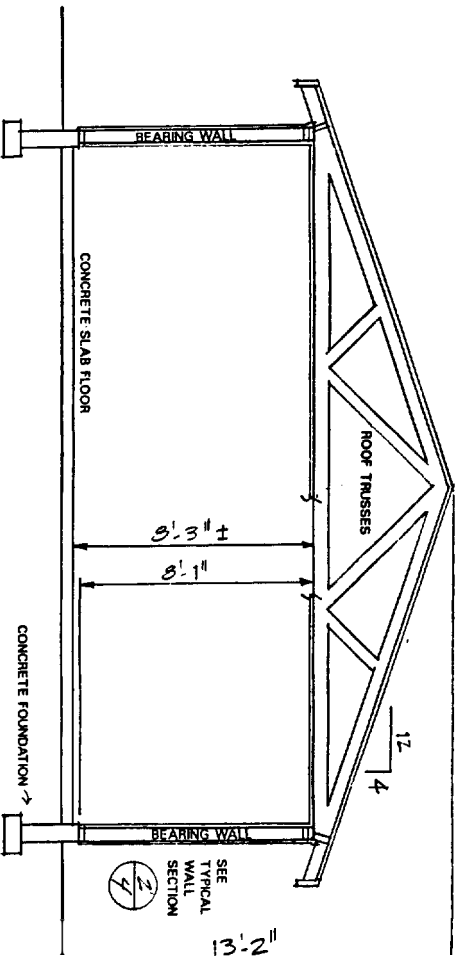


7 RIDGEVENT DETAIL



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

NOTE:
FOUNDATION PLAN DIMENSIONS ARE TO FACE OF
CONCRETE ON CENTERLINE OF BEARING, AS SHOWN.



A CROSS-SECTION
SCALE: 1/4" = 1'-0"

NOTE:
CROSS-SECTIONS ILLUSTRATE
GENERAL STRUCTURE OF BUILDING
FOR DETAILS SEE TYPICAL
WALL SECTION AND RESPECTIVE
FRAMING PLANS.

SHEET CONTENTS CROSS-SECTION FOUNDATION PLAN EXTERIOR ELEVATIONS FRONT WALL FRAMING ELEV. RIDGEVENT DETAIL	DESIGN 	PLAN NO. 720-1	
	DRAWN 		
EET 3 OF 6	DATE 10		

Structural/General Notes/Specifications

A. General

The following notes shall clearly and supplement the working drawings.

B. Codes & Standards

CURRENT EDITIONS OF THE INTERNATIONAL BUILDING CODE (IBC),
INTERNATIONAL RESIDENTIAL CODE (IRC)
UNIFORM BUILDING CODE (UBC) AND CABO

C. Live Loads

Roof 25 lbs/sf
Floors 40 lbs/sf
Stairs & Exit 100 lbs/sf

Earth Pressure 30lbs/sd equiv. Fluid pressure

D. Soil & Foundation Data

- Soil bearing data not available. Assumed soil bearing capacity = 2000 lbs/sf.
- Extend all footings down to undisturbed soil of the specified strength with a minimum depth of 1'-6" below adjacent grade, or as required by local building official, based on local frost line depth.
- Center all footings on columns and walls unless specifically dimensioned otherwise.
- Compacted fill to be well graded and granular with not more than 5% passing a 200 sieve. Place in 8-inch loose lifts and compact to 95% modified AASHTO density at optimum moisture.

E. Cast-In Place Concrete and Reinforcing Steel

- Concrete of the following 28-day strength: 5 sack cement (min 3000 psi); max. 6 gal water/sack for all structural concrete, including foundations and slabs on grade. Maximum sized aggregate 3/4". Add Master Builders Pozzolith per manufacturer's recommendations to all concrete except footings. Concrete for exterior walls to be air entrained (5% air).
- Reinforcing steel ASTM A-615 grade 40/60. Use grade 40 for temperature steel, stirrups and dowels. Detail, fabricate and place in accordance with the latest edition of A.C.I. "Manual of Standard Practice".
- Concrete cover on reinforcing steel (clear dimensions):
 - Suspended slabs 3/4"
 - Beams & columns (in lbs) 1 1/2"
 - Non-exposed vertical faces 1"
 - Vertical faces exposed to earth or weather 2"
 - Bottom of footings 3"
 - Slabs-on-grade (from top) 1 1/4"
- Lap all field splices 24 diameters with minimum of 12". Bend outer wall footing bars 12 inches or use corner bars at all corners and wall intersections.
- Provide min. one continuous #4 bar at top and bottom of foundation walls w/ #4 at 12" o.c. where wall height exceed two feet. Provide min two continuous #4 bars in footings. Develop foundation walls to footings w/ #4 x 1'-4" long @ 16" o.c. Embedded 6" into footing. (No shear keys required).
- Reinforce around wall and slab openings, with sides of 12" or greater, with two #5 bars extending 24" beyond corners on all four sides. Provide one extra #5 diagonal bar, 4'-0" long, at each corner.
- Slabs-on-grade. Roll sub grade and moisten before pour. Saw cut crack control joints within 24 hours of pour or install Zip-Slip, with maximum of 12'-0" for 4" non-reinforced slabs and 40'-0" for reinforced slabs. (min. reinforcing w/s 6" x 6" x 14, supported)
- Vibrate all concrete. Segregation of materials to be prevented. Test cylinders not required.
- Place no fill against foundation or basement walls until floors are in place or walls have been adequately shored to resist lateral earth pressures.

F. Masonry (as applicable)

- Hollow masonry units: F'M = 1350 (half & half c.m.u.)
Mortar type S: 1 pt. 1/2 lime putty, 4 sand
Grout: 2000 psi pea gravel concrete (7 sack)
 - Reinforcing steel: ASTM A-615, grade 40.
 - Place grout in lifts no greater than 4'-0" height.
 - Wall reinforcing:
 - 6" walls: #4 vertical @ 48" o.c. w/ #9 wire horiz. Joint reinf. @ 8" o.c.
 - 8" walls: #5 vertical @ 48" o.c. w/ 3/16" dia wire horiz. Joint reinf. @ 8" o.c.
- Install two bars in corners, wall intersections, wall endings and around openings. Lap all bars 20 inches and joint reinforcing, 12 inches. Use corner bars for outer bars in bond beams and at intersecting walls.
- Anchor brick veneer to wood framed wall as detailed with 22 ga. X 7/8" x 7" galvanized corrugated wall ties @ 16" o.c. w/ one Simpson a20e nail.

G. Timber and Wood Framing

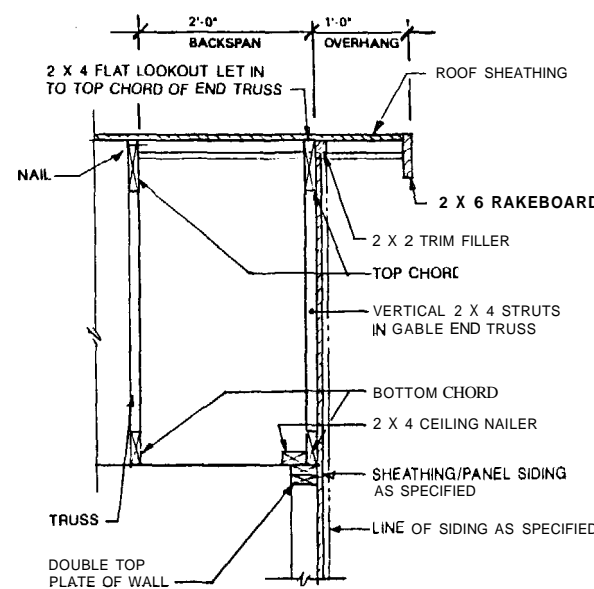
- Substitution of wood species identified herein may be as approved by local Building Official and material strength and capacities shall equal or exceed that of the species identified herein.
- All lumber to be graded per book 16 of the West Coast Lumber Inspection Bureau:
 - HF/DF no. 2 for joists, rafters, light framing, plates and bracing
 - DF no. 1 for posts and beams
 - HF/DF "stud" for stud wall framing
- Comply with the latest edition of the NFPA "National Design Specification" as modified by the "IBC for all structural lumber requirements.
- Joists and rafters shall have 2" nominal thick solid blocking at supports.
- Splice laminated members together w/ 10d nails @ 12" o.c., staggered. Splice laminations at supports only.
- Provide cut washers for all bolts bearing on wood. All nails shall be common wire nails.
- Glue-laminated members, Douglas Fir, A.I.T.C. grading: combination 24F-V3 for simple spans; 24F-V8 for cantilevered spans. Dry conditions of use. Architectural appearance grade where exposed to view. Fabrication plant A.I.T.C. inspected. / Wrap individual members.
- Plywood: Roof sheathing to be 1/2" C-D int-apa plywood with exterior glue, P.I. 24/0 (see S-ply for panelized roofs) Nailing @ 6" o.c. at panel edges and @ 12" o.c. at intermediate supports. Sub-flooring to be 3/4" C-D-apa plywood with exterior glue, P.I. 32/16. Use T&G if no underlayment. Glue and nail with @ 6" o.c. at panel edges and @ 10" at intermediate supports.
- Pre-fabricated truss members to be designed by applicable state licensed engineer in accordance with requirements shown in the drawings. Contractor shall verify as-built dimensions and conditions prior to truss fabrication and coordinate as required. All engineering data shall be made available for submission to the Building Official as required.

H. Structural Steel

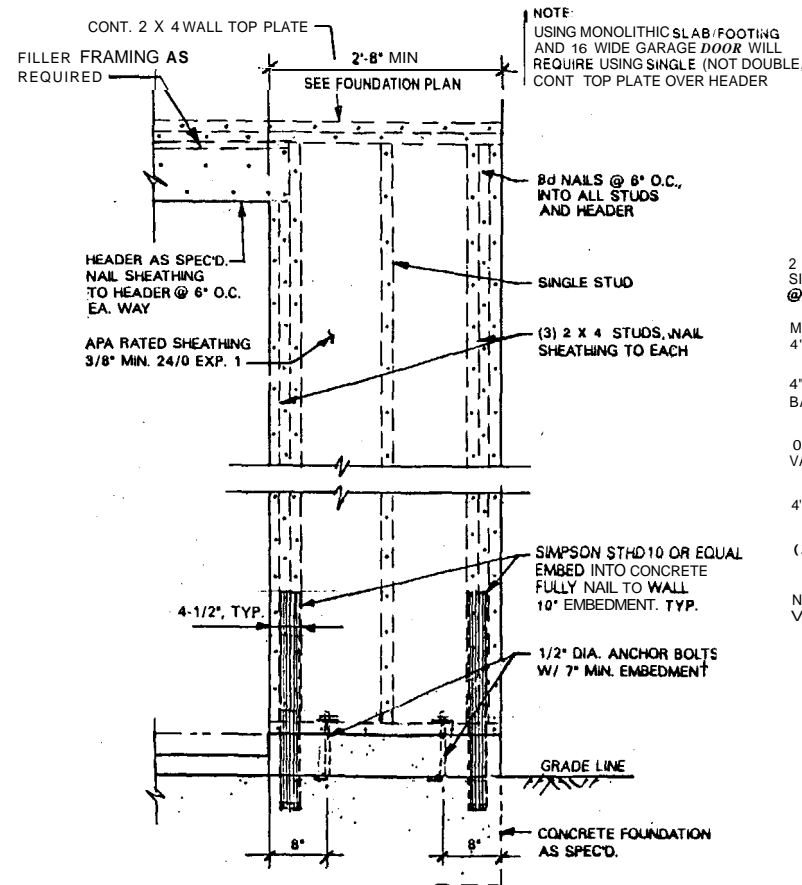
- All steel, except tubing: ASTM A-36. Pipe: ASTM A-53, Type E or S, grade B. Tubular section: ASTM A500, grade B. All bolts: ASTM A-307/A-325, type X.
- All fabrication, erection and detailing shall be in accordance with the latest edition of the "Manual of Steel Construction" of the American Institute of Steel Construction.
- All welding by WABO certified welders in accordance with the "Welding Handbook" by the American Welding Society.
- All welds 3/16" min. continuous fillet welds using ASWAS, E70XX electrodes.
- Provide washers on all bolted connections.
- All steel not embedded in concrete or masonry shall receive one shop coat of an approved primer paint. Apply two coats of heavy asphaltic paint to all steel exposed to earth.
- Furnish complete shop drawings prior to fabrication.

I. Miscellaneous

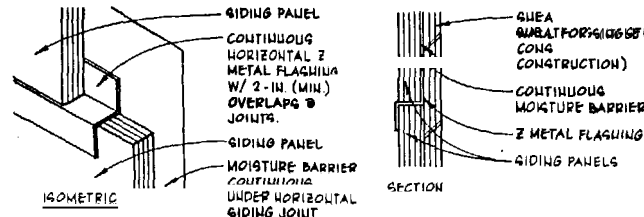
- Contractor shall verify all site conditions and dimensions in field.
- Provide temporary bracing as required until all permanent connections and stiffening have been installed.
- Verify size and locations of all openings in floor, roof and walls and coordinate with electrical and mechanical work.
- Pre-fabricated items shall be handled and installed in accordance with manufacturers' recommendations. Pre-fabricated assemblies shall be coordinated with any as-built conditions by the contractor regarding dimensions, clearance and applicable building code requirements.
- All HVAC equipment shall be determined by owner and/or contractor specific to this project and comply with all applicable codes. Performance data and distribution layout shall be provided by mechanical subcontractor. Submittals shall be coordinated by the contractor as required by the Building Official.
- It is the intent of these drawings and specifications to comply with the requirements of the Building Code and all other relevant codes and ordinances. Any discrepancies, omissions or errors shall be brought to the attention of the designer for clarification or correction before beginning the work. It is the responsibility of the general contractor to seek clarification or correction if needed.



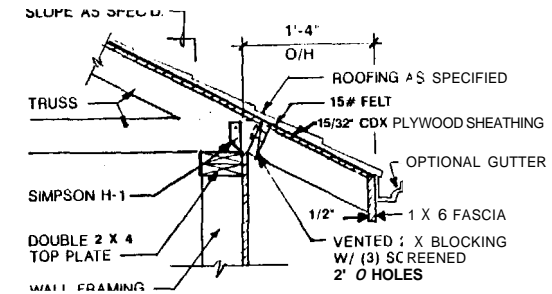
4 GABLE LOOKOUT DETAIL
SCALE: 1" = 1'-0"



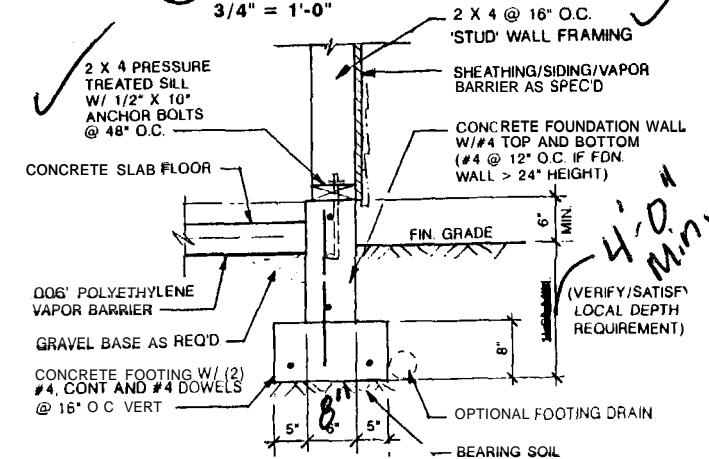
5 ALTERNATE BRACED WALL PANEL
3/4" = 1'-0" (FOR 1-STORY) AS PER UBC 2320.11.4, IBC 2308.9.3 & .9.3.1, IRC R602.10.3, 10.8 & CABO 602.9



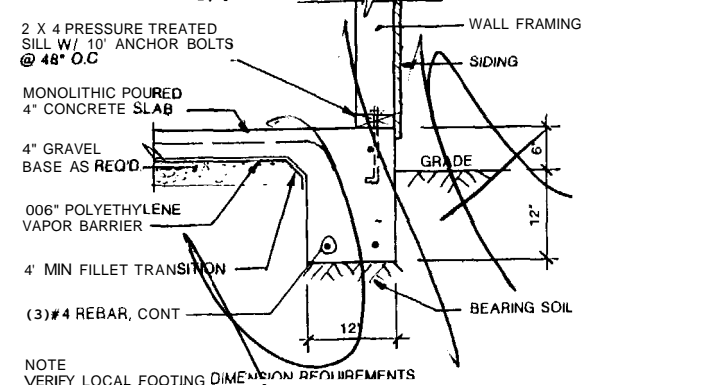
6 FLASHING DETAIL FOR PANEL SIDING



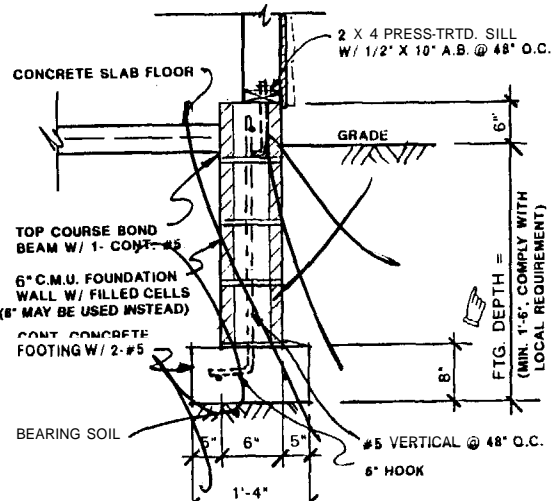
3 TRUSS EAVE DETAIL
3/4" = 1'-0"



2 TYPICAL WALL SECTION
3/4" = 1'-0"



1 THICKENED EDGE FOOTING
NOTE: CORNER REINFORCING BARS AS PER GENERAL NOTE "F . 4"



7 C.M.U. FOUNDATION WALL

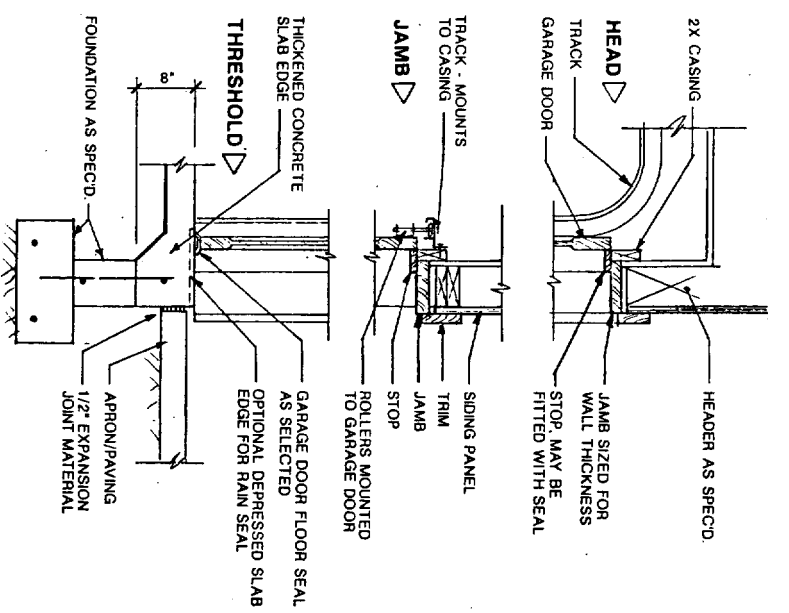
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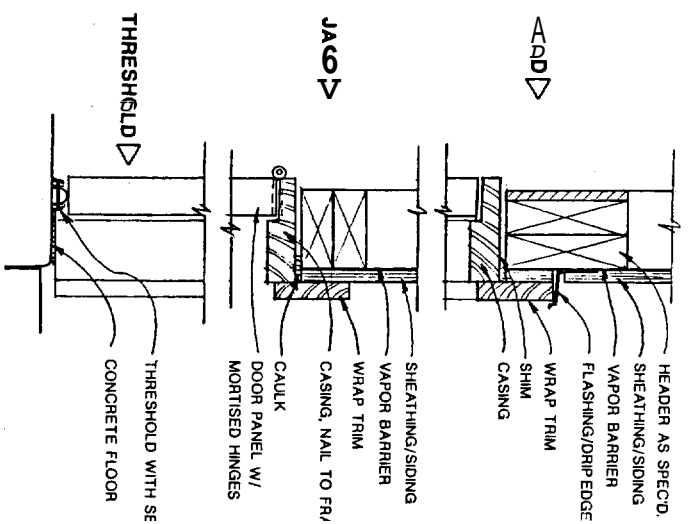
FLASHING DETAIL
STRUCTURAL/GENERAL NOTES
TYPICAL WALL SECTION
ALTERNATE BRACED WALL PANEL
GABLE LOOKOUT DETAIL
EAVE DETAIL

HEET
4
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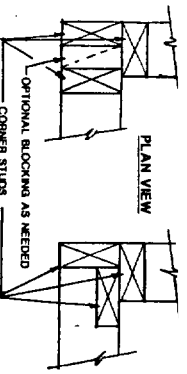


6 GARAGE DOOR DETAIL
3/4" = 1'-0"

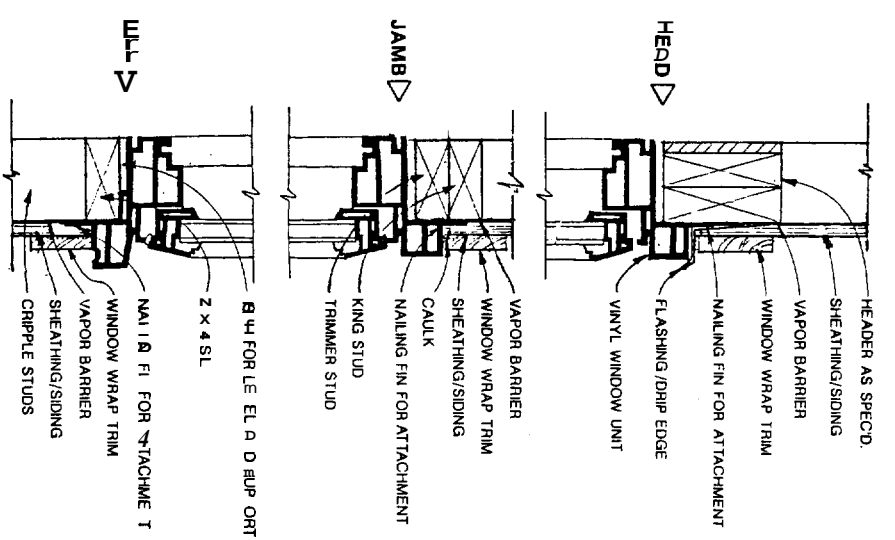
NOTE: DOOR AND WINDOW COMPONENTS SHOWN ARE GENERIC AND ACTUAL PRODUCTS MAY VARY SLIGHTLY IN CONFIGURATION.



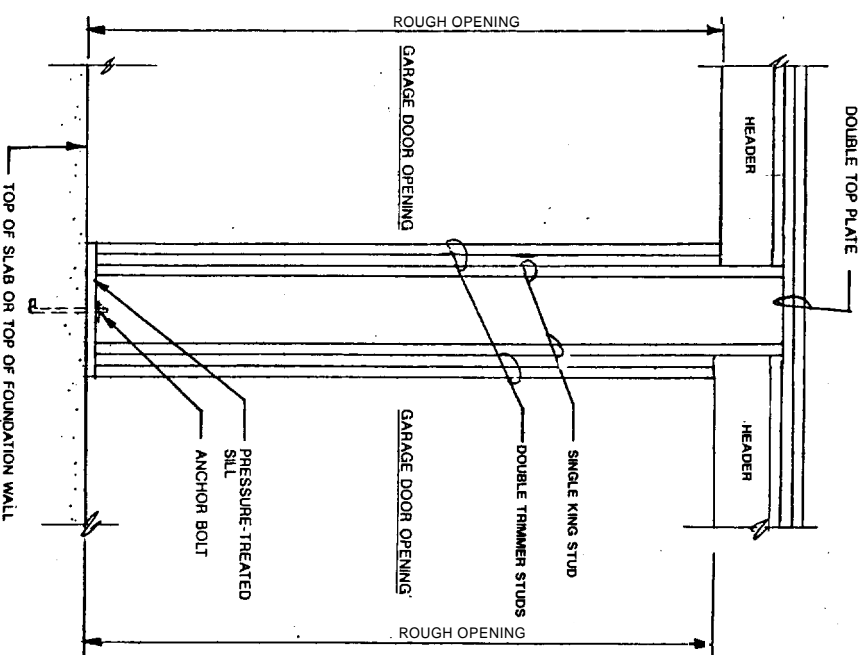
3 DOOR DETAIL



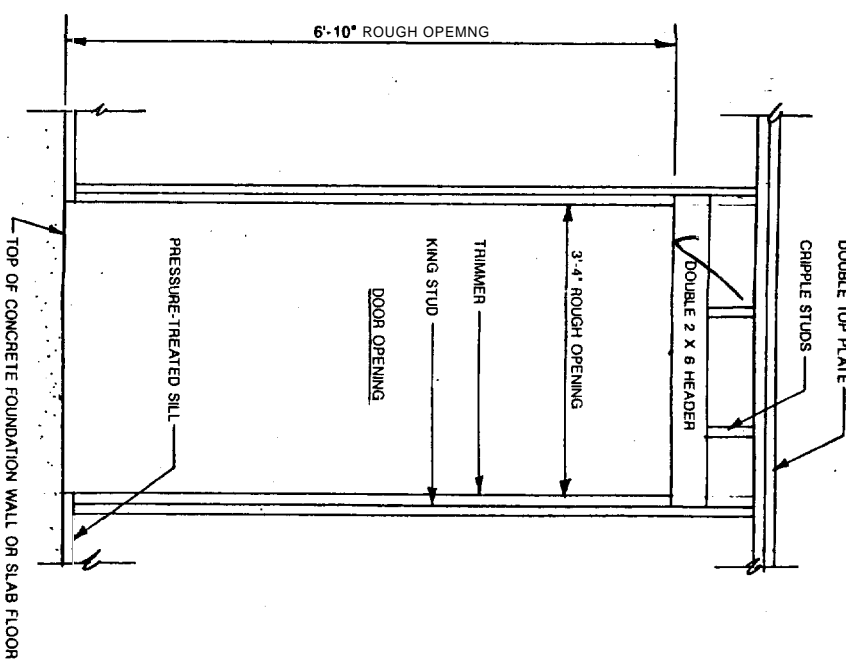
CORNER FRAMING OPTIONS



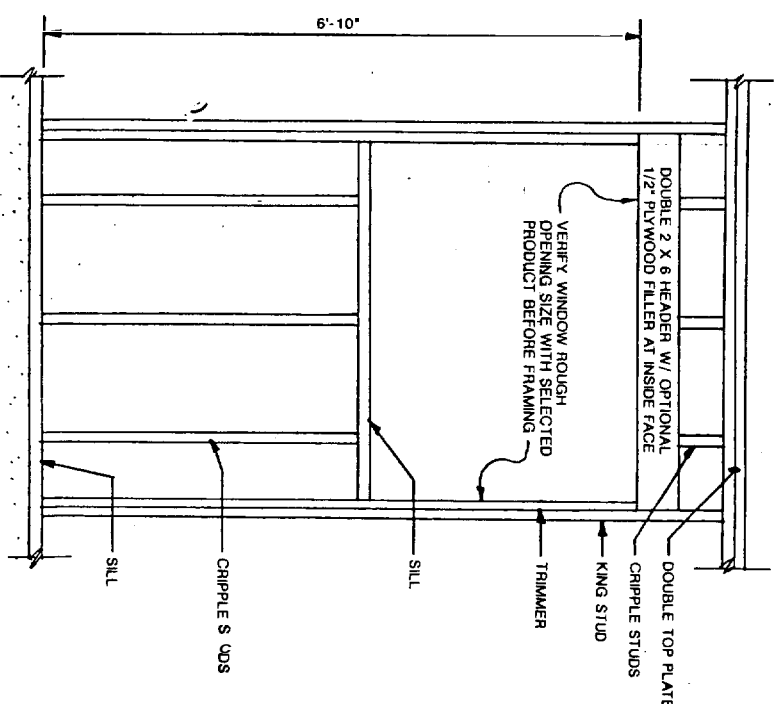
2 VINYL WINDOW DETAIL




5 GARAGE DOOR SEPARATOR FRAMING DETAIL
(FOR USE WITH OPTIONAL PAIR OF DOORS)



4 DOOR FRAMING DETAIL



1 WINDOW FRAMING DETAIL

5 OF 6	SHEET CONTENTS GARAGE DOOR DETAILS DOOR DETAILS WINDOW DETAILS WALL OPENING FRAMING DETAILS	DESIGN B	PLAN NO. 720-1	 www.behmdesign.com
		DRAWN B		
		DATE 4/		

2303.4 Trusses. Metal-plate-connected wood trusses shall be manufactured as required by TPI 1. Each manufacturer of trusses using metal plate connectors shall retain an approved agency to make unscheduled inspections of truss manufacturing and delivery operations. The inspection shall cover all phases of truss operations, including lumber storage, handling, cutting fixtures, presses or rollers, manufacturing, bundling and banding.

2303.4.1 Truss design drawings. Truss construction documents shall be prepared by a registered design professional and shall be provided to the building official and approved prior to installation. These construction documents shall include, at a minimum, the information specified below. Truss shop drawings shall be provided with the shipment of trusses delivered to the job site.

- Slope or depth, span and spacing;
- Location of joints;
- Required bearing widths;
- Design loads as applicable;
- Top chord live load (including snow loads);
- Top chord dead load;
- Bottom chord live load;
- Bottom chord dead load;
- Concentrated loads and their points of application;
- Controlling wind and earthquake loads;
- Adjustments to lumber and metal connector plate design value for conditions of use;
- Each reaction force and direction;
- Metal connector plate type, size, thickness or gage, and the dimensioned location of each metal connector plate except where symmetrically located relative to the joint interface;
- Lumber size, species and grade for each member;
- Connection requirements for:
 - Truss to truss girder;
 - Truss ply to ply; and
 - Field splices.
- Calculated deflection ratio or maximum deflection for live and total load;
- Maximum axial compression forces in the truss members to design the size, connections and anchorage of the permanent continuous lateral bracing. Forces shall be shown on the truss construction documents or on supplemental documents; and
- Required permanent truss member bracing location.

TABLE 2304.7(1)
ALLOWABLE SPANS AND LOADS FOR WOOD STRUCTURAL PANEL SHEATHING AND SINGLE-FLOOR GRADES CONTINUOUS OVER TWO OR MORE SPANS WITH STRENGTH AXIS PERPENDICULAR TO SUPPORTS^a

SHEATHING GRADE	Panel thickness (inches)	Maximum span (inches)		Load ^b (psf)		FLOOR ^c
		With edge support	Without edge support	Total load	Live load	
Panel span rating	Panel thickness (inches)	With edge support	Without edge support	Total load	Live load	Maximum span (inches)
12/0	1/2	12	12	40	30	0
16/0	3/8	16	16	40	30	0
20/0	1/2	20	20	40	30	0
24/0	3/8	24	20 ^d	40	30	0
24/16	3/8	24	24	50	40	16
32/16	1/2	32	28	40	30	16 ^e
40/20	3/4	40	32	40	30	20 ^f
48/24	1/2	48	36	45	35	24
54/32	3/4	54	40	45	35	32
60/32	1/2	60	48	45	35	32

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kN/m².

a. Applies to panels 24 inches or wider.

b. Floor and roof sheathing conforming with this table shall be deemed to meet the design criteria of Section 2304.7.

c. Uniform load deflection limitations V_{100} of span under live load plus dead load, V_{100} under live load only.

d. Panel edges shall have approved tongue-and-groove joints or shall be supported with blocking unless $1/2$ -inch minimum thickness underlayment or $1/2$ -inch of approved cellular or lightweight concrete is placed over the subfloor, or finish floor is $1/2$ -inch wood strip. Allowable uniform load based on deflection of V_{100} of span is 100 pounds per square foot except the span rating of 48 inches on center is based on a total load of 65 pounds per square foot.

e. Allowable load at maximum span.

f. Tongue-and-groove edges, panel edge clips (one midway between each support, except two equally spaced between supports 48 inches on center), lumber blocking or other. Only lumber blocking shall satisfy blocked diaphragm requirements.

g. For $1/2$ -inch panel, maximum span shall be 24 inches.

h. Span is permitted to be 24 inches on center where $1/2$ -inch wood strip flooring is installed at right angles to joist.

i. Spans are permitted to be 24 inches on center for doors where $1/2$ -inch of cellular or lightweight concrete is applied over the panels.

TABLE 2304.7(4)
ALLOWABLE SPAN FOR WOOD STRUCTURAL PANEL COMBINATION SUBFLOOR-UNDERLAYMENT (SINGLE FLOOR)^{a,b}
(Panels Continuous Over Two or More Spans and Strength Axis Perpendicular to Supports)

IDENTIFICATION	MAXIMUM SPACING OF JOISTS (inches)			
	18	20	24	32
Species group ^c	Thickness (inches)			
1	1/2	3/4	1	—
2, 3	3/4	1	1 1/4	—
4	1	1 1/4	1 3/4	—
Single floor span rating ^d	16 o.c.	20 o.c.	24 o.c.	32 o.c.

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kN/m².

a. Spans limited to value shown because of possible effects of concentrated loads. Allowable uniform loads based on deflection of V_{100} of span is 100 pounds per square foot except allowable total uniform load for $1/2$ -inch wood structural panels over joists spaced 48 inches on center is 65 pounds per square foot. Panel edges shall have approved tongue-and-groove joints or shall be supported with blocking, unless $1/2$ -inch minimum thickness underlayment or $1/2$ -inch of approved cellular or lightweight concrete is placed over the subfloor, or finish floor is $1/2$ -inch wood strip.

b. Floor panels conforming with this table shall be deemed to meet the design criteria of Section 2304.7.

c. Applicable to all grades of saaded exterior-type plywood. See DOC PS 1 for wood species groups.

d. Applicable to Underlayment grade, C-C (Plugged) plywood, and Single Floor grade wood structural panels.

TABLE 2304.7(5)
ALLOWABLE LOAD (PSF) FOR WOOD STRUCTURAL PANEL ROOF SHEATHING CONTINUOUS OVER TWO OR MORE SPANS AND STRENGTH AXIS PARALLEL TO SUPPORTS (Plywood Structural Panels Are Five-Ply, Five-Layer Unless Otherwise Noted)^{a,b}

PANEL GRADE	THICKNESS (inch)	MAXIMUM SPAN (inches)	LOAD AT MAXIMUM SPAN (psf)	
			Live	Total
Structural I sheathing	1/2	24	20	30
	3/8	24	35 ^c	45 ^c
	1/2	24	40 ^c	50 ^c
	3/8	24	70	80
Sheathing, other grades covered in DOC PS 1 or DOC PS 2	1/2	16	40	50
	3/8	24	20	25
	1/2	24	25	30
	3/8	24	40 ^c	50 ^c
	1/2	24	45 ^c	55 ^c
	3/8	24	60 ^c	65 ^c

For SI: 1 inch = 25.4 mm, 1 pound per square foot = 0.0479 kN/m².

a. Roof sheathing conforming with this table shall be deemed to meet the design criteria of Section 2304.7.

b. Uniform load deflection limitations V_{100} of span under live load plus dead load, V_{100} under live load only. Edges shall be blocked with lumber or other approved type of edge supports.

c. For composite and four-ply plywood structural panel, load shall be reduced by 15 pounds per square foot.

TABLE 2304.7(1)
ALLOWABLE SPANS FOR LUMBER FLOOR AND ROOF SHEATHING^{a,b}

SPAN (inches)	MINIMUM NET THICKNESS (inches) OF LUMBER PLACED			
	Perpendicular to supports		Diagonally to supports	
	Surfaced dry ^c	Surfaced unseasoned	Surfaced dry ^c	Surfaced unseasoned
24	Floor	3/4	3/4	3/4
	Roofs	1 1/8	1 1/8	1 1/8
16	Floor	3/4	3/4	3/4
	Roofs	1 1/8	1 1/8	1 1/8
24	Floor	3/4	3/4	3/4
	Roofs	1 1/8	1 1/8	1 1/8

For SI: 1 inch = 25.4 mm.

a. Installation details shall conform to Sections 2304.6.1 and 2304.6.2 for floor and roof sheathing, respectively.

b. Floor or roof sheathing conforming with this table shall be deemed to meet the design criteria of Section 2304.6.

c. Maximum 19-percent moisture content.

TABLE 2304.7(2)
SHEATHING LUMBER, MINIMUM GRADE REQUIREMENTS: BOARD GRADE

SOLID FLOOR OR ROOF SHEATHING	SPACED ROOF SHEATHING	GRADING RULES
Utility	Standard	NLGA, WCLB, WWPA
4 common or utility	3 common or standard	NLGA, WCLB, WWPA, NSLB or NELMA
No. 3	No. 2	SPB
Merchantable	Construction common	RIS

TABLE 2304.8.1
FASTENING SCHEDULE

CONNECTION	FASTENING ^{a,b}	LOCATION
1. Joist to sill or girder	3-8d common 3-3" x 0.131" nails 3-3" 14 gage staples	toenail
2. Bridging to joist	2-8d common 2-3" x 0.131" nails 2-3" 14 gage staples	toenail each end
3. 1" x 6" subfloor or less to each joist	2-8d common	face nail
4. Wider than 1" x 6" subfloor to each joist	3-8d common	face nail
5. 2" subfloor to joist or girder	2-16d common	blind and face nail
6. Sole plate to joist or blocking	16d at 16" o.c. 3" x 0.131" nails at 8" o.c. 3" 14 gage staples at 12" o.c.	typical face nail
Sole plate to joist or blocking at braced wall panel	3-16d at 16" 4-3" x 0.131" nails at 16" 4-3" 14 gage staples per 16"	braced wall panels
7. Top plate to stud	2-16d common 3-3" x 0.131" nails 3-3" 14 gage staples	end nail
8. Stud to sole plate	4-8d common 4-3" x 0.131" nails 3-3" 14 gage staples	toenail
9. Double studs	2-16d common 3-3" x 0.131" nails 3-3" 14 gage staples	end nail
	16d at 16" o.c. 3" x 0.131" nail at 8" o.c. 3" 14 gage staple at 8" o.c.	face nail
10. Double top plates	16d at 16" o.c. 3" x 0.131" nail at 12" o.c. 3" 14 gage staple at 12" o.c.	typical face nail
Double top plates	8-16d common 12-3" x 0.131" nails 12-3" 14 gage staples typical face nail	lap splice
11. Blocking between joists or rafters to top plate	3-8d common 3-3" x 0.131" nails 3-3" 14 gage staples	toenail
12. Rim joist to top plate	8d at 6" (152 mm) o.c. 3" x 0.131" nail at 6" o.c. 3" 14 gage staple at 6" o.c.	toenail
13. Top plates, laps and intersections	2-16d common 3-3" x 0.131" nails 3-3" 14 gage staples	face nail
14. Continuous header, two pieces	16d common	16" o.c. along edge
15. Ceiling joists to plate	3-8d common 5-3" x 0.131" nails 5-3" 14 gage staples	toenail
16. Continuous header to stud	4-8d common	toenail
17. Ceiling joists, laps over partitions (see Section 2308.10.4.1, Table 2308.10.4.1)	3-16d common minimum, Table 2308.10.4.1 4-3" x 0.131" nails 4-3" 14 gage staples	face nail
18. Ceiling joists to parallel rafters (see Section 2308.10.4.1, Table 2308.10.4.1)	3-16d common minimum, Table 2308.10.4.1 4-3" x 0.131" nails 4-3" 14 gage staples	face nail
19. Rafter to plate (see Section 2308.10.1, Table 2308.10.1)	3-8d common 3-3" x 0.131" nails 3-3" 14 gage staples	toenail
20. 1" diagonal brace to each stud and plate	2-8d common 2-3" x 0.131" nails 2-3" 14 gage staples face nail	face nail
21. 1" x 8" sheathing to each bearing wall	2-8d common	face nail
22. Wider than 1" x 8" sheathing to each bearing	3-8d common	face nail
23. Built-up corner studs	16d common 3" x 0.131" nails 3" 14 gage staples	24" o.c. 16" o.c. 16" o.c.
24. Built-up girder and beams	20d common 32" o.c. 3" x 0.131" nail at 24" o.c. 3" 14 gage staple at 24" o.c.	face nail at top and bottom staggered on opposite sides
	2-20d common 3-3" x 0.131" nails 3-3" 14 gage staples	face nail at ends and at each splice
25. 2" planks	16d common	at each bearing
26. Collar tie to rafter	3-16d common 4-3" x 0.131" nails 4-3" 14 gage staples face nail	face nail
27. Jack rafter to hip	3-10d common 4-3" x 0.131" nails 4-3" 14 gage staples	toenail
	2-16d common 3-3" x 0.131" nails 3-3" 14 gage staples	face nail
28. Roof rafter to 2-by ridge beam	2-16d common 3-3" x 0.131" nails 3-3" 14 gage staples	toenail
	2-16d common 3-3" x 0.131" nails 3-3" 14 gage staples	face nail
29. Joist to band joist	3-16d common 5-3" x 0.131" nails 5-3" 14 gage staples	face nail
30. Ledger strip	3-16d common 4-3" x 0.131" nails 4-3" 14 gage staples	face nail
31. Wood structural panels and particleboard: ^a Subfloor, roof and wall sheathing (to framing): Single Floor (combination subfloor-underlayment to framing): 32. Panel siding (to framing)	1/2" or less 2 3/8" x 0.113" nail ^b 1 1/2" 16 gage ^c 6d ^d or 6d ^e 2 3/8" x 0.113" nail ^b 2" 16 gage ^c 8d ^d 1 1/2" to 1 3/4" 10d ^d or 8d ^e 1/2" or less 6d ^d 8d ^e	

For SI: 1 inch = 25.4 mm.

a. Common or less nails are permitted to be used except where otherwise stated.

b. Nails spaced at 6 inches on center at edges, 12 inches at intermediate supports except 6 inches at supports where spans are 48 inches or more. For nailing of wood structural panel and particleboard diaphragms and shear walls, refer to Section 2305. Nails for wall sheathing are permitted to be common, box or casing.

c. Common or deformed shank.

d. Deformed shank.

e. Common.

f. Deformed shank.

g. Common-resistor nailing or casing nail.

h. Fasteners spaced 3 inches on center at exterior edges and 6 inches on center at intermediate supports.

i. Corrosion-resistor roofing nails with $1/2$ -inch diameter head and $1/2$ -inch length for $1/2$ -inch sheathing and $1 1/2$ -inch length for $1 1/2$ -inch sheathing.

j. Corrosion-resistor staples with nominal $1/2$ -inch crown and $1 1/2$ -inch length for $1/2$ -inch sheathing and $1 1/2$ -inch length for $1 1/2$ -inch sheathing. Panel supports at 16 inches (20 inches if strength axis in the long direction of the panel, unless otherwise marked).

k. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.

l. Panel supports at 24 inches. Casing or finish nails spaced 6 inches on panel edges, 12 inches at intermediate supports.

m. For roof sheathing applications, 8d nails are the minimum required for wood structural panels.

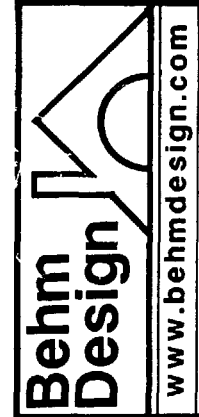
n. Staples shall have a minimum crown width of $1/2$ -inch.

o. For roof sheathing applications, fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports.

p. Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports for subfloor and wall sheathing and 3 inches on center at edges, 6 inches at intermediate supports for roof sheathing.

q. Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports.

r. Fasteners spaced 4 inches on center at edges, 8 inches at intermediate supports.



QUESTIONS?
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P. AN NO.

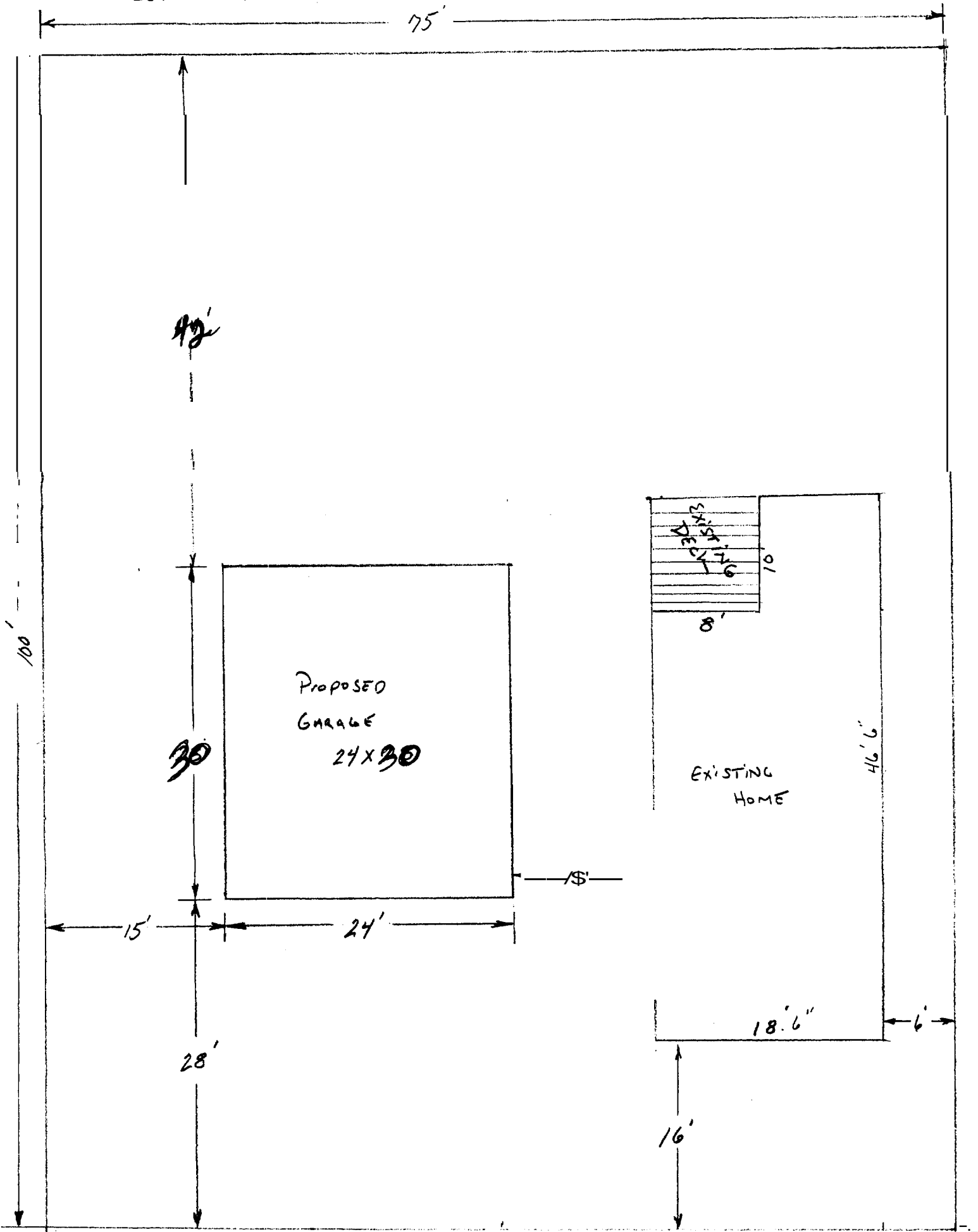
DESIGN DRAWN DATE
04

SHEET CONTENTS
EXCERPTS FROM IBC CODE
-NAILING REQUIREMENTS
-SHEATHING REQUIREMENTS
-TRUSS REQUIREMENTS

SHEET
6
OF 6

ZONE R-5
 MAP 428
 Block B
 LOT 9

Attention: TAMMY MUNSON
 2:00 PM 6-16-03
 7500 SQUARE FEET



R-5
 Sides - 8'
 Front - 20'
 Lot cov. - 20'
 OK

140
 SHERWOOD ST

SET BACKS

Side yard 8'
 Front 20'
 Back 20'

MIN. Requirements Per UNIT

MIN LOT SIZE = 3,000 PER UNIT